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SECURITY & FACILITATION

# ICAO TRIP STRATEGY COMPENDIUM

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A KEY OVERVIEW OF THE  
TRAVELLER IDENTIFICATION MANAGEMENT

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Published by:

| ICAO

## SECURITY & FACILITATION

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The International Civil Aviation Organization (ICAO) is a UN specialized agency, established by States in 1944 to manage the administration and governance of the Convention on International Civil Aviation (Chicago Convention).

ICAO works with the Convention's 191 Member States and industry groups to reach consensus on international civil aviation Standards and Recommended Practices (SARPs) and policies in support of a safe, efficient, secure, economically sustainable and environmentally responsible civil aviation sector.

ICAO's mission is to serve as the global forum of States for international civil aviation, with the objective to support and enable a global air transport network that meets or surpasses the social and economic development and broader connectivity needs of global businesses and passengers.

Security & Facilitation is one of the five comprehensive Strategic Objective of ICAO, meant to enhance global civil aviation security and facilitation. This Strategic Objective reflects the need for ICAO's leadership in aviation security, facilitation and related border security matters.

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## INTRODUCTORY MESSAGE FROM THE PRESIDENT OF THE ICAO COUNCIL, OLUMUYIWA BENARD ALIU



OLUMUYIWA BENARD ALIU

The number of air passengers is unparalleled and is forecast to continue rising.

The total number of passenger traffic in 2016 was 3.8 billion and the international scheduled flights carried no less than 1.6 billion passengers in 2016, and this figure is expected to rise to nearly 3 billion by 2030 based on the latest ICAO projections.

At the same time, the world is increasingly challenged today by a complex socio-political landscape, and one which has the potential to negatively impact the remarkable global connectivity achieved to-date through ICAO.

A key decision in that regard was made by the 38th Session of the ICAO Assembly, when it endorsed the ICAO Traveller Identification Programme (TRIP) Strategy. This provided an important new framework for strengthening and improving States' citizen identity establishment and management processes, a critical foundation for an effective and secure national travel document issuance regimen.

The 39th Session of the ICAO Assembly further endorsed the priorities for the ICAO TRIP Strategy, and its expected outcomes for the 2017-2019 triennium, through Resolution A39-20. This identified the need for national and international actions to ensure the security and integrity of traveller identification and border control programmes, ultimately in aid of our collaborative efforts to limit the movements of terrorist and criminal agents.

ICAO leadership is essential to the successful achievements of the ICAO TRIP Strategy. Our *No Country Left Behind* initiative, seeks to coordinate and provide assistance and capacity building for States toward their more effective ICAO compliance and aviation benefit optimization. In this context, there is a clear need for greater resource mobilization toward TRIP-related objectives in conjunction with our Member States, international and regional organizations, industry and other stakeholders.

This closer cooperation will also help ICAO develop additional guidelines, best practices and lessons learned, thereby strengthening still further the collaborative global ID management and secure travel document framework.

In my role as President of the ICAO Council, I am grateful for our Member States' commitments to ensuring continued ICAO leadership in the field of aviation security and facilitation, and in particular in the implementation and regular refinement of the TRIP Strategy.

Enhanced global connectivity and the freer flow of passengers and goods are nothing short of essential requirements where the ambitions of our Member States for socio-economic sustainability is concerned. Through our new TRIP strategy, and many related efforts under our current Strategic Objective for Security and Facilitation, ICAO will continue to enhance our approaches and partnerships in this area in order to help governments keep their borders both better secured and less obtrusive to passengers and shippers everywhere.



## INTRODUCTORY MESSAGE FROM THE SECRETARY GENERAL OF ICAO, FANG LIU



FANG LIU

ICAO's Traveller Identification Programme (TRIP) strategy is a key pillar of ICAO's Security and Facilitation Strategic Objective. Its main purpose is to strengthen our Member States' capacities to establish citizen identities in a secure and reliable way, and to formalize those secure identities through ICAO compliant passports or other official travel documents.

This first edition of the new ICAO TRIP Compendium showcases the guidance material produced by our Technical Advisory Group on Traveller Identification Programme (TAG/TRIP), and is designed to help Member States implement the various TRIP elements.

The majority of this work is conducted under the Standards and Recommended Practices (SARPs) of Annex 9 to the Chicago Convention (Facilitation) and through the MRTD specifications in ICAO Doc 9303. Through standards, the TRIP Strategy harmonizes the global line of defense in our shared battle to confront international terrorism.

Facilitation activities are strongly supportive of eight of the 17 UN Sustainable Development Goals (SDGs), and the ICAO TRIP Strategy significantly contributes to UN Security Council Resolutions 2178 (2014) and 2309 (2016). A number of areas still need to be addressed, including the global implementation of common standards, the harmonization of intelligence and data sharing, and the evolution towards a secure digital process covering every aspect of today's identity and travel document priorities.

An important part of my mission as Secretary General of ICAO is to convey this message to all our partners involved. Recently, during a Special meeting of the Security Council's Counter-Terrorism Committee (CTC) on "Terrorist Threats to Civil Aviation", it was proposed that the UN Counter-Terrorism Executive Directorate (CTED), in cooperation with ICAO, continue to explore new means of addressing the terrorist threat through various ICAO TRIP elements.

Meanwhile, as highlighted during the annual meeting of the World Economic Forum in Davos this year, challenges remain for Member States towards implementing the biometric standards established by ICAO. The ICAO Secretariat has developed a roadmap to guide States in the implementation process, and it is our hope that our new Global Aviation Security Plan will also aid in the improved global coordination and realization of these urgent objectives.

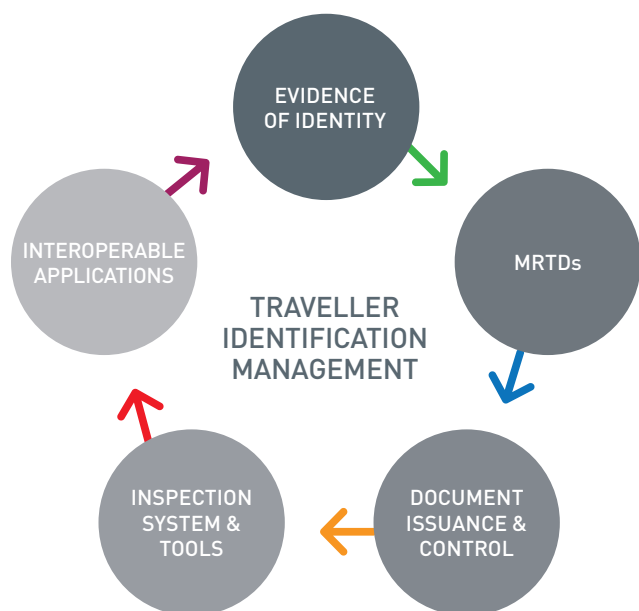
The GASeP, in addition to the ICAO Global Risk Context Statement, our Public Key Directory, and various supporting working groups, task forces and security programmes and projects, are all essential elements in how ICAO is aiding with these global outcomes.

We all have a part to play in realizing more robustly secure and less obtrusive solutions for our inter-related citizen identification and border control objectives, and ICAO is pleased to be placing this new TRIP resource at the disposal of our States and partners to the benefit of our shared goals.



## INTRODUCING THE FIRST ICAO TRIP STRATEGY COMPENDIUM

The ICAO TRIP Strategy Compendium is a planning and implementation guide for secure traveller identification management – a complete report of strategy, policy and guidance on the implementation of different elements of the ICAO TRIP Strategy since its adoption at the 38<sup>th</sup> Session of the ICAO Assembly in October 2013.



Addressed to subject matter experts, government administrators, and the personnel of document issuance authorities, civil registries, passport offices, as well as Customs and Immigration officials, and industry experts, this first edition showcases the guidance material produced by the **Technical Advisory Group on Traveller Identification Programme (TAG/TRIP)**.

It is designed to help Member States implement the various elements of the ICAO TRIP Strategy and focuses on ICAO's leadership across all elements of the TRIP Strategy in collaboration with other UN entities and external partners.

Since 1974, when provisions for international aviation security were first disseminated as **Annex 17-Security** to the Chicago Convention, ICAO assumed a leadership role in developing aviation security policies and measures at the international level, including efforts to enhance the security of travel documents (addressed by the Machine Readable Travel Document (MRTD) Programme), and to improve the training of security personnel by developing course material on a range of topics for use by civil aviation administrations and a network of regional aviation security training centres.

ICAO's leadership and activities in travel documentation policy and operational matters have made a significant contribution to the enhancement of aviation security and facilitation through uniform and progressive development of travel document Standards and Recommended Practices (SARPs) in **Annex 9 – Facilitation** to the Chicago Convention, guidance material and the provision of assistance to States in the implementation of effective and efficient travel document and border control systems.

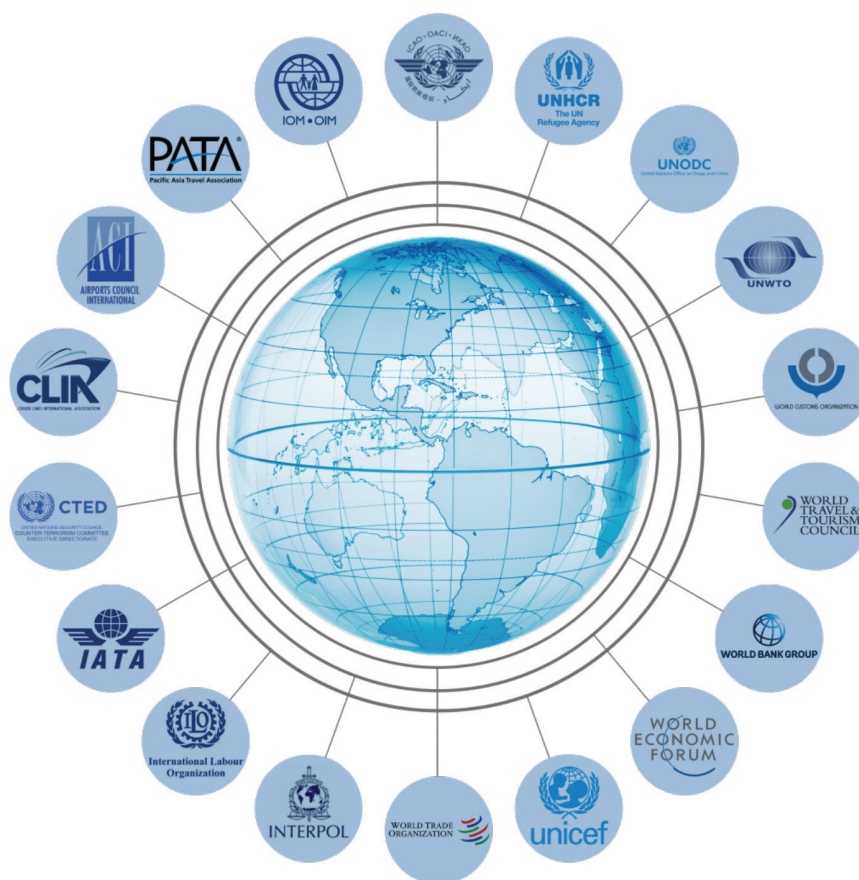
The production of standardized specifications for travel documents, such as Doc 9303, and the data contained therein, is aimed at building a satisfactory level of confidence in the reliability of travel documents and in the effectiveness of inspection procedures for implementation by Member States.

First adopted at the 38<sup>th</sup> Session of the ICAO Assembly (24 September – 4 October 2013), the priorities for the ICAO Traveller Identification Programme (TRIP) Strategy and expected outcomes for the 2017-2019 triennium have been further endorsed by the 39<sup>th</sup> Session of the ICAO Assembly held last October 2016.

The **ICAO TRIP Strategy** aims to establish the goal and objectives of traveller identification management, to lead and reinforce a global approach, and to provide direction for action by ICAO, States and the many international, regional and industry partners in identification management with a unique vision: all Member States can uniquely identify individuals.



INTERNATIONAL  
COOPERATION: KEY  
FOR SUCCESSFUL  
IMPLEMENTATION





STANDARD

Uniform application recognized as necessary for safety of and regularity of international air navigation. Requires notification of differences.

RECOMMENDED PRACTICES

Uniform application recognized as desirable in the interest of safety, regularity or efficiency of international air navigation. Contracting States should endeavor to conform.

DIFFERENCES TO STANDARDS

States obliged to report to ICAO if they cannot implement a Standard.

The Strategy also provides the basis for a detailed Business Plan to be developed, commensurate with resources available, and corresponding actions to be taken. Recognizing the benefits of traveller identification management to aviation security and facilitation, ICAO defines its mission as being to contribute to the capacity of Member States to uniquely identify individuals by providing appropriate authorities, worldwide, with the relevant supporting mechanisms to establish and confirm the identity of travellers.

Moreover, the **Assembly Resolution A39-20**, “Consolidated statement of continuing ICAO policies related to facilitation”, identified national and international actions in ensuring the security and integrity of traveller identification and border controls and urged Member States to maximize security and facilitation benefits, including preventing acts of unlawful interference and other threats to civil aviation, through their travel document and border control programmes.

During the United Nations Security Council Session in September 2016, the Secretary General of ICAO called for closer collaboration to ensure the security of global services, including prevention of terrorist attacks against civil aviation. The Secretary General also affirmed that ICAO actively supports UN Security Council Resolutions (SCRs) and will contribute to further coordination with the UN Security Council Global Strategy.

Building on the Security Council Resolutions, **ICAO is one of the 38 entities of the Counter-Terrorism Implementation Task Force (CTITF)** with a common action plan to respond to the challenge of Foreign Terrorists (FTFs) through the implementation of **UN SCR 2178 and UN SCR 2309**, with a key focus on the requirements relating to advance passenger information and passenger data exchange programmes and promoting the international standards adopted by UN agencies for this purpose.

RESOLUTION A39-20 APPENDICES:

A	Development and implementation of facilitation provisions
B	National and international action in ensuring the security and integrity of traveller identification and border controls
C	National and international action and cooperation on facilitation matters
D	Passenger data exchange

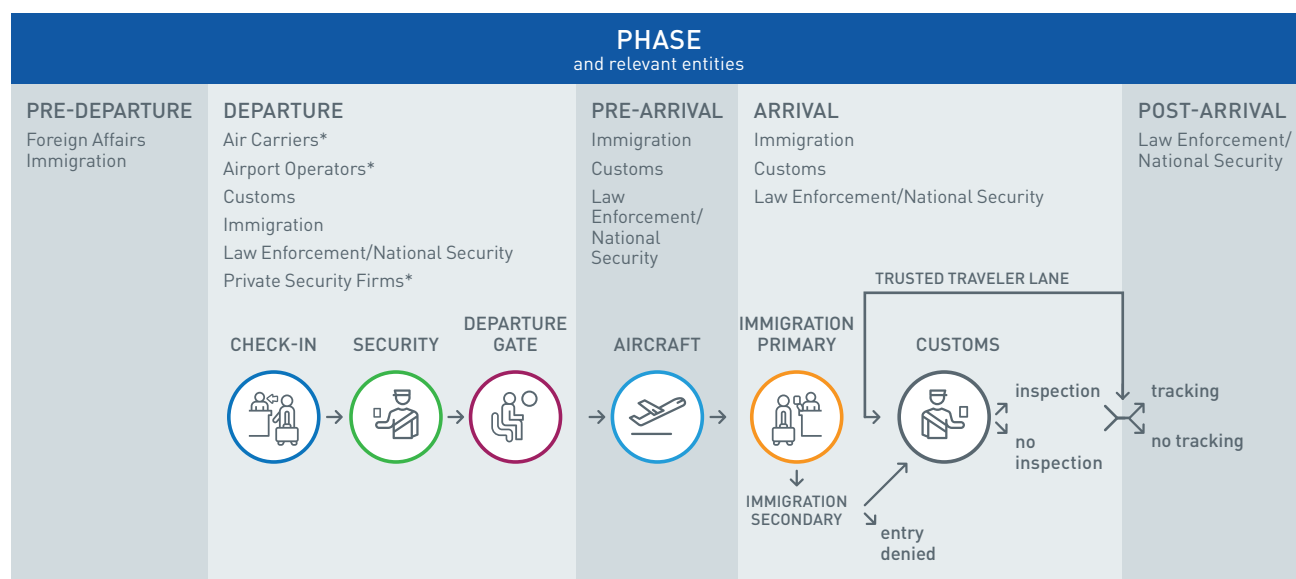
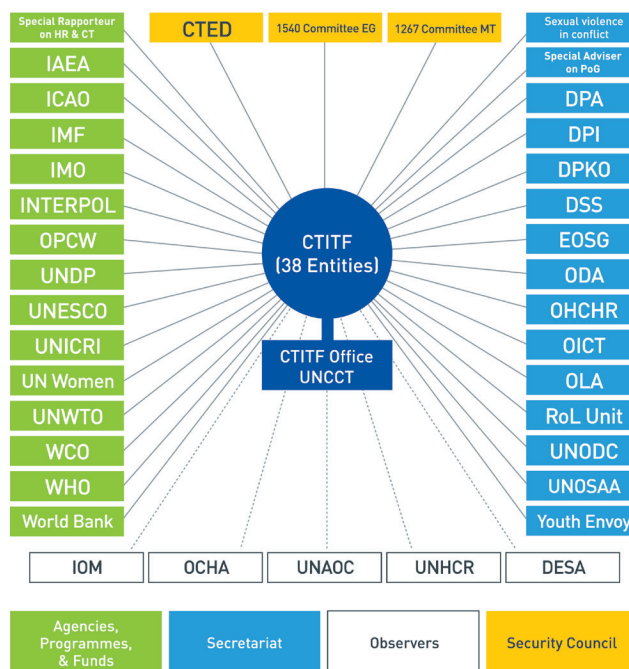


ICAO is also cooperating in an initiative of the CTITF Working Group on Border Management relating to Counter-Terrorism. An “ICAO TRIP Guide for Assessing Border Control Management” will be developed based on UNCTED and CTITF guidance material, such as the CTITF Air Travel Cycle Model, with the aim to identify best practices in the five phases of the air travel cycle and to highlight baseline steps to prevent the cross-border mobility of terrorists and other criminals while facilitating international business and tourist travel.

The movement of people by air must be regulated in order to ensure the **Global Strategy** is effective at identifying and preventing the movement of terrorists and foreign terrorist fighters for secure and effective border management. Both Doc 9303 and the ICAO TRIP Strategy contribute significantly to the various UN Assembly and Security Council Resolutions that require States to improve the security of producing and issuing identity and travel documents and to preventing and detecting alterations or fraudulent use. As well, they are required to prevent the movement of Foreign Terrorists (FTFs) through effective border controls and control of issuance of identity papers and travel documents. Facilitation activities are also linked to eight of the **17 UN Sustainable Development Goals (SDGs)**.

#### ICAO AND THE UNITED NATIONS GLOBAL COUNTER-TERRORISM STRATEGY

### CTITF MEMBER ENTITIES



#### FIVE PHASES OF THE AIR PASSENGER TRAVEL CYCLE\*

\*An Initiative of the CTITF Working Group on Border Management Relating to Counter-Terrorism



Further to this joint ICAO TRIP Strategy and UN agenda, and in the context of the No Country Left Behind initiative, the ICAO Secretary General requested the development of an **ICAO TRIP Implementation Roadmap for Member States**, which has been endorsed by the 39<sup>th</sup> Session of the ICAO Assembly (A39). The ICAO TRIP Roadmap aims to provide target milestones for the implementation by States of the ICAO TRIP Strategy. It is primarily based on the responses received from Member States on ICAO TRIP Strategy Implementation and Assistance, as well as on the global analysis of the Universal Security Audit Programme Continuous Monitoring Approach (USAP-CMA) results for Annex 9 security-related Standards and Recommended Practices (SARPs).

It is therefore important to note that the content of **this new publication builds upon and is aligned with the TRIP Roadmap for Member States**, which describes, among other items, projects, deliverables, Key Performance Indicators (KPIs) and implementation dates related to key activities for the implementation of the five elements of the ICAO TRIP Strategy.

Our readers will also benefit from a **better understanding of the applicable regulatory framework** and efforts made so far by international organizations and their members to support information sharing and continued enhancement of traveller identification management. The publication will also allow readers to familiarize themselves with **the roles and responsibilities of all entities involved in the Strategy**.

Ultimately, the **ICAO TRIP Compendium provides a key overview of the TRIP Strategy as well as a genuine decision-making aid for its strategic implementation**.

ICAO wishes to thank all those involved. Our team is grateful to each of the international organizations and individual professionals who took time from their busy schedules to work with us and for the valuable contributions they brought to the first edition of this new publication.

We wish you a successful and fruitful Thirteenth TRIP Symposium and Exhibition and we look forward to welcoming your feedback on this first edition of the ICAO TRIP Compendium!

#### UN 17 SUSTAINABLE DEVELOPMENT GOALS (SDGs)



\*Security and Facilitation





# GLOSSARY OF ABBREVIATIONS, TERMS AND DEFINITIONS

ABBREVIATION	FULL FORM	ABBREVIATION	FULL FORM
ABCs	Automated Border Controls	MRTD	Machine Readable Travel Document
ACI	Airports Council International	MRZ	Machine Readable Zone
API	Advance Passenger Information	NTWG	New Technologies Working Group
ATC	Air Transport Committee	PNR	Passenger Name Record
CAA	Civil Aviation Authority	OAS	Organization of American States
CASSOA	Civil Aviation Safety and Security Oversight Agency	OSCE	Organization for Security and Co-operation in Europe
CBA	Cost-benefit analysis	PKD	Public Key Directory
CTITF	Counter-Terrorism Implementation Task Force	SARPs	Standards and Recommended Practices
DGCA	Directorate General of Civil Aviation	SDG	Sustainable Development Goals
eMRP	Electronic Machine Readable Passport	SIDS	Small Island Developing States
eMRTD	Electronic Machine Readable Travel Document	SLTD database	Stolen and Lost Travel Documents database
eMROTD	Electronic Machine Readable Official Travel Document	TAM	Technical Assessment Mission
FALP	Facilitation Panel	TAG/TRIP	Technical Advisory Group on the Traveller Identification Programme
EoI	Evidence of Identity	TDIA	Travel Document Issuing Authority
EU	European Union	TD3	Size 3 Machine Readable Travel Document
iAPI	Interactive Advance Passenger Information	ToRs	Terms of Reference
ICAO	International Civil Aviation Organization	TRIP	Traveller Identification Programme
ICBWG	Implementation and Capacity Building Working Group	UN	United Nations
ICCAIA	International Coordinating Council of Aerospace Industries Associations	UNHCR	Office of the United Nations High Commissioner for Refugees
INTERPOL	International Police Organization	UNCTED	United Nations Counterterrorism Executive Directorate
ILO	International Labour Organization	UNODC	United Nations Office on Drugs and Crime
IOM	International Organization for Migration	UNWTO	United Nations World Tourism Organization
ISO	International Organization for Standardization	USAP	Universal Security Audit Programme
ITF-OECD	International Transport Forum - Organisation for Economic Co-operation and Development	USOAP	Universal Safety Oversight Audit Programme
LDS	Logical Data Structure	WB	World Bank
MRCTDs	Machine Readable Convention Travel Documents	WCO	World Customs Organization
MRP	Machine Readable Passport		



## TERMS AND DEFINITIONS

### ADVANCE PASSENGER INFORMATION (API) SYSTEM.

An electronic communications system whereby required data elements are collected and transmitted to border control agencies prior to flight departure or arrival and made available on the primary line at the airport of entry.

**AUTHENTICATION.** A process that validates the claimed identity of a participant in an electronic transaction.

**AUTOMATED BORDER CONTROL (ABC).** An automated system which authenticates the electronic machine readable travel document or token, establishes that the passenger is the rightful holder of the document or token, queries border control records, then determines eligibility for border crossing according to pre-defined rules.

**BIOGRAPHICAL DATA (BIODATA).** The personalized details of the bearer of the document appearing as text in the visual and machine readable zones on the MRTD, or on the chip if present.

**BIOMETRIC.** A measurable, unique, physical characteristic or personal behavioural trait used to recognize the identity, or verify the claimed identity, of an enrollee.

**BIOMETRIC DATA.** The information extracted from the biometric and used either to build a reference template (template data) or to compare against a previously created reference template (comparison data).

**BIOMETRIC IDENTIFICATION.** A means of identifying or confirming the identity of the holder of an MRTD by the measurement of one or more properties of the holder's person.

**BIOMETRIC SYSTEM.** An automated system capable of:

- capturing a biometric sample from an end user for an MRP;
- extracting biometric data from that biometric sample;
- comparing that specific biometric data value(s) with that contained in one or more reference templates;
- deciding how well the data match, i.e. executing a rule-based matching process specific to the requirements of the unambiguous identification and person authentication of the enrollee with respect to the transaction involved; and
- indicating whether or not an identification or verification of identity has been achieved.

**BIOMETRIC VERIFICATION.** A means of identifying or confirming the identity of the holder of an MRTD by the measurement and validation of one or more unique properties of the holder's person.

**BORDER INTEGRITY.** The enforcement, by a State, of its laws and/or regulations concerning the movement of goods and/or persons across its borders.

**BREEDER DOCUMENT.** Documentation used as evidence of identity when applying for a travel document.

**COUNTERFEIT.** An unauthorized copy or reproduction of a genuine security document made by whatever means.

**DATA PAGE.** The page of the passport book, preferably the second or penultimate page, which contains the biographical data of the document holder. See "Biographical data".





**ELECTRONIC MACHINE READABLE PASSPORT (eMRP).**

A TD3 size MRTD conforming to the specifications of Doc 9303-4, which additionally incorporates a contactless integrated circuit including the capability of biometric identification of the holder. Commonly referred to as “ePassport”.

**ELECTRONIC MACHINE READABLE TRAVEL DOCUMENT (eMRTD).**

An MRTD (passport, visa or card) that has a contactless integrated circuit embedded in it and the capability of being used for biometric identification of the MRTD holder in accordance with the standards specified in the relevant Part of Doc 9303 — *Machine Readable Travel Documents*.

**ePASSPORT.** Commonly used name for an eMRP. See Electronic Machine Readable Passport (eMRP).

**FORGERY.** Fraudulent alteration of any part of the genuine document.

**GLOBAL INTEROPERABILITY.** The capability of inspection systems (either manual or automated) in different States throughout the world to obtain and exchange data, to process data received from systems in other States, and to utilize that data in inspection operations in their respective States. Global interoperability is a major objective of the standardized specifications for placement of both eye readable and machine readable data in all eMRTDs.

**HOLDER.** A person possessing an MRTD, submitting a biometric sample for verification or identification whilst claiming a legitimate or false identity. A person who interacts with a biometric system to enroll or have his identity checked.

**ICAO PUBLIC KEY DIRECTORY (ICAO PKD).** The central database serving as the repository of Document Signer Certificates (CDS) (containing Document Signer Public Keys), CSCA Master List (MLCSCA), Country Signing CA Link Certificates (LCCSCA) and Certificate Revocation Lists issued by Participants, together with a system for their distribution worldwide, maintained by ICAO on behalf of Participants in order to facilitate the validation of data in eMRTDs.

**IDENTIFICATION/IDENTIFY.** The one-to-many process of comparing a submitted biometric sample against all of the biometric reference templates on file to determine whether it matches any of the templates and, if so, the identity of the eMRTD holder whose template was matched. The biometric system using the one-to-many approach is seeking to find an identity amongst a database rather than verify a claimed identity. Contrast with “Verification”.

**IDENTITY.** The collective set of distinct personal and physical features, data and qualities that enable a person to be definitively identified from others. In a biometric system, identity is typically established when the person is registered in the system through the use of so-called “breeder documents” such as birth certificate and citizenship certificate.

**IMPOSTER.** A person who impersonates the rightful holder of a genuine travel document.

**INTERACTIVE API (iAPI) SYSTEM.** An electronic system that transmits, during check-in, API data elements collected by the aircraft operator to public authorities who, within existing business processing times for passenger check-in, return to the operator a response message for each passenger and/or crew member.

**INTERNATIONAL AIRPORT.** Any airport designated by the Member State in whose territory it is situated as an airport of entry and departure for international air traffic, where the formalities incident to customs, immigration, public health, animal and plant quarantine and similar procedures are carried out.

**INSPECTION SYSTEM.** A system used for inspecting MRTDs by any public or private entity having the need to validate the MRTD, and using this document for identity verification, e.g. border control authorities, airlines and other transport operators, financial institutions.

**INTEGRATED CIRCUIT (IC).** Electronic component designed to perform processing and/or memory functions.

**INTEROPERABILITY.** The ability of several independent systems or sub-system components to work together.

**ISSUING AUTHORITY.** The entity accredited for the issuance of an MRTD to the rightful holder.

**ISSUING ORGANIZATION.** Organization authorized to issue an official MRTD (e.g. the United Nations Organization, issuer of the laissez-passer).

**LAISSEZ-PASSER.** A document, generally similar to a passport, issued under the auspices of a supranational entity (e.g. United Nations).

**LOGICAL DATA STRUCTURE (LDS).** The Logical Data Structure describes how data are stored and formatted in the contactless IC of an eMRTD.



**MACHINE READABLE PASSPORT (MRP).** A passport conforming with the specifications contained in Doc 9303-4. Normally constructed as a TD3 size book containing pages with information on the holder and the issuing State or organization and pages for visas and other endorsements. Machine readable information is contained in two lines of OCR-B text, each with 44 characters.

**MACHINE READABLE TRAVEL DOCUMENT (MRTD).** Official document, conforming with the specifications contained in Doc 9303, issued by a State or organization which is used by the holder for international travel (e.g. MRP, MRV, MROTD) and which contains mandatory visual (eye readable) data and a separate mandatory data summary in a format which is capable of being read by machine.

**MACHINE READABLE VISA (MRV).** A visa conforming with the specifications contained in Doc 9303-7. The MRV is normally attached to a visa page in a passport.

**PERSONAL IDENTIFICATION NUMBER (PIN).** A numeric security code used as a mechanism for local one-to-one verification with the purpose to ascertain whether the card holder is in fact the natural person authorized to access or use a specific service such as the right to unlock certain information on the card.

**PERSONALIZATION.** The process by which the portrait, signature and biographical data are applied to the document.

**PKD PARTICIPANT.** An ICAO Member State or other entity issuing or intending to issue eMRTDs that follows the arrangements for participation in the ICAO PKD.

**PUBLIC AUTHORITIES.** The agencies or officials of a Contracting State responsible for the application and enforcement of the particular laws and regulations of that State which relate to any aspect of [Annex 9's] Standards and Recommended Practices.

**RISK MANAGEMENT.** The systematic application of management procedures and practices which provide border inspection agencies with the necessary information to address movements or consignments which represent a risk.

**TRAVEL DOCUMENT.** A passport or other official document of identity issued by a State or organization, which may be used by the rightful holder for international travel.

**TRIP STRATEGY.** ICAO's holistic approach to travel documents and identification matters providing a framework for achieving significant enhancements in aviation security and facilitation by bringing together the elements of identification management and in building on ICAO leadership in matters related to Machine Readable Travel Documents (MRTDs). The ICAO TRIP Strategy provides the basis for detailed work plans to be developed, commensurate with resources available, and corresponding actions to be taken.

At the centre of the ICAO TRIP Strategy is the key proposition for States, ICAO and all stakeholders to address, individually and collectively, that a holistic, coherent, coordinated approach to the interdependent elements of traveller identification management is essential, encompassing the following elements:

1. Evidence of identity: credible evidence of identity, involving the tracing, linkage and verification of identity against breeder documents to ensure the authenticity of identity;
2. Machine Readable Travel Documents (MRTDs): the design and manufacture of standardized MRTDs, including ePassports, that comply with ICAO specifications;
3. Document issuance and control: processes and protocols for document issuance by appropriate authorities to authorized holders, and controls to prevent theft, tampering and loss;
4. Inspection systems and tools: inspection systems and tools for the efficient and secure reading and verification of MRTDs, including use of the ICAO PKD; and
5. Interoperable applications: globally interoperable applications and protocols that provide for timely, secure and reliable linkage of MRTDs and their holders to available and relevant data in the course of inspection operations.

**VERIFICATION/VERIFY.** The process of comparing a submitted biometric sample against the biometric reference template of a single enrollee whose identity is being claimed, to determine whether it matches the enrollee's template. Contrast with "Identification"

**VISITOR.** Any person who disembarks and enters the territory of a Contracting State other than that in which that person normally resides; remains there lawfully as prescribed by that Contracting State for legitimate non-immigrant purposes, such as touring, recreation, sports, health, family reasons, religious pilgrimages, or business; and does not take up any gainful occupation during his stay in the territory visited.







# REGULATORY FRAMEWORK





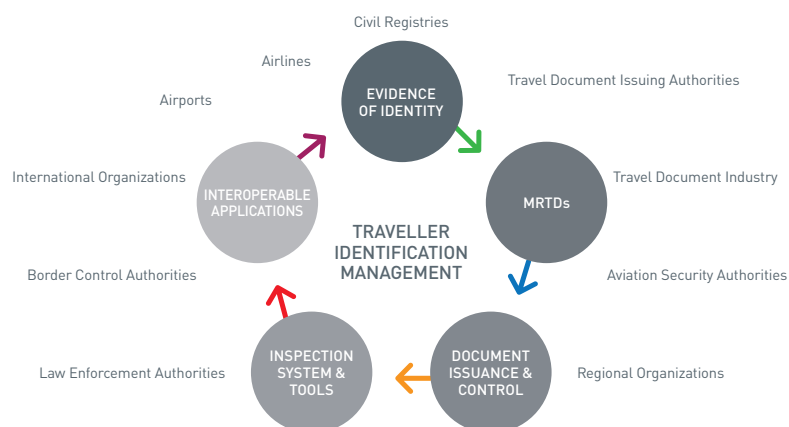
## REGULATORY FRAMEWORK

### ROLE OF INTERNATIONAL REGULATORS AND NATIONAL STAKEHOLDERS

Travel documents serve the broad transport sector by contributing to border integrity not only in air transport but also in maritime and land transport settings. These important benefits extend the contribution of ICAO TD-related activities beyond ensuring border integrity at international airports.

The TRIP Strategy provides significant enhancement for the future in both aviation security and facilitation by bringing together the elements of holistic identification management into an integrated results-oriented framework.

#### ICAO TRIP STRATEGY AND KEY STAKEHOLDERS



#### ICAO – [www.icao.int](http://www.icao.int)



The International Civil Aviation Organization is a UN specialized agency, established by States in 1944 to manage the administration and governance of the Convention on International Civil Aviation (Chicago Convention), in order

to promote the safe and orderly development of international civil aviation throughout the world. From 1974, when provisions for international aviation security were first disseminated as Annex 17 to the Chicago Convention, ICAO assumed a leadership role in developing aviation security policies and measures at the international level, including efforts to enhance the security of travel documents and to improve the training of security personnel.

ICAO's leadership and activities in travel document policy and operational matters have made a significant contribution towards the enhancement of aviation security and facilitation. This has been achieved through the development of travel document Standards and Recommended Practices (SARPs) in Annex 9, supported by the international specifications contained in Document 9303, *Machine Readable Travel Documents*, Technical Reports and other related guidance materials. In combination, these elements assist States in the implementation of effective and efficient travel document and border control systems.



Standards and Recommended Practices (SARPs) adopted by the ICAO Council under the provisions of the Chicago Convention are defined, in the case of Annex 9, as follows:

- **Standard:** Any specification, the uniform observance of which has been recognized as practicable and as necessary to facilitate and improve some aspect of international air navigation, which has been adopted by the Council pursuant to Article 54 (1) of the Convention, and in respect of which non-compliance must be notified by Contracting States to the Council in accordance with Article 38.
- **Recommended Practice:** Any specification, the observance of which has been recognized as generally practicable and as highly desirable to facilitate and improve some aspect of international air navigation, which has been adopted by the Council pursuant to Article 54 (1) of the Convention, and to which Contracting States will endeavour to conform in accordance with the Convention.



Increased cooperation with industry stakeholders and various international organizations strengthens the considerable efforts made to improve the security of travel documents and greater collaboration is being planned. Moreover, ICAO has developed technical expertise and has established working groups dedicated to machine readable travel documents and to biometric identification systems, providing greater security to travel documents and the identification of their holders.

Ultimately, the Facilitation Section, under Aviation Security and Facilitation in ICAO's Air Transport Bureau, provides assistance and support to Member States in the implementation of Annex 9 and the associated technical specifications and guidance materials. At the same time, the 2016 ICAO Assembly Resolution A39-20 "*Consolidated statement of continuing ICAO policies related to facilitation*" and the ICAO TRIP Strategy provide the strategic framework for the advancement of this work.

## CIVIL AVIATION AUTHORITIES



The appropriate authority for civil aviation is often a Directorate General of Civil Aviation (DGCA) or a Civil Aviation Authority (CAA) and is usually linked with the Ministry of Transport. The appropriate authority has several responsibilities and tasks aimed at implementing SARPs at the national level. Further, it also devises and promulgates aviation policies and regulations to comply with international obligations. The civil aviation regulatory framework normally includes developing and carrying out aviation security standards, inspection and supervision of the aviation industry, issuing licenses, aircraft registration and other permits.

As a specialist civil aviation regulator, the DGCA or CAA is an active participant, together with other national authorities, in the delivery of the TRIP Strategy as a result of its obligation to implement the SARPs found in Annex 9,

including those related to facilitating and expediting the clearance of air travellers. Among the national authorities concerned, the appropriate authority not only plays the part of general coordinator, but also is the national focal point for communications with ICAO. The DGCA has a duty to urge and help the other authorities concerned to comply with Annex 9 by adopting applicable regulations and actions to prevent unnecessary delays during border clearance operations at airports. Besides these activities, the appropriate authority has other responsibilities related to facilitation, such as setting out aviation laws and regulations involving facilitation, supporting the application of the Advance Passenger Information (API) system, and engaging with the aviation industry and other national authorities to ensure national facilitation objectives are achieved.

## TRAVEL DOCUMENT ISSUING AUTHORITIES



The authority responsible for issuing travel documents will vary from country to country, depending on national administrative arrangements and the structure of government. Usually, the national authority for issuing travel documents is the Ministry of Foreign Affairs, the Immigration Department, the Passport Office, or part of a National Police Authority. The authority is not only responsible for issuance, renewal and cancellation of passports, but is also obliged to keep abreast of technical updates to passports with regard to identity, security and operational aspects. Amongst other things, new versions of passports will use the latest security features to guard against misuse. The authority should establish transparent procedures for processing passport applications and make them available to applicants.



## BORDER CONTROL AUTHORITIES



As is the case for the travel document issuing authority, the work of border control is the responsibility of different departments in different countries. In most countries, the border control authority is the Immigration Department, the National Police Authority (Public Security) or Customs. The Customs authority is also responsible for controlling the movement of people, animals and goods into, as well as out of, the country. With regard to the TRIP Strategy, the border control authority is in charge of managing and administering the movement of travellers across national borders. The obligations of the border control authority include maintaining the integrity and security of the border area, detecting and preventing the illegal entry of aliens, and facilitating the flow of legitimate travellers in accordance with the obligations contained in Annex 9 to the Chicago Convention.

To achieve appropriate levels of security and efficiency, the border control authority should adopt proper regulations and procedures, including implementing an immigration inspection system which reasonably reduces the length and frequency of passport inspections without compromising national security objectives. In the event that fraudulent, falsified or counterfeit travel documents are detected, the border control authority should seize the documents, remove them from circulation immediately and return them to the appropriate authority of the State concerned.

## INTERNATIONAL ORGANIZATIONS WORKING CLOSELY WITH ICAO ON FACILITATION MATTERS

**INTERPOL –**  
[www.interpol.int](http://www.interpol.int)



**INTERPOL**

The International Criminal Police Organization (INTERPOL) is an intergovernmental organization and the largest international police organization in the world. Its operations span 190 countries. Officially created in 1923 as the International Criminal Police Commission, the organization became known as INTERPOL in 1956. Its mission is to enable police all over the world to work together to fight international crime. The organization employs the latest technology in its operations, which ensures the ability to contend with 21<sup>st</sup> Century crime. To support the police worldwide, INTERPOL works to ensure that they have access to the tools and services necessary to do their jobs effectively. It provides targeted training, expert investigative support, relevant data and secure communication channels.

Around the world, police forces are involved with the monitoring and surveillance of individuals suspected of criminal activity, maintenance of identification databases, and control of the movement of people across country borders. INTERPOL contributes by maintaining an identification system that specifically targets criminals, wanted, and missing persons and by facilitating the use of MRTDs through the operation of its Stolen and Lost Travel Documents (SLTD) database.

**IOM – [www.iom.int](http://www.iom.int)**



Established in 1951, the International Organization for Migration (IOM) is the leading inter-governmental organization for migration, encompassing 166 Member countries, with offices located in some 100 countries. Its mission is the promotion of humane and orderly migration through the provision of advice and services to governments.

The IOM works within a four-tiered framework that involves migration and development, forced migration, regulation of migration, and the facilitation of migration. This requires that the IOM engage in activities in migration law, migrant health, the protection of migrant rights, and policy guidance, especially for governments. The inclusion of these elements within its programmes means that the IOM contributes fully to the promotion of international cooperation.



tion on issues of migration and develops practical solutions to issues of migration. Biometric information from the IOM has the capacity to enhance the efficacy of MRTDs. These issues fall within the mandate of the IOM, and are elaborated upon at the IOM website ([www.iom.int](http://www.iom.int)).

## ISO – [www.iso.org](http://www.iso.org)



International  
Organization for  
Standardization

The International Organization for Standardization (ISO) is a non-governmental organization, working independently towards the development of international standards and innovative solutions to challenges on a global scale. It has members from 164 countries and 3897 technical bodies. Its operations are guided by an efficient system of governance with its central secretariat based in Geneva.

Since 1947, when the organization officially began operations, the ISO has developed more than 21 000 international standards, which cover numerous industries. The standards impact on sectors such as technology, healthcare, agriculture and food safety. Essentially, the ISO collaborates with ICAO to maintain and develop the international technical specifications relating to MRTDs which are published in ICAO's Doc 9303, *Machine Readable Travel Documents*.

## ITF-OECD – [www.itf-oecd.org](http://www.itf-oecd.org)



Created in 2006, the International Transport Forum (ITF) at the Organisation for Economic Co-operation and Development (OECD) is an intergovernmental organization composed of 59 member countries, which acts as a think-tank for transport policy. ITF is the only global body that covers all transport modes and it provides insights on issues related to transport policy. While administratively integrated with the OECD, the ITF is politically autonomous.

The primary objectives guiding the work of the ITF revolve around concepts of social inclusion, prosperity, sustainable development, and the achievement of well-being for

human life. In order to accomplish this role, the ITF emphasizes the need for evidence-based policy as well as the implementation of technology-based improvements to transport. The ITF organizes the Annual Summit of transport ministries, which offers an appropriate forum for debate on emerging technologies and related issues on international transport and transport security. The summit is crucial for debating the implementation of MRTDs in individual countries, as well as enabling the presentation of evidence to support the implementation of technological advancements.

## OSCE – [www.osce.org](http://www.osce.org)



Organization for Security and  
Co-operation in Europe

The Organization for Security and Cooperation in Europe (OSCE) consists of 54 States from North America, Europe, and Asia, which makes it the largest regional security organization. The organization provides a forum for dialogue on security issues, which enables the pursuit of joint action for the improvement of the lives of communities and individuals.

The pursuit of the security mandate within the OSCE depends on its units of experts, its extensive network, and the individual institutions that comprise the entire organization. The primary issues it addresses include arms control, human trafficking, terrorism, and energy security. The maintenance of partnerships with countries in the Asian and Mediterranean regions further enhances its capability to accomplish the policy goals of the organization. The extensive reach of the OSCE is crucial to the TRIP Strategy, because collaboration yields a wide range of security intelligence that enhances the efficiency of the MRTDs, especially in relation to their applicability in Customs matters. OSCE is also active in the fields of identity and border management, key components of the TRIP Strategy.

## UNCTED – [www.un.org/sc/ctc](http://www.un.org/sc/ctc)

In 2004, under Resolution 1535 adopted by the United Nations Security Council, the United Nations Counter-Terrorism Executive



Directorate (UNCTED) was established to assist the work of the Counter-Terrorism Committee (CTC), which is a sub-



subsidiary body of the United Nations Security Council created to enhance the legal and institutional ability of countries to counter terrorist activities, and coordinate the process of monitoring the implementation of Resolution 1373 (2001). Pursuant to the Security Council Resolution 2129 (2013), CTED's mandate was extended until the end of 2017.

CTED is divided into two sections. One section is the Assessment and Technical Assistance Office (ATAO), which is comprised of five technical groups dealing with technical assistance, terrorist financing, border control, arms trafficking and law enforcement; general legal issues, including legislation, extradition and mutual legal assistance and finally, issues raised by Resolution 1624 (2005), as well as the human rights aspects of counter-terrorism in the context of Resolution 1373 (2001). The second section is the Administrative and Information Office (AIO), which consists of a quality control unit to improve the technical quality and consistency in the language and format of CTED documents and a public communications and outreach unit to strengthen its outreach activities. The ICAO Secretariat works closely with CTED across a range of security and counter-terrorism initiatives that flow from the relevant Security Council Resolutions and which relate to ICAO's work on aviation security and facilitation, including the TRIP Strategy.

### UNHCR – [www.unhcr.org](http://www.unhcr.org)

The office of the United Nations High Commissioner for Refugees (UNHCR) is the UN's Refugee Agency and is dedicated to the protection of rights and saving lives while building better future conditions for stateless people, refugees, and displaced communities. It is governed by the UN General Assembly and the Economic and Social Council (ECOSOC). Since 1950, the organization has worked to fulfil its mandate to ensure that every person has the right to seek asylum and refuge in their flight from persecution, war, or disaster. Today, UNHCR has dedicated staff in 128 countries around the world, from major capitals to remote and often dangerous locations, specializing in a wide range of disciplines, including legal protection, administration, community services, public affairs and health.



The UNHCR collaborates with ICAO on an ongoing basis and with a particular focus on the travel documentation for stateless people and refugees. In 2012, this collaboration enabled the development of the joint UNHCR/ICAO Guide for Issuing Machine Readable Convention Travel Documents for Refugees and Stateless Persons.



### UNWTO – [www2.unwto.org](http://www2.unwto.org)

The United Nations World Tourism Organization (UNWTO) is the UN agency responsible for the promotion of responsible, sustainable and universally accessible tourism. The composition of the WTO includes both countries and private sector members, tourism associations and local tourism authorities, including 157 countries and some 500 affiliate members. The core concept guiding the operations of the agency is the advancement of tourism as a driver of economic growth, sustainability of the environment, and inclusive development for member countries.

Through the range of internal policies developed over the years, the WTO has the capacity to advance socio-economic development as well as enhance the monitoring of tourist movement on an international scale. The technical collaborations that are an essential part of its organizational functions ensure special attention is dedicated to developing nations, especially in cases where MRTD implementation is hindered by a lack of resources.

### WORLD BANK GROUP –

[www.](http://www.worldbank.org)

[worldbank.org](http://worldbank.org)



**WORLD BANK GROUP**

Established in 1944, the World Bank Group is a consortium of five individual organizations: the International Bank for Reconstruction and Development, the International Development Association, the International Finance Association, the Multilateral Investment Guarantee Agency, and the International Centre for Settlement of Investment



Disputes. This unique partnership is aimed at reducing poverty and supporting development, with the ambitious goals to end extreme poverty within a generation and boost shared prosperity.

With 189 Member countries, the World Bank Group handles development activities and policy implementation as well as the provision of information services to the community. The activities of the Group foster development in areas of technology, social services, and infrastructure. Through its activities, the Group monitors and regulates the activities of various governments. Through auditing and lending to governments, the Group has the power to implement policies that are meant to benefit the population. The launch of Open Development in 2010 has fostered innovation and research, while also facilitating financing. Under the Identification for Development project, the Group promotes the development of effective security systems by governments. The project introduces the use of identification systems and machine readable identification documents, which supports the execution of MRTDs and related standards.

## WCO – [www.wcoomd.org](http://www.wcoomd.org)

Established in 1952 as the Customs Co-operation Council (CCC), the World Customs Organization (WCO) is an independent intergovernmental body whose mission is to enhance the effectiveness of Customs administrations. The membership of the WCO spans 180 administrations, processing about 98% of the total trade taking place across the globe. As the global centre of Customs expertise, the WCO is the only international organization with competence in Customs matters and can rightfully refer to itself as the voice of the international Customs community.



The pursuit of its mandate is driven by a number of instruments such as conventions and training, which is guided by the Secretariat. The Secretariat is comprised of over 100 officials whose technical expertise is vital for the effective functioning of the council. The role of the Secretariat is to support the efforts of Members in modernizing and improving the quality of local Customs. The WCO also acts to prevent fraudulent activities by promoting transparency and predictable environments in Customs. This is regarded as integral to the development of internal security and the

generation of Customs information to detect threats and provide advance passenger information (API).

## ACI – [www.aci.aero](http://www.aci.aero)



Airports Council International (ACI) acts as the single trade representative body for the airports of the world. The organization was established in 1991, and seeks to represent the interests of airports to governments and international organizations Council involved in the civil aviation sector, including ICAO.

ACI provides opportunities for training, while developing standards and policies that are recommended for the operation of airports. In consequence, the organization represents the concerns of world airport authorities, while providing guidelines that help the organizations in their day-to-day operations.

ACI is involved in airport facilitation, which covers the management of passenger flow and cargo movement, in addition to responding to customer expectations. The organization develops airport service quality initiatives, including the implementation of passenger security screening. ACI is also committed to the passenger journey, and advocates biometric passenger tracking and airport passenger information accessibility through an open system. Consequently, the actions of ACI interact with ICAO in advancing interoperable API and the development and application of MRTD systems in airports globally.

## IATA – [www.iata.org](http://www.iata.org)

The International Air Transport Association (IATA) is the trade association for the world's airlines, with a membership of 265 airlines that handle approximately



83% of the total air traffic globally. The mission of IATA is to represent and serve the airline industry, while pursuing the vision to achieve innovation for a profitable and sustainable airline industry that is globally connected. In existence for more than 70 years, IATA actively engages in the development of global commercial standards upon which airline industry operations are built. The activities and policies simplify processes, increasing efficiency and reducing costs, while also improving convenience for the passenger.



The adoption of identification systems and machine readable documentation supports the objectives of security and efficiency. IATA is very actively engaged in efforts to both enable and improve passenger data exchange. Accordingly, IATA has developed a toolkit that facilitates understanding of the global framework and requirements for passenger data transmission. ICAO, IATA and the WCO work closely to develop and manage the global guidelines and requirements for passenger data exchange, including Advance Passenger Information (API).

## STRATEGIC OBJECTIVE C - AVIATION SECURITY AND FACILITATION

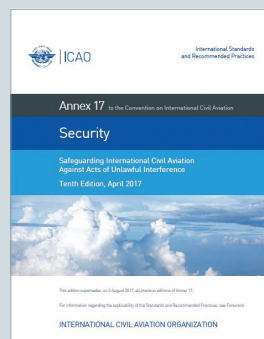
The air transport system and the aviation industry's well-being constitute a global good and a shared responsibility of the international community, due to their strategic relevance for societies and economies of all countries in the world. Passenger facilitation, ease of mobility and connectivity, are important to the development of the global economy.

Travel documents (TDs), comprising passports and other identity documents which may be used for international travel, underpin the ideals of international civil aviation, cooperation and trust because they are used to readily and reliably confirm the identity of persons, and thereby enable seamless and secure international travel. TDs are, however, only as satisfactory as the identification-related systems behind their production, issuance, control and inspection.

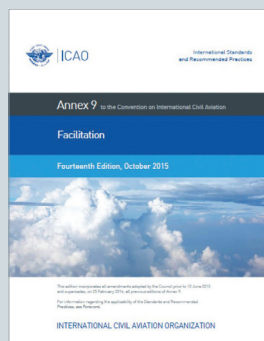
A wide array of Member State authorities and/or ministries and other entities have mandates and interests in traveller identification, including State-level, regional and international organizations concerned with issues such as:

- Passport issuance
- Visa issuance
- Security
- Business and leisure travel
- Trade and tourism
- Immigration/migration
- Border controls
- Law enforcement/anti-crime
- Treaties – human rights, refugees, stateless persons
- Civil registries
- Special events
- Emergencies

It is therefore important to implement procedures, mechanisms and cooperative actions which, pursuant to the **Convention on International Civil Aviation, 1944** (Chicago Convention) and its Annex 9, strengthen the capacity of States to assess and manage impediments to the facilitation of international air transport, thereby enabling legitimate and efficient passenger flows.



**Annex 17, Security – Safeguarding International Civil Aviation Against Acts of Unlawful Interference** sets out the standards and recommended practices and procedures to prevent and suppress acts of unlawful interference against civil aviation. It provides a broad mandate for ICAO to develop and promote measures that can achieve these objectives, including aspects of traveller identification that are of relevance to the achievement of security aims.



**Annex 9 – Facilitation** sets out the international framework of Standards, Recommended Practices and procedures on Facilitation under the aegis of Article 37 of the Convention, which provides, inter alia that “the International Civil Aviation Organization shall adopt and amend from time to time, as may be necessary, international standards and recommended practices and procedures dealing with...customs and immigration procedures...and such other matters concerned with safety, regularity and efficiency of air navigation as may from time to time appear appropriate”.



**Annex 9 – Facilitation** is based on 10 articles of the Chicago Convention which require that the civil aviation community comply with laws governing the inspection of aircraft, cargo and passengers by authorities concerned with customs, immigration, agriculture and public health:

- **Article 10:** Landing at customs airport
- **Article 13:** Entry and clearance regulations
- **Article 14:** Prevention of spread of diseases
- **Article 22:** Facilitation of formalities
- **Article 23:** Customs and immigration procedures
- **Article 24:** Customs duty
- **Article 29:** Documents carried in aircraft
- **Article 35:** Cargo restrictions
- **Article 37:** Adoption of international standards and procedures
- **Article 38:** Departures from international standards and procedures

The General Principles of Annex 9 require Member States to take the necessary measures to minimize the time required for the accomplishment of border controls, minimize the inconvenience caused by the application of administrative and control requirements, foster and promote the exchange of relevant information between Member States, and develop effective information technology to increase the efficiency and effectiveness of their procedures at airports.

Chapter 3 of **Annex 9, Entry and Departure of Persons and their Baggage**, sets the regulatory framework that is the backbone of the ICAO TRIP Strategy. Chapter 8 of Annex 9, Other Facilitation Provisions, sets out the requirements for key mechanisms to enable implementation such as National Air Transport Facilitation Committees, Airport Facilitation Committees, and national air transport facilitation programmes. Moreover, these key mechanisms encourage cooperation between ministries and are a powerful means of coordinating activities between government departments and agencies concerned with or responsible for the various aspects of facilitation of civil aviation, besides playing a significant role in promoting the ICAO TRIP Strategy.

Annex 9 also establishes that no documents other than those provided for in Annex 9, Chapter 3, shall be required by Contracting States of visitors for entry into and departure from their territories. Some of the elements of the ICAO TRIP Strategy are already supported by the Standards or Recommended Practices in Annex 9; it is worth mentioning the ICAO Public Key Directory (PKD), Machine Readable Passports (MRPs) and Advanced Passenger Information (API).

## HOW ICAO ENVISIONS THE FUTURE OUTCOMES OF THE TRIP STRATEGY



### THE ICAO COUNCIL

The 37<sup>th</sup> Session of the ICAO Assembly (28 September - 8 October 2010) urged Member States to intensify their efforts to safeguard the security and integrity of breeder documentation and requested that the Council take appropriate measures to establish guidance. Travel documents are recognized as a matter of strategic importance for international civil aviation under ICAO's Council-approved Strategic Objective C-Security and Facilitation. Direction having been given, ICAO's activities have been positioned to provide Member States with the necessary focus, orientation and support.

During the 38<sup>th</sup> Session of the ICAO Assembly (24 September - 4 October 2013), Member States adopted the **ICAO Traveller Identification Programme (ICAO TRIP) Strategy**, aiming to:

1. Establish the goal and objectives of traveller identification management
2. Lead and reinforce a global approach, entailing five closely linked and mutually-complementary identification management activities:
  1. Evidence of Identity
  2. Machine Readable Travel Documents (MRTDs)
  3. Document Issuance and Control
  4. Inspection Systems and Tools
  5. Interoperable Applications
3. Provide direction for action by ICAO, States and the many international, regional and industry partners in identification management.



The first overall outcome and milestones of the ICAO TRIP Strategy for a triennium (2014-2016) were approved as follows:

OUTCOME	MILESTONES
Holistic identification management	Identification management as a best practice
Completion of Machine Readable Passports (MRPs) implementation	Only MRPs issued
Compliance with travel document Standards and specifications (Annex 9 and Doc 9303)	Developed Doc 9303 compliance mechanism
Implementation of ePassports	Established ICAO model roadmaps and ePassport Standard
Travel document inspection using Automated Border Control (ABCs) gates	Expanded use of ABCs
Maximize level of ICAO PKD participation	Increased number of PKD participants

In taking account of the A38 outcome, the importance of having an ICAO TRIP work programme was discussed and reconfirmed at the 22<sup>nd</sup> Meeting of the Technical Advisory Group on Machine Readable Travel Documents (TAG/MRTD/22), held from 21-23 May 2014, in Montréal. Following the Secretariat's initiative outlined in the ICAO "Update on Non-Compliant Machine Readable Passports (MRPs)", a timeframe was established for the Secretariat, in close cooperation with the TAG/MRTD and its working groups, to draft and finalize the work plan, for submission to the Secretary General for approval.

The TAG/MRTD/22 also reconfirmed TAG's central role in supporting the Secretariat in the global implementation of the ICAO TRIP Strategy. The meeting endorsed the new Terms of Reference (ToRs) of the TAG and changed its name to the TAG/TRIP, in order to fully align it with the enhanced scope of the TRIP strategy, beyond the former MRTD Programme. The TAG/MRTD/22 also noted that successful implementation of the ICAO TRIP Strategy would require a coherent communications strategy, thus the importance of having the ICAO TRIP Strategy work programme address communications issues, including articulating key messages and ways of delivering them to principal audiences.

Some of the ICAO TRIP Strategy outcome for the triennium 2014-2016 presented rather broad indications of scope instead of being results-oriented outcomes. Consequently, the work programme needed to articulate each outcome in detail, clarifying the scope, outlining activities and defining the outcomes in results-oriented language.

During the 39<sup>th</sup> Session of the ICAO Assembly (27 September – 6 October 2016), Member States adopted the priorities

for the Facilitation Programme, including the ICAO TRIP Strategy, and the expected outcome for the 2017-2019 triennium. These included developments pertaining to the current status of the ICAO TRIP Strategy, assistance activities, and the relationship between the ICAO TRIP and the United Nations agenda. More extensively, the Assembly Resolution A39/20 – *Consolidated statement of continuing ICAO policies related to facilitation*, identified national and international action in ensuring the security and integrity of traveller identification and border controls. Specifically, the Assembly urged Member States, through their travel document and border control programmes, to uniquely identify individuals to maximize security and facilitation benefits, including preventing acts of unlawful interference and other threats to civil aviation.



THE 39<sup>th</sup> SESSION OF THE ICAO ASSEMBLY

In addition, short term milestones have been identified to help provide focus and direction for activities related to each objective for the current triennium. Achieving them lays the foundation for achieving mid-term and long-term objectives in the future. The ICAO TRIP Strategy priorities and outcome for 2017-2019 are endorsed and split as indicated in page 27:



PRIORITY/KEY ACTIVITY	OUTCOME
Development of an ICAO TRIP Roadmap.	Implementation of the roadmap and corresponding risk analysis documents.
Enhanced recognition of ICAO leadership of the ICAO TRIP Strategy through international cooperation (including the UN system) and coordination of regional activities.	Improved service delivery to States through efficient coordination and cooperation.
Development of capacity-building and assistance (through the ICAO Resource Mobilization Strategy).	Identification of potential donors and development of specific projects for voluntary funds and/or grants for the provision of technical assistance for the States and management of donor-funded assistance projects.
Promotion and communication to States of the five elements of the ICAO TRIP Strategy by ensuring increased visibility and wider distribution of the guidance material.	Symposia and regional seminars; development of a compendium of all TAG/TRIP activities and outputs.
Evidence of Identity (Eoi)	
Determination of Best Practices and guidance material on evidence of identity.	Approved Evidence of Identity guide developed.
Machine Readable Travel Documents (MRTDs)	
Assistance to States for the completion of Machine Readable Passport (MRP) implementation.	Identification of issues encountered by States in implementing MRPs and determination of type of assistance to be provided.
Development and update of travel document specifications, as well as guidance material on MRTDs.	Amendments to travel document specifications (Doc 9303) and publication of Doc 9303 revisions as required.
Machine Readable Convention Travel Documents (MRCTDs).	Update the Guide for Issuing MRCTD for Refugees and Stateless Persons to include new Annex 9 Standard 3.12.
MRTD-related Universal Security Audit Programme (USAP) audit questions.	Evaluation and adjustment of audit questions as and if required.
Document Issuance and Control	
Development of the Doc 9303 Compliance Programme.	Development of assessment guidelines and a protocol questionnaire for the assessment of the testing entities.
Inspection Systems and Tools	
Cost-benefit analysis (CBA) template for PKD participation in coordination with Automated Border Control (ABC) and ePassport implementation.	Assessment tool for States willing to implement PKD in line with ePassport issuance and ABC gates implementation.
Development of specifications for Inspection Systems and Tools.	Improve the involvement of border officials in the work of the TAG/TRIP on border management.
Interoperable Applications	
Passenger Data exchange.	Increased outreach to States on Advanced Passenger Information (API) and Passenger Name Record (PNR) programmes through collaboration with the World Customs Organization (WCO), International Air Transport Association (IATA) and United Nations Counter-Terrorism Committee Executive Directorate (UNCTED).
INTERPOL Stolen and Lost Travel Document (SLTD) database.	Promotion of data submission to the SLTD and its use for checking passports during border controls.



Among those priorities, the ICAO TRIP Roadmap was approved by the ICAO Air Transport Committee (ATC) at its January 2017 session with the aim of assisting States in their implementation of the TRIP Strategy at the national level. In the context of ICAO's No Country Left Behind initiative, the roadmap is designed to assist Member States with the task of identifying individuals and enhancing the security and integrity of their travel documents and border controls.



THE PRESIDENT OF THE COUNCIL OF ICAO DURING THE TRIP REGIONAL SEMINAR IN ANTIGUA, IN JANUARY 2017



THE SECRETARY GENERAL OF ICAO DURING THE TRIP REGIONAL SEMINAR IN HONG KONG, IN JULY 2017

ICAO's leadership is essential to the successful achievement of the roadmap's objectives, focusing on enhancing aviation security and improving facilitation by providing States with a blueprint that sets out the elements that must be in place. To this end, there is a need to ensure both national coordination and international cooperation for the effective implementation of the following roadmap objectives (deliverables and timeframe described in annex C of the AT-WP/2138):

- a) strengthen relevant national authorities to accomplish these objectives;
- b) promote effective application of ICAO SARPs of Annex 9 – Facilitation;

- c) develop a policy framework that will address all the elements of the ICAO TRIP Strategy;
- d) establish a National Air Transport Facilitation Programme and associated committees;
- e) strengthen, as appropriate for each State, breeder and travel document security, passenger screening procedures and biometric information systems;
- f) nominate a national focal point for the exchange of information on facilitation matters;
- g) assure systematic collaboration between the authorities at points of departure and arrival with a view to developing compatible and efficient border control management;
- h) evaluate the creation of specialized operations centres in each State for timely information exchange, with full respect for domestic laws on protection and confidentiality of personal information;
- i) encourage the development of joint efforts at the sub-regional, regional, interregional and global levels to support the development of institutional capacity for facilitation matters; share best practices in a range of areas related to civil aviation, such as document security and fraud detection, inspection techniques;
- j) broaden existing cooperation mechanisms among Member States, international and regional organizations and the civil aviation industry, for information exchange in order to allow early detection of security threats to passenger security and the industry's well-being;
- k) transmit, in a timely manner, passengers' information prior to takeoff to effectively support screening at the destination airport, while preserving their individual rights, as well as develop and improve compatible systems for the collection and use of API and PNR information;
- l) commit to report on a regular basis, lost and stolen passports, to the extent possible, to the INTERPOL Stolen and Lost Travel Documents Database;
- m) exchange studies and evaluations on investigative techniques and professional training;
- n) undertake significant and coordinated outreach actions with neighbouring States to improve facilitation measures, methods, and frameworks; and
- o) provide appropriate training to the specialized personnel dealing with travel facilitation.

The Roadmap will be adjusted with inputs from the Facilitation Panel and the TAG/TRIP experts at least once every other year before being submitted to the Secretary General for approval, and a high-level update on the status of the roadmap will be provided to the ATC on a regular



basis. A mechanism will need to be developed to monitor the implementation by States of the objectives expressed above for the TRIP roadmap.

In the same context, discussions have been conducted to develop, in parallel, a resource mobilization strategy involving Member States, international and regional organizations, manufacturers and stakeholders, in order to provide States with technical assistance including funding, capacity-building and technology transfer.

The Secretariat continues to undertake existing activities to support Member States, such as arranging the annual TRIP Symposium and Exhibition in Montréal, publishing the ICAO TRIP Magazine twice per year, maintaining and developing the new online secure TRIP Platform for stakeholders, while more targeted assistance will be provided by each Regional Office.



**12<sup>th</sup> ANNUAL ICAO TRAVELLER IDENTITY PROGRAMME (TRIP) SYMPOSIUM – THE WORLD’S FOREMOST TRAVEL DOCUMENT SECURITY AND TRAVEL IDENTIFICATION EVENT WAS ATTENDED BY OVER 550 PARTICIPANTS AT ICAO HEADQUARTERS.**

In addition to the existing ICAO mechanisms such as the Facilitation Panel (FALP), the Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP) and its working groups and the ICAO Public Key Directory (PKD), the ICAO Secretariat is developing and consolidating its working arrangements with a number of international organizations that have a key role to play in the implementation of the TRIP Strategy.

This is done through the establishment of new or updated Memoranda of Understanding (MoUs) with organizations such as the International Organization for Standardization (ISO), the International Organization for Migration (IOM), the International Criminal Police Organization (INTERPOL), the United Nations Office on Drugs and Crime (UNODC) and the Organization for Security and Cooperation in Europe (OSCE).



**THE SECRETARY-GENERAL OF ICAO, FANG LIU (CENTRE) AND THE SECRETARY-GENERAL OF INTERPOL, JÜRGEN STOCK (SECOND FROM LEFT), ON THE OCCASION OF THE BILATERAL MEETING HELD ON 28 JUNE HEADQUARTERS OF INTERPOL IN LYON (FRANCE).**

Other key stakeholder organizations include the International Air Transport Association (IATA), the World Customs Organization (WCO), the World Bank Group (WB), the Organization for Economic Co-operation and Development (OECD) and relevant UN entities such as the Counter-Terrorism Committee Executive Directorate (CTED), the Office of the United Nations High Commissioner for Refugees (UNHCR) and the World Tourism Organization (UNWTO).



**ICAO AIR TRANSPORT BUREAU DIRECTOR, BOUBACAR DJIBO, AND IOM'S HEAD OF IMMIGRATION AND BORDER MANAGEMENT, FLORIAN G. FORSTER EXCHANGING THE SIGNED AGREEMENT DURING A SPECIAL CEREMONY.**

Five Memoranda of Understanding or Cooperation have been signed between ICAO and other organizations in relation inter alia to facilitation matters:

1. **INTERPOL:** this MoU, originally signed in 2000, is being updated to refer to the ICAO TRIP Strategy and with the objective of providing a framework for cooperation in areas related to aviation security, facilitation and border management with the view to contributing to the sustainable development of air transport, the strengthening of national security and the prevention of transnational crimes.



2. **IOM:** MoU signed in November 2016 to provide a framework for activities related to air transport, migration and border management with the view to contributing to the sustainable development of air transport, passenger travel facilitation and better management of migratory movements.
3. **OECD-ITF (International Transport Forum):** MoU signed in June 2015 in order to strengthen collaboration in areas of mutual interest including the security and facilitation of travellers, pursuant to the requirements of Annex 9 and Annex 17.
4. **UNWTO:** MoU signed in 2010 to strengthen collaboration and identify specific areas of mutual interest such as security and facilitation of travellers, and also to develop and implement specific projects in these areas.
5. **WCO:** MoU signed in June 2011 to strengthen technical cooperation and the exchange of information in areas such as air cargo security, border management, customs procedures, passenger data and other relevant activities.

As part of the coordination with the UN Security Council Global Strategy, ICAO actively participates in the work associated with the implementation of UN Security Council Resolutions 1373 (2001), 1624 (2005), 2178 (2014) and 2309 (2016).



THE SECRETARY-GENERAL OF THE INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO), FANG LIU, BRIEFED THE UN COUNTER-TERRORISM COMMITTEE (CTC) ON ICAO'S POLICIES, PROGRAMMES, AND PRIORITIES IN THE FIELD OF SECURITY AND COUNTER-TERRORISM, ON 23 JUNE 2016, IN NEW YORK.

## ANNEX 9 – FACILITATION (14<sup>th</sup> EDITION, 2015): STANDARDS AND RECOMMENDED PRACTICES (SARPS) RELEVANT TO THE ICAO TRIP STRATEGY

### AMENDMENT 25 TO ANNEX 9 – IMPACT ON THE IMPLEMENTATION OF THE TRIP STRATEGY BY MEMBER STATES

Amendment 25 to ICAO's Annex 9 – Facilitation became effective on 25 October 2015. Amongst other things, the amendment related to assistance to aircraft accident victims and their families, Machine Readable Travel Documents (MRTDs), cargo facilitation and INTERPOL's Stolen and Lost Travel Documents (SLTD) database. As with all changes to Annex 9, the amendment had a direct bearing on the delivery of elements of the TRIP Strategy.

Amendment 25 included a new Standard to require States to promptly report accurate information about stolen, lost, and revoked travel documents, issued by their State, to INTERPOL for inclusion in the Stolen and Lost Travel Documents (SLTD) database. At the same time, a new Recommended Practice provided for States to, as far as practicable, query at entry and departure border control points the travel documents of individuals travelling internationally against the INTERPOL Stolen and Lost Travel Documents (SLTD) database. For States that were not already reporting such information to INTERPOL, it was proposed that information be submitted directly to the SLTD database by INTERPOL National Central Bureaus and law enforcement agencies using INTERPOL's "I-24/7" secure global police communication system. ICAO Member States that were not INTERPOL member States should consider joining INTERPOL or explore with INTERPOL the establishment of administrative arrangements to enable the submission of information to the SLTD. In July 2017, ICAO further reminded States of these provisions in a special State Letter (EC 6/3 – 17/92) and sought feedback on implementation by means of a short questionnaire.

Also included in Amendment 25 were developments of the Recommended Practices regarding the use of the ICAO Public Key Directory. Contracting States issuing or intending to issue eMRTDs should join the ICAO Public Key Directory (PKD) and upload their information to the PKD. States implementing checks on eMRTDs at border controls should join the ICAO Public Key Directory (PKD) and use the information available from the PKD to validate eMRTDs at border controls.



A significant enhancement introduced by Amendment 25 was the addition of a Standard requiring States to ensure that travel documents for refugees and stateless persons (“Convention Travel Documents”) are machine readable, in accordance with the specifications of Doc 9303. (“Convention Travel Documents” are provided for in the 1951 Convention Relating to the Status of Refugees and the 1954 Convention Relating to the Status of Stateless Persons.) As States are already required to issue passports that are machine readable, the necessary State-led infrastructure and processes should already be in place. However, the requirement for Convention Travel Documents (CTDs) to now conform to the specifications in Doc 9303 will involve, as a minimum, the modification of national laws and State-level CTD-issuance procedures and materials to comply with Doc 9303 and the training of staff to implement new procedures. To further assist States with the implementation of these requirements, the joint ICAO/UNHCR Guide for Issuing Machine Readable Convention Travel Documents for Refugees and Stateless Persons (February 2017 edition) provides detailed information for the agencies responsible for issuing CTDs.

Amendment 25 also provided the opportunity to introduce a definition of necessary precautions to aid the task to be performed by aircraft operators under the Standard that requires them to take necessary precautions at the point of embarkation to ensure that persons are in possession of the documents prescribed by the States of transit and destination for control purposes as described in Chapter 3 of Annex 9. As such, necessary precautions are defined as: ‘Verifications carried out by adequately trained staff members of the aircraft operator or the company operating on behalf of the aircraft operator, at the point of embarkation, in order to ensure that every person holds a valid travel document and, where applicable, the visa or residence permit required to enter the State of transit and/or receiving State. These verifications are designed to ensure that irregularities (e.g. obvious document alteration) are detected.’ This addresses an important part of the operational process relating to border controls and facilitation.

Finally, Amendment 25 adjusted the Recommended Practice which states that if any fee is charged for the issue, renewal or replacement of a travel document, the amount of such fee should not exceed the cost of the operation. The adjustment had the effect of including replacement travel documents in addition to documents being issued or renewed.

48 SARPs in the Fourteenth Edition of Annex 9 (Amendment 25, October 2015) are identified as being related to the elements of the TRIP Strategy:

1. **Evidence of Identity (Eoi):** “credible evidence of identity, involving the tracing, linkage and verification of identity against breeder documents to ensure the authenticity of identity.”

Related Annex 9 SARPs: None

2. **MRTDs:** “the design and manufacture of standardized MRTDs, including ePassports, that comply with ICAO [Doc 9303] specifications.”

Related Annex 9 SARPs:

5 Standards and 4 Recommended Practices

## 5 STANDARDS

3.4	Contracting States shall not extend the validity of their machine readable travel documents.
3.11	All passports issued by Contracting States shall be machine readable in accordance with the specifications of Doc 9303, Part 4.
3.12	Contracting States shall ensure that travel documents for refugees and stateless persons (“Convention Travel Documents”) are machine readable, in accordance with the specifications of Doc 9303.
3.14	When issuing passports that are not machine readable, Contracting States shall ensure that the personal identification and document issuance data and the format of the data page conform to the specifications for the “visual zone” set forth in Doc 9303, Part 4. The “machine readable zone” area shall be filled with words such as “this passport is not machine readable” or other data to preclude fraudulent insertion of machine readable characters.
3.66	If Contracting States issue Crew Member Certificates, then these shall be issued only in the form of machine readable cards in accordance with the specifications of Doc 9303, Part 5.



## 4 RECOMMENDED PRACTICES

3.9	Contracting States should incorporate biometric data in their machine readable passports, visas and other official travel documents, using one or more optional data storage technologies to supplement the machine readable zone, as specified in Doc 9303, <i>Machine Readable Travel Documents</i> . The required data stored on the integrated circuit chip is the same as that printed on the data page, that is, the data contained in the machine-readable zone plus the digitized photographic image. Fingerprint image(s) and/or iris image(s) are optional biometrics for Contracting States wishing to supplement the facial image with another biometric in the passport. Contracting States incorporating biometric data in their Machine Readable Passports are to store the data in a contactless integrated circuit chip complying with ISO/IEC 14443 and programmed according to the Logical Data Structure as specified by ICAO.
3.13	When issuing identity documents or visas accepted for travel purposes, Contracting States should issue these in machine readable form, as specified in Doc 9303.
3.27	When issuing visas that are not machine readable, Contracting States should ensure that the personal and issuance data in such documents conform to the specifications for the visual zone of the machine readable visa, as set forth in Doc 9303, Part 7.
3.67	To the extent that aircraft operators issue crew identity cards, Contracting States should require the production of such identity documents in the format shown in Appendix 7, i.e. in the same layout as the visual zone of the machine readable crew member certificate and having the capability to support machine assisted identity confirmation and document security verification.

- 3. Document Issuance and Control:** “processes and protocols for document issuance by appropriate authorities to authorized holders, and controls to prevent theft, tampering and loss.”

### Related Annex 9 SARPs:

11 Standards and 7 Recommended Practices

## 11 STANDARDS

3.3	Contracting States that use integrated circuit (IC) chips or other optional machine readable technologies for the representation of personal data, including biometric data, in their travel documents shall make provision whereby the encoded data may be revealed to the holder of the document upon request.
3.7	Contracting States shall regularly update security features in new versions of their travel documents, to guard against their misuse and to facilitate detection of cases where such documents have been unlawfully altered, replicated or issued.
3.8	Contracting States shall establish controls to safeguard against the theft of their blank travel documents and the misappropriation of newly issued travel documents.
3.8.1	Contracting States shall establish appropriate controls over the entire travel document application, adjudication and issuance processes to ensure a high level of integrity and security.
3.11.1	For passports issued after 24 November 2005 and which are not machine readable, Contracting States shall ensure the expiration date falls before 24 November 2015.
3.16	Contracting States shall establish transparent application procedures for the issuance, renewal or replacement of passports and shall make information describing their requirements available to prospective applicants upon request.
3.17	Contracting States shall issue a separate passport to each person, regardless of age.
3.24	Contracting States shall establish simple and transparent application procedures for the issuance of entry visas for prospective visitors and shall ensure that applications for such visas are acted upon as quickly as possible after receipt.
3.26	When issuing entry visas to prospective visitors, Contracting States shall normally provide that such visas be valid for use within a period of at least six months from the date of issue regardless of the number of entries and with the understanding that the duration of each stay may be limited.
3.65	Contracting States shall facilitate and expedite the process under which aircraft operators based in their territories can apply for Crew Member Certificates (CMCs) for their crew members.  <b>Note:</b> The CMC was developed as a card for use for identification purposes by crew members, leaving the crew licences to serve their primary purpose of attesting to the professional qualifications of the flight crew members.



3.68	CMCs shall be issued only after a background check has been carried out by or on behalf of the relevant public authority. In addition, adequate controls such as a certification of employment status of an applicant prior to issuance, controls on blank card stock, and accountability requirements for issuing personnel, shall be placed on the issuance of CMCs.
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## 7 RECOMMENDED PRACTICES

3.15	Contracting States should establish publicly accessible facilities for the receipt of passport applications and/or for the issuance of passports.
3.16.1	If any fee is charged for the issue, renewal or replacement of a travel document, the amount of such fee should not exceed the cost of the operation.
3.18	<p>When issuing passports for tourism or business travel, Contracting States should normally provide that such passports be valid for a period of at least five years, for an unlimited number of journeys and for travel to all States and territories.</p> <p><b>Note 1:</b> In consideration of the limited durability of documents and the changing appearance of the passport holder over time, a validity period of not more than ten years is recommended.</p> <p><b>Note 2:</b> Emergency, diplomatic, official and other special purpose passports could have a shorter validity period.</p>
3.25	Visa issuance procedures should not normally require the applicant to make a personal appearance at the issuing office.
3.66.1	Contracting States should put in place procedures which will enable any crew member issued with a Crew Member Certificate to examine and review the validity of the data held, and to provide for correction if necessary, at no cost to the crew member.
3.67.1	Contracting States should ensure that a record of each crew member's certificates and other official identity document issued, suspended or withdrawn is stored in an electronic database, secure from interference and unauthorized access. All information stored in the electronic database and crew member certificate should be restricted to details which are essential for the purpose of verifying a crew member's identity.
3.72	Contracting States should provide their civil aviation inspectors with an identity document, taking Appendix 8 into consideration.

4. **Inspection Systems and Tools:** "inspection systems and tools for the efficient and secure reading and verification of MRTDs, including use of the ICAO PKD."

### Related Annex 9 SARPs:

1 Standard and 4 Recommended Practices

## 1 STANDARD

3.10	Contracting States shall promptly report accurate information about stolen, lost, and revoked travel documents, issued by their State, to INTERPOL for inclusion in the Stolen and Lost Travel Documents (SLTD) database.
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## 4 RECOMMENDED PRACTICES

3.9.1	Contracting States issuing or intending to issue eMRTDs should join the ICAO Public Key Directory (PKD) and upload their information to the PKD.
3.9.2	Contracting States implementing checks on eMRTDs at border controls should join the ICAO Public Key Directory (PKD) and use the information available from the PKD to validate eMRTDs at border controls.
3.10.1	Each Contracting State should, as far as practicable, query, at entry and departure border control points, the travel documents of individuals travelling internationally against the INTERPOL Stolen and Lost Travel Documents (SLTD) database.
3.28	Contracting States should not require either from visitors travelling by air, or from aircraft operators on their behalf, identification information in writing supplementary to that presented in their identity documents. Where the collection of identity information is required, Contracting States should develop systems for the electronic capture of this information from machine readable travel documents or other sources.

5. **Interoperable Applications (including API and PNR):** "globally interoperable applications and protocols that provide for timely, secure and reliable linkage of MRTDs and their holders to available and relevant data in the course of inspection operations."

### Related Annex 9 SARPs:

5 Standards and 11 Recommended Practices



## 5 STANDARDS

3.48	<p>Each Contracting State that introduces an Advance Passenger Information (API) system under its national legislation shall adhere to international recognized standards for the transmission of Advance Passenger Information.</p> <p><b>Note 1:</b> API involves the capture of a passenger's or crew member's biographic data and flight details by the aircraft operator prior to departure. This information is electronically transmitted to the border control agencies in the destination or departure country. Thus, passenger and/or crew details are received in advance of the departure or arrival of the flight.</p> <p><b>Note 2:</b> The UN/EDIFACT PAXLST message is a standard electronic message developed specifically, as a subset of UN/EDIFACT, to handle passenger manifest (electronic) transmissions. UN/EDIFACT stands for "United Nations rules for Electronic Data Interchange For Administration, Commerce and Transport." The rules comprise a set of internationally agreed standards, directories and guidelines for the electronic interchange of structured data, and in particular that related to trade in goods and services between independent, computerized information systems. The WCO, IATA and ICAO have jointly agreed on the maximum set of API data that should be incorporated in the PAXLST message to be used for the transmission of such data by aircraft operators to the border control agencies in the destination or departure country. It is to be expected that the UN/EDIFACT standard may be supplemented by modern message techniques, such as international xml standards or web-based applications.</p> <p><b>Note 3:</b> Under its current format structure the UN/EDIFACT PAXLST message will not accommodate general aviation usage.</p>
3.48.1	<p>When specifying the identifying information on passengers to be transmitted, Contracting States shall require only data elements that are available in machine readable form in travel documents conforming to the specifications contained in Doc 9303. All information required shall conform to specifications for UN/EDIFACT PAXLST messages found in the WCO/IATA/ICAO API Guidelines.</p>
3.48.2	<p>When seeking to implement a national Advance Passenger Information (API) programme, Contracting States that are unable to comply fully with the provisions contained in 3.48.1 with respect to data element requirements shall ensure that only those data elements that have been defined for incorporation into the UN/EDIFACT PAXLST message are included in the national programme's requirement or follow the WCO's Data Maintenance Request (DMR) process for any deviation from the standard.</p>

3.48.5	<p>If a Contracting State requires API data interchange, then it shall seek, to the greatest extent possible, to limit the operational and administrative burdens on aircraft operators, while enhancing passenger facilitation.</p>
3.48.7	<p>Contracting States requiring that passenger data be transmitted electronically through an Advance Passenger Information system shall not also require a passenger manifest in paper form.</p>

## 11 RECOMMENDED PRACTICES

3.4.1	<p>Contracting States utilizing Automated Border Control (ABC) systems should ensure that gates are adequately staffed while operational to ensure a smooth passenger flow and respond rapidly to safety and integrity concerns in the event of a system malfunction.</p>
3.48.3	<p>When implementing a new Advance Passenger Information (API) programme, Contracting States that are unable to accept passenger data transmitted in accordance with the UN/EDIFACT PAXLST specifications using the industry standard transmission method as described in 3.48.1 should consult users on the operational and cost impact incurred in modifying the UN/EDIFACT PAXLST message and its contents to the required alternate format.</p>
3.48.4	<p>Contracting States should seek to minimize the number of times API data is transmitted for a specific flight.</p>
3.48.6	<p>Contracting States should refrain from imposing fines and penalties on aircraft operators for any errors caused by a systems failure which may have resulted in the transmission of no, or corrupted, data to the public authorities in accordance with API systems.</p>
3.48.8	<p>Contracting States seeking to implement an Interactive Advance Passenger Information (iAPI) system should:</p> <ol style="list-style-type: none"> <li>seek to minimize the impact on existing aircraft operator systems and technical infrastructure by consulting aircraft operators before development and implementation of an iAPI system;</li> <li>work together with aircraft operators to develop iAPI systems that integrate into the aircraft operator's departure control interfaces; and</li> <li>conform to the Guidelines on Advance Passenger Information (API) adopted by WCO/ICAO/IATA when requiring iAPI.</li> </ol>



3.48.9	Contracting States' and aircraft operators' API systems, including iAPI, should be capable of 24/7 operation, with procedures in place to minimize disruption in the event of a system outage or failure.
3.48.10	Contracting States and aircraft operators should, where appropriate and, as applicable, on a 24/7 (continuous) basis, provide operational and technical support to analyse and respond to any system outage or failure in order to return to standard operations as soon as practicable.
3.48.11	Contracting States and aircraft operators should establish and implement appropriate notification and recovery procedures for both scheduled maintenance of information systems and non-scheduled system outages or failures.
3.49	Contracting States requiring Passenger Name Record (PNR) access should align their data requirements and their handling of such data with the guidelines contained in ICAO Doc 9944, Guidelines on Passenger Name Record (PNR) Data, and in PNRGOV message implementation guidance materials published by the WCO and endorsed by ICAO and IATA.
3.49.1	Contracting States and aircraft operators should provide the appropriate level (where practicable, a 24/7 arrangement) of contact support.
3.49.2	When specifying requirements for the transfer of PNR data, Contracting States should consider the adoption and implementation of the PNRGOV message as a method of transferral of PNR data.

## UNITED NATIONS CONVENTIONS AND SECURITY COUNCIL RESOLUTIONS RELEVANT TO THE ICAO TRIP STRATEGY

All UN Member States have national objectives and responsibilities relating to the efficient and effective operation of their border control functions, including immigration and migration management, and ensuring the facilitation of trade, travel and tourism. These activities all require secure, reliable and efficient traveller identification. In addition, many Member States are also Parties to certain international Treaties and Agreements whose effective implementation similarly call for secure, reliable and efficient traveller identification, namely:

- UN Security Council Resolutions 1373 (2001), 1624 (2005), 2178 (2014) and 2309 (2016).

- United Nations Convention Relating to the Status of Refugees
- United Nations Convention Relating to the Status of Stateless Persons
- United Nations Convention on the Rights of the Child
- United Nations Convention against Transnational Organized Crime and Supplementary Protocols:
  - Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children
  - Protocol Against the Smuggling of Migrants by Land, Sea and Air

## UNITED NATIONS CONVENTIONS HIGHLIGHTS RELEVANT TO THE ICAO TRIP STRATEGY



Recognizing the importance of aviation development to ICAO's global mandate and the new UN Sustainable Development Goals (SDGs), ICAO has begun to more actively engage States and donor/development stakeholders and to map its work against SDG deliverables. In the case of the Facilitation Section, our work under the ICAO Traveller Identification Programme (TRIP) Strategy supports the attainment of SDG 16 (promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels) with a specific focus on Target 16.9: By 2030, provide legal identity for all, including birth registration.





THE UN SDG ACTION CAMPAIGN IS AN INITIATIVE OF THE SECRETARY GENERAL, WITH THE MISSION OF ENSURING THAT EVERYONE HAS THE SUPPORT, ENCOURAGEMENT AND CAPABILITY TO ADVOCATE AND ACT TO ENSURE THE SDG AGENDA IS BROUGHT TO LIFE.

Convention Travel Documents (CTDs) are travel documents that States Parties to the 1951 Convention Relating to the Status of Refugees ("the 1951 Convention") and the 1954 Convention Relating to the Status of Stateless Persons ("the 1954 Convention") shall issue to refugees or stateless persons lawfully staying on their territory (see respective Article 28 of both Conventions), and as such are travel documents foreseen in two international treaties for persons benefitting from an internationally recognized status. Facilitation, these CTDs are machine readable, in accordance with the specifications of Doc 9303.

United Nations Convention on the Rights of the Child adopted by General Assembly resolution 44/25 of 20 November 1989, which decides that States Parties shall "ensure the implementation of these rights in accordance with their national law and their obligations under the relevant international instruments in this field, in particular where the child would otherwise be stateless [Article 7]", and "undertake to respect the right of the child to preserve his or her identity, including nationality, name and family relations as recognized by law without unlawful interference [Article 8]".



United Nations Convention against Transnational Organized Crime adopted by General Assembly resolution 55/25 of 15 November 2000, which decides that States Parties shall "strengthen, to the extent possible, such border controls as may be necessary to prevent and detect trafficking in persons and the smuggling of migrants"(see respective Article 11 of both Protocols, supplementing the Convention).

## SECURITY COUNCIL RESOLUTION HIGHLIGHTS REGARDING BORDER AND IDENTITY MANAGEMENT

As part of the coordination with the UN Security Council Global Strategy, ICAO actively supports UN Security Council Resolutions 1373 (2001), 1624 (2005), 2178 (2014), and 2309 (2016) as well as the Counter-Terrorism Implementation Task Force (CTITF). By doing so, ICAO makes contributions consistent with its own mandate in relation to the ICAO TRIP Strategy.



### UN SECURITY COUNCIL URGES JOINT MEASURES TO PROTECT 'CRITICAL INFRASTRUCTURE' FROM TERRORIST ATTACKS

United Nations Security Council Resolutions:

1. Resolution 1373 adopted at its 4385 meeting, on 28 September 2001, on Terrorist Attacks, which decides that all States shall "Prevent the movement of terrorists or terrorist groups by effective border controls and controls on issuance of identity papers and travel documents, and through measures for preventing counterfeiting, forgery or fraudulent use of identity papers and travel documents".
2. Resolution 1624 adopted by the Security Council at its 5261<sup>st</sup> Meeting, on 14 September 2005, on Combatting Terrorism, which calls upon all States to "cooperate, inter alia, to strengthen the security of their international borders, including by combating fraudulent travel documents and, to the extent attainable, by enhancing terrorist screening and



passenger security procedures with a view to preventing those guilty of [incitement to commit a terrorist act or acts] from entering their territory”.

3. Resolution 2178 adopted by the Security Council at its 7272<sup>nd</sup> Meeting, on 24 September 2014, on Foreign Terrorist Fighters, which “Reaffirms that all States shall prevent the movement of terrorists or terrorist groups by effective border controls and controls on issuance of identity papers and travel documents, and through measures for preventing counterfeiting, forgery or fraudulent use of identity papers and travel documents,” and which “Calls upon Member States to require that airlines operating in their territories provide advance passenger information to the appropriate national authorities in order to detect the departure from their territories, or attempted entry into or transit through their territories, by means of civil aircraft, of individuals designated by the Committee established pursuant to resolutions 1267 (1999) and 1989 (2011) (“the Committee”), and further calls upon Member States to report any such departure from their territories, or such attempted entry into or transit through their territories, of such individuals to the Committee, as well as sharing this information with the State of residence

or nationality, as appropriate and in accordance with domestic law and international obligations”;

4. Resolution 2309 adopted by the Security Council at its 7775<sup>th</sup> Meeting, on 22 September 2016, on aviation security, which calls upon all States to “strengthen their international and regional cooperation to strengthen information-sharing, border control, law enforcement and criminal justice to better counter the threat posed by foreign terrorist fighters and returnees.”
5. Resolution 2368 adopted by the Security Council at its 8007<sup>th</sup> Meeting on 20 July 2017, which encourages all States “to update their methods for cutting off funds to terrorist groups, preventing their travel, banning them from acquiring arms and ensuring that sanctions were fully implemented” and notably “reaffirms its call upon Member States in resolution 2178 (2014)” to require API, and further “calls upon Member States to develop the capability to process Passenger Name Records (PNR) data...”

## IMPLEMENTATION OF THE ICAO TRIP STRATEGY BY MEMBER STATES: RESOURCES AND SUPPORT



THE ICAO SECRETARIAT HAS A TOTAL OF 701 STAFF MEMBERS OF WHICH 525 ARE BASED IN HEADQUARTERS, MONTRÉAL, CANADA (PHOTO ABOVE); 23 IN THE ASIA AND PACIFIC OFFICE IN BANGKOK, THAILAND; 22 IN THE EASTERN AND SOUTHERN AFRICAN OFFICE IN NAIROBI, KENYA; 24 IN THE WESTERN AND CENTRAL AFRICAN OFFICE IN DAKAR, SENEGAL; 19 IN THE MIDDLE EAST OFFICE IN CAIRO, EGYPT; 45 IN THE EUROPEAN AND NORTH ATLANTIC OFFICE IN PARIS, FRANCE, INCLUDING 18 ECAC STAFF MEMBERS; 22 IN THE SOUTH AMERICAN OFFICE IN LIMA, PERU; AND 21 IN THE NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE IN MEXICO CITY, MEXICO.



The use of false identities and fraudulent travel documents, in addition to systemic weak-points in the identification management framework of many Member States, remain major vulnerabilities which continue to be exploited by criminal and terrorist networks.

At the national level, implementation of the ICAO TRIP Strategy requires coordinated action between many government and industry entities, such as passport issuing offices, aviation security authorities, civil registries, border control and law enforcement agencies, airlines, airport authorities, the travel document industry, immigration authorities and other interested parties. The mechanism and requirement for such coordination on matters relating to facilitation already exist in Annex 9 through national air transport facilitation programmes and their related committees.

Governments, pursuant with their laws, regulations and national programmes on aviation security, and in accordance with the relevant ICAO Standards Recommended Practices (SARPs) will seek to develop appropriate legislation enabling them to effectively implement the ICAO TRIP Strategy.

Guidance material regarding the implementation of the TRIP Strategy elements and the ICAO international specifications for machine readable travel documents (Doc 9303) are available at [www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx](http://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx)

ICAO provides assistance at the regional level through regional seminars and donor-funded assistance programmes such as the Sahel Project and the Caribbean Project, both funded by the Government of Canada.







# ICAO TRIP-RELATED ACTIVITIES

# 2





**NARJESS ABDENNEBI** is Chief Facilitation Section for the International Civil Aviation Organization (ICAO).

In this role she is responsible to develop Standards and Recommended Practices (SARPs) related to the facilitation of the international air transport system, found in Annex 9 – Facilitation, and to manage all the activities related to the ICAO Traveller Identification Programme (ICAO TRIP) Strategy which includes the development of specifications for Machine Readable Travel Documents (MRTDs).

When she joined ICAO in 2008, Mrs Abdennebi was appointed Chief Economic Analysis and Policy Section, responsible for matters related to air transport regulation, economics of airports and air navigation services, aviation data and economic studies of ICAO, enabling the monitoring of the Strategic Objectives of the Organization.

Prior to this appointment, Mrs Abdennebi has held a variety of marketing, sales and market research positions in the air transport industry, notably with a regional air carrier and with Airbus where she worked for over seven years.

## THE TECHNICAL ADVISORY GROUP ON THE TRAVELLER IDENTIFICATION PROGRAMME (TAG/TRIP)

ICAO's work on machine-readable travel documents (MRTDs) began with the establishment of the ICAO Panel on Passport Cards in **1968**, which was tasked with developing recommendations for a standardized passport book or card that would be machine readable.

Its work spawned the first edition of "A Passport with Machine-Readable Capability" (Doc 9303) published in **1980**. The Panel was then dissolved and, in **1983**, ICAO was recognized as the most appropriate agency of the United Nations (UN) to be responsible for the development and propagation of MRP specifications.

The Air Transport Committee (ATC) invited the ICAO Secretary General to establish a Technical Advisory Group (TAG) of experts for the purpose of advising ICAO of any adjustments which might have to be made to Doc 9303 as a result of technical experience gained with the use of the MRPs. It was understood that the group would maintain close liaison with the International Organization for Standardization (ISO) and other bodies in this field.

In **1990**, ATC further expanded the terms of reference of the TAG/ MRP and the Group's name was then changed to the TAG on Machine Readable Travel Documents (TAG/MRTD).

Following the endorsement by the 38<sup>th</sup> Assembly of the implementation of the ICAO TRIP Strategy in **2013**, the Air Transport Committee approved in October **2015** the change of name of this advisory group from TAG/MRTD to **TAG on the Traveller Identification Programme (TAG/TRIP)** and revised Terms of Reference (ToRs) have been further developed in order to reflect the expanded scope of the TRIP Strategy.

The TAG/TRIP ("TAG") and its subsidiary working groups (the Implementation and Capacity Building Working Group and the New Technologies Working Group) assist the Secretariat in implementing the ICAO Traveller Identification Programme (TRIP) Strategy. The Advisory Group consists of government and private sector experts (through ISO) working in the TRIP field.

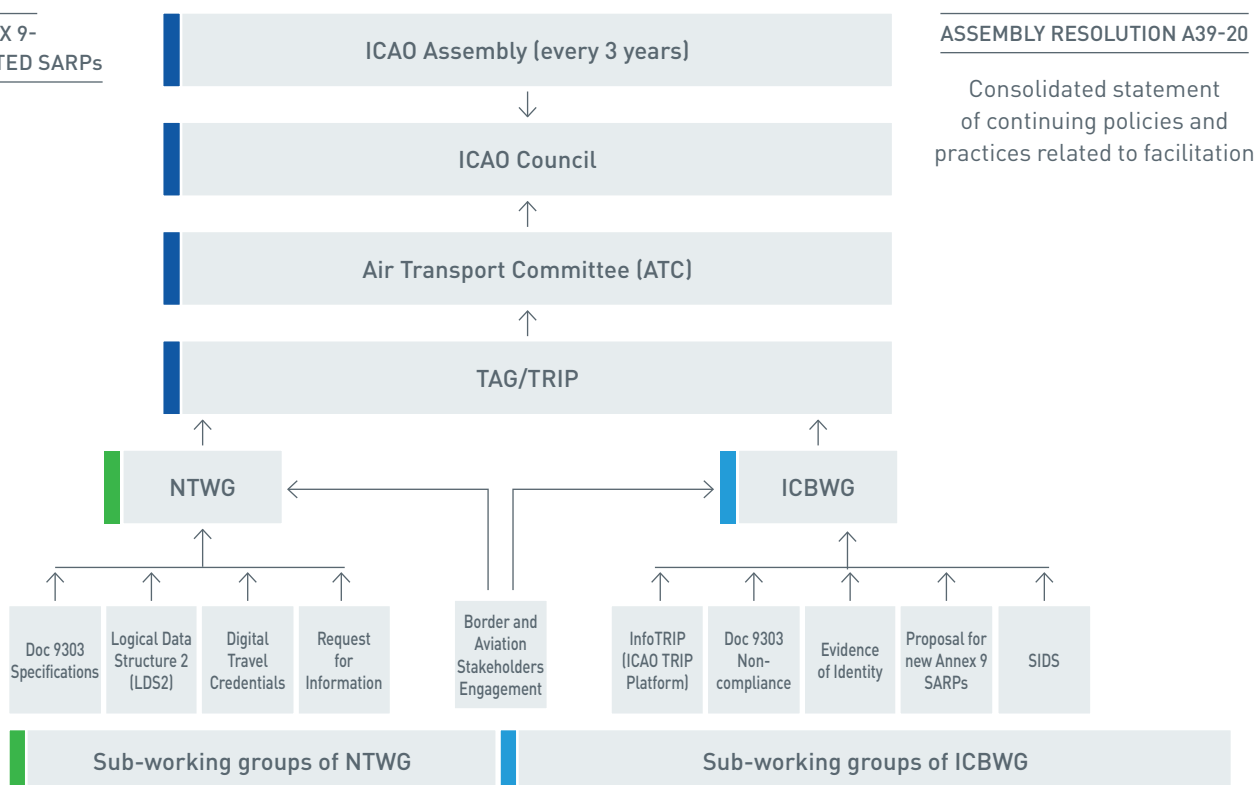


Member States and select international organizations nominate qualified and experienced experts to become TAG/TRIP Members and Observers. Expertise across all aspects of the TRIP Strategy is sought. As such, nominees are drawn from national civil/birth registration authorities,

passport and other travel document-issuing authorities, Customs, immigration, law enforcement, foreign affairs, interior affairs and other authorities and organizations relevant to the ICAO TRIP Strategy.

#### MANDATE OF THE WORK PROGRAMME OF THE ICAO TRIP STRATEGY

##### ANNEX 9- RELATED SARPs



The mandate of the work programme of the TRIP Strategy is articulated in the Appendix B of A39-20.

The TAG/TRIP exercises a dual function within the TRIP Strategy:

- it establishes policy recommendations and proposals; and
- it develops, establishes and maintains TRIP-related specifications.

Accordingly, the TAG/TRIP undertakes the tasks required for the implementation of the ICAO TRIP Strategy and the provision of related capacity-building assistance. Over 80 internationally reputed experts are involved in TAG/TRIP activities and working groups. The TAG/TRIP endorses completed tasks of the Working Groups, oversees tasks underway and sets the work programmes of the Working Groups.



Today, the number of members and observers has increased exponentially, from 21 in the TAG/MRTD to 36 Member States in the TAG/TRIP (see **Table 1**), and from

10 to 19 observer organizations (see **Table 2**), achieving a significantly enhanced geographical representation of qualified and experienced experts.

Member States <sup>1</sup> (Table 1)			
Argentina	India	Netherlands	Sudan
Australia	Indonesia	New Zealand	Sweden
Canada	Iraq	Nigeria	Switzerland
Chile	Ireland	Portugal	The former Yugoslav Republic of Macedonia
China	Italy	Qatar	Ukraine
Colombia	Japan	Republic of Moldova	United Arab Emirates
Egypt	Kenya	Russian Federation	United Kingdom
France	Kyrgyzstan	South Africa	United States
Germany	Luxembourg	Spain	Uruguay

Observer International Organizations (Table 2)	
Airports Council International (ACI)	International Organization for Migration (IOM)
Banjul Accord Group Aviation Safety Oversight Organization (BAGASOO)	International Organization for Standardization (ISO)
Civil Aviation Safety and Security Oversight Agency (CASSOA)	Organization for Security and Cooperation for Europe (OSCE)
European Civil Aviation Conference (ECAC)	Organization of American States (OAS)
European Union (EU)	Inter-American Committee on Terrorism (OAS)
International Air Transport Association (IATA)	United Nations Counter Terrorism Executive Directorate (UNCTED)
International Coordinating Council of Aerospace Industries Associations (ICCAIA)	United Nations High Commissioner for Refugees (UNHCR)
International Criminal Police Organization (INTERPOL)	United Nations Office on Drugs and Crime (UNODC)
International Labour Organization (ILO)	World Tourism Organization (UNWTO)
United Nations (Department of Management)	

<sup>1</sup> The above listing of the States Members of the TAG/MRTD were nominated after ICAO State letter EC 6/8 – 16/48 dated 3 June 2016 was issued, where all Member States and select international organizations were invited to nominate qualified and experienced experts to sit as Members and Observers of the new Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP).



There are presently two TAG Working Groups collaborating with the ICAO Secretariat:

## THE NEW TECHNOLOGIES WORKING GROUP (NTWG)

The long-established ICAO NTWG is comprised of technical experts from Member States and from industry and develops strategy, policy, specifications and guidance material in relation to the manufacture, security, testing, issuance, deployment and globally interoperable use of MRTDs in both physical and electronic form. It also focuses on the related aspects of travel document holder identification, document validation and secure border control. The Group conducts ongoing research into technology suitable for deployment in MRTDs, issuance and border control environments, and information sharing initiatives. It supports the Secretariat in ensuring ICAO Doc 9303 is current and relevant in the light of technological advances and changing operational environments. In addition, it provides support to the ICAO Public Key Directory Board and helps to develop interoperable inspection best practices and/or guidance that leverage the capabilities of eMRTDs and improve the security and effectiveness of border control processes.

NTWG undertakes its technical work regarding the specifications for machine readable passports through a structured cooperation with the International Organization for Standardization (ISO). Through arrangements that were formalized in 1989, a liaison mechanism enables manufacturers of travel documents, readers and other technologies to provide technical and engineering advice under the auspices of ISO. This also has the effect of enabling the technical specifications in Doc 9303 to be endorsed by the ISO as ISO Standard 7501.

## THE IMPLEMENTATION AND CAPACITY BUILDING WORKING GROUP (ICBWG)

The ICAO ICBWG was established in 2008, as a response to a growing realization, at the policy level, that the work to establish global MRTD and related identity management requirements needed to be supplemented by efforts in the area of implementation support. Numerous developing States lack the resources (e.g. funding, technical expertise etc.) to implement comprehensive MRTD technical specifications, thereby impacting on the universal implementation of ICAO-compliant MRTDs. The ICAO Secretariat and TAG/TRIP Members and Observers, including those drawn from government agencies and industry, take part in the work of ICBWG.

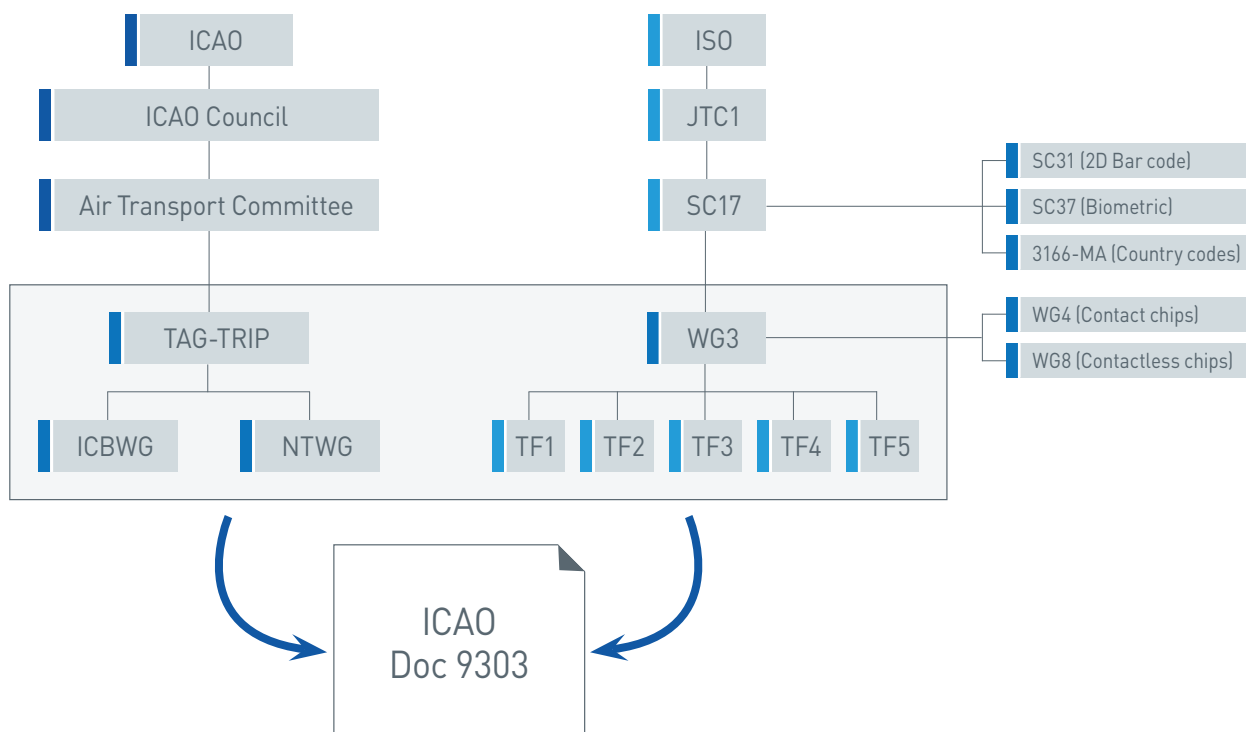
In essence, the role of ICBWG is to assist the Secretariat with the implementation of the TRIP work programme, supporting ICAO's objectives in the field of traveller identification. The group supports the Secretariat's efforts to develop and maintain a guiding long-term vision for identification management (as defined by the ICAO TRIP Strategy) which assists Member States to uniquely identify individuals, and to enhance the security and integrity of their travel documents and border clearance operations. Some of the key activities of the ICBWG include:

- Developing guidance material and tools for implementing TRIP-related standards, recommended practices and specifications, and measuring compliance;
- Updating ICAO policy and guidance material on the ICAO TRIP Strategy, with a view to keeping it current and responsive to changes and the needs of ICAO Member States;
- Supporting capacity building initiatives and regional initiatives, including seminars and symposia;
- Facilitating ICAO TRIP assistance in the form of education, training and identification of experts for projects conducted through a resource mobilization process or voluntary contributions;
- Building the knowledge and strategic capability of States in order that they can design, procure and implement new technologies and processes that drive value;
- Maintaining up-to-date information on the status of States in relation to travel document and border control; and
- Contributing to the development and maintenance of SARPs and technical specifications on MRTD or eMRTD issuance and border control matters, including serving as a forum for providing input and feedback.

The ICBWG promotes partnerships with other international organizations and inter-governmental fora and promotes increased State participation in and use of the ICAO PKD. It is also responsible for the development of guidelines for assessing security standards covering the handling and issuance of travel documents.



## WORKING RELATIONSHIP BETWEEN ICAO AND ISO



Meetings of the TAG/TRIP take place approximatively every two years and participation is restricted to TAG Members, Member States and international organizations attending as observers. The NTWG and ICBWG meetings are open more broadly to other experts from the industry in order to enable a feedback loop with the industry so that the development of the performance-based Standards and Recommended Practices (SARPs) drives industry innovations and development of technological solutions related to MRTDs for the benefit of the States.

## TAG/TRIP/1 ACHIEVEMENTS AND KEY AREAS OF PROGRESS

The First Meeting of the Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP),

corresponding to the 23<sup>rd</sup> meeting of the former TAG/MRTD was held at ICAO Headquarters, Montreal, Canada, from 30 March to 1 April 2016 and was attended by 30 TAG/TRIP Members and advisers from 12 Member States as well as 12 observers from six international organizations.

The meeting broadly endorsed the new Terms of Reference for the TAG/TRIP, mandating TAG to assist the Secretariat in developing, maintaining, and operating programmes to ensure States comply with ICAO Standards and specifications for travel documents. Based on the work of the Group's technical experts, the TAG/TRIP meeting agreed on a comprehensive set of amendments to Doc 9303, *Machine Readable Travel Documents*, 7<sup>th</sup> Edition.



Key areas of progress and work during this meeting also included:

Topic	Overview	Key area of progress & work
ICAO TRIP Strategy Promotional Plan	During the various events held in 2014 and 2015, the slow progression in the number of States having implemented the ICAO TRIP Strategy since its endorsement by the 38 <sup>th</sup> Session of the ICAO Assembly (A38) was clearly identified. Therefore it was deemed necessary to develop an action plan to promote more actively the ICAO TRIP Strategy.	Adoption of the implementation of a promotional plan for supporting of the ICAO Traveller Identification Programme (TRIP) Strategy in ICAO Member States, mustering the regulatory framework, the target population of the TRIP Strategy, the promotional mix and implementation timelines.
ICAO TRIP Platform	The ICAO Traveller Identification Programme (TRIP) Strategy is mandated to set specifications and best practices for its five elements. ICAO Facilitation is committed to work with Member States and partner agencies in assisting them to compile and disseminate TRIP-related information to address security deficiencies, prevent and combat trans-border crime, promote facilitation benefits of the Strategy, and establish sustainable communication channels among agencies to share valuable information.	Adoption of the implementation of a promotional plan for supporting of the ICAO Traveller Identification Programme (TRIP) Strategy in ICAO Member States, mustering the regulatory framework, the target population of the TRIP Strategy, the promotional mix and implementation timelines.  The support of the TAG/TRIP is essential to maintain the accuracy and relevance of the site.
Job-card concept	The concept of “Job-cards” is a method helping to clearly define the work the TAG/TRIP intends to undertake under its terms of reference and to serve as a basis for the Facilitation work programme.	Adoption of the “Job-cards” method to ensure that there is sufficient information on context, justification, milestones and clear deliverables for all work items of the Group, in order to facilitate monitoring and reporting and to serve as the basis for the Facilitation work programme.
Operational Plan for the implementation of the ICAO TRIP Strategy	An operational plan for the implementation of the TRIP Strategy including key activities, deliverables and timescales, while addressing each element of the of the ICAO TRIP Strategy, has been proposed by the ICAO Secretariat. It has been recommended that related tasks to be translated into “job-cards” and linked to the 39 <sup>th</sup> Session of the Assembly resolution to further help the building of the Global Aviation Facilitation Programme, by linking each “job-card” to identified issues and associated targets and goals.	Endorsed the Operational Plan for the implementation of the ICAO TRIP Strategy with associated key performance indicators to enable the pace of implementation to be monitored.
Implementation of ICAO Technical Reports (Roadmap)	The use of new reading systems, new storage media, and new measures that are required to protect privacy and ensure data integrity, must all be addressed. NTWG proposed a roadmap to provide guidance on the implementation issues associated with new specifications.	Endorsed the guidance document “Roadmap for Implementation of New Specifications” and approved its regular issuance as guidance on the implementation of new specifications under the responsibility of the NTWG



Use of Automated Border Control (ABCs)	ICAO Secretariat proposed a process allowing States to evaluate, through a cost benefit analysis, the potential benefits that could encourage them to implement and use Automated Border Control (ABC). The proposed CBA template covers ePassports, ABCs and PKD which included the measurement of proposed key performance indicators (KPIs).	Endorsed the proposed process through the definition of a cost-benefit analysis template, which will enable States to evaluate potential benefits linked to the implementation of Automated Border Control (ABC) gates in coordination with ePassports and the ICAO Public Key Directory (PKD).
Global Aviation Facilitation Plan	The uniform implementation of ICAO SARPs is a fundamental tenet of the Chicago Convention. Standardization therefore is the uniform and consistent implementation of SARPs and related specifications for Machine Readable Travel Documents. Efforts to attain greater standardization must nonetheless recognize that ICAO Member States have disparate human, technical and financial resources at their disposal to manage aviation facilitation matters.	<p>Considered the establishment of a Global Aviation Facilitation Plan (GAFP) which would enhance the implementation of the Annex 9 SARPs and support the evolution of the ICAO TRIP Strategy.</p> <p>The goal would be universal and address key aviation facilitation issues and challenges in both developed and developing States.</p> <p>A set of performance indicators would need be developed, with a view to ensuring that each target was monitored by at least one indicator for an agreed target year.</p> <p>The meeting agreed to provide further advice on the proposed way forward, goals and targets, and contents of the GAFP and on the post-2016 ICAO global aviation facilitation policy and programming framework.</p>
Revision of the Logical Data Structure Policy Update (LDS2 policy Sub-Group)	Progress made by the LDS2 Sub-Working Group of the NTWG to develop optional extensions to the technical structure governing the issuance of the ePassport – the Logical Data Structure (LDS), has been provided along with a demonstrator session for LDS2, to test the specifications and show the feasibility and the possibilities that LDS2 has to offer, with the objective of illustrating the potential benefits that extended ePassport functions could yield.	Endorsed the continued review of reading/writing/amending/deleting permissions as well as the work on the development of global guidance for LDS2 and supported continued policy development on added use cases.
Doc 9309 Compliance Scheme (Doc 9303 Compliance Programme)	In order to align the current progress towards establishing a programme to validate compliance with the specifications of ICAO Doc 9303 with other similar ICAO programmes, it has been proposed to develop a methodology based on objectives and criteria for conducting compliance testing and extend “recognition of compliance” to those testing entities that ICAO determines properly employ the ICAO methodology and/or meet ICAO criteria, through a formal assessment.	<p>Endorsed the direction proposed by the Doc 9303 Compliance Programme for passports and directed ICBWG to develop assessment guidelines, along with a protocol questionnaire, and to conduct beta tests of the Doc 9303 Compliance Programme with cooperating Issuing Authorities of Member States.</p> <p>The TAG/TRIP also approved that the ICBWG continue to undertake ad hoc assessments while the proposed Doc 9303 Compliance Programme is being developed.</p>



Sub-Group for issues faced by small States	ICBWG requested the formation of a sub group to work on providing guidance, advice and options for smaller States that issue lower volumes of passports and may have fewer sources of revenue to develop identity and Border solutions. The sub group would also explore how TRIP can engage and support smaller or developing nations more effectively, in support of the <i>No Country Left Behind</i> initiative and how the effectiveness of TRIP capacity-building initiatives might be increased.	Approved the formation of a sub-group to work on issues faced by small States.
Non-compliant machine readable passports (MRPs)	A key role of the ICBWG is to monitor the status of States in relation to MRP issuance and Doc 9303 compliance, in order to provide advice and/or assistance where appropriate	TAG/TRIP/1 approved that the ICBWG expands its research into suspected cases on non-compliant ePassports through data analysis and, where warranted, distributes outreach letters to the issuing State
Audit questions	There is a need to regularly revisit and refine the audit questions and the ICBWG proposes to form a subgroup to review the current questions. A key part of the work will be to map the audit questions back to the SARPs and link them to key outcomes and guidance material in the ICAO TRIP Strategy.	Approved the formation of a sub-group to consider specific audit questions, map them to support and guidance, and identify any needs and/or gaps with the objective to provide recommendations to the Secretariat.

MEETING OF TAG/TRIP/1, 30 MARCH 2016







## Come see what the world looks like with Augmented Identity.

*"Augmented Identity is security that you benefit from every minute of every day without even seeing it, without even knowing it's there. Security that protects us and allows us to enjoy life to the full and with even greater peace of mind"*

**DIDIER LAMOUCHE**

CHIEF EXECUTIVE OFFICER

We are the global leader in trusted identities for an increasingly digital world – and this is no small feat. We provide customized solutions in a world that evolves and advances faster than ever before. Today, information travels rapidly around the digitized space, defying boundaries and breaking the traditional codes of security. But our industry expertise, our knack for foresight and our keen ability to adapt has brought us to the forefront of our industry and continues to push us even further every day.

### Leading us into the future

Being a leader means staying on top of the disruptive innovations that impact our security landscape. We understand that the exponential growth of connected objects incites an urgent need to secure people in their physical and digital worlds, but also objects they interact with. We know that in our globalized society, the number of peer-to-peer exchanges, travel and border crossings are exploding. We are aware that the digitalization of the

economy brings about a wave of new business models. We are also mindful of the consumerization of technology and how it impacts our identity and private life.

### Empowering people to enjoy life through trusted identities

At IDEMIA, we embrace this new reality and we understand the security concerns that accompany advancement. We analyzed the world around us and reinvented the concept of identity. We call it Augmented Identity – an identity that ensures privacy and trust and guarantees secure, authenticated and verifiable transactions. An identity that is so enhanced, adaptable, strengthened and self-sovereign that it allows us to truly enjoy life – because securing our identity is key to making our world a safer place.

### Protecting people and places

Travel isn't what it used to be! People today are in constant motion – moving faster and traveling farther than ever before. While this spike in movement

around the globe brings our societies closer, it also generates new demands for increased efficiency and safety for public authorities. We make it easier to travel. Yesterday, heading to the airport required so much prep work. Now with us, you simply show your face or fingerprint and your identity is verified. You're then free to check-in, pass security and get on the plane without producing any document whatsoever. With our technology, each passenger should reach the Duty Free zone within 10 minutes after they arrive — a true revolution in comparison to what we experience today!

With close to €3bn in revenues, IDEMIA is the result of the coming together of OT (Oberthur Technologies) and Safran Identity & Security (Morpho). This new company counts 14,000 employees of more than 80 nationalities and serves clients in 180 countries.







**DAVID PHILP** is the General Manager of the Identity and Passports business unit of the Service Delivery and Operations Branch at the Department of Internal Affairs; a role he has held for one year. Prior to this, he led the Passports Office for more than 15 years. During that time, David has lead a number key, and highly successful Passports initiatives, including the introduction of ePassports, automated issuance processes and, most recently, online Passport applications.

David is also responsible for the RealMe logon service and the RealMe online identity verification service (IVS). The RealMe Log in service is used by around 1 million New Zealanders to log in to government services. The Real Me IVS provides a passport equivalent, secure online identity.

## UPDATE BY THE CHAIR OF THE IMPLEMENTATION AND CAPACITY BUILDING WORKING GROUP (ICBWG)

Since its formation in 2008, the Implementation and Capacity Building Working Group (ICBWG) has held meetings around the world, from Cape Verde to Samoa. The Group is made up of experts from government, international and regional organizations, and the International Standards Organization (ISO), working to assist the ICAO Traveller Identification Programme (TRIP) in meeting its strategic objectives.

Although initially set up to deliver projects, over time it has become clear that the ICBWG's strength is in providing advice, support and expertise to States on behalf of ICAO. One of the Working Group's core roles is to produce guidance and assessment material in areas related to travel documents and identity. Identifying and addressing non-compliance with relevant ICAO standards and specifications is also a key function of the ICBWG.

The ICBWG has taken the opportunity to hold meetings in regions that may benefit from ICBWG knowledge and expertise, and always endeavours to undertake capacity-building workshops, discussions, seminars and presentations in addition to the plenary meeting. The ICBWG has also, where possible, held meetings in tandem with ICAO regional seminars and symposia to support global outreach and ensure ongoing representation from a wide range of States.

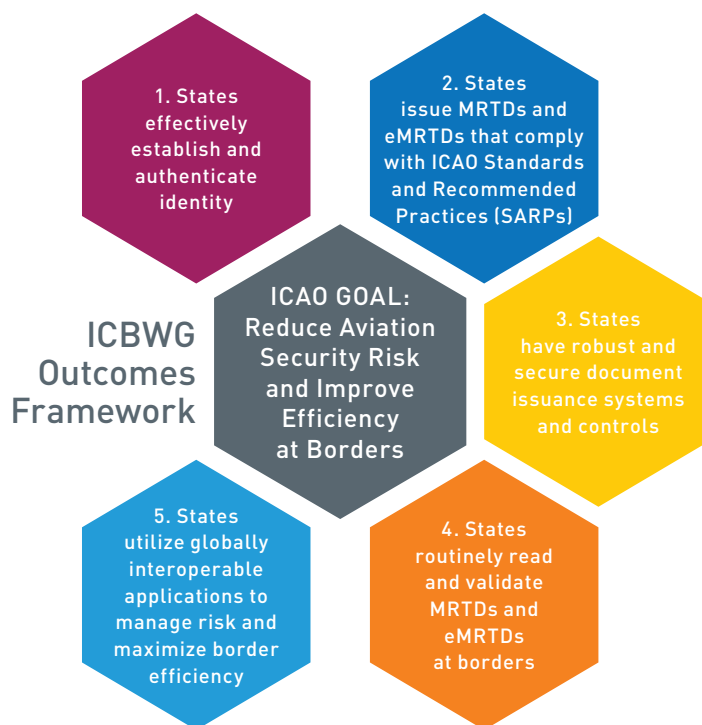
### ICBWG STRATEGIC OUTCOMES

As part of the Group's strategic framework, the ICBWG has defined five overarching strategic outcomes that encompass the five key elements of TRIP (Evidence of Identity, MRTDs, Document Issuance and Control, Inspection Systems and Tools, and Interoperable Applications). The ICBWG's intended outcomes are to ensure:

1. States effectively establish and authenticate identity.
2. States issue MRTDs and eMRTDs that comply with ICAO Standards and Recommended Practices (SARPs).
3. States have robust and secure document issuance systems and controls.
4. States routinely read and validate MRTDs and eMRTDs at borders.
5. States utilize globally interoperable applications to manage risk and maximize border efficiency.



## ICBWG STRATEGIC OUTCOMES



## WORKING TOWARDS A “FUTURE STATE”

The ICBWG outcomes are best understood as a future state, which the Group is working towards. They provide a long-term strategic focus to which the Group can align its activities and outputs. These efforts help to deliver ICAO’s Security and Facilitation goal of reducing aviation security risk and improving efficiencies at borders.

At the heart of ICBWG’s work is ICAO’s No Country Left Behind initiative, which aims to assist States with the implementation of Standards and Recommended Practices (SARPs). The Working Group continues to develop tools and guidance, and provide advice to States to ensure they can meet the necessary SARPs and best practice guidelines.

SARPs are not an outcome in themselves, but through the capability uplift that normally occurs with compliance, the hope is that States can provide better services to their citizens, and contribute to a safe and secure aviation sector.

The ongoing success of the Working Group hinges on its ability to make connections in many regions; this enables the ICBWG to develop guidance material and provide advice that is relevant and applicable for all ICAO’s Member States, regardless of their technical capabilities or geographical position.

## DOCUMENT UPDATES

The ICBWG’s *Collection of Best Practices for the Acquisition of Machine Readable Travel Document Goods* provides expert views on the key considerations when a State is looking to procure tools and technology related to traveller identification. The collection is not a ‘how to’ guide, but rather, captures experiences and tips from experienced leaders who have procured and implemented MRTD projects and programmes.

The *Guide for Circulating Specimen Travel Documents* provides information for States on how to distribute specimens of their travel documents to border authorities. A critical component of ensuring a travel document is accepted is to provide examples, so that other States can familiarize their officials, and assist them to facilitate genuine identities and identify fraudulent books.

The *Guide for Assessing Security of Handling and Issuance of Travel Documents* has been recently reviewed to include a third section. The Guide provides information on best practice, and enables States to evaluate their secure issuance operations, identify gaps and make improvements.



New guidance material on *ICAO Guidance on Evidence of Identity* will be published in 2017. The fundamental identity principles outlined in ICAO's *Guide Towards a Better Practice in National Identification Management (2013)* are still central to the new document:

1. the identity exists and is living (e.g. was born and has not since died);
2. the identity is unique to your system (e.g. applicant is the sole claimant); and
3. the identity is used in the community (there is a 'social footprint').

The new *ICAO Guidance on Evidence of Identity* provides case studies and tools to enable States to systematically evaluate their identity ecosystem, and apply the core identity principles to their own situation using the identity information available to them.

## SHIFTING FOCUS TO ADDRESS EMERGING ISSUES

The formation of the ICBWG in 2008 was, in part, a response to the approaching deadline for all States to produce machine readable passports (MRPs) by 2010. With the task of global MRPs achieved, one of ICBWG's most important initiatives has been identifying and rectifying Doc 9303 compliance issues. The advice provided by the ICBWG has led to a number of States correcting issues with their travel document design and production.

ICBWG is now beginning to shift focus towards a much more challenging issue: as more States transition to ePassports, identifying and addressing non-compliance becomes increasingly more complex. Correctness of the visual inspection (VIZ) and machine-readable zones (MRZ) are now only part of the interoperability puzzle. Problems with the functionality of the chip and its compliance with Doc 9303 specifications can severely impact border operations and undermine States' investment in ePassport technology. The ICBWG is currently gathering data on ePassport non-compliance so that it can begin contacting States where significant issues are identified.

The *ICAO-UNHCR Guide for Issuing Machine Readable Convention Travel Documents (MRCTDs) for Refugees and Stateless Persons (MRCTDs)* has been revised and published following amendments to Annex 9 that require all travel documents issued under the Refugee and Stateless conventions to be machine readable. There has been a

definite upward trend in the number of States issuing MRCTDs, and the excellent work of UNHCR will continue to be supported by ICBWG and its non-compliance sub-group.

All States have the technology available to produce MRCTDs. The main issue to overcome is normally ensuring agencies within a State are working together effectively. It is important to note that the authority that makes determinations on refugee and stateless status can retain this function, with the secure document being produced by the specialized travel document issuing authority. This is generally the most effective use of resources and expertise in any State.

## DOING MORE WITH SCARCE RESOURCES

Within *No Country Left Behind*, a clear focus on the challenges faced by Small States has emerged. Common issues across the Small States Group (often Small Island States) can relate to economic constraints, and the availability of expert resources, which hampers their ability to meet SARPs. In the case of passport issuance, small volumes mean States may lack the revenue and economies of scale to maintain and improve their operations and passport technology. Investing wisely in technology that addresses the State's actual problems is even more critical when resources are scarce.

The ICBWG intends to produce guidance on the economic case for investing in an ePassport, including cost-benefit analysis and how a State might work through investment logic. The guidance will outline the functionality of ePassports, and the technical and operational considerations to be aware of. The guide will also provide a series of questions States should be asking themselves when considering whether an ePassport is the right solution for them, and indeed whether they are ready for one. The questions will enable States to self-assess their ability to extract benefit from ePassport technology.

The ICBWG is also looking to produce new guidance material on the use of biometrics, and their role in traveller identification.

**David Philp**

Chair, ICAO, Implementation and Capacity Building Working Group

Manager Passports

Department of Internal Affairs, New Zealand







**R. MICHAEL HOLLY** joined the State Department as a Passport Specialist in 1985 and was posted to consular assignments with the Washington Passport Agency, the Miami Passport Agency, the Special Issuance Agency, the Office of Field Operations, and the Office of the Deputy Assistant Secretary for Passport Services (CA/PPT). Mr Holly's Department assignments also included work as the Special Assistant to the Assistant Secretary in the Bureau of Intelligence and Research and as a Department of State liaison to the Coalition Provisional Authority in Baghdad, Iraq.

Mr Holly was selected as Director, International Affairs Staff, Passport Services in December 2006. In March 2013, Mr Holly was promoted to the position of Senior Advisor for International Affairs, Passport Services, Bureau of Consular Affairs. In this position he helps to coordinate U.S. policy on international issues that impact on passport processes and resource requirements, as well as, to focus the Directorate's participation in international fora that deals with travel document security, standards, issuing processes, and information data sharing.

Mr Holly has been active with the ICAO Technical Advisory Group on Machine Readable Travel Documents (TAG/MRTD) and the New Technologies Work Group (NTWG) since 2001. Mr Holly currently serves as the Chair, NTWG and is a member on the ICAO Public Key Directory (PKD) Board.

## UPDATE BY THE CHAIR OF THE NEW TECHNOLOGIES WORKING GROUP (NTWG)

One of the key tasks of the NTWG is to help develop and maintain the technical strategies, implementation policies, specifications, and guidance materials that are essential to the delivery of the TRIP Strategy and the related Standards and Recommended Practices (SARPs) in Annex 9 – *Facilitation*. Of particular importance is the role the NTWG plays in maintaining the international travel document specifications found in ICAO's Doc 9303, *Machine Readable Travel Documents*.

The current work and activities of the NTWG are directly contributing to the advancement of all of the elements of the ICAO TRIP Strategy. This work is only possible because of the contributions and dedication of the many experts from governments and industry who comprise the NTWG. They meet twice every year in full sessions of the NTWG and a number of sub-groups undertake work throughout the year on specific development areas. These are detailed elsewhere in this Compendium.

In 2016, the Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP) met at the ICAO headquarters in Montréal and, among other things, agreed upon the work programme of the NTWG. This helps to establish priorities and ensure alignment with the policies and objectives approved by the ICAO governing bodies in this subject area.

Coming out of the 2016 meeting of the TAG/TRIP, the NTWG undertook to continue its work producing technical materials for subsequent incorporation as specifications in Doc 9303. Looking ahead, the NTWG is committed to developing a comprehensive approach to the policy and process issues that arise from the use of advanced technologies in MRTDs and eMRTDs. This entails developing specifications that enable States to leverage the full functionality of eMRTDs and producing guidance materials to promote the use of eMRTDs beyond border control to the wider community involved in identity verification activities.

At the same time, the NTWG is developing guidance materials to promote real time secure validation of travel document data, among States and authorities. The NTWG intends to monitor and respond to the evolution of technology to ensure access control and PKI schemes continue to provide a secure infrastructure for eMRTDs and data validation.



An important part of the NTWG's work is to explore the use of digital – or mobile – travel credentials as globally enabled travel documents. If feasible, the group will work to develop specifications and guidance to enable ICAO's Member States to derive the full benefit of such standardized mobile credentials. Developing specifications to support the issuance of mobile/virtual credentials could fundamentally change the format of the passport and the means by which passengers are processed. Key policy, technical and legal questions will need to be addressed by the working group as they evaluate this new concept.

Other examples of NTWG's diverse programme of work include:

The standardization of Visible Digital Seal technology to provide authorities with a tool to strengthen the integrity of documents where integrated circuit (IC) chip technology is not a viable option;

- efforts to standardize and endorse technical specifications designed to enhance the functionality of ePassports. Known by experts as Logical Data Structure 2 (LDS2), the new specifications will enable States to place information on the IC chip of an ePassport, and access such information, during normal border control and visa issuance operations. NTWG is working to address the policy and operational barriers to implementation, in collaboration with the International Organization for Standardization's WG3;
- the creation of international best practices (Best Practice Guidelines for Optical Machine Authentication) to promote the optimal placement of document features, thereby adding to the base of international specifications that can be applied during manual or automated document processing;

- updates to the photo standards published in Doc 9303 to ensure that States are using the most recent photo technologies available to print and store photos in the travel documents that they issue. Enhancing the overall quality of photographs improves the usability of the document at the border and furthers the ability of border services officers to match the holder to the document; and
- identifying means and strategies to combat the threat of photo morphing to further enhance the security of the travel document and the processes behind its issuance.

Advances in border and identity management technology have created new demands for the NTWG. Alongside the initiatives described above, the group is supporting the effort to engage border control authorities and other key stakeholders (e.g. airlines) to help build awareness of key technologies and align modernization efforts.

The ICAO NTWG has played a critical role in the establishment of sound and secure international travel document specifications. The experience of the group, combined with the technical and operational expertise of its membership, will ensure that the NTWG can support ICAO's pursuit of effective traveller identification well into the future.

**R. Michael Holly**

*Chair, ICAO, New Technologies Work Group  
Senior Advisor for International Affairs  
US Department of State, USA*







**ROMAN VANEK** was born 1968 in Prague. After graduating from the University of Fribourg, he joined the Swiss Federal Administration, where he has held various positions. Today, he is the Chief of the Division Identity Documents & Special Tasks. Aside from his responsibilities in other areas (Measures against Hooliganism, Central Bureau for Firearms and Explosives), he is also responsible for the Swiss Passport and the Identity Card. In this function, he is the representative of Switzerland at the Technical Advisory Group on Machine Readable Travel Documents (TAG-MRTD) of ICAO and the Article 6 Committee of the European Commission. From May 2012 – December 2016 he was Chair the ICAO PKD Board. As of 2017, he is a Member of the ICAO PKD Executive Body.



## A MESSAGE FROM THE FORMER CHAIR AND CURRENT MEMBER FOR SWITZERLAND OF THE ICAO PUBLIC KEY DIRECTORY (PKD) EXECUTIVE

How would you best describe your ePassport? Would you describe it as the latest in “chip” technology? Or do you just think that it has nice design and represents your country appropriately? Or would you prefer to say that this document facilitates your cross-border travels whenever you take a plane or any other means of travel?

Probably, all of the above apply. This said, the primary goal of issuing ePassports is to facilitate cross border travel as much as possible, while mitigating document fraud by using state of the art technologies when producing and checking ePassports. To authenticate an ePassport successfully and reliably, you need to have access to the relevant certificates and execute the Passive Authentication protocol as described in Doc 9303 7<sup>th</sup> Edition, Parts 11 and 12.

The ICAO PKD was established to help and to support the reliable authentication of ePassports and other eMRTDs<sup>1</sup>. It is considered an ICAO recommended practice to join the ICAO PKD, to upload information to the ICAO PKD and to use the information made available by other PKD participants.

The PKD supports processes of reading and verifying travel documents in an efficient and cost-effective manner. Understandably, the ICAO PKD is an essential part of the ICAO Traveller Identification Programme (TRIP) Strategy.

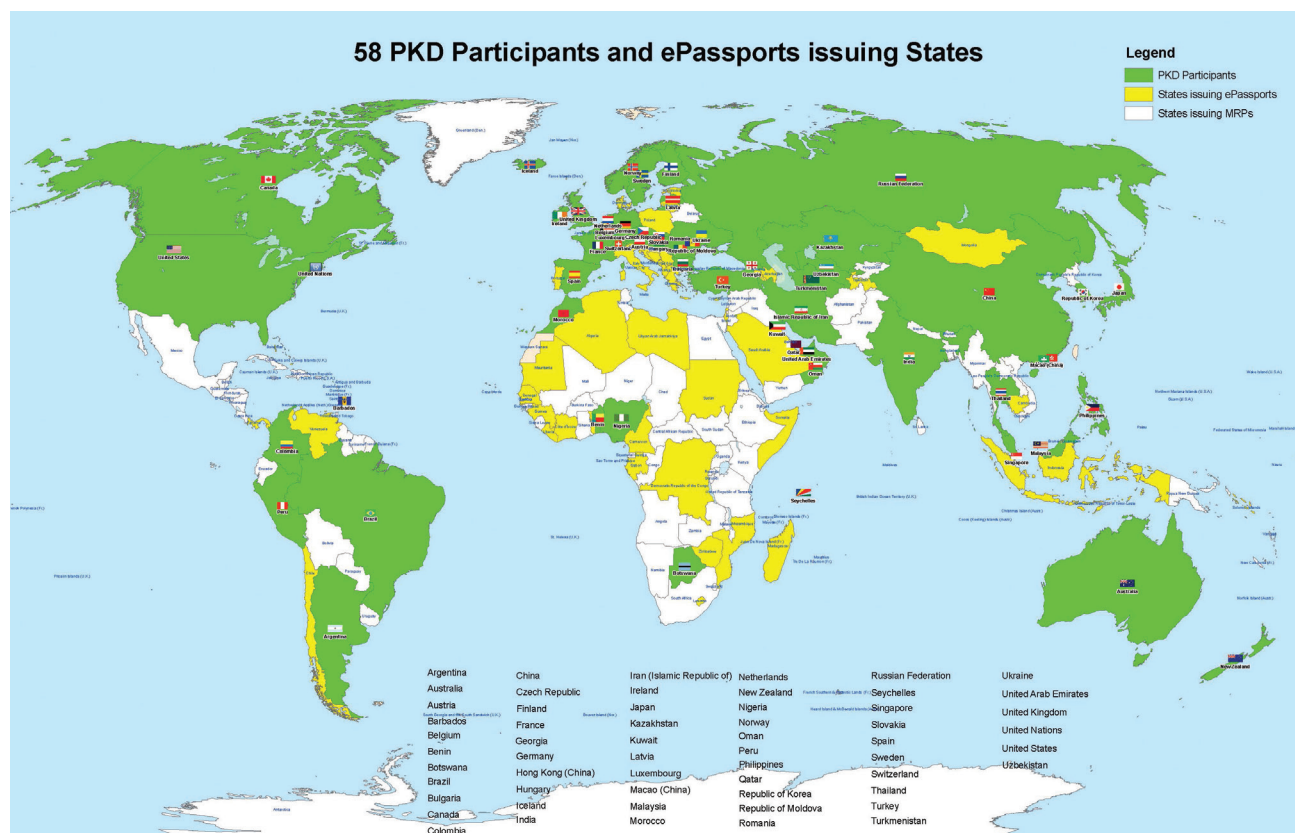
As the ICAO PKD serves security and facilitation needs at the same time, making use of the ICAO PKD will help to counter gaps in the security of a country's border control systems, while at the same time, improving and facilitating the experience of travellers crossing borders.

SECURITY &  
FACILITATION



<sup>1</sup> Electronic Machine Readable Travel Document





AS OF AUGUST 2017

How can the ICAO PKD achieve all this even though the sign up and participation fees are very affordable? ABC Gates and different variations of self-service kiosks introduced all over the globe help to streamline and facilitate border crossings. Today, travellers holding eMRTDs can use these new methods to have their travel documents authenticated and their personal and biometric information checked against the information stored in the chip in the eMRTD.

By doing so, the queuing lines and waiting times are reduced, allowing for smooth passage through border controls. At the same time, these new technologies, in combination with other controls and checks, offer the possibility to maintain a high level of security. They give border control authorities the possibility to focus on special cases that require their attention, instead of having to check each and every single traveller.

The fees associated with ICAO PKD are reasonable. Compared to the high stakes involved, this is a very wise investment. The one time registration fee is USD 15 900 plus an annual fee charged to cover the operating expenses of ICAO and the operator. In 2017, this fee amounted to approximately USD 34 400. It is expected, that the annual fee in 2018 will remain at approximately the same level.

As of today, the ICAO PKD has 58 Participants who contribute through their participation to the global effort to provide a secure, safe and welcoming travel environment. Hopefully, this global effort will be expanded to many more countries in the coming years.

#### Roman Vanek

*Former Chairperson and current member for Switzerland  
ICAO Public Key Directory Board  
Chief Division: Identity Documents & Special Tasks  
Federal Office of Police, Switzerland*





# VERIDOS

IDENTITY SOLUTIONS

by Giesecke+Devrient  
and Bundesdruckerei



## Veridos Secures Identities

**Identity Solutions.** Veridos GmbH is a joint venture between two of Germany's best known providers of secure government solutions, Bundesdruckerei GmbH and Giesecke+Devrient GmbH. Having inherited extensive technological expertise from its parent companies, Veridos has risen to become one of the top-tier companies producing, implementing and managing high-tech and future-proof identity solutions. Find out more about how Veridos can help you make the most secure decision and visit us at ICAO's TRIP Symposium in Montréal, October 24<sup>th</sup> to 26<sup>th</sup>, 2017, booth 11.

[www.veridos.com/ICAO](http://www.veridos.com/ICAO)







## ELEMENTS OF IDENTIFICATION MANAGEMENT

The rapid growth of identity fraud affects many areas of society and raises serious concerns for security and safety. Much work has been done in the area of travel documents to combat document fraud and increase passport security and the associated systems for the personalization and issuance of these documents.

Border authorities have upgraded their document inspection systems and passenger checks to improve security at border control points, providing increased security from both ends of the travel continuum. The increase of international data sharing and use of new technologies, including the ICAO Public Key Directory (PKD), has resulted in improved capabilities toward fraud detection.

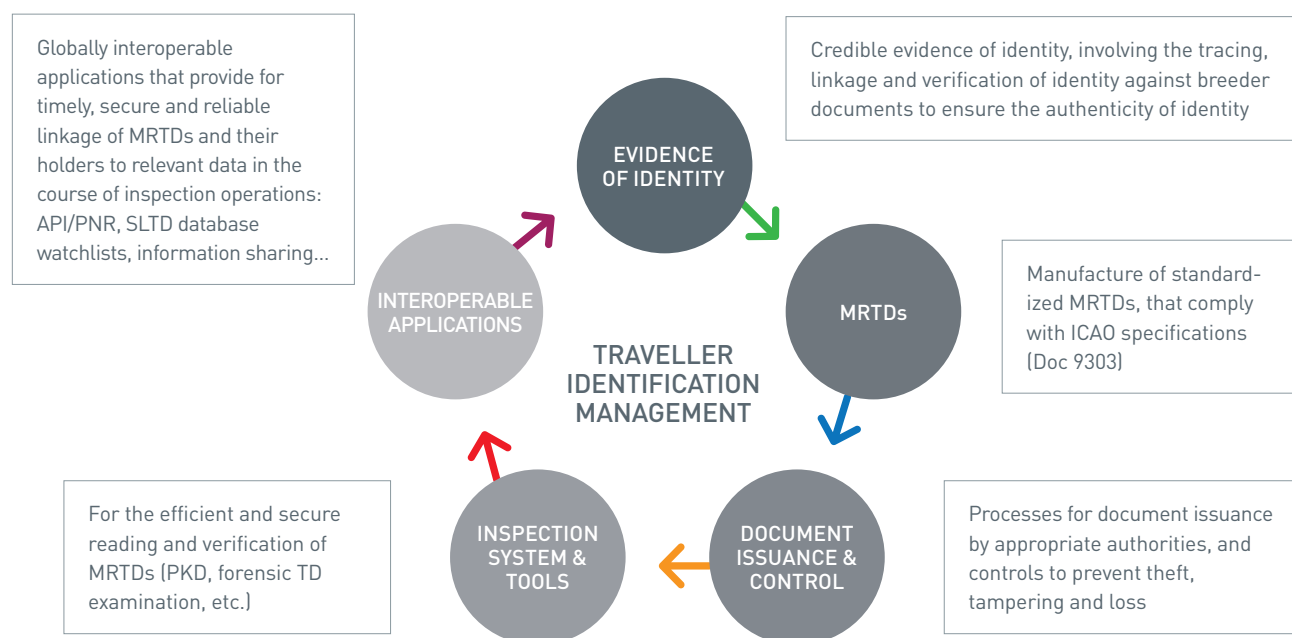
These measures have been very successful in raising the level of passport security. However, they have resulted in the shift away from travel document fraud (alteration, counterfeit) toward attempts to obtain a genuine passport based on false identities. This effect has further highlighted the risks of fraudulently obtaining a genuine passport.

The ability of a criminal to perpetrate this and other similar types of fraud relies upon deceiving the authori-

ties into accepting a bogus identity during the application (enrolment) process. This process requires, among other things, the applicant to provide “evidence of identification” in order to substantiate and justify the claim of entitlement. Often, to accomplish this, applications are accompanied by documentation, generally known as breeder or foundational documents.

ICAO’s goal in drawing attention to the need for security and integrity in the application and enrolment for travel documents is to achieve a consistent level of security and integrity across the travel document continuum. The document itself needs to be secure, the issuing processes need to be methodical and of high integrity and the checks made to a document at borders need to be thorough and trustworthy.

In consideration of the scope of these activities, traveller identification management necessarily involves a broad spectrum of mandates and interests at both the global and State levels that directly or indirectly contribute to the effectiveness and efficiency of travel documents issuance systems. The following is a representation of the holistic approach to identification management in ICAO’s TRIP Programme.





For ICAO and its Member States, it follows that the vision in traveller identification management is that *all Member States can uniquely identify individuals*. When the elements of identification management are appropriately achieved, States will be in a position to identify individuals through their travel documents with the highest possible degree of certainty, security and efficiency.

Given the benefits of traveller identification management to aviation security and facilitation, and the vision that all Member States can uniquely identify individuals, ICAO's mission is to *contribute to the capacity of Member States to uniquely identify individuals by providing appropriate authorities worldwide with the relevant supporting mechanisms to establish and confirm the identity of travellers*.

Under the ICAO TRIP Strategy, and in accordance with the decisions of ICAO's governing bodies, the support mechanisms constitute **four pillars**:

- a) development of the international framework of Standards and Recommended Practices (SARPs) specifications (Doc 9303) and guidance material;
- b) implementation assistance for the benefit of States' programmes, with focus on building assistance partnerships to recruit and mobilize financial and in-kind resources;
- c) assessment of compliance with the international framework, with emphasis on cost-effective methods to produce recommendations to address deficiencies; and
- d) delivery of the PKD, including governance, management, administration and operations.

The ICAO TRIP Strategy provides the basis for detailed work plans to be developed, commensurate with resources available, and corresponding actions to be taken. With renewed focus and in conjunction with identification management partners, and building on progress to date, ICAO will continue to produce and provide globally endorsed measures, tools, services and other means to:

- mitigate risks to aviation security and broader national security through robust methods of identification management and border control;
- assist in the detection and prevention of terrorism and crime through the prevention of the fraudulent use of identification documents;

- facilitate the movement of genuine travellers through the airport process using automated clearance systems to increase throughput;
- reduce staff and training costs by standardizing and simplifying document verification processes;
- enable interoperability and the use of standard technologies for identification management for both States and industry, leading to efficient operations and cost reduction;
- increase States' confidence in their ability to verify that documents have been appropriately issued and have not been altered; and
- provide for cost-effective deployment of security and border control personnel and resources on a risk-management basis.

The ICAO TRIP Strategy will establish a comprehensive framework to lead Members States, ICAO and traveller identification partners into the future. At appropriate intervals, monitoring, reporting and review of implementation progress, and fine-tuning, as appropriate, will ensure that the Strategy remains up-to-date and forward-looking.

The programme goals for 2020 and beyond are as follows:

- Member States optimally manage traveller identity;
- Machine Readable Passports (MRPs) implementation is completed;
- compliance with travel document Standards and specifications (Annex 9 and Doc 9303) is assessed and reported;
- all passports are ePassports;
- all Member States use Automated Border Controls (ABCs) for travel document inspection; and
- participation in ICAO PKD is comprehensive.

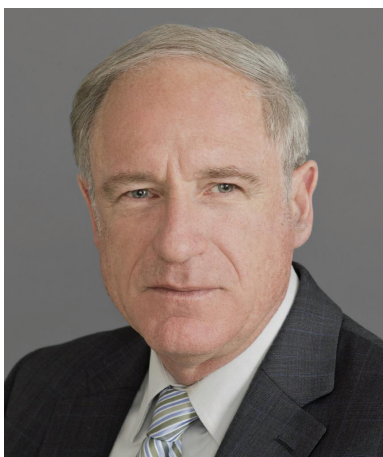
The ICAO TRIP Compendium offered an opportunity to further extend the existing collaboration with UN entities and various international organizations.

The Secretary General of ICAO invited each organization to bring their expertise and contribution in the development of this publication, outlining the five elements of the TRIP Strategy: Evidence of Identity, Machine Readable Travel Documents, Document Issuance and Control, Inspection and Tools, and Interoperable Applications.

Let us take a deep look into these outstanding joint efforts, in the following chapters.





EVIDENCE OF  
IDENTITYFOREWORD BY THE SENIOR  
DIRECTOR, TRANSPORT AND ICT  
GLOBAL PRACTICE, WORLD BANKJOSÉ LUIS IRIGOYEN

Expanding the reach and quality of identification systems is a key development priority for the World Bank Group. An estimated 1.1 billion people are today without any officially-recognized ID, preventing many of them from accessing vital services or exercising their rights, including to travel. At the same time, many countries lack robust identification systems capable of uniquely identifying their residents throughout their lifetime. Without a trusted evidence base for their issuance, few will be able to obtain travel documents and these will less likely be accepted across country borders.

In this context, we welcome the ICAO Travel Identification Program Strategy

Compendium as an important step towards reaching the goal of more accessible and inclusive air travel. The mission of TRIP – to strengthen the capacity of ICAO member States to uniquely identify individuals and to provide their residents with robust, verifiable proof of their identities – promises to bring lasting benefits for civil aviation and contribute to the broader development agenda of member States.

It is also closely aligned with the objectives of the World Bank's multi-sectoral Identification for Development (ID4D) initiative, which supports countries in designing and implementing robust, inclusive, and responsible ID systems. In addition to providing financing for identification systems and guidance on the legal frameworks, institutional arrangements, technologies, and use cases to interested country governments, ID4D also works to foster closer collaboration among the various public, private, non-profit, and multilateral stakeholders working on this agenda. Knowledge resources such as the TRIP Strategy Compendium are excellent tools to build capacity and help all stakeholders reach a common understanding on such multi-faceted issues.

Robust identity management is essential for the integrity of travel documents. Therefore, strengthening the national identification systems and identity management practices of our member countries is a promising new area for close collaboration between the World Bank and ICAO. This would add to the long and



successful engagement between our two organizations in support of air transport in emerging and developing countries, a partnership that has included transport policy, safety and security, airport and air traffic control infrastructure, and environmentally sustainable civil aviation practices, among many other themes.

In particular, the World Bank, through ID4D, looks forward to working with a group of agencies, including ICAO, to developing a common understanding of how international standards can contribute to improved identity management and foster greater regional integration of identification systems. In this context, I encourage readers to access ID4D's upcoming analysis of international standards across the identity management lifecycle, which will be available at [www.worldbank.org/id4d](http://www.worldbank.org/id4d)

As the international standard-setting body for travel documents and convener of the New Technologies Working Group, ICAO's normative role is critical for the World Bank's efforts in this space, in support to our overarching goals of ending extreme poverty and boosting shared prosperity. I therefore congratulate ICAO for its leadership and efforts in developing the Compendium, and thank it for giving us the chance to contribute to this important document.

**José Luis Irigoyen**

Senior Director, Transport and ICT Global Practice  
World Bank





## IDENTIFICATION FOR DEVELOPMENT (ID4D) – A WORLD BANK GROUP INITIATIVE

An estimated 1.1 billion people—most of whom live in Sub-Saharan Africa and South Asia—are without any officially-recognized identification, including 200 million children under the age of five who have not had their births registered. They may face barriers or be prevented from exercising rights and accessing services, enrolling in school and benefiting from social protection to opening a bank account and travelling safely through regular channels.

In many developing countries, foundational identification systems—such as national IDs and civil registration—are paper-based. In the absence of a reliable foundational system, identity management often becomes fragmented across several functions and agencies, which can lead to inconsistency and duplication of resources and efforts. Countries in these situations are missing an important opportunity to transform their economies and strengthen how public and private services are delivered.

Providing individuals with a unique and verifiable ID is increasingly being recognized as a key enabler and accelerator of sustainable development and the elimination of poverty, as evidenced by adoption of Sustainable Development Goal (SDG) target 16.9 to, “by 2030, provide legal identity for all including birth registration”. But identification is not just a worthy objective in its own right; it also has the potential to contribute to solving some of the most pressing development challenges today, such as:

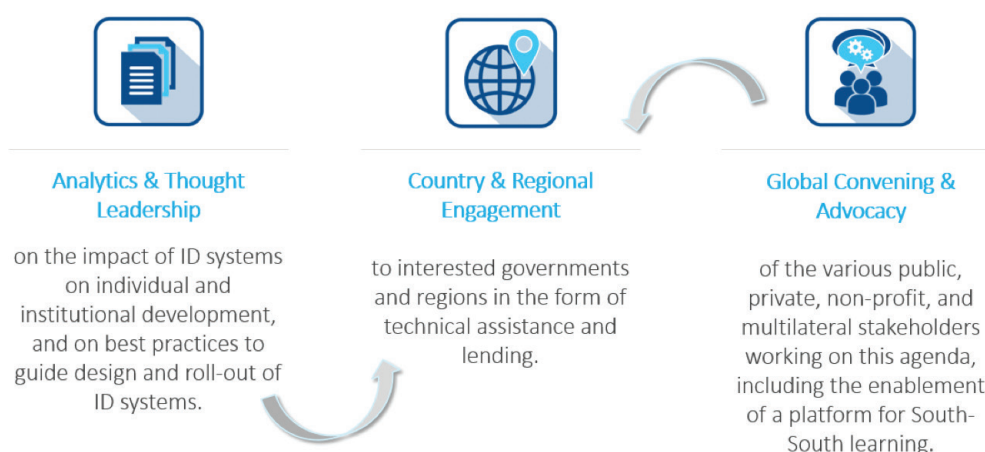
- Financial Inclusion.** Less than half of all adults in the poorest 40 percent of households have a bank account—and approximately 375 million unbanked adults in developing economies (18 per cent) are constrained by not having the necessary documentation. Robust digital identification systems make it easier to fulfil Know Your Customer (KYC) requirements of financial institutions and reduce risks, which have the potential to greatly expand financial services for the poor.
- Social Protection.** Providing all with a proof of identity can help improve access to social protection, including by making marginalized populations more visible. Social protection can also be delivered more effectively with precise targeting and credible verification of the intended beneficiaries, as enabled by digital identification systems.
- Governance.** Foundational identification systems are a crucial instrument to strengthen public administration. Aside from negating the need for mass voter registration drives to maintain current voter rolls, being able to uniquely identify each resident offers the ability to make public administration more efficient, including through the removal of ‘ghost civil servants’.
- Public Health.** Being able to uniquely identify individuals is fundamental to the delivery and sustainability of universal health coverage (UHC). It can also help ensure that children and adults receive the full course of required vaccinations and facilitate more accurate monitoring of the treatment of communicable diseases such as tuberculosis and HIV/AIDS.
- Women’s Empowerment.** Women often struggle to assert their rights and access services due to lack of identification, for example to claim and own property. Often, their government benefits and wages are deposited into a household account rather than into their own account. A digital ID credential or number linked to their unique biometric identifiers can ensure that they are able to open and operate their own financial accounts.
- Safe and Orderly Migration.** Foundational identification systems, such as national IDs and civil registration, are essential for maintaining the integrity of travel documents and enabling individuals to travel through regular channels. A growing number of countries are exploring bilateral and regional arrangements to use national ID cards – or even numbers – as a credential for cross-border travel, which has potential to make migration more accessible and safe, especially land travel for border communities.
- Forced Displacement.** Over 65 million people worldwide have been forced to leave their homes because of war, violence, and persecution, of which 22.5 million have crossed international borders in search of safety. Providing internally-displaced persons and refugees with a proof of ID is fundamental for their protection as well as for facilitating durable solutions, such as local integration, returns and re-integration, and resettlement.



## ID4D: HELPING DEVELOPING COUNTRIES REALIZE THE TRANSFORMATIONAL POTENTIAL OF DIGITAL ID SYSTEMS

It is for these reasons that the World Bank Group launched the Identification for Development (ID4D) initiative in 2014. ID4D brings together ten arms of the World Bank Group<sup>1</sup> to provide comprehensive, cross-sectoral support for the development of robust, inclusive, responsible and sustainable digital ID systems in client countries. The three pillars of ID4D are: thought leadership and analytics; country and regional engagement; and global convening and advocacy.

FIGURE 1 – THREE PILLARS OF ID4D'S WORK



### THOUGHT LEADERSHIP AND ANALYTICS

ID4D produces original research that has a practical value to governments, development partners and other stakeholders. This includes data collection and analysis on the importance of identification systems, on how identification systems can be built to address development needs in various sectors, and on their implementation progress and impact around the world. In particular, ID4D seeks to identify and disseminate best practices to guide the design and roll-out of identification systems, including guidance on legal, governance and technology solutions, and how to adapt these to various country contexts and implement them at scale.

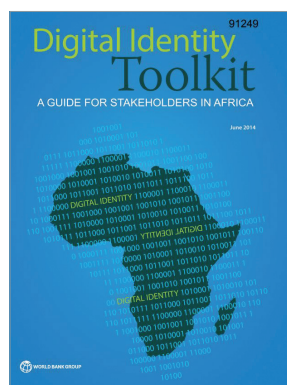
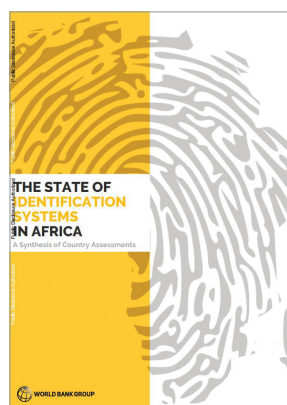
Some examples of ID4D's work in this pillar include:

- The **Digital Identity Toolkit**, which provides broad and high-level guidance for practitioners involved in designing or implementing identification systems. This will be updated in 2018.
- The **ID4D Global Dataset** is updated annually as the only source of estimates on the number of people without officially-recognized ID across 198 economies, as well as the features of each country's national ID and civil registration system.
- **Thematic case studies** on the role of identification systems in different use cases, such as women's empowerment, ending child marriage, forced displacement, financial inclusion, healthcare, and education.

<sup>1</sup> Transport and ICT; Governance; Social Protection and Jobs; Health, Nutrition and Population; Finance and Markets; Gender; Legal; Development Data; the International Finance Corporation (IFC); and the Consultative Group to Assist the Poor (CGAP).



- **Guidance on the costs of identification systems**, which considers different technology choices and conditions for implementation.
- **Reports on the state of identification systems in Africa**, including profiles of each country's national ID and civil registration systems, as well as a synthesis of 17 national assessments that ID4D supported during 2015-2017.
- **Scientific impact assessments** on the effect of identification systems on access to services, government savings and other development outcomes.



## COUNTRY AND REGIONAL ENGAGEMENT

ID4D provides technical assistance and mobilizes World Bank financing to help countries design, build and strengthen identification systems. These engagements are typically at the national level, but are starting to include an increasing number of regional-level initiatives, where ID4D supports regional economic communities to achieve mutual recognition of their national IDs for the free movement of people and deeper integration.

Assistance is provided across three stages:

1. **Assessments and roadmaps.** ID4D has developed a standardized methodology – the Identity Management System Analysis (IMSA) – that has been used in 28 countries. IMSAs typically form the basis of a roadmap for moving forward with assistance.
2. **Design and dialogue.** More in-depth studies and planning – based on the priorities of the country – are supported in this stage, as well as facilitation of multi-sectoral collaboration to maximize the development impact of the identification system. For example, in regional projects, this may involve the development of standards for cross-border mutual recognition and interoperability.
3. **Implementation.** At this stage, various financial instruments can be utilized to invest in rolling out the identification system and supporting its integration into service delivery and other use cases.

Importantly, the assistance is informed by the work in the other two pillars and is delivered in close collaboration with other development partners and donors. For example, ID4D is working closely with the East African Community (EAC) Secretariat, UNHCR and IOM on interoperability and mutual recognition of national IDs in East Africa.

## ID4D: GLOBAL CONVENING AND ADVOCACY

With its multi-sectoral approach, ID4D is well-placed to unify and drive the global identification agenda by raising awareness, harmonizing the varying interests on this topic, and strengthening coordination among UN, non-government and private sector actors. To this end, ID4D has spearheaded three major initiatives:

- **Facilitating development of the 10 Principles on Identification for Sustainable Development**, which provide a framework of norms and best practices and have since been endorsed by 18 other UN and international organizations, donors and private sector associations.
- **Convening a broad spectrum of standards and normative bodies to foster a better understanding of international standards across the identity management lifecycle** and to document a minimum level that allows for economies of scale, deployment and interoperability in developing countries.
- **Launching a South-South knowledge exchange approach** that facilitates countries learning from each other's successes, failures and lessons learned.

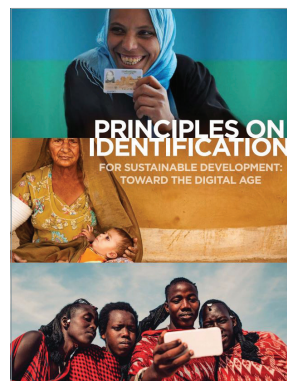


## PRINCIPLES ON IDENTIFICATION FOR SUSTAINABLE DEVELOPMENT

In order to maximize the potential benefits of identification systems for sustainable development, while mitigating many of the risks, it is important to develop a common understanding of the characteristics of identification systems that make them beneficial for development. The ten *Principles on Identification for Sustainable Development*, offer such a shared vision.

By applying these Principles, governments and development partners will be able to align their support and vision for the implementation of identification systems along a set of shared values and standards.

The Principles were developed in a process involving 15 organizations that was facilitated by ID4D and the Centre for Global Development during 2016. As of July 2017, 19 UN and international organizations, donors and private sector associations had endorsed the Principles.



### PRINCIPLES ON IDENTIFICATION FOR SUSTAINABLE DEVELOPMENT

#### **INCLUSION: UNIVERSAL COVERAGE AND ACCESSIBILITY**

1. Ensuring universal coverage for individuals from birth to death, free from discrimination.
2. Removing barriers to access and usage and disparities in the availability of information and technology.

#### **DESIGN: ROBUST, SECURE, RESPONSIVE, AND SUSTAINABLE**

3. Establishing a robust—unique, secure, and accurate—identity.
4. Creating a platform that is interoperable and responsive to the needs of various users.
5. Using open standards and ensuring vendor and technology neutrality.
6. Protecting user privacy and control through system design.
7. Planning for financial and operational sustainability without compromising accessibility.

#### **GOVERNANCE: BUILDING TRUST BY PROTECTING PRIVACY AND USER RIGHTS**

8. Safeguarding data privacy, security, and user rights through a comprehensive legal and regulatory framework.
9. Establishing clear institutional mandates and accountability.
10. Enforcing legal and trust frameworks through independent oversight and adjudication of grievances.





## INPUTS FROM THE IMPLEMENTATION AND CAPACITY BUILDING WORKING GROUP (ICBWG)

### CONTEXT AND AIM OF THIS ELEMENT, INCLUDING EXPERTS' VIEWS

Evidence of Identity (Eoi) is a holistic approach to the establishment and verification of identity. Eoi provides a framework for assessing and combining identity information to provide confidence that an individual is who they claim to be. For traveller identification, it is necessary for the agency to uniquely identify the individuals who are seeking to access the service, and to do so with a high degree of confidence.

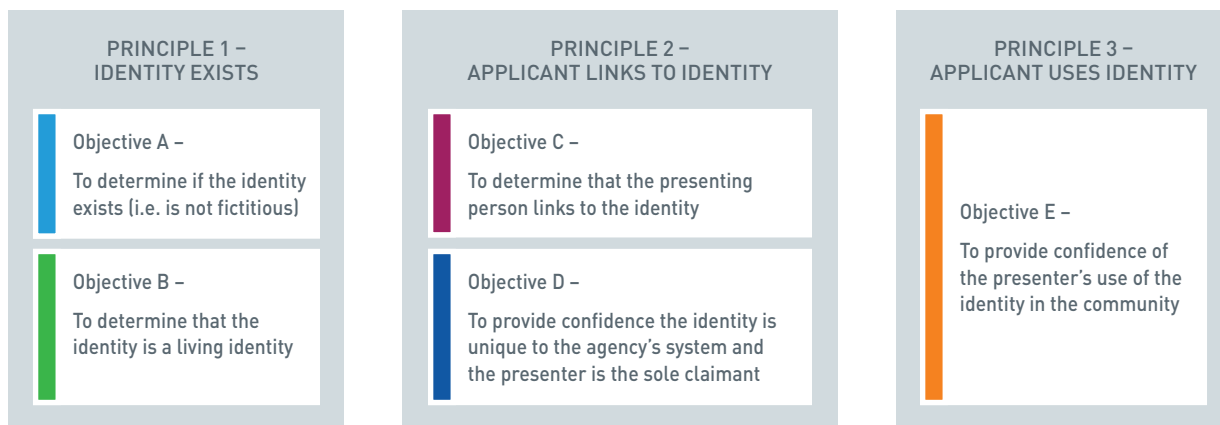
The examination and decision-making processes that authorities follow to establish and verify a person's identity can be sub-standard when compared with the security of the document or credential being issued. Fraudsters will generally seek the path of least resistance, and in some cases this may be the issuance process rather than the physical travel document. If there are gaps in the process that make it easier to secure a Falsely Obtained Genuine (FOG) document, then the fraudsters will seek this method, rather than forgery. The resulting document is genuinely issued by the State which can be validated against source data and is less likely to be detected than a fake, altered or counterfeit document.



The targeting of the issuance process can damage reputational gains made by increasing the physical security of the travel document. It also undermines the State's financial investment in improvement of security technology. The basis for an authority's secure issuance process is the documents, civil registry records, databases, and other information used to validate an applicant's identity. However, systematically assessing the identity information available is not routinely carried out by States. Eoi provides a methodology for such an assessment.

Eoi processes are based on a three-principle approach to establishing identity. These principles, and their related objectives, are outlined below in **Figure 1**. Applying these principles robustly to an individual case will provide an appropriate level of confidence that a person actually owns the identity they claim to own.

FIGURE 1 – Eoi PRINCIPLES





The Eol framework also enables an agency to examine its services as a whole, and balance risk with facilitation in a methodical way using identity information that is appropriate to the context. It also provides the agency with the ability to identify gaps and issues in the process or wider identity eco-system.

ICAO's mandate with respect to evidence of identification is to assist States to properly and uniquely identify individuals as part of the travel document issuance process or as they move across borders. In many States, the travel document issuing authority is one of the most important authoritative sources of identity information. It is therefore the establishment of identity, and validation of identity, that ICAO is most focussed on – largely for the purposes of security.

Identity fraud is an enabler for a range of criminal activities, from organized crime to terrorism. Weak identity management processes in the travel document issuance and border sector will be targeted to facilitate these activities. If States do not undertake the necessary steps to identify individuals effectively, the repercussions can be extremely serious. As an authoritative source, the State agency has an obligation to ensure that identity is established with a high degree of assurance. A robust and secure travel document should seek to fulfil each of the three principles to a high level of confidence, especially the first time a travel document is issued to that person.

If the first interaction is strong, then the Travel Document Issuing Authority can leverage the strength of the first issuance process for subsequent interactions such as a renewal application, or the replacement of a lost or stolen passport.

Based on the responses received following the ICAO State Letter EC6/8 – 16/04, in January 2016, more than 80 per cent of States responding (61 out of 74) have indicated that they have established a national framework related to Evidence of Identity.

## SUGGESTED APPROACH FOR IMPLEMENTATION



Before an agency redevelops any issuance processes, it will first need to understand the principles, and the evidence available to establish or validate identity. This is called “assessing the identity eco-system” which includes having an in-depth understanding of the issuance and registration processes of every piece of evidence to understand how much confidence can be placed in it and gained from its inclusion in an Eol process.

For example, if an agency is considering use of a driver's licence to support its travel document issuance processes, it will need to understand how robust the driver's licence issuance process is. An assessment can then be made to determine the extent to which the licence can be used as evidence. Depending on the availability and the quality of the driver's licence database, it could be used to match information against other records. Direct matching to the license database will help validate that the claimed identity exists. Otherwise, agencies may only be able to rely upon it as evidence of use in the community.

Additional information related to the evidence can also be useful. For example, if an applicant has consistently held a driver's licence in the same name for a number of years, the authority may have a higher level of confidence that the claim to the identity is genuine. Similarly, maintaining the same address or phone number over a significant period of time could also indicate a lower risk.



Agencies will deal with a range of documents and have varying degrees of confidence in their legitimacy, or the legitimacy of the information on them. The inherent 'value' of a document or record to the identity process will differ from State to State. For example, a birth certificate may be acceptable evidence that an identity exists in some States, whereas other States may have very little confidence in the registration processes or the documents produced by some or all of their registry offices.

If an agency has less confidence in the integrity of their State's birth registration process or the accuracy of their birth registers, they might place more emphasis on other evidence. For example – for many States, evidence that shows the applicant uses the identity in the community (their social footprint) may be as reliable as birth certificates. In this case, the agency might increase the amount of evidence required to meet Objective E, as illustrated in the **Diagram 1, page 71**. The social footprint evidence can support claims that the applicant links to the identity, especially where there is no other evidence available. However, authorities should bear in mind that the use of an identity must not always be the proof of its legitimacy (e.g. occasionally persons are known by acquaintances and local authorities by a nickname, aliases or another assumed name for many years).

It is important to understand that the issuance processes should not be entirely reliant on documents and register checks to gain confidence in an identity. Once the foundational documents and processes are understood, States will then need to consider what gaps are likely to exist and how other back-office processes can support the identification process. Agencies should always look to crosscheck their own databases using tools and techniques such as data mining, risk profiling, biographic and biometric matching.

Eol processes are also likely to be subject to ongoing amendment and modification to take account of environmental changes such as:

- policy changes;
- new information about methods of misuse and abuse of identity;
- changes in the processes to obtain identity-related documents; and
- new technologies.

## CHALLENGES AND SOLUTIONS



It is not feasible to prove, with absolute certainty, the identity of an individual wanting to obtain a travel document. This would require an identity process so cumbersome and intrusive that the costs would greatly outweigh any benefits. The principles and the supporting framework of the Eol approach therefore refer to a range of evidence that, used in combination, can provide a high degree of confidence that individuals are who they claim to be.

ICAO cannot be prescriptive on how to achieve the key Eol principles and their objectives. There is no 'one-size-fits-all' solution for Eol. How authorities design their Eol processes will depend on a State's customs, working practices and legal frameworks and will likely differ from other States.

Agencies and authorities should seek to fulfil each of the three principles to a high level of confidence with a robust and secure process, especially the first time they interact with an individual. If the first interaction is strong, then the authority can leverage the strength of the first process for subsequent interactions such as a renewal application, or other identity products and services provided.

Although the principles are broad enough to apply in any State, each agency will face different challenges in relation to evidential requirements, for example:

- a) there may be multiple valid versions of foundational documents available for use (e.g. birth and/or death certificates);
- b) legislation may prevent validation of documents, access to source registers or information sharing between government departments and States;
- c) historic travel or foundational document records may be paper-based – leading to a lengthy manual checking process; and
- d) databases of information may be application-based rather than person-centric – making it difficult to match various historical applications under the same identity.



Regardless of these challenges, agencies can still establish robust issuance processes by utilizing a range of documents, records and other evidence to build confidence in an identity.

Agencies should assess individuals against each of the three Eol components. Each component provides important evidence about distinct aspects of identity. On its own, each component only satisfies part of the evidential process required to provide confidence that an individual is the true 'owner' of their claimed identity.

There are many other examples of 'identity-related' information that can also be utilized depending on the State. Information such as a phone number, IP address, tax and social security numbers, and national ID numbers can all be used to determine the amount of risk posed by an applicant. The consistent use of information over time can also give authorities confidence in its legitimacy.

## SUCCESS STORY ON THE IMPLEMENTATION OF THIS TRIP ELEMENT

### THE FIDELITY INITIATIVE

One of the two projects in which foundational documents play a central role, financed by the European Commission under the Security theme of the Seventh Framework Programme, is the FIDELITY project. FIDELITY stands for 'Fast and trustworthy Identity Delivery and check with ePassports leveraging Traveller Privacy'. FIDELITY is a multi-disciplinary initiative that has analyzed shortcomings and vulnerabilities in the ePassport life cycle, and has developed technical solutions and recommendations to overcome them.

FIDELITY demonstrates privacy enhanced solutions to:

- **Secure issuing processes:** authentication of documents, preventing impersonation and fraud;
- **Improve ePassport security and usability:** authentication processes, ID check speed, accuracy of biometrics, management of certificates, access to remote databases, convenience of biometric sensors and inspection devices;
- **Better manage lost and stolen passports;**
- **Ensure privacy:** privacy-by-design, the exclusive FIDELITY-applied principle will be considered in all phases of the ePassport life cycle, using characteristics



such as systematic anonymization of data and separation of data streams using privacy-enhancing technologies.

The aim of FIDELITY is to strengthen trust and confidence of stakeholders and citizens in ePassports, provide more reliable ID checks, hence hinder criminal movements, and ease implementation of E/E records providing better analysis of migration flows. Solutions were designed for backwards compatibility to be deployed progressively in the existing infrastructure.

The FIDELITY consortium is composed of market-leading companies, innovative SMEs, renowned academia, ethical-sociological-legal experts, and end-users, which will help to define requirements and recommendations and assess results. They will, with the other partners, actively promote the project results to stakeholders and international working groups that elaborate future ePassport standards.

Source: Ronald Belser, the Immigration and Naturalization Service, Kingdom of the Netherlands, [www.fidelity-project.eu](http://www.fidelity-project.eu)



## ICAO GUIDE TOWARDS BETTER PRACTICE IN NATIONAL IDENTIFICATION MANAGEMENT

ICAO's mandate to develop guidance material related to better practice in national identification management refers to ICAO Assembly Resolution A37-20, Appendix D – Facilitation, Section II, which recognized that a passport is the “basic official document that denotes a person's identity and citizenship and is intended to inform the state of transit or destination that the bearer can return to the state which issued the passport.” To achieve this, the Assembly Resolution also underscored the importance of maintaining international confidence in the integrity of the passport as an essential function of the international travel system and that the veracity and validity of machine readable travel documents depends on the documentation and processes used to identify, confirm citizenship or nationality and assess the entitlement of the passport applicant.

The Guide highlights the need for consistent efforts in all aspects of the travel continuum. It suggests that the examination and decision-making processes, and particularly the establishment of confidence in a person's identity within this process, is an area which can easily fall behind in terms of strength of security when compared with that of the document itself. It proposes measures in different areas of interest throughout the issuance process where a higher level of confidence may be achieved.

The Guide does not set standards for how confidence in a person's identity should be established by relevant authorities. This will vary from State to State, dependent upon on local laws and legal frameworks, customs, and the nature of which ‘foundational’ documents are used. The terms “breeder documents,” “foundational documents” and “source documents” are used interchangeably as the documents of evidence of identification. The Guide sets out a framework of outcomes to be achieved in order to assure confidence in a person's identity prior to issuing a travel document to an individual.

The scope of the Guide is to provide States with guidance on establishing evidence of identification in order to properly and uniquely identify individuals for the purposes of issuing trusted travel documents and to contribute to overall security worldwide. It focuses on the need to achieve EoI principles outlined earlier: the identity exists, the applicant links to identity and the applicant uses the identity in the community.

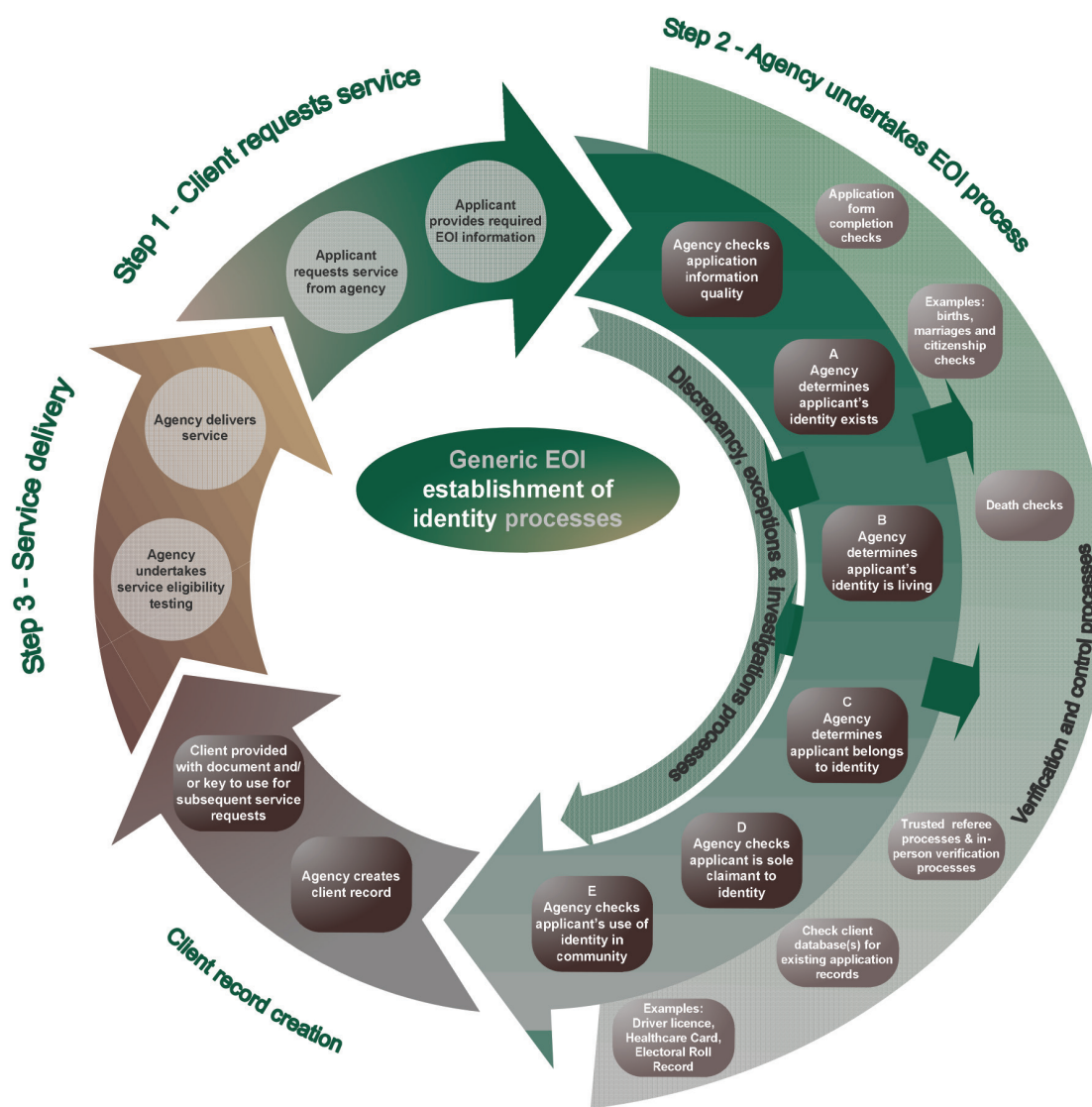
The Guide is not prescriptive in how to establish each of these goals. Each state may use all or a combination of the means used to establish evidence of identity including civil registration and “social footprint” checks (evidence that the person uses their claimed identity in the community), and foundational documents.

It is important to understand that issuance processes should not be totally reliant on document and register checks to gain confidence in an identity. Once the foundational document and processes are understood, States then need to consider what gaps are likely to exist and how other back-office processes can support the identification process. Issuing authorities should always look to cross-check their own databases using tools and techniques such as data mining, risk profiling and biometric matching. A new version of the guidance entitled ICAO Guidance on Evidence of Identity will be released in 2017.

This publication can be found at  
[www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx](http://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx)



DIAGRAM 1 – EXAMPLE OF BUSINESS PROCESS FOR ESTABLISHING AN INDIVIDUAL'S IDENTITY





## MACHINE READABLE TRAVEL DOCUMENTS (MRTDs)

### MESSAGE FROM THE DIRECTOR OF INTERNATIONAL PROTECTION, THE UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES



CAROL BATCHELOR is the Director of the Division of International Protection of the UN High Commissioner for Refugees. From 2010 – 2015, Ms. Batchelor served as the UNHCR Representative to Turkey. Prior to this she was the first Director of the UNHCR Ethics Office, which she opened in 2008. Previously, Ms. Batchelor served as Chief of Mission for UNHCR operations covering India and the Maldives, and as Senior Legal Officer in the Department of International Protection at UNHCR HQs, spearheading the expansion of the international legal framework and UNHCR's mandate on statelessness during the 1990's.

Dear readers,

It is my pleasure to introduce the revised *Guide for Issuing Machine Readable Convention Travel Documents for Refugees and Stateless Persons*, which was issued jointly by the International Civil Aviation Organization (ICAO) and the United Nations High Commissioner for Refugees (UNHCR) in February 2017.

The issuance of travel documents to refugees and stateless persons builds on a long-standing tradition, dating back 95 years, to the “Nansen passport” of the first High Commissioner for Refugees under the League of Nations. UNHCR has, since its creation in 1950, remained committed to the promotion, support and facilitation of such travel documents, both to refugees and to stateless persons, as an integral part of its international protection mandate.

Throughout its work, UNHCR has seen that access to travel documents can make a concrete and tangible impact on the lives of refugees and stateless persons. Apart from enabling freedom of movement, travel documents can facilitate durable solutions, such as resettlement to a third country, or allow refugees and stateless persons to access opportunities provided through complementary pathways, including in other countries, and thereby advancing livelihoods and education opportunities, and permitting family unity.



Providing refugees and stateless persons with the means to travel in a safe and regular manner is particularly important in today's world, with unprecedented numbers of displaced persons seeking to travel irregularly through dangerous land and sea routes, potentially exposing them to exploitation, abuse, violence and human trafficking. The issuance of travel documents, coupled with enhanced opportunities for resettlement and complementary pathways, can therefore reduce the risks associated with irregular movement and, in some cases, save lives.

UNHCR remains committed to cooperate with and provide support to States, including those which are yet to transition to machine-readable travel documents, with the aim of ensuring that all refugees and stateless persons have access to

travel documents in accordance with international standards. The joint UNHCR/ICAO Guide is essential in this work, as it provides the basis for UNHCR's advocacy and technical support, and outlines the concrete steps which each State needs to take in order to issue Convention Travel Documents in line with existing international standards.

UNHCR would like to thank ICAO for their continued collaboration and support in the development and promotion of international standards related to the issuance of travel documents to refugees and stateless persons.

**Carol Batchelor**  
Director of International Protection  
United Nations High Commissioner for Refugees

## GUIDE FOR ISSUING MACHINE READABLE CONVENTION TRAVEL DOCUMENTS FOR REFUGEES AND STATELESS PERSONS

### THE ORGANIZATIONS THAT HAVE PARTNERED IN DEVELOPING THE GUIDE

The *Guide for Issuing Machine Readable Convention Travel Documents for Refugees and Stateless Persons* ("MRCTD Guide") was first developed and issued by the International Civil Aviation Organization (ICAO) and the United Nations High Commissioner for Refugees (UNHCR) in October 2013. Its purpose was to support States in the issuance of Convention Travel Documents (CTDs) to refugees and stateless persons in machine readable format, in line with the 1951 Convention relating to the Status of Refugees (1951 Refugee Convention), the 1954 Convention relating to the Status of Stateless Persons (1954 Statelessness Convention), and the 1944 Convention on International Civil Aviation (Chicago Convention).



### NANSEN PASSPORT

In February 2017, the MRCTD Guide was revised by ICAO and UNHCR to reflect Standard 3.12 on machine-readability. The revision also integrates considerations related to the handling and protection of personal data in the context of document issuance.

### THE CONTEXT

#### CONVENTION TRAVEL DOCUMENTS FOR REFUGEES AND STATELESS PERSONS

Unlike nationals, refugees do not enjoy the protection of their country of nationality and therefore cannot, or can-



not reasonably, avail themselves of a national passport for travel purposes. Similarly, stateless persons are not considered as nationals by any state, and are therefore reliant on their countries of residence to obtain a travel document. The right of refugees and stateless persons to a CTD issued by their country of lawful stay is therefore outlined in article 28 the 1951 Refugee Convention and the 1954 Statelessness Convention, respectively.

Travel documents for refugees and stateless persons are essential to freedom and liberty of movement, as enshrined in article 13 of the Universal Declaration of Human Rights and article 12 of the International Covenant on Civil and Political Rights, and are intricately linked to the exercise of other human rights, such as the right to work, the right to an education and the principle of family unity. Such documents can further facilitate the attainment of durable solutions, such as resettlement or voluntary repatriation, and allow refugees and stateless persons to access other opportunities provided through complementary pathways to protection and solutions, including through humanitarian admission and transfer, family reunification, skilled migration, labour mobility schemes, scholarships and education mobility schemes.

## INTERNATIONAL STANDARDS

International standards and specifications for travel documents have undergone significant developments since the 1951 Refugee Convention and the 1954 Statelessness Convention were drafted. UNHCR notes that the effective realization of the rights set out in these Conventions can only be achieved if refugees and stateless persons have access to travel documents that are issued in line with current international standards, as adopted by ICAO.

In June 2015, the ICAO Council further adopted a specific standard for CTDs to refugees and stateless persons to be issued in machine readable format (MRCTDs). Standard 3.12, which became applicable to all States Parties to the 1944 Convention on International Civil Aviation (Chicago Convention) as of February 2016, reads as follows:

**“CONTRACTING STATES SHALL ENSURE THAT TRAVEL DOCUMENTS FOR REFUGEES AND STATELESS PERSONS (CONVENTION TRAVEL DOCUMENTS) ARE MACHINE READABLE, IN ACCORDANCE WITH THE SPECIFICATIONS OF DOC 9303.”<sup>1</sup>**

UNHCR and ICAO have already, since the first release of the MRCTD Guide in 2013, encouraged the issuance of MRCTDs to refugees and stateless persons. With the newly adopted ICAO Standard, however, the issuance of MRCTDs has become mandatory for all States Parties to the Chicago Convention, and thereby also to the vast majority of States Parties to the 1951 Refugee Convention and/or its Protocol, and the 1954 Statelessness Convention.<sup>2</sup>

Machine-readability, already an established standard for national passports, offers a multitude of benefits for States, as well as for document holders, including enhanced security features (which reduces the risk of document fraud and counterfeit); global uniformity and inter-operability with existing systems (contributing to effective and secure border controls and travel); and reciprocal recognition.

## PURPOSE AND SCOPE OF THE GUIDE

The MRCTD Guide seeks to support States with the concrete administrative, legislative and technical steps which are required to issue MRCTDs, which are in line with both ICAO Standards, on one hand, and the requirements of the 1951 Refugee Convention and the 1954 Statelessness Convention, on the other.

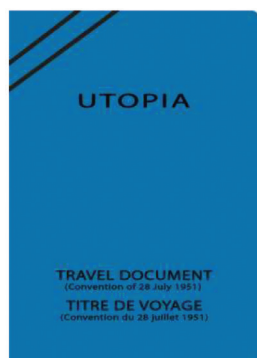
The MRCTD Guide provides practical and concrete advice on the required legal and administrative framework, such as provisions in domestic law, organizational structure, book production and personalization of CTDs, as well as the concrete procedures for application, entitlement, issuance and withdrawal of travel documents. It further outlines the detailed technical specifications to be adhered to in order for a CTD to be issued in line with ICAO Standard 3.12 and Doc 9303, as well as considerations for the protection of personal data.

## STRUCTURE AND COMPONENTS OF THE GUIDE IN CONNECTION WITH MRTDs

The MRCTD Guide consists of two parts: Part I on “Legal and Administrative Framework”, and Part II on “Technical Specifications”. The Guide also includes, as an Appendix, two MRCTD Specimens, for refugees and for stateless persons, respectively.

Part I provides practical and concrete advice on the required legal and administrative framework which is required for States to issue MRCTDs, including with regard to;



MRCTD FOR REFUGEES  
COVER DESIGN

- national legal framework;
- organizational structure and Travel Document Issuing Authority;
- application process;
- entitlement process;
- book production and personalization;
- issuance, withdrawal, and lost and stolen MRCTDs; and
- security of MRCTDs.

Part II sets out the technical specifications for MRCTDs. These specifications are necessary to ensure interoperability among documents issued by Contracting States to the 1951 Refugee Convention and the 1954 Statelessness Conventions. The guidance is based on ICAO Doc 9303, and addresses:

- general characteristics of MRCTDs;
- general layout of the MRCTD data page; and
- MRCTD data elements.

Part II also highlights the specificities of CTDs for refugees and stateless persons, as per the requirements of the 1951 Refugee Convention and 1954 Statelessness Convention, in particular:

- the mandatory return clause,
- the geographical validity, and
- certain data elements and requirements in the Specimen Travel Document in the Annex to these Conventions, which are now rendered obsolete.

The revision of the MRCTD Guide in February 2017 updated the Guide to reflect the adoption of ICAO Standard 3.12, and also updated integrated data protection considerations in the handling of personal data in the context of application and issuance of MRCTDs.

## IMPLICATIONS

The MRCTD Guide is an essential tool to support States in their transition to MRCTDs, in accordance with Standard 3.12 and Doc 9303.

It further facilitates the work of UNHCR and ICAO in providing technical support and guidance to States, with the aim of ensuring that all refugees and stateless persons have access to travel documents issued in line with international standards.

## MACHINE READABLE DATA PAGE FOR MRCTD

[illegible]

<sup>1</sup> ICAO, International Standards and Recommended Practices, Annex 9 to the Convention on International Civil Aviation – Facilitation, Fourteenth Edition, October 2015 (“Annex 9”), Chapter 3, para. 3.12, available at: [www.icao.int/publications/Documents/7300\\_9ed.pdf](http://www.icao.int/publications/Documents/7300_9ed.pdf)  
Doc 9303 is available at: [www.icao.int/publications/pages/publication.aspx?docnum=9303](http://www.icao.int/publications/pages/publication.aspx?docnum=9303)

<sup>2</sup> With the exception of the Holy See and Tuvalu, all States Parties to the 1951 Refugee Convention and/or its Protocol, and the 1954 Statelessness Convention are also party to the Chicago Convention, see: [www.icao.int/secretariat/legal/List%20of%20Parties/Chicago\\_EN.pdf](http://www.icao.int/secretariat/legal/List%20of%20Parties/Chicago_EN.pdf)



## HOW THE INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO) CONTRIBUTES TO THE ICAO TRIP STRATEGY



**TOM KINNING** is the convener of ISO/IEC JTC1 SC17 Working Group 3, which is the group that, in close cooperation with ICAO, is responsible for the development and maintenance of the specifications for Travel Documents, ICAO Doc 9303 and ISO/IEC 7501.

In this function he is an active contributor to the work of ICAO's Technical Advisory Group, the New Technologies Working Group, the Implementation and Capacity Building Working Group, as well as ICAO's PKD Board. He has been the lead editor of various technical papers, such as Technical Reports and ICAO Doc 9303.

For more than thirty-five years he has held various management positions in ICT, product development, and production of Identity Documents and related systems. He has been leading various large scale projects on the implementation of (e)Passport schemes.

In 2016 Tom was appointed editor in chief of *Keesing's Journal of Documents & Identity*.

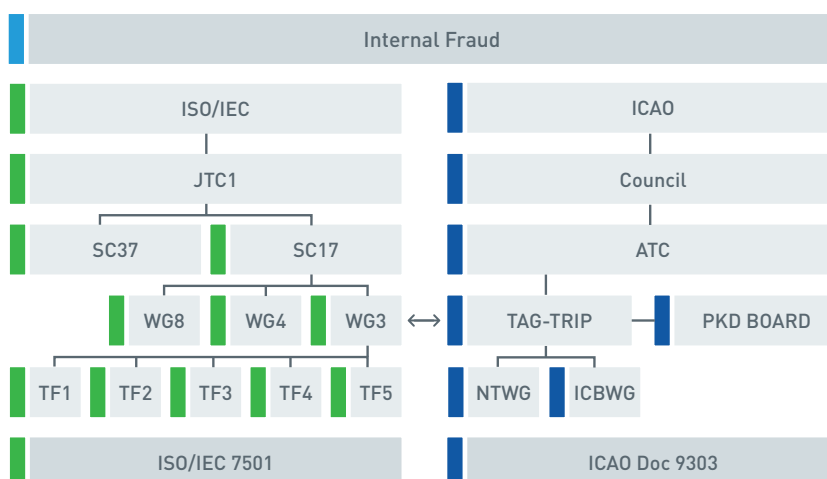
ISO/IEC JTC1 SC17 (SC17) Working Group 3 (WG3) is the liaison group between the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) on the one hand, and the International Civil Aviation Organization (ICAO) on the other, governed initially by the liaison formula defined in Resolutions 178, 179, and 181 of the 1989 Plenary of SC17 and, after 1994, by the liaison formula defined in Resolution 291 of the 1994 Plenary of SC17.

The work within WG3 is organized through five Task Forces:

- **TF1** – New Technologies;
- **TF2** – ICAO Doc 9303 and ISO/IEC 7501 Editorial Drafting;
- **TF3** – Application Issues;
- **TF4** – Test Methodologies;
- **TF5** – Data Structure and Security Framework for MRTDs.

### CO-OPERATION AND COMPLETION

WG3 works collaboratively with ICAO, the Secretariat of ICAO's Technical Advisory Group on the Traveller Identification Program (TAG/TRIP) and the two working groups established to advance the work programme of the TAG/TRIP, the New Technologies Working Group (NTWG) and the Implementation and Capacity Building Working Group (ICBWG). Furthermore, WG3 supports the work of the ICAO Public Key Directory (PKD) Board with technical expertise.





The co-operation concerns providing technical support and drafting of specifications and guidance material, covering the five pillars of the ICAO TRIP:

- Evidence of Identity;
- Machine Readable Travel Documents – ICAO Doc 9303;
- Document Issuance and Control;
- Inspection Systems and Tools;
- Interoperable Applications.

This cooperation was governed initially by the liaison formula defined in Resolutions 178, 179, and 181 of the 1989 Plenary of SC17 and, after 1994, by the liaison formula defined in Resolution 291 of the 1994 Plenary of SC17. ICAO's TRIP Secretariat and ISO's Central Secretariat are currently discussing updating these liaison formalities specifically dealing with the following:

- ISO and ICAO to encourage the continual collaboration between ICAO and JTC 1/SC 17 in the ongoing maintenance of ICAO Doc 9303, to be formalized in a Cooperation Agreement or Memorandum of Understanding.
- Other ISO and ISO/IEC standards can make normative or informative references directly to Doc 9303. The ICAO Doc 9303 series is made available, free of charge, through ICAO's website. Therefore, there should be no issues in terms of availability.
- As a result, there would be no need to further maintain the ISO/IEC 7501 series. It would be appropriate to consider withdrawing the series.

To address its work programme, WG3 works, in addition to ICAO, extensively with Working Groups within SC17 (Cards and Personal Identification), SC27 (IT Security Techniques), SC31 (Automatic Identification and Data Capture Techniques), SC37 (Biometrics), ISO/IEC 3166-MA (Country Codes Management) and international organizations such as INTERPOL, the International Organization for Migration (IOM), and the Organization for Security and Co-operation in Europe (OSCE).

## TECHNICAL ASSISTANCE IN SUPPORT OF ICAO TAG/TRIP

WG3 supports the TAG/TRIP by providing technical assistance in an increasing number of areas. This assistance is provided through WG3's five Task Forces.

Key activities include:

- assisting the ICAO Technical Advisory Group on the Traveller Identification Programme (ICAO TAG/TRIP) and its Implementation and Capacity Building Working Group (ICBWG) to address application issues;
- assisting the ICAO Technical Advisory Group on the Traveller Identification Program (ICAO TAG/TRIP) and its New Technologies Working Group (NTWG) to develop and refine specifications as required and publication of them through ICAO Technical Reports; and
- providing technical expertise to ICAO's Public Key Directory (PKD) Board and the Board's Executive Body.

Specifically, **WG3 through its Task Force 1 (TF1) – New Technologies** supports the work programme of ICAO TAG/TRIP by working with the NTWG in the following areas:

- standards for Emergency/Temporary Passports;
- study of the use of barcodes;
- ISO/IEC 19794 3<sup>rd</sup> generation; and
- updating specifications for portrait quality.

**WG3 through its Task Force 2 (TF2) – 9303 and 7501 Editorial Drafting** supports the work programme of ICAO TAG/TRIP by working with the NTWG and the ICBWG in:

- drafting new editions of ICAO Doc 9303;
- drafting amendments to ICAO Doc 9303; and
- editorial work on Technical Reports.

**WG3 through its Task Force 3 (TF3) – Application Issues** supports the work programme of ICAO TAG/TRIP by drafting specifications for transliteration in the machine readable and visual inspection zones of an MRTD.

TF3 supports the work of the NTWG on:

- OCRB specifications (ISO1831 and ISO/IEC 30116).

TF3 supports the work of the ICBWG in the following areas:

- Better Practice in National Identity Management;
- Capacity-building Work in Identity Management and Border Security;
- breeder documents; and
- MRTD and eMRTD Certification.



**WG3 through its Task Force 4 (TF4) – Test Methodology** supports the work programme of ICAO TAG/TRIP by focusing on test methodology development. Specifically:

- durability tests;
- ISO balloting of RF interface tests;
- drafting RF & Protocol tests;
- drafting test specifications for Inspection Systems; and
- drafting test specifications for PKI objects.

**WG3 through its Task Force 5 (TF5) – Data Structure and Security Framework for eMRTDs** supports the work programme of ICAO TAG/TRIP by working with the NTWG on e-Passport Data Structures and Security in the following areas:

- revision of the Logical Data Structure (LDS2);
- Visible Digital Seals;
- guidance on Public Key Infrastructure; and
- guidance on the handling of electronic non-conformities.

WG3 representatives regularly participate in meetings of:

- ICAO TAG/TRIP
- ICAO TAG/TRIP NTWG
- ICAO TAG/TRIP ICBWG
- ICAO PKD Board
- ICAO PKD Board Executive Body

**Tom Kinneging**

Convenor of ISO/IEC JTC1 SC17

International Organization for Standardization (ISO)





## INPUTS FROM THE NEW TECHNOLOGIES WORKING GROUP (NTWG) AND THE IMPLEMENTATION AND CAPACITY BUILDING WORKING GROUP (ICBWG)



This element of the TRIP Strategy refers to the design and manufacture of standardized MRTDs, including ePassports, that comply with ICAO Doc 9303 specifications. ICAO's mandate in its leadership role with respect to MRTDs stems from the Convention on International Civil Aviation (the "Chicago Convention") which covers the full range of requirements for efficient and orderly civil aviation operations, including provisions for clearance of persons through border controls.

Under this mandate, ICAO develops and maintains international Standards in Annex 9 – Facilitation to the Chicago Convention for implementation by Member States. In the development of such Standards, it is a fundamental precept that if public authorities are to facilitate inspection formalities for the vast majority of air travellers, those authorities must have a satisfactory level of confidence in the reliability of travel documents and in the effectiveness of inspection procedures. The production of standardized specifications for travel documents and the data contained therein is aimed at building that confidence.

In 2004, the ICAO Assembly affirmed that cooperative work on specifications to strengthen the security and integrity of travel documents should be pursued by the Organization as a matter of high priority. In addition to the International Organization of Standardization (ISO), consultants to

TAG/MRTD include the International Air Transport Association (IATA), the Airports Council International (ACI) and the International Criminal Police Organization (INTERPOL). One year later, in 2005, the 188 Member States of ICAO approved a new Standard that all States must begin issuing machine readable passports in accordance with Doc 9303 no later than 2010, and all non-machine readable travel documents must have expired no later than 2015.

Since 2014, ICAO emphasized the importance of issuing ICAO-compliant MRTDs and underscored the importance of meeting the 24 November 2015 deadline set out in Standard 3.11 of Annex 9 – Facilitation, which requires all non-MRPs to be out of circulation by that deadline. It implemented a communication plan in order to encourage Member State compliance with this deadline and to minimize inconvenience to the travelling public.

At its second meeting of the 206<sup>th</sup> Session in November 2015, the ICAO Council requested that Member States be reminded of the online Compliance Checklist (CC) included in the Electronic Filling of Differences (EFOD) system which allows States to record information on compliance with Standards of Annex 9 – Facilitation in order to enable the Council to determine the extent of Annex 9 compliance and if further action should be taken in this regard.

The MRTD Programme, through the Implementation and Capacity Building Working Group (ICBWG) of the TAG/TRIP, monitors the progress made by Member States in their issuance of Doc 9303-compliant travel documents. However, there is a view among MRTD experts that some Member States are not issuing MRTDs that are fully compliant with the specifications in Doc 9303. Therefore, a proposed systematic process for evaluating passport compliance with Doc 9303 specifications is being finalized with the delineation of operations and respective roles and responsibilities identified.

Responses received to the letter disseminated to States with respect to MRTDs, shows that 73 per cent of States (54) are currently issuing ePassports, which is still low.



## SUGGESTED APPROACH TO IMPLEMENTATION



MRTDs and eMRTDs are designed to securely facilitate the movement of travellers across borders. Many States have utilized systems and technologies (e.g. automated border crossing gates) to streamline passenger processing, and target resources more effectively. These gains are reliant on interoperable travel documents that comply with Doc 9303 specifications. States should therefore ensure they place real emphasis on procuring and maintaining a system that produces compliant travel documents.

Technology in the identity management space is moving forward quickly, with a variety of new solutions becoming available. With so much choice, States' approaches to procurement need to be outcomes-focussed. What is the problem you are trying to solve? Or the ultimate outcome that you are looking for? Once these questions have been answered, then a technology that meets the need should be selected, rather than starting with a new technology that may not meet the need. States should refer to the ICAO *Collection of Best Practices for Acquisition of MRTD Goods and Services* for additional information and expert tips on outcome-focussed procurement.

One area where the ICBWG is encouraging States to consider their investment closely is ePassports. States should assess the cost versus benefit of the technology, and whether the States' issuance volumes and border traffic meet the threshold for the technology to be economically viable, or whether the investment is better spent elsewhere. The ICBWG is producing guidance which will provide a series of questions States should be asking themselves when considering whether an ePassport is the right solution for them, and in-

deed whether they are ready for one. The questions will enable States to self-assess their ability to extract benefit from ePassport technology, a question that should be asked well before initiating discussions with a vendor.

A key driver for States is often the belief that implementing an ePassport will secure greater visa-waiver status, and facilitate easier passage for their citizens. In reality, visa-waiver status considers a broad range of factors that span diplomacy and identity management infrastructure. If a State's Evidence of Identity (Eoi) processes are not trusted, the technology contained within their passport becomes a moot point.

Therefore, assessing the likelihood of direct benefit to citizens is a key question. What will the ePassport chip give me that a standard MRP will not? How will I fund the additional cost of the ePassport book and associated technology? Is my border ready to read and validate the digital certificates from the ePassport chip? Do my current Eoi processes undermine any benefit an ePassport may bring, or potentially introduce more risk? These and many other questions need to be considered carefully.

Building strong evidence of identity processes may be a more important investment for States, before they consider moving to an upgraded MRTD or eMRTD.

## CHALLENGES AND SOLUTIONS



One of the biggest challenges for States is non-compliance. When an MRTD has a defect in its machine readable zone and/or electronic chip, it creates delays for the citizen traveller as well as border officers and officials. It can also bring undue scrutiny to the traveller if the border officer considers the document to be fraudulent, counterfeit or altered.



In standard MRTDs, the most common issues relate to data formatting and/or personalization settings in issuance systems. Typical issues in the Machine-Readable Zone (MRZ) include incorrect positioning of the MRZ, poor formatting of the MRZ data elements, incorrect use of check digits within the MRZ, security features and/or other elements impinging upon the MRZ and affecting readability, and the inclusion of 2D barcodes within the passport's biodata page.

Increasingly, issues with ePassport readability are emerging that can severely impact border processing, undermine States' investment in the ePassport, and damage confidence in the technology. These issues generally relate to the logical data structure and/or certificate validation.

The ICBWG and NTWG encourage States to validate their MRTDs against Doc 9303 standards and seek the assistance of independent testing authorities to assess compliance of new travel documents. Ensuring that any contract with the vendor requires production of a compliant travel document is also key.

It is worth noting that States are now required to produce Doc 9303-compliant Convention Travel Documents (Refugee and Stateless), that are machine-readable in accordance with the specification. For additional information on meeting this requirement, States should refer to the *ICAO-UNHCR Guide for Issuing Machine Readable Convention Travel Documents for Refugees and Stateless Persons*.

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## SUCCESS STORY ON THE IMPLEMENTATION OF THIS TRIP ELEMENT

### FINGERPRINT CAPTURE AND THE GERMAN EXPERIENCE

Germany is the first EU State to introduce secondary biometrics into ePassports as required by the European Commission. The German passport system went live on November 1, 2005 and it became the first generation of electronic Machine Readable Travel Documents (eMRTDs). ICAO-compliant, complete with facial image, personal data and a Radio Frequency (RF) chip, this primary biometric system was the precursor to a secondary phase which was introduced in November 2007, which included a fingerprint

biometric. European Union Member States were required to have fingerprint biometrics included in their ePassports as of the summer of 2008 and Germany was the first to meet this deadline, with a combined total of 7 million ePassports, of which 2.5 million were second generation.

Source: "Biometric capture: The German fingerprint initiative", Dr. Uwe Seidel, Forensic Institute of the Federal Criminal Police Office of Germany (ICAO MRTD Report, Vol. 4, No. 2, 2009)





## DOC 9303 – BRIEF OVERVIEW

ICAO Member States have recognized that standardization is a necessity and that the benefits of adopting the Doc 9303 Standards formats for passports and other travel documents extend beyond the obvious advantages for States that have the machine readers and databases for use in automated clearance systems.

The Seventh Edition of Doc 9303 represents a restructuring of the ICAO specifications for Machine Readable Travel Documents, without incorporating substantial modifications to the specifications, and has been reformatted into a set of specifications for Size 1 Machine Readable Official Travel Document (TD1), Size 2 Machine Readable Official Travel Documents (TD2) and Size 3 Machine Readable Travel Documents (TD3) as well as visas. This set of specifications consists of various separate documents in which general (applicable to all MRTDs) as well as MRTD form factor specific specifications are grouped.

Doc 9303 is divided into twelve sections. Each section describes a specific aspect of the MRTD. The sections of Doc 9303 are designed in such way that the issuer of MRTDs can extract a complete set of specifications that are relevant to a specific type of MRTD (form factor).

The technical specifications sections of Doc 9303 have been endorsed by the International Organization for Standardization under ISO Standard 7501, which means that these ICAO specifications have achieved the status of worldwide standards.

ICAO will issue, from time to time, a Supplement to Doc 9303. The specifications of Doc 9303 should always be read in conjunction with the additional information set out in the latest release of the Supplement, available on the ICAO website at [www.icao.int/publications/pages/publication.aspx?docnum=9303](http://www.icao.int/publications/pages/publication.aspx?docnum=9303)

## ICAO COLLECTION OF BEST PRACTICES FOR THE ACQUISITION OF MRTD GOODS AND SERVICES

This “Collection of Best Practices for the Acquisition of Machine Readable Travel Document (MRTD) Goods and Services” has been produced by the time to Subgroup of the Implementation and Capacity Building Working Group (ICBWG) of the ICAO Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP), in order to provide assistance to State authorities issuing tenders for MRTD-related systems.

Procurement projects are often large, complex and consist of a multitude of discrete tasks to be completed within pre-planned timeframes. Protracted and intricate projects require preparation and coordination in order to draw strategic connections between the planning and implementation stages. They also establish a framework for cost minimization and certainty of delivery. Those seeking to embark on a procurement process for MRTD systems should be aware of the pitfalls and obstacles involved in such ventures and how to design the procurement process to mitigate or prevent problems before they occur.

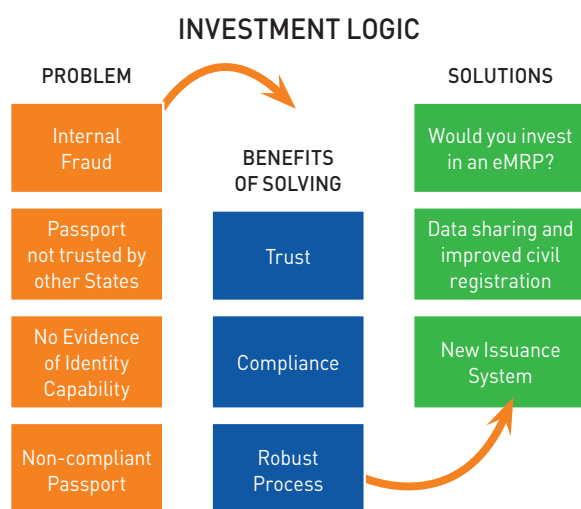
The Collection leads the reader from the basic principles of procurement, to steps in the procurement process and provides a ‘Tip Sheet’ that lists possible and common problems and solutions.

The Collection begins by outlining the principles of procurement that should be considered before the project commences and are referenced throughout the process. They include the future vision for the use of MRTD technology, a comprehensive assessment of external markets, local legislation and internal stakeholders and a thorough risk analysis and Risk Management Plan.



The Collection then describes the procurement process, from defining the needs of the project, to the tender process, evaluating bids, awarding contracts and managing change:

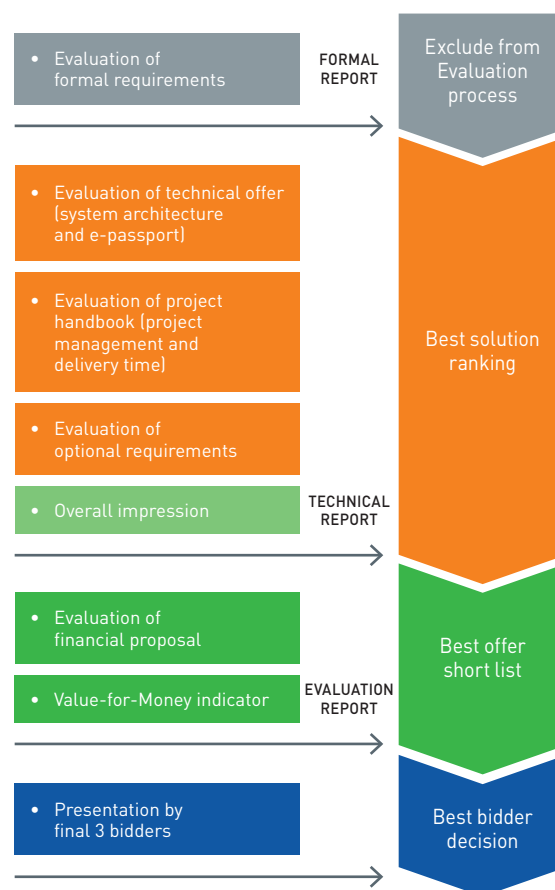
**FIGURE 1 – POINTS TO WATCH DEFINING THE NEEDS FOR AN MRTD RELATED SYSTEM**



The Collection details the requirements of each step and alerts the reader to areas of potential difficulty. In conjunction with the Tip Sheet, the Collection assists the reader to develop a successful and efficient procurement process that is cost-effective and delivers results.

The Collection recommends that States clearly identify the root cause of the problem they wish to solve and elucidate the outcome they expect when procuring a new MRTD-related system. It suggests that the bidder provide a compliance matrix that describes how the system will fulfil each requirement or provide alternative solutions.

**FIGURE 2 – SAMPLE OF AN EVALUATION PROCESS**



It advises that contracts should be carefully written and must contain the fundamental legal obligations of each side as well as project related procedures. The contract assumes greatest importance in the event of dispute and must be written to clearly identify the roles and responsibilities of each party.



The Collection proposes that a team consisting of subject matter experts, from technical to commercial, is involved in evaluating each bid. This is to ensure that no one individual has undue influence and that the needs of all stakeholders are considered.

The Collection is recommended for use by State authorities because it illustrates international procurement best practices and details each step in the procurement process while supporting the reader by identifying common problems and their solutions.

This publication can be found at

[www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx](http://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx)

## GUIDANCE ON EMERGENCY TRAVEL DOCUMENTS

The “*Guidance on Emergency Travel Documents*” is a guide to principles for Recommended Practice developed by the Subgroup of the New Technologies Working Group (NTWG) of the ICAO Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP). It was released in May 2016.

Emergency travel documents are issued by States to travellers needing to travel urgently in distressed or unpredictable situations where it is not possible to issue a standard full validity passport<sup>1</sup>. Where the Issuing Authority<sup>2</sup> considers that the person has a justified need to travel on urgent or compassionate grounds, States may issue a specific type of document, commonly a passport-sized book (with fewer pages) or (depending on the circumstances outside the country of origin in the country of issuance) a one-page sheet, with a restricted time and territorial validity, in order to facilitate scheduled travel back or to a named destination or to complete short term travel.

A specific Emergency Travel Document in a uniform format<sup>3</sup> is issued by a number of Member States of the European

Union to unrepresented EU citizens in third countries (i.e. EU citizens holding the nationality of a Member State which is not represented in a given third country), whose passport has been lost, stolen or destroyed or is temporarily unavailable. The document can be issued by any EU Member State under the authority of the Member State of nationality. It covers a single journey with a validity period barely longer than the minimum period required for completion of the journey for which it is issued. The purpose of the common format EU ETD is to provide genuine assistance to unrepresented EU citizens in emergency situations in third countries. Some EU Member States issue their own national ETDs to unrepresented EU nationals for the same purpose.

However, there are no global standards or recommended practices for the issuance of ETDs. The ICAO Specifications (Doc 9303, 7<sup>th</sup> Edition) for Machine Readable Travel Documents (MRTDs) do not include any specifications or guidance in relation to ETDs and Annex 9 – *Facilitation* (Chapter 3) provides an exemption from ICAO minimum standards for these documents. As a result, varying standards are used by each individual Issuing Authority. There is currently no clear definition for ETDs and they may have a lower security level attached to their deliverance.

Bearing in mind the existing gap in the current ICAO guidance contained within Annex 9 – *Facilitation* and Doc 9303 (Machine Readable Travel Documents – Specifications), the purpose of this Guidance is to promote a consistent approach in the issuance of ETDs in order to:

- enhance the security of the document;
- protect the individual;
- promote greater confidence for border staff in handling ETDs at ports; and
- address the vulnerabilities presented by inconsistent practices and security features.

<sup>1</sup> In this guidance ‘standard full validity passport’ refers to a passport issued with no restrictions to its use as a travel document. It also assumes compliance with the specifications outlined in ICAO Doc 9303

<sup>2</sup> Doc 9303 7<sup>th</sup> edition part one defines the term “Issuing Authority”, being “The entity accredited for the issuance of an MRTD to the rightful holder”

<sup>3</sup> 396/409/CSFP: Decision of the Representatives of the Governments of the Member States, meeting within the Council of 25 June 1996 on the establishment of an emergency travel document, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:41996D0409>



The Guidance covers travel documents issued by Issuing Authorities to travellers in distressed or unpredicted situations where it is not possible to issue a standard full validity passport or travel document book and addresses the following areas:

- security/issuance;
- cost;
- format;
- validity;
- document title/name; and
- post-issuance.

This Guidance does not cover:

- standard full validity passports delivered in emergency situations;
- standard passports delivered with limited validity;
- convention travel documents, (which are covered under separate guidance on Issuing Machine Readable Convention Travel Documents for Refugees and Stateless Persons – see 4) or “Laissez-passer” issued by the United Nations or the European Union; or
- travel documents issued by humanitarian organisations such as the ICRC.

However, it is intended that this Guidance can be used as a measure of best practice across all issuing organizations, such as humanitarian organizations who issue travel documents to stateless and displaced persons, vulnerable migrants (including refugees and asylum seekers). Humanitarian organizations are encouraged to comply with its general principles to improve the standards and security of their documents.

This publication can be found at [www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx](http://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx)

## ROADMAP FOR IMPLEMENTATION OF NEW SPECIFICATIONS FOR MRTDs, VERSION 1, 2016

The “Roadmap for Implementation of New Specifications for MRTDs” is developed by ISO/IEC JTC1 SC17 WG3/TF1 for the New Technologies Working Group (NTWG) of the ICAO Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP) and was released in April 2016.

The introduction of new travel document technologies is a gradual learning process that requires adaptation from the organizations that issue these documents, as well as those that use them and supporting systems to effectively manage travellers at points of entry and departure. Ensuring that all affected systems and processes are effectively modernized is needed if States are to fully benefit from improved document functionality.

Implementation practices that come within the scope of Doc 9303 and Technical Reports endorsed by the TAG/TRIP show that just the publication of new material is not always sufficient. More guidance is needed on the implementation strategy to be followed by implementers of both inspection systems and MRTDs.

The Roadmap has been developed to bring awareness to key advancements to travel document specifications. It ultimately supports the introduction of new specifications and it must be respected as guidance only.

This Roadmap provides information on the implementation issues of new specifications and consists of:

- (backwards compatibility) consequences for MRTDs and systems;
- additional pre-requisites to be met before implementation (such as test specifications);
- the path to be followed by States and implementers; and
- timetables (planning diagrams) for updating inspection systems, overlap period with respect to issuing new features in MRTDs, time period in which both ‘old’ and ‘new’ MRTDs will be in circulation, and timing when ‘old’ specifications become deprecated.

Each main section covers a specific set of specifications, published in Doc 9303 or an ICAO Technical Report.

The sub sections within a section describe the consequences for implementation in the areas of:

- backwards compatibility;
- implementation pre-requisites;
- implementation strategy; and
- implementation timetable.

This publication can be found at [www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx](http://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx)





## DOCUMENTS ISSUANCE & CONTROL

### MESSAGE FROM THE SECRETARY GENERAL, INTERNATIONAL TRANSPORT FORUM, OECD (ITF-OECD)



YOUNG TAE KIM

Dear readers,

It is my pleasure to introduce you to the first edition of the TRIP STRATEGY COMPENDIUM on Comprehensive Traveller Identification Management.

Proper identification of travellers is a cornerstone of transportation security across all modes. New technologies and ground-breaking innovations are allowing traveller identification to be conducted in a faster, more reliable and more accurate way than ever before, while at the same time being less invasive and time-consuming for travellers. Such innovations will certainly be discussed at our 2018 Summit of Ministers

of Transport, the theme of which, *Transport Safety and Security*, aligns very well with much of the work done under the auspices of ICAO, including this document.

In today's rapidly changing world, security is an integral concern for all modes of transport, especially in aviation as highlighted by UN Security Council Resolution 2178. The hazard of improper traveller identification creates a risk of harm to the transportation system and those who use it, as well as the possibility of the transportation system being used to conduct criminal or illicit activities. However, by mitigating this risk, we could be creating another one: slowing down the border process and causing needless delays to travellers. Thus, the challenge we face is to identify passengers in a way that is both secure and efficient, but to use technologies that are affordable in order to ensure that, as ICAO often puts it: "No country is left behind".

The TRIP compendium presents an opportunity to showcase the various measures put in place to ensure that traveller identification is done more securely and more efficiently. The TRIP Strategy rests on five pillars: evidence of identity, machine readable travel documents, document issuance and control, inspection systems and tools and, finally, interoperable applications.



At the 2015 Summit of Ministers of Transport held in Leipzig, Germany, our Ministers expressed their support for harnessing new technology to make more effective use of current transport infrastructure, and recognized the potential benefits of this technology for efficiencies in transport services related to tourism. These new technologies include those used to identify travellers in a secure and efficient way.

In this context, we are very glad to support ICAO in fostering progress and international cooperation in the field of traveller identification and helping to better link up proof of identity and travel documents. We strongly believe that new technologies can ensure greater document security and pave the way to increased automation and a more fluid and pleasant passenger experience. To get there, however, will require governments and industry to work together, challenge the status quo and creatively harness the power that new technologies can provide.

The ITF and ICAO have a productive and well-established relationship. We've worked together on aviation data, forecasting, the environment, liberalization, safety management systems and now, this publication. We have also participated in each other's events, bringing our respective perspectives to our partner's stakeholders. Our contribution to this document is one more sign of our commitment to this growing collaboration. We hope that it can generate some meaningful discussion and spark new ideas on how to put cutting edge technology to best use.

In closing, I would like to congratulate the ICAO Secretariat and all the authors for putting together this innovative and forward-thinking document. I look forward to continued cooperation with ICAO.

**Young Tae Kim**  
Secretary General  
International Transport Forum, OECD





## USING TECHNOLOGY TO BETTER IDENTIFY PASSENGERS AND FACILITATE THEIR FLOW THROUGH SECURITY SCREENING

A key component of any mitigation measure against a security risk is the proper identification of said risk. Since the risk we are mitigating is an action by a passenger that is harmful to aviation and those who make use of aviation, then it stands to reason that we must first clearly identify this passenger and properly evaluate the risk that he, or she, poses to the aviation system. But since the vast majority of passengers do not pose a risk to aviation security, the assessment previously described must be done in a way that does not severely inhibit the free flow of passengers.

Today, particularly on international flights, we use a passport to identify the passenger and then match the name on the boarding pass to that on the identification document to ensure that they match.

### PASSPORTS

One drawback of this approach is its very low reliance on modern and widely available technology. We still rely on the passport as the most common form of travel document. This paper document traces back its ancestry over two and half millennia. Technologies, such as machine readability, forgery proofing and the installation of a chip containing biometric information about the passport holder have made this document far more secure than its predecessors. It remains, nevertheless, an anachronism that in an industry such as air transportation, where paper-based airline tickets ceased to be issued nine years ago, where freight travels without paper documentation and where boarding passes are stored on smart phones, we still rely on a paper document to identify passengers.

If we were to design a system from scratch today, surely smart phones, biometric identification, information technology and blockchain technology would all play an important role.

### SCREENING

To understand the system we have in place today, it is important to remember how we got here. The screening of air passengers began as a response to the emergence of hijackings as a new security threat in the 1960s and 1970s and in many ways it resembles the system we have today. Passengers walk through metal detectors and their hand luggage is searched. While screening technology has greatly evolved from the simple metal detector and hand searching to powerful x-ray imaging machines and millimetre-wave scanners, the overall process remains relatively the same.

This process of screening passengers and their carry-on baggage is the most visible part of the aviation security regime and one of the many layers that make-up the aviation security framework. It relies on a mix of technology to detect certain prohibited objects and the judgement of screening officers to identify irregular types of behaviour. The use of behavioural analysis varies by country, with Israel generally regarded as a world leader. Security screening needs to be both effective and efficient, to meet the public's needs for both secure air travel and speedy processing.

While screeners can inspect the contents of bags, physically search passengers and analyse their behaviour, in many countries these passengers are not required to identify themselves and screeners have no way of knowing the level of risk they pose, except for those whose boarding pass contains a special code mandating a more thorough screening.





**ALAIN LUMBROSO** is an economist at the International Transport Forum (ITF) of the Organisation for Economic Co-Operation and Development (OECD), based in Paris. At the ITF, Mr Lumbroso leads the organisation's research activities in aviation policy as well as a project on safety management systems across all modes of transport and one looking at remotely piloted aerial systems.

## THE THREE-TIERED APPROACH

In December 2008, the International Transport Forum of the Organisation for Economic Cooperation and Development held a roundtable entitled *Terrorism and International Transport: Towards Risk-based Security Policy*. One of the papers presented at that roundtable, *Towards Risk-Based Aviation Security Policy* by Robert W. Poole Jr. of the Reason Foundation presented the idea of having a three-tiered approach to security screening, one for low-risk passengers, one for high-risk passengers and one for ordinary passengers, made up mainly of leisure travellers and infrequent flyers (Poole, 2008). This requires a level of sophisticated risk management from authorities who will need to confidently identify low-risk passengers and minimize the number of falsely identified high-risk passengers.

Some of Poole's ideas have been implemented quite successfully, such as identifying low-risk travellers. In the U.S., TSA – Pre-Check enables over four million American passengers to enjoy accelerated screening procedures in dedicated lanes. These passengers do not have to remove shoes, belts, jackets, segregate laptops or separate liquids from the other contents of their carry-on bags. This results in a faster screening process and, according to the TSA, wait times of less than five minutes for 97% of these passengers. Participation in Pre-check is subject to an \$85 membership fee, a background check, an interview and submitting to fingerprinting.

In Canada, trusted travellers also enjoy similar simplified security screening procedures. These trusted travellers include members of the NEXUS and Global Entry programmes, air crew, airport workers and members of the Canadian and US armed forces. To qualify for either of these programmes, the applicant must undergo an extensive background check and fingerprinting.

The adoption of Poole's approach has offered significant benefits to trusted travellers. It has also meant that non-participating travellers also benefit from having these low-risk passengers expedited more quickly, enabling more security resources to be dedicated to their lines.

This article will focus on passengers who are not part of a trusted traveller programme and how travel documents could help authorities and screeners better determine if a passenger should be treated as a low, high or unknown risk.

## VIRTUAL DOCUMENTS?

If we invented travel documents today, they would likely be in electronic rather than paper formats. What is commonly referred to as an ePassport is actually a paper document with an embedded chip containing the same biometric information found in the paper document. But could the ePassport actually be a fully electronic and virtual document rather than the physical, chip-embedded document we know today?

The idea may seem far-fetched but the technologies required to achieve this outcome may already exist today. One such technology is Blockchain. Blockchain technology is most famous for managing BitCoins, the all-electronic crypto-currency.

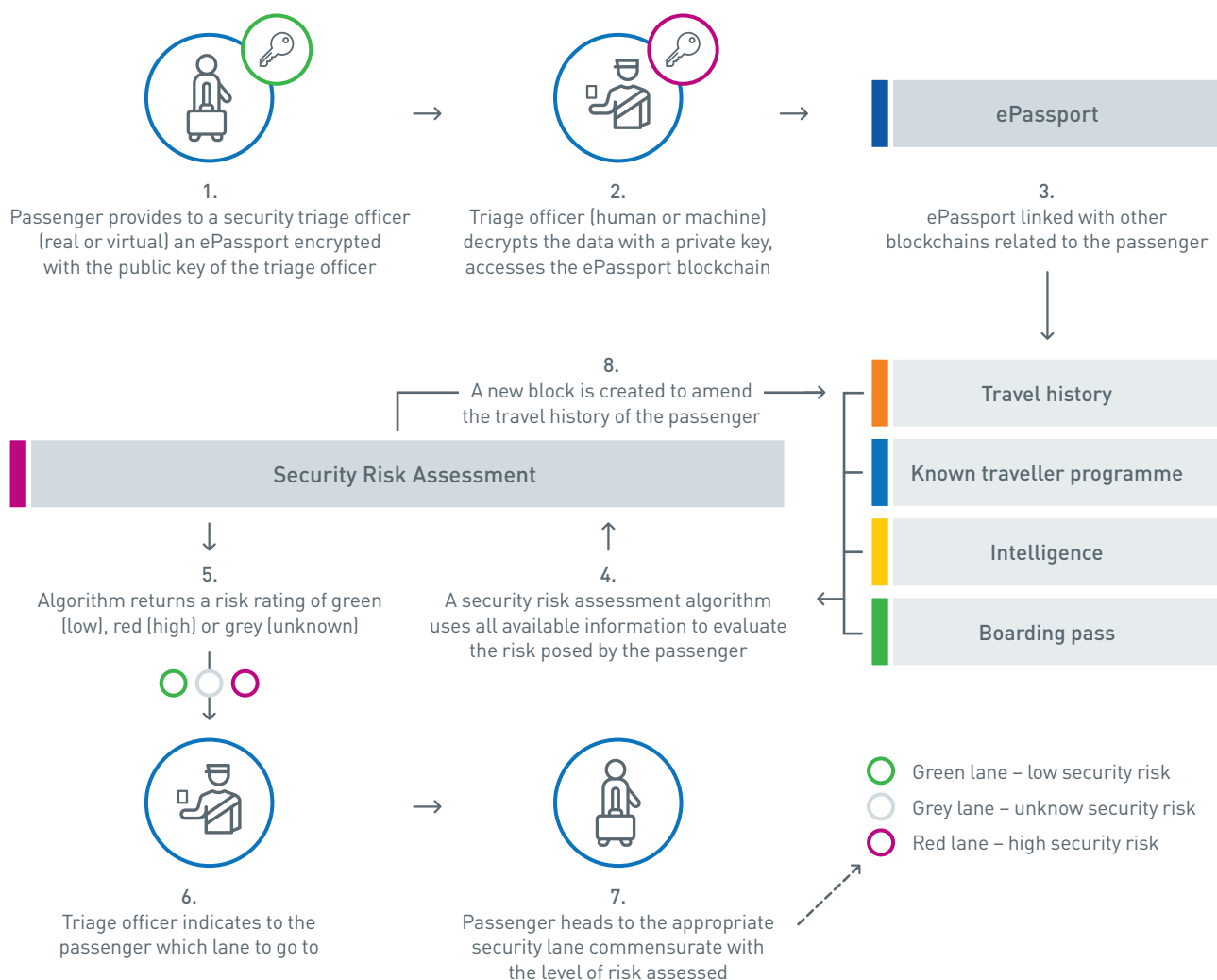


Blockchain technology provides record-keeping for transactions between parties that can't be forged or tampered with through a highly distributed database. Blockchain technology enables passenger data to be secure, encrypted, non-modifiable, tamper-proof and unusable for any other purpose. It is also managed by a virtual network of linked databases, rather than by a national government which makes it easier to adopt global standards.

The **graphic** below shows how a passenger could present a triage officer or automated triage machine with a blockchain-based ePassport which would then get decrypted. Information contained would include the passenger's identification, travel history, participation in any known traveller programme, travel document, such as a boarding pass and any

intelligence gathered on the passenger. This would then contribute to a security risk assessment and if the traveller should be treated as a low, high or unknown risk, which would determine what screening process would be most appropriate for the passenger in question. Simultaneously, a new blockchain would be created on the passenger's travel history to include the travel about to take place.

A blockchain based ePassport would encompass all five ICAO TRIP elements. Blockchain would ensure that it is credible and traceable, the design could be globally standardized, there would still be control over issuance, inspection systems and tools would be retrofitted to access ePassports and it would be perfectly interoperable because it relies on a globally accessible technology such as blockchain.





When combining the security features of blockchain with the power of the smart phone, it becomes easy to imagine a world where ePassports would actually be fully electronic, where identity, biometric information and travel history would all be part of the blockchain and an ePassport could be carried as a blockchain token on your smartphone, with the underlying information stored in the cloud and accessed from anywhere in the world in an instant.

## BETTER SCREENING

The advantages for security screening could be significant. First, it would provide a far more secure form of identification of the traveller than even the most secure passports available today.

Second, it could enable tracking of all travel electronically, rather than relying on stamps on a paper document. This could immediately help identify travel patterns that could indicate a security risk at the security checkpoint, something which is impossible with the current passport. In addition, the ePassport could be a lifetime document, with regularly updated biometric features, which means past travel activities could not be concealed from a screening officer simply by using a new passport. This information could then be used to augment the security layer already created by computer-assisted passenger pre-screening programmes, such as the one in the US.

Third, by using blockchain, it could enable one authority to warn all others that a given passenger presents a low, ordinary or high risk to security. By storing the fact that the passenger is part of the TSA Pre-check programme, for example, it could provide security screeners around the world with an indication that this passenger is lower risk, at least according to US standards. Of course this does not imply automatic mutual recognition, but it could help manage the low/ordinary/high risk segmentation proposed by Poole. It would be up to different countries to decide what weight to accord this information, but such information would not be considered trivial in an overall risk-assessment.

Embedding biometrics into a truly electronic and virtual passport is a first step. The next step would then be linking a passenger name record, or PNR, to this virtual passport. The linking of the two should enable identification and the boarding pass to be available on the same virtual document. This may not be a very complicated process thanks to Advanced Passenger Information (API) protocols that require passengers to provide a passport number and issuing country when either buying an airline ticket or checking

in. By linking API, PNR, travel document and identification, securely through blockchain technology, we could now envision a situation where a passenger's thumbprint, for example, would replace both the passport and the boarding pass and make travel documents a thing of the past.

## AUTOMATING PASSENGER IDENTIFICATION

Combining the ePassport, biometric recognition and the PNR opens the possibility of automating the whole passenger identification process in the same way the French PARAFE programme allows for automated border entry for holders of French biometric passports.

For example, a passenger could arrive at an automated security checkpoint, have their thumbprint or facial recognition points scanned, and have a system use that thumbprint or facial scan to look up their travel document and boarding pass from the blockchain. With that information, the system could then perform a risk assessment of the passenger. Once that risk assessment is done, the automated gate would open and the passenger would be directed to the appropriate lane for screening that is commensurate with the level of risk determined by the system's algorithms.

The suggestion above, in addition to being more convenient for passengers and less prone to fraud, also adds a new layer of security. It would allow a reallocation of security resources away from traveller identification and towards more useful areas of the security system.

In many airports outside of the United States, such as in Canada or in Europe, you only need to show a boarding pass to be eligible for screening. No identification is required (identification is required to board in Canada and many European countries). This means a passenger on a no-fly list could be screened and enter the sterile area by simply using a ticket issued to any random name. They would not be able to board the aircraft of course and would be subject to screening but the situation is not desirable. By combining identification and a boarding pass through secure technology such as blockchain, it would be impossible to even enter the screening area if the person's boarding pass is not issued in their name.

New technologies can also be leveraged to better manage security queues, improving both efficiency and security. For example, we can imagine an app-based system where the passenger could reserve a spot ahead of time in the security queue, show up at the reserved time and be guaranteed



to be processed in a short timeframe. Reserving a spot in a queue has been done successfully in theme parks for years and this technology could very easily be transferred to aviation. This would allow passengers to buffer for less time to pass security and would also allow security screeners to know ahead of time when higher, average and lower risk passengers are anticipated, enabling them to better plan the various security lanes, especially if the reservation is combined with advanced passenger information.

Another promising arena for assessing security risk is social media monitoring. The US has recently begun exploring the potential usefulness of social media in determining whether or not to allow foreigners to enter the United States. From an aviation security perspective, this information is gathered too late as it happens post-flight. Data mining social media could also prove useful if conducted before a flight and may help identify passengers who present a higher security risk and warrant more thorough screening.

## PROMISES AND PITFALLS

Technologies offer many opportunities but they create some pitfalls as well. Here, we will focus on two of the most important ones. The first is the issue of cybersecurity. As we turn to technology to help improve aviation security and the flow of passengers at security checkpoints, we also create new fronts that may be vulnerable to cyber-attacks. This is why technologies used for aviation security must be tamper-proof, such as blockchain, or have a built in resiliency that ensures that if they fall victim to hacking, the impact of such an attack is contained.

The second issue is passenger rights and privacy. This is considerably more complex. We must find a balance between the legitimate needs of aviation security and the rights of citizens to their privacy and to not live constantly under a cloud of suspicion. Being able to identify high-risk passengers and subjecting them to additional screening requirements must be accompanied by a process by which passengers can challenge an authority's assertion that they pose a level of security risk to aviation. It therefore becomes essential that passengers are informed of their status and their rights to contest this status. However, this may harm investigations and intelligence gathering exercises. Authorities will need to balance security concerns with the rights all citizens are entitled to and may not do so with as much transparency as one would expect in open and democratic societies.

This last point raises an important concern about the drawbacks of new and innovative technologies. While people gladly share a great deal of personal information on social media, they are hesitant to share the same information with governments, unless there can be a clear demonstration that this will save them time or money. Citizens want security, but do not want to live in police state. So the fact that technologies could improve aviation security by making it easier to identify passengers is not sufficient to justify rolling them out. We must also make sure that the benefits to aviation security are real and that the privacy implications are met with broad social acceptance.

## LEVERAGING TECHNOLOGY

The ideas proposed in this short article would certainly come with their own challenges to implementation and may prove unfeasible or cost-prohibitive. The objective was not to promote a given technology as a panacea, but rather to encourage security authorities to leverage cutting edge technologies to address the issue of traveller identification. The ideas expressed above may have some inherent flaws which better ideas could improve upon. The point here is to move away from our traditional approaches to passenger identification which hark back to technology from another era and encourage the adoption of ground-breaking technologies to provide passengers with an air transportation system that is both more secure and more efficient.

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## INPUTS FROM THE IMPLEMENTATION AND CAPACITY BUILDING WORKING GROUP (ICBWG)



This element of the ICAO TRIP Strategy refers to processes and protocols for document issuance by appropriate authorities to authorized holders, and protocols to prevent theft, tampering and loss.

The integrity of passports and other travel documents is a key component of national and international anti-crime and anti-terrorism strategies. Because travel documents can be powerful tools in the hands of criminals or terrorists, controlling the security of a country's travel document and its issuance processes directly impacts not only national and international security but also international respect for the integrity of the document.

In recent years, the rapid development of new technologies and new security techniques has led to a shift of travel document fraud. In the past, people who committed fraud concentrated on the end of the document production chain by falsifying or forging physical documents. Now, they concentrate their efforts at the beginning of the chain – document issuance systems as well as any kind of document register. Consequently, countries should be particularly concerned with the security of handling and issuance processes to help prevent the issuance of legitimate documents to terrorists or criminals under false identities.

Controlling the security of a country's travel document issuance process has not only a direct impact on national and international security but also on the international respect accorded to the documents' integrity. The integrity of the passport, and other travel documents, is a key component of national and international anti-crime and anti-terrorism strategies. The integrity of the document is paramount, particularly when presented by citizens for visas and for border crossings. It may also impact the entry requirements of other nations.

While travel document integrity is necessary for national and international security, issuing authorities are also faced with the challenge of finding the correct balance between security, service, privacy and cost. However, fraud prevention is undeniably more efficient and much less costly than dealing with the consequences of successful fraud.

Therefore, the ICAO Implementation and Capacity Building Working Group (ICBWG) was tasked to set up an assessment guide to support Governments with the execution of an assessment of their travel document issuance programmes, in order to address fraud prevention, outline security best practices and provide assistance in assessing the security performance of the issuance process.

Based on the main findings, in response to the survey addressed in the ICAO State Letter EC6/8 – 16/04, 27 January 2016, regarding document issuance and control, 60 per cent of the reporting States (44) are using the ICAO Guide for Assessing Security of Handling and Issuance. Therefore, there is a need to further promote the guide in order to encourage States to use it, together with adapting cost-effective state-of-the-art technology for Travel Document Security.



## SUGGESTED APPROACH FOR IMPLEMENTATION



A comprehensive, risk-based understanding of its own end-to-end travel document issuance process is critical for any issuing authority. The ICAO Guide for Assessing Security of Handling and Issuance is the critical tool for achieving this. States should undertake an assessment using the Guide (outlined later in this section), bringing together a number of representatives from the agency, and possibly from other security-focussed areas. For example, it may be beneficial to have experts who do not necessarily understand travel documents and border control, but can help assess risk accurately. Authorities should consider the broader context and processes that impact or feed into the identity and issuance system. For example, how does secure document issuance sit within the national identity ecosystem, and the national strategy for identity?

States should use the Guide to assess security gaps. The risk for each State will be different, but the most pressing or urgent issues should emerge from the assessment. The secure handling continuum is complex and dynamic, and States need to understand and document issues and the potential risks in order to choose what changes to make and when to make them. For example, there may be trade-offs between what presents the most risk individually, versus a number of smaller issues that might collectively make a bigger impact sooner, with less investment.

## CHALLENGES AND SOLUTIONS



It is the task and responsibility of Governments to provide their citizens with reliable, secure and internationally accepted travel documents. As travel documents themselves are becoming more secure, the next step is that increased emphasis be placed on the security of the handling and issuance process to help prevent the issuance of legitimate documents under false identity.

Appropriate international standards for secure travel documents are set by the International Civil Aviation Organization (ICAO). Strengths, weaknesses and potential risks will be detected through an assessment for Handling and Issuance of Travel Documents.

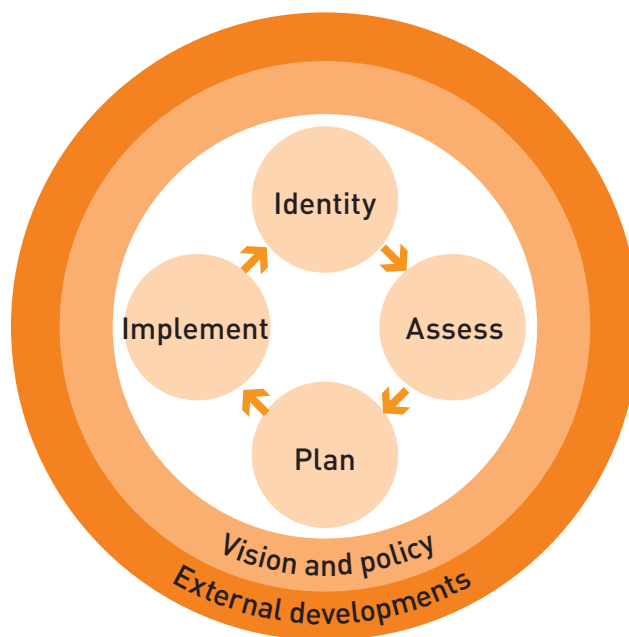
The Assessment helps:

- States to evaluate their own travel document issuance and handling processes;
- in capacity-building efforts, to assess a State's handling and issuance processes; and
- in assessing the handling and issuance processes of States under consideration for visa-waiver eligibility.

The following scheme<sup>1</sup> shows that executing an assessment is one of the four steps of the continuous process Governments should pay attention to.

<sup>1</sup> Executive overview ICAO Guide for Assessing Security of Handling and Issuance of Travel Documents, version 0.6, October 28, 2009





This methodical, analytical approach also enables the detection and anticipation of possible bottlenecks and threats, and creates opportunities for improvement. Based on the outcome of the assessment, the requesting Government can then decide which recommendations (if any) that it will implement.

Establishing a citizen's identity to an appropriate level can only be successful if all components of the identity infrastructure are considered. The identity infrastructure consists of four main components: registration, documents, processes and instruments. The identity infrastructure is fundamental to the life cycle of citizens, starting with the origin of the identity, the use of identity details, control of movement (for example border crossing) and the end of an identity. The assessment will cover all components of the identity infrastructure to some extent, with the primary focus on travel documents and ICAO compliancy<sup>2</sup>.

States may not have the experts available to undertake a full assessment. ICAO can assist States by providing expert resources to undertake or support assessments. States should note that, normally, a period of two weeks is required to undertake a comprehensive assessment. The scope and complexity of issues related to secure document

issuance requires the use of qualified independent assessors who are familiar with the ICAO Assessment Guide and how to use it.

Before an assessment can be conducted, there are several requisite elements that must be defined and agreed upon. To achieve maximum benefit, the assessors will require access to all parts of the application and issuance process. They will also need to be able to speak with relevant staff involved in each of the processes. If for example, access cannot be provided, the assessment may not be as comprehensive as it could be.

Assessors conduct an objective and comprehensive in-country analysis of a nation's travel document handling and issuance programme. The assessors will then generate a confidential report for the requesting Government. Following completion of the assessment, a report will be prepared by the independent assessors indicating the findings and prioritizing them in relation to how serious they are. The requesting Government is owner of the report, which can be used as the basis for further work to improve the application and issuance processes. The results of the assessment and the content of the report are confidential and only known to the requesting Government and the assessor.

<sup>2</sup> ICAO compliancy is conditional for cross border interoperability.



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## SUCCESS STORY ON THE IMPLEMENTATION OF THIS ELEMENT

### GEORGIA'S NEW IDENTIFICATION MANAGEMENT SYSTEM

Georgia is one example of a State that was able to transform a poorly managed system into a better functioning model, as a part of the world's response to the identity management challenge following the events of 9/11. The reform of the Georgian identity management system that began in 2006 yielded tremendous results:

- The Unified Database of Population Registration responds to an estimated 30,000 daily requests from public and private institutions.
- Average service time is six to seven minutes.
- Average waiting time is five minutes.
- The largest service centre in Tbilisi services up to 8,000 individuals daily.
- Client satisfaction has been rated at over 92% for the last several years.



Source: "Reforming the Identification Management System: The Georgian Experience", Levan Samadashvili and Nato Gagnidze (ICAO MRTD Report, Vol. 10 No. 1, 2015)

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## ICAO GUIDE FOR ASSESSING SECURITY OF HANDLING AND ISSUANCE OF TRAVEL DOCUMENTS

The “*Guide for Assessing Security of Handling and Issuance of Travel Documents*” was developed by the Subgroup of the Implementation and Capacity Building Working Group (ICBWG) of the ICAO Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP). It was released in March 2017.

The Assessment Guide was developed by an international group of independent experts who have experience across all relevant aspects of the travel document continuum. The Guide includes establishing the identity of applicants, the travel document application process, workflow and security within the travel document issuance area, personnel issues, and printing and dispatch of documents. It is divided into three parts:

- The first part recommends best practices to prevent and mitigate security threats at every step of the travel document issuance process.
- The second part provides a comprehensive evaluation tool checklist to assess the issuance process vulnerabilities.
- The third part is a guide for experts, which contains a series of templates containing a summary of what is important in each Chapter of the Guide.

The measures and practices presented in this guide are recommended practices and, as such, no country is required to adopt them. However, if implemented, they can provide a strong defence against fraud.

This guide will be maintained by the ICAO Implementation and Capacity Building Working Group (ICBWG). Questions, comments and feedback on the guide should be addressed to the ICBWG at [ICBWG@icao.int](mailto:ICBWG@icao.int)

This publication can be found at [www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx](http://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx)

## ICAO GUIDANCE FOR CIRCULATING SPECIMEN TRAVEL DOCUMENTS, VERSION 1, 2016

The “*Guidance for Circulating Specimen Travel Documents*” was developed by the Subgroup of the Implementation and Capacity Building Working Group (ICBWG) of the ICAO Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP) and was released in March 2016.

In order to facilitate international travel, it is essential that Member States issuing passports distribute specimens to other countries. This should be done as widely as possible and is extremely important when an issuing State introduces a new passport or updates an existing design with new features.

This guide sets out the process to be followed in order to achieve the minimum standards for communicating the features of a new passport and how this might be achieved. An example of best practice is included.

The aim of this process is that all receiving States are aware that an issuing State has introduced a new or updated passport and that they are familiar with its design and security features by viewing at least one specimen.

The receiving State may hold the specimen(s) in a location of its choosing according to its own internal policies. However, where no policies exist, it is recommended that they be held by the Border Control Authority. This guide also suggests methods of distribution.

The Guide and its Appendix can be found on the ICAO website at [www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx](http://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx)





## INSPECTION SYSTEMS AND TOOLS

## FOREWORD FROM THE SECRETARY GENERAL OF THE UN WORLD TOURISM ORGANIZATION (UNWTO)



TALEB RIFAI

In recent decades, global tourism, despite challenges and occasional shocks, has experienced sustained growth making it one of the world's fastest-growing economic sectors. International tourist arrivals have increased steadily, from 25 million globally in 1950 and 278 million in 1980 to a total of 1.235 billion in 2016. The United Nations World Tourism Organization (UNWTO) expects tourism to continue along this upward trajectory, forecasting international arrivals to reach 1.8 billion by 2030.

This significant expansion of tourism has benefited from improved connectivity in air transport, reflecting the symbiotic relationship between tourism and air transport and their positive development impact. In 2016, more than half of international tourist arrivals reached their destinations by air, with higher proportions of flights to long-haul destinations.

The partnership between UNWTO and the International Civil Aviation Organization (ICAO) has a history of nearly four decades, beginning in 1978 when the two organizations entered into a Working Arrangement that established mutual consultancy on issues of common interest. In 2010, it was strengthened through a Memorandum of Cooperation, which identified common action areas including connectivity, economic regulation, taxation, and consumer protection. In 2013, UNWTO and ICAO signed a joint statement to work together to position aviation and tourism as leaders in the pursuit of sustainable development.

The partnership was further reinforced in September 2015, when the Medellin Statement was adopted at the first joint UNWTO/ICAO High-Level Forum on Tourism and Air Transport for Development, held alongside the 21<sup>st</sup> UNWTO General Assembly in Medellin, Colombia. The Medellin Statement highlights the potential of air transport and tourism in contributing to the 17 universal Sustainable Development Goals (SDGs).

In light of the growing numbers of tourists and air travellers worldwide, as well as the common objectives towards 2030 defined by the SDGs, the cooperation



between UNWTO and ICAO has become ever more important. Joint efforts towards an integrated position and action on issues such as connectivity, competitiveness and travel facilitation, will strengthen the sector's capacity to mainstream sustainable consumption and production patterns.

Complementarily, UNWTO has been focusing on better understanding visa policies worldwide. Our research shows that while there have never been as many people travelling around the globe, the world has never been as open for tourists as it is today in terms of travel facilitation. In 1980, on average, 75% of the world population was required to obtain a traditional visa before travelling; this was reduced to 58% in 2016.

Although this development clearly indicates the strong efforts of governments around the world to minimize travel barriers and reap the benefits of global travel flows, challenges remain. As with other sectors, advances in technology have brought many new solutions, improvements and innovations to the tourism sector and will continue to do so. Yet dependency on technological infrastructure, coupled with other growing security risks, brings a vulnerability to the sector that needs to be overcome.

One of the increasingly popular national policy trends emerging from UNWTO research over the past years is the adoption of a more differentiated

approach to visa policies, using complex evaluation and decision-making mechanisms that go beyond the traditional patterns of mirroring overall trends, reacting to competitors' behaviour, or reciprocating the actions of the origin country of tourists.

However, at this important point in history, more nuanced answers to visa facilitation challenges are needed – answers that underline and strengthen the symbiosis between travel facilitation and security and promote a truly safe, secure and seamless travel experience. To advance connectivity and competitiveness along with travel facilitation, continued efforts must be made in areas such as data protection, risk preparation and responsiveness. ICAO and UNWTO must therefore continue advancing in these areas through evidence and cooperation.

Only through effective and meaningful collaboration at all levels, nationally and internationally, will the tourism and air transport sectors be able to intensify their roles in shepherding a more stable, sustainable and inclusive future for all. UNWTO wishes to thank ICAO once again for the continued partnership, which I am confident will allow us to advance towards this goal.

**Taleb Rifai**  
Secretary-General  
World Tourism Organization (UNWTO)







**DIRK GLAESSER** is Director for Sustainable Development of the Tourism Department at the World Tourism Organization (UNWTO). The department deals with the different challenges and opportunities of tourism development, among them environment and planning, investment and finance, risk and crisis management.

## VISA FACILITATION

### BACKGROUND

Visa policies are among the most important national policies influencing international tourism. The development of policies and procedures for visas, as well as for other important travel documents such as passports, is closely linked to the development of tourism. Half a century ago, travel was heavily impacted by customs regulations, currency exchange limitations and visa formalities. However, with the swift growth of international tourism in the last six decades, the quality, reliability and functionality of visas and other travel documents has also evolved.

Despite the remarkable progress that has been made in visa facilitation in past years, which has contributed to the steady growth of travel flows and thus the expansion of the tourism sector worldwide, visa policies often continue to be inefficient, representing an obstacle to tourism growth.

However, it must be noted that the functions and significance of visas have also evolved over time. In general, visa policies serve to ensure security, to control immigration and limit the activities of travellers, to generate revenue, and to control tourism demand by ensuring a destination's carrying capacity is not exceeded. With security risks constantly evolving, the function of ensuring safe travel and entry to destinations has gained significant attention, demanding that visa facilitation measures go hand-in-hand with strengthening security. However, evidence shows that although security is commonly stated to be the reason to impose a visa requirement, many countries respond in a reciprocal manner<sup>1</sup> to policies adopted by their counterparts toward them.

From a traveller's point of view, visas represent a formality that mainly exists to impose a cost. If the cost of obtaining a visa – either the direct cost of fees, or the indirect costs including distances travelled and time spent throughout the application process – exceeds a threshold, prospective travellers are simply deterred from making a journey or choose an alternative destination for which obtaining a visa requires less effort. With the continued growth of international tourism and digitalization changing travel behaviour, countries increasingly strive to ensure their overall competitiveness by enhancing travel facilitation and by offering high-quality tourist experiences, in addition to bolstering security through highly accurate and reliable identification processes.

The quest for efficient visa policies and processes is not new. In 1963, the delegates of 87 States agreed at the United Nations Conference on International Travel and Tourism in Rome that: "Governments should extend to the maximum number of States the practice of abolishing, through bilateral agreements or by unilateral decision, the requirement of entry visas for temporary visitors."<sup>2</sup>

Since 1980, and with the changing functions of visas in mind, UNWTO has regularly collected information on visa policies worldwide. From 2012, the Organization has regularly published reports, presenting a global vision of

<sup>1</sup> Reciprocity refers to the implemented visa policies between two countries. A policy is reciprocal if both countries have the same visa requirement for one another. It is non-reciprocal otherwise.

<sup>2</sup> United Nations Conference on International Travel and Tourism (1964), Recommendations on International Travel and Tourism, August 21–September 5, 1963. Rome



travel facilitation based on carefully collected and analyzed data. These reports include an in-depth review of data from 1980 and 2008 along with figures for the last five years.

This evidence-based approach has allowed UNWTO to build extensive expertise over time and to observe trends and patterns based on tangible data. This approach played a crucial role in identifying relationships, which helped trigger an unprecedented global trend in visa facilitation over recent years.

## AREAS OF OPPORTUNITY

Although visa facilitation has been on the global agenda since 1963, only in recent years have the data shown a noticeable shift in approaches towards establishing and implementing facilitating visa policies, leading to a more open world overall.

When looking at the policy approaches taken by different countries around the world, one of the most visible shifts is in how regulations are being revised and adapted. While countries tend to thoroughly review policy changes before introducing them, they are increasingly following a more context-related approach that aligns with the needs of individual countries and the potential risks and benefits of travel facilitation, while moving away from traditional homogeneous visa policies across destinations.

Based on such observations, as well as experience from regular data collection and close cooperation with regions and countries, UNWTO has formulated the following areas of opportunity with the aim to support destinations and prioritize actions with regard to their visa facilitation policies.<sup>3</sup> As policies and approaches of countries towards visa regulation are continuously evolving, the areas of opportunity are also constantly changing based on developments in trends and patterns observed.

### 1. Increase and enhance communications related to visa policies.

The availability and reliability of information on the entry policies at a given destination – especially with regard to visa categories requirements and procedures – is among the simplest yet least-addressed areas of opportunity. Making clear and up-to-date information available in multiple languages, through various credible channels of communication, ensures both transparency of procedure and traveller satisfaction. Furthermore, creating communica-

tion channels that allow for feedback from stakeholders responsible for submitting visa applications on behalf of travellers (e.g. hotlines) enables governments to identify and address common problems more effectively.

### 2. Enhance visa application processes and entry procedures.

Another major opportunity for destinations lies in the way temporary visitor visa requests are processed and the processing requirements. Modern information technology is crucial in making more time available for security processes of visa applications by reducing the bottlenecks created by the traditional procedures. For example, receiving passenger information ahead of time reduces the wait time at borders. In addition to using a more effective IT infrastructure and databases, processing capacity can be increased by opening additional visa processing centres and consulate services, or by increasing the number of flexible staff that can be placed in different workplaces, depending on the demand. Also, segment-oriented queue management at the port of entry, such as dedicated lines for families, group travellers or frequent flyers, can not only speed processes but also serve as useful instruments to influence strategic relations with key segments and markets.

### 3. Differentiate the treatment of low, medium and high-risk travellers.

Destinations can significantly benefit from applying a strategy of differentiation between low, medium and high-risk source markets, groups, routes and passengers. Visa exemptions can, for example, be extended to source markets that enjoy very high mobility in the world and to special niche groups, such as 'trusted traveller' segments, of both business and leisure travellers. In addition, visas on arrival and eVisas are valuable alternatives to traditional visas for the medium-risk markets and could enhance the visa processing capabilities of destinations without an extensive network of representatives abroad.

### 4. Develop and improve product- and group-specific facilitation measures.

Regional joint visa agreements strengthen a region's image and effectively promote its destinations as multi-stop destinations. There are already a number of regional agreements in place that allow travellers from a third country to move freely among member countries once admitted by one of the participating countries. Participating countries can strengthen the unified image by agreeing on the same

<sup>3</sup> World Tourism Organization (2016), Visa Openness Report 2015, UNWTO, Madrid



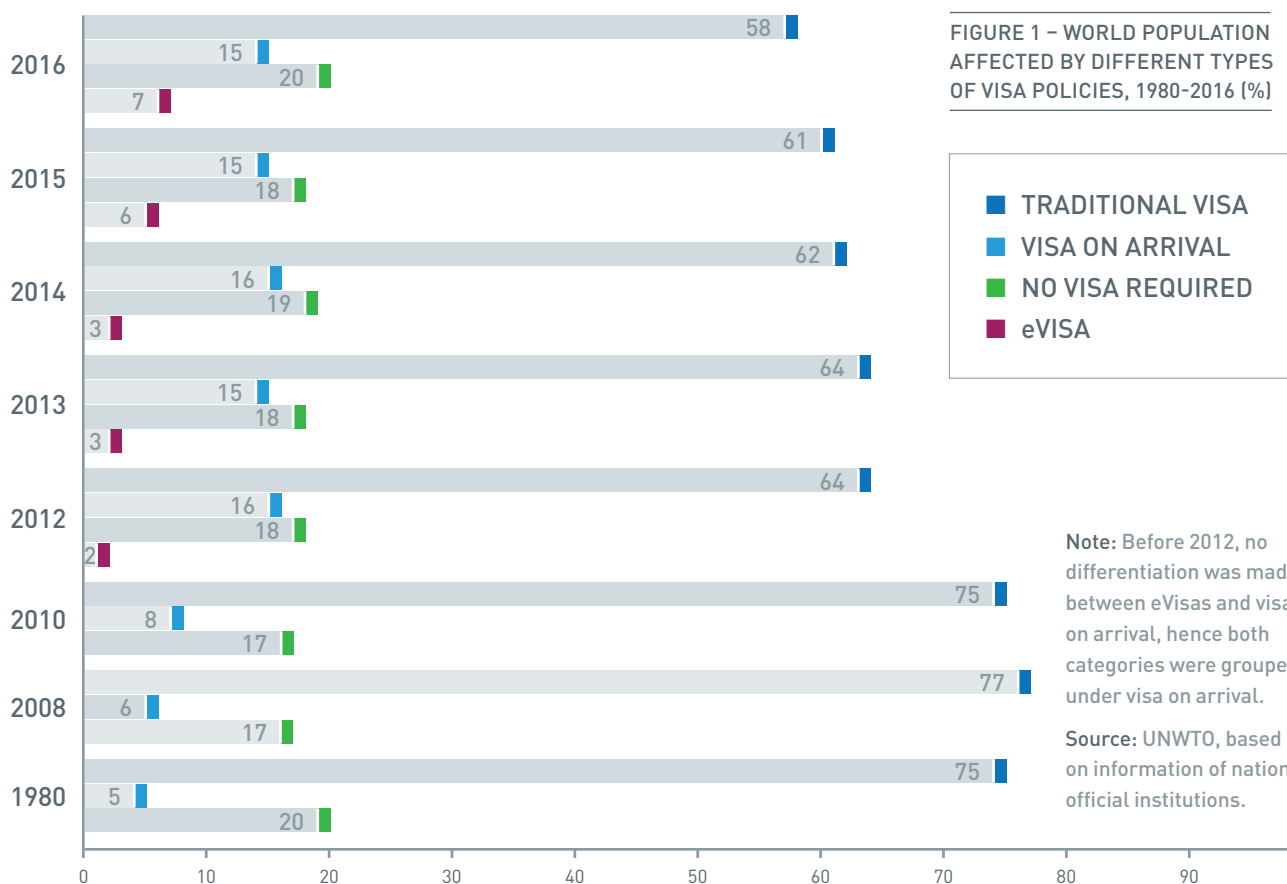
eligible source markets and requirements. Opportunities also exist for issuing longer-duration visas with multiple entry possibilities, generating repeat visitors on the one hand and allowing for efficient resource allocation and expanding capacity, on the other. Other destination-specific initiatives can lead to increased competitiveness, such as extending the time of transit visas and facilitating measures for groups of high importance (e.g. families and participants of mega events).

## TRENDS AND PATTERNS

Despite major improvements in visa facilitation procedures, thanks to determined action by governments around the world, visa requirements continue to significantly affect international tourism. In 2016, 58% of the world population was still required to obtain a traditional visa prior to departure (75% in 1980). By contrast, 20% of the world's

population was able to enter a destination without a visa (similar to 1980); while another 15% could obtain a visa on arrival and 7% could obtain eVisas. All changes resulted in an openness score<sup>4</sup> of 34, which indicated that the highest level of openness ever recorded was achieved in 2016.

While today the world is more open than ever before, there is still great potential to improve visa facilitation. Around 2012, visa procedures improved visibly. In 2010, on average, 75% of the world population required a traditional visa when travelling. This number dropped to 64% in 2012, the largest shift observed so far. By contrast, on average, 77% of the world population required a traditional visa when travelling in 2008. This was primarily due to the reduction of traditional visas – most commonly replaced by “visa on arrival” policies. In consequence, the world openness score increased from 22 in 2010 to 31 in 2012.



<sup>4</sup> The openness index was developed by UNWTO to reflect the extent to which a country is facilitating tourism. The higher the score, the better. Scores range from 0 to 100.

<sup>5</sup> In 2012, eVisas were accounted for separately for the first time. In 2008 and 2010, no category distinctions were made between eVisas and visas on arrival.

<sup>6</sup> A more detailed analysis of trends and patterns also within subregions is provided in UNWTO's annual reports on visa facilitation.



TABLE 1 – REGIONS OF DESTINATIONS BY PERCENTAGE OF WORLD POPULATION AFFECTED BY VISA POLICIES, 2016

	% of world population affected by visa policies				
	No Visa	Visa on arrival	eVisa	Traditional Visa	
World	34	20	15	7	58
Advanced Economies	27	24	1	6	70
Emerging Economies	35	19	18	7	56
<b>By UNWTO regions:</b>					
Africa	32	10	26	9	55
North Africa	21	20	1	0	79
West Africa	27	8	22	7	63
Central Africa	11	3	0	15	81
East Africa	52	7	56	12	25
Southern Africa	26	26	0	0	74
Americas	39	34	4	4	58
North America	13	9	0	8	83
Caribbean	45	43	1	2	54
Central America	34	32	3	0	65
South America	40	31	9	6	54
Asia and the Pacific	44	23	23	11	43
North-East Asia	32	29	2	4	65
South-East Asia	56	32	25	13	30
Oceania	44	24	20	11	45
South Asia	41	4	41	15	39
Europe	26	22	3	3	72
Northern Europe	24	24	0	0	76
Western Europe	24	24	0	0	76
Central/Eastern Europe	25	18	6	6	70
Southern/Mediterranean Europe	28	26	2	2	70
– of which EU-28	24	24	0	0	76
Middle East	23	2	24	8	66

## THE GROWING USE OF eVISAS

Interestingly, since the increased implementation of visa on arrival policies in 2012, countries have begun to use eVisa systems to a far greater extent. While the figures for visa on arrival policies have not increased since then, the percentage of the world population able to obtain eVisas has increased from 2% in 2012 to 7% in 2016, indicating that this type of visa continues to grow in importance for temporary visitors, giving countries the opportunity to diversify their visa offering further.<sup>5</sup>

The responsibilities for processing electronic visas are usually transferred to external, private sector entities, reducing the impact on public administration resources. Destinations tend to outsource these services without differentiating between different markets and groups. This trend, and the implications for data security, is reason for concern. It is reflected in the ICAO TRIP Initiative, which requires more reflection and dialogue on the matter.



## EMERGING ECONOMIES LEADING IN VISA FACILITATION

A closer examination of data on the share of tourists required to obtain a traditional visa and the increasing implementation of alternatives such as eVisas and visas on arrival also shows that emerging economies are the primary drivers of increased openness on a global scale. This trend contrasts with the tendencies of advanced economies, which have demonstrated a slight decrease in their overall openness.

Additionally and from a regional perspective, destinations in Asia and the Pacific continue to facilitate international travel the most while European destinations continue to be among the most restrictive destinations, respectively requiring 43% and 72% of the world population to obtain a traditional visa prior to departure.<sup>6</sup> Overall, South-East Asia and East Africa remained the most open subregions in 2016 while Central Africa and North America were the least open.



**Note:** Due to rounding, aggregates do not necessarily add to 100.

**Source:** UNWTO, based on information of national official institutions.

- a) Scores range from 0 to 100; the higher the openness score, the better. Openness indicates to what extent a destination is facilitating tourism. It is calculated by summing the percentage of the world population exempt from obtaining a visa with the percentages of no visa weighted by 1, visa on arrival weighted by 0.7, eVisa by 0.5 and traditional visa weighted by 0. For the (sub)regional totals, the percentages of the four different visa categories and the resulting openness score represent the averages of economies in that group (where destination economies are weighted by natural logarithm of the population size (i.e.  $\ln((1,000 \text{ population}))$ ) in order to take into account differences in destination size).
- b) Traditional visa means that a visa has to be obtained prior to departure and is not an electronic visa (eVisa).
- c) Advanced economies and emerging economies classifications are based on the International Monetary Fund (IMF); see the World Economic Outlook, October 2015 at [www.imf.org/external/pubs/ft/weo/2015/02/weodata/groups.htm](http://www.imf.org/external/pubs/ft/weo/2015/02/weodata/groups.htm). Of the 195 destinations analyzed in 2016, 37 are classified as advanced economies and 158 as emerging economies.
- d) The EU-28 countries are Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxemburg, Malta, the Netherlands, Poland, Portugal, Ireland, Romania, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom.



## RECIPROCITY AND VISA FACILITATION

In terms of reciprocity<sup>7</sup>, half of the visa policy pairs around the world remain reciprocal. Of those, the majority (29%) represent mutually closed policy pairs based on traditional visas. The maximum shift from reciprocal to unilaterally implemented policies was observed between 2010 and 2012, in concert with the greatest observed decline of traditional visa policies. Overall, in 2016, emerging economies continue to have a higher level of reciprocal openness compared to advanced economies. Additionally, since the first analysis of reciprocity within and between specific economic and regional blocs in 2014, higher levels of open reciprocity could be found within individual blocs in comparison to the global percentage (19% in 2016). This suggests that cooperation among countries at the political and economic levels can facilitate visa policies. By comparison, open reciprocity between members of various blocs and non-members remains significantly lower. Here again emerging economies have outpaced advanced economies in increasing their open reciprocity.

TABLE 2 – WORLD VISA POLICY RECIPROCITY (%), 2008-2016

	2008	2010	2012	2013	2014	2015	2016
Reciprocal	71	68	54	54	52	51	50
No Visa	14	16	16	16	17	17	19
Traditional Visa	57	52	35	36	33	31	29
Visa on arrival or eVisa	0	0	3	2	3	3	3
Not reciprocal	29	32	46	46	48	49	50

Finally, data collected by UNWTO has also allowed for a detailed analysis of the effects of global visa policies on different markets. The data shows similar overall patterns to those of openness, indicating an increased mobility of source markets over time, with particularly visible improvements for emerging economies.

## OUTLOOK

The dependency of tourism development on the actions of governments, especially the facilitation of formalities for international travel, was already recognized by the international community in 1963. Although, more than 50 years later, visa policies continue to present decisive barriers to travel and tourism, continuously collected and analyzed evidence has proven that the link between visa facilitation and economic growth through tourism is increasingly recognized by national authorities, who have responded with concrete facilitation measures.

While half of the world's visa policies continue to be implemented in a bilateral manner, more open and unilateral approaches based on differentiated and context-sensitive strategies are nevertheless increasing, indicating the

efforts of governments to better seize the benefits of the enormous growth in international travel flows.

However, current global developments in terms of security are also bringing to light new and complex challenges that require careful planning of these approaches, hence careful development and implementation of facilitation measures that allow for a seamless, but also a safe and secure, travel experience.

As international air transport is the most common mode of transport for international tourism, the ongoing collaboration between UNWTO and ICAO, the United Nations Organizations responsible for tourism and aviation, is more important today than ever.

To further advance the agenda of travel facilitation and support ICAO and its TRIP Strategy, UNWTO continues to prioritize visa facilitation as a significant tool to further promote tourism across the world. This includes encouraging governments to accommodate security concerns into visa facilitation processes, through more harmonized and carefully-considered approaches to eVisa systems, as well as by extending processing capacities through strategic and systematic segmentation and prioritization of key source markets, among other measures.

In order to achieve these objectives in a responsible manner, as required by two strong and continuously growing sectors, it is essential to strengthen the resilience of both the tourism and the air transport sectors – a shared conviction and objective which will continue to underpin the partnership between UNWTO and ICAO.

### Dirk Glaesser

Director, Sustainable Development of Tourism  
World Tourism Organization (UNWTO)

<sup>7</sup> Reciprocity refers to the implemented visa policies between two countries. A policy is reciprocal if both countries have the same visa requirement for one another, and non-reciprocal otherwise.







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**LAMBERTO ZANNIER**

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## FOREWORD BY THE SECRETARY GENERAL OF THE ORGANIZATION FOR SECURITY AND CO-OPERATION IN EUROPE (OSCE)

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Preventing the cross-border movement of terrorists and other criminals is a high priority for the Organization for Security and Co-operation in Europe.

Many countries are concerned about the number of people radicalized to violence and travelling to fight or train alongside terrorist groups in conflict and non-conflict areas. These individuals can, in turn, become further radicalized and pose a new terrorist threat to their homeland or third countries, including transit countries. As terrorist groups come under increased pressure in conflict zones, we are now seeing an increase in the number of returning foreign terrorist fighters (FTFs).

We in the OSCE believe that all those involved in civil aviation, whether working in the airline industry, as governmental officials in foreign affairs or immigration, as front-line officers in international organizations, or for private companies supplying security equipment – we all have a role to play in preventing the cross-border movement of terrorists.

The OSCE's comprehensive approach to security fits well within the holistic ICAO TRIP Strategy. There is a strong level of cooperation at present between our organizations, whether it be improving evidence of identity, promoting membership in the ICAO Public Key Directory, enhancing the use of Advance Passenger Information, or training in the detection of forged documents and imposters. We are actively promoting ICAO standards within the OSCE area and we intend to develop this cooperation still further by using our field presences to develop joint OSCE-ICAO capacity-building.

The task of bringing all States up to the level specified by ICAO TRIP will require much work. However, in addition to the OSCE, there are a number of organizations involved in this effort going forward. The key to efficiency is co-ordination. I believe ICAO has an important role to play in identifying pertinent capacity-building needs and coordinating the actions of our constituents and partners. For our organization, the end-goal is to provide tailored collaboration at the most local level by capitalizing on our extensive OSCE assets on the ground and in the region.

**Lamberto Zannier**  
Secretary General  
Organization for Security and Co-operation in Europe







**SIMON DEIGNAN** manages the OSCE's Travel Document Security Programme within the Transnational Threats Department that includes document security, identity security, access to databases, training in the physical inspection of travel documents, and expanding the use of Advance Passenger Information. He has been working on OSCE issues since 2010 including as a Political Advisor for both the Irish and Swiss Chairmanships. Prior to the OSCE, Simon worked in the private sector for an international management consultancy.

## THE OSCE ADDRESSES ALL THE STRATEGIC COMPONENTS OF ICAO TRIP

### OSCE MANDATE IN PREVENTING THE CROSS-BORDER MOVEMENT OF TERRORISTS

Preventing the cross-border movement of terrorists is one of the priorities of the international community. This was clearly recognized at the UN-level in Resolution 2178 of September 2014 which aimed at stemming the flow of foreign terrorist fighters (FTFs). Following the adoption of this Resolution, the 57 participating States of the OSCE agreed on Ministerial Declaration 5/14 which commits States to the full implementation of the UN Resolution and tasks the OSCE with supporting States in this endeavor.

In particular, this Declaration calls on participating States “to prevent the movement of foreign terrorist fighters through effective border controls and controls on the issuance of identity papers and travel documents, to exchange information in this regard, and to implement Ministerial Council Decisions Nos. 7/03<sup>1</sup>, 4/04<sup>2</sup>, 6/06<sup>3</sup> and 11/09<sup>4</sup> on travel document security while fully respecting our obligations under international law, including refugee and human rights law to ensure that refugee status is not abused by the perpetrators, organizers or facilitators of terrorist acts”. The Declaration supplemented the OSCE Consolidated Framework in the Fight against Terrorism and the Border Security and Management Concept.

Additionally, following calls from the UN Security Council for States to adopt Advance Passenger Information Systems in Resolutions 2178 and 2309, the OSCE adopted Ministerial Council Decision 6/16 which commits participating States to establishing national advance passenger information (API) systems in accordance with international standards and to increase the added value of API data by seeking to establish automated cross-checking of this data against relevant watchlists.

Based on this mandate, the OSCE has been increasing its capacity-building efforts to (i) augment controls on the issuance of identity and travel documents; (ii) improve information sharing at the border; and (iii) increase training for border control officers.

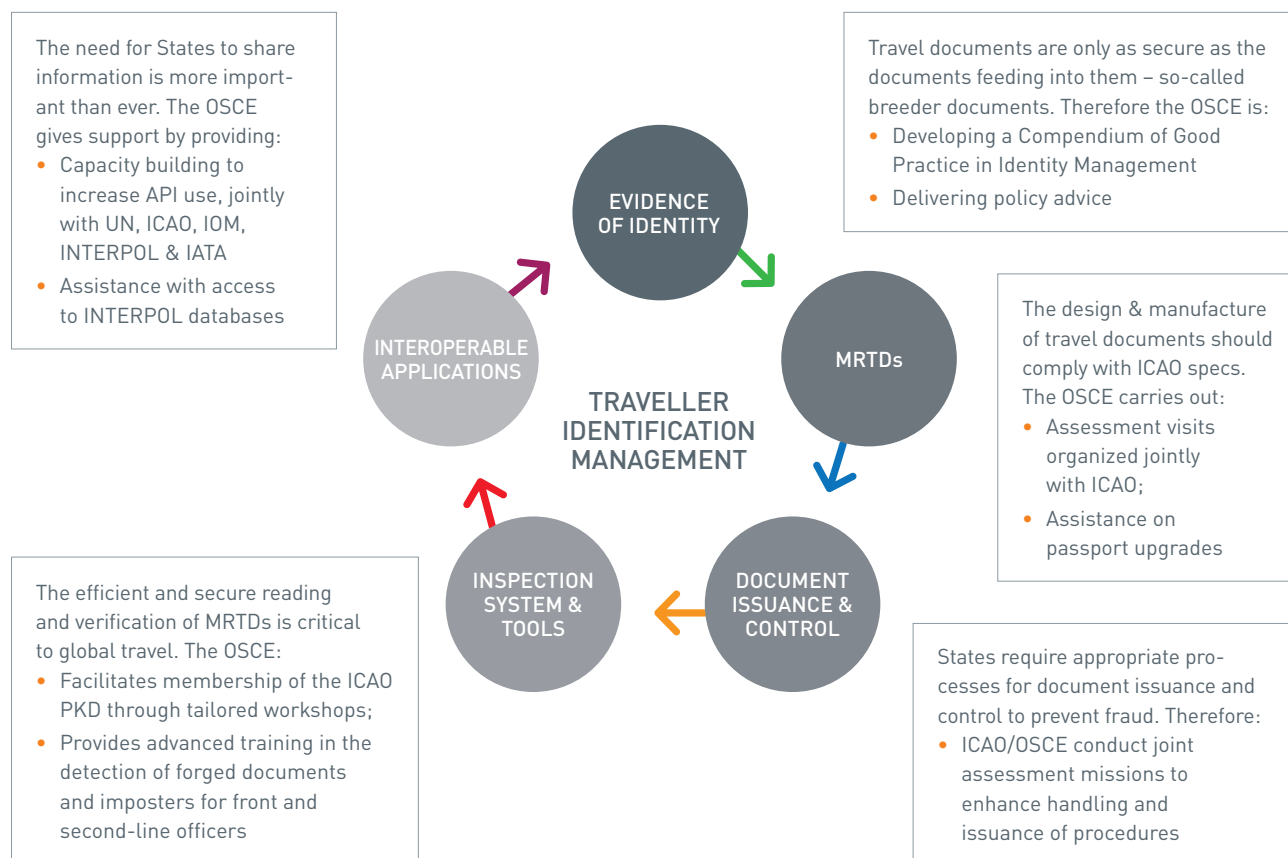
<sup>1</sup> Decision No. 7/03 on Travel Document Security – ensuring full compliance with the recommended ICAO minimum security standards for the handling and issuance of passports.

<sup>2</sup> Decision No. 4/04 on Reporting lost/stolen passports to Interpol's automated search facility/stolen travel document database (ASF-SLTD).

<sup>3</sup> Decision No. 6/06 on further measures to prevent the criminal use of lost/stolen passports and other travel documents.

<sup>4</sup> Decision No. 11/09 on Travel Document Security – ICAO Public Key Directory.





## HOW THE OSCE CONTRIBUTES AS A KEY IMPLEMENTING PARTNER OF THE ICAO TRIP STRATEGY IN “INSPECTION SYSTEMS AND TOOLS”

### a) Increasing Membership of the ICAO Public Key Directory

Recognizing the inseparable link between ePassports and the ICAO Public Key Directory, OSCE participating States adopted Ministerial Council Decision MC.DEC/11/09 in December 2009. The Decision calls upon participating States to consider becoming participants in the ICAO PKD and tasks the OSCE to raise awareness and to facilitate the participation in and the use of the ICAO PKD.<sup>5</sup>

Currently the ICAO PKD has 58 Member States worldwide. The OSCE began promoting membership of the PKD in 2009, and since then, membership has risen from eight (at the end of 2009) to 30 among OSCE participating States and 5 OSCE Partners for Co-operation.

Given the increased political impetus and the growing awareness of the value of the ICAO PKD, the OSCE publishes an annual membership overview, and organizes national seminars to either raise awareness or to facilitate the participation in and the use of the ICAO PKD.

Since 2009, the OSCE has conducted awareness-raising seminars in Uzbekistan, Moldova, Kyrgyzstan, Albania, Armenia, Turkmenistan, Tajikistan and Kazakhstan, as well as a preparatory workshop in Turkmenistan to assess the necessary tools and templates required to join the PKD.

<sup>5</sup> MC.DEC/11/09 also encourages Partners for Co-operation to voluntarily implement this decision.



FIGURE 1 – MAGNIFIED SECTION OF ICAO PKD MEMBERSHIP MAP IN THE OSCE AREA, TAKEN FROM <https://gis.icao.int/epassport/>

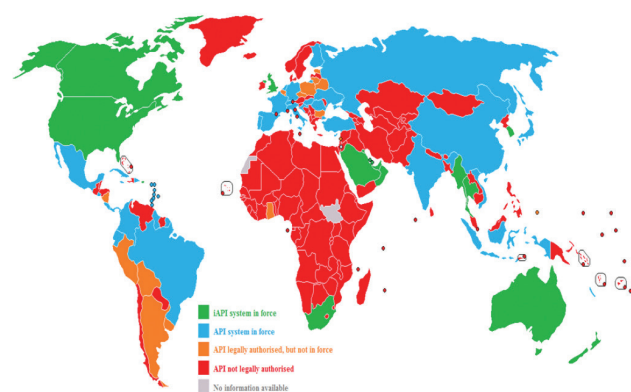


#### b) Increasing the use of Advance Passenger Information (API)

As outlined, States are now committed to establishing a national API system in line with international standards. The main contribution of API systems to border management is that details of arriving/departing passengers are received prior to the arrival of the flight, in the case of batch API, and prior to departure in the case of interactive API. Thus, law enforcement officials can know in advance whether potential or known offenders are travelling, thereby giving them adequate time to utilize their resources more efficiently, and to reduce their workload through the use of technology.

In order to support OSCE participating States in the implementation of Ministerial Decision 6/16 and UNSCR 2178, the OSCE is organizing national workshops on API in order to bring together all relevant national stakeholders, together with international experts, IT service providers, and donor States. The workshops are arranged to (i) explain the benefits and functions of API; (ii) to address existing shortcomings that prevent the establishment of API systems; and (iii) to identify financial and technical support available from donor States and/or international organizations. The ultimate goal of these national workshops is the design of roadmaps that will indicate the main steps that need to be followed to move towards an API-enabled environment.

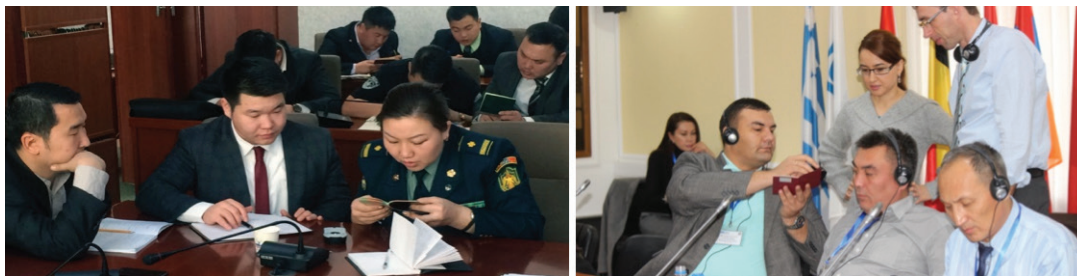
FIGURE 2 – OVERVIEW OF THE USE OF API WORLDWIDE BASED ON DATA FROM THE IATA API/PNR TRACKER



#### c) Training courses in the Detection of Forged Documents and Imposters

Most terrorists are not known to authorities before they travel, making it difficult to detect when they enter the international travel system or to provide other States sufficient warning to interdict them en route. FTFs may travel to destination countries directly or try to disguise their travel by first transiting through third countries.





All of these high-tech passports and automatic borders might have gaps unless we have border guards with the skills and capacity to analyze and assess whether a traveller is suspicious or not.

The increasing trend towards look-alike fraud coupled with more complex and sophisticated forgery techniques, require a high degree of skill for border officers to detect.

The OSCE organizes training for front-line, second-line and train-the-trainers in the latest detection methods, and donates modern detection equipment. In 2016, training courses were arranged in Ukraine (4 courses), Kazakhstan, Mongolia (2 courses), and Tajikistan, with 213 people trained in total. In 2017, there will be training in Kazakhstan (2 courses), Uzbekistan, Mongolia, Turkmenistan, Bosnia, Pristina, and Skopje. These trainings also contribute to building a network of experts to improve international co-operation on the latest forgery methods.

In addition, we have a dedicated Border Management Staff College in Dushanbe, Tajikistan which holds both annual and monthly staff courses for present and prospective senior managers from border guards, border police, customs, drug control and transnational crime agencies, primarily from Central Asian States and Afghanistan.

## CLOSER COLLABORATION BETWEEN THE OSCE AND ICAO ON TRIP IMPLEMENTATION

Cooperation between ICAO and the OSCE has traditionally been strong. As the standard setting organization for travel documents, ICAO has participated in many capacity-building activities carried out by the OSCE. Moreover, both the 2013 adoption of the ICAO Traveller Identification Programme (TRIP) by ICAO Member States, and the soon-to-be-agreed Memorandum of Understanding (MoU) be-

tween the OSCE and ICAO, opens up opportunities to reinforce how the two organizations collaborate. ICAO is one of our main partners in the area of Travel Document Security and our joint aim, in our view, should be to further strengthen our co-operation in order to ensure the best possible efficiency and synergy to develop joint capacity-building.

Building on the traditionally strong cooperation in the upgrading of travel documents, and the more recent excellent collaboration on increasing the use of API, the two organizations could increase this partnership in other activities.

Firstly, OSCE activities to increase the membership of the ICAO PKD could be further enhanced with complementary ICAO technical support. Secondly, the document training programmes of the two organizations could seek to further coordinate their activities, potentially with a view to pooling resources in certain regions. And thirdly, turning to the 'Evidence of Identity' section of the TRIP programme, the OSCE has combined the efforts of its Vienna-based unit working on international travel security and its Warsaw-based unit working on population registration and freedom of movement, with the aim of developing a 'Compendium of Good Practices in Identity Management in the OSCE Area'. This is being drafted with the assistance of experts from the relevant ICAO working groups, and it is hoped these good practices can be promoted through ICAO with a view to supporting States where gaps are identified.

In conclusion, the OSCE will continue working to promote ICAO standards in the OSCE area, and to develop joint capacity-building, both through our specialized Travel Document Security Programme in Vienna and through our strong network of Field Operations.

**Simon Deignan**

Programme Manager – Travel Document Security  
Transnational Threats Department – OSCE





## WORKING AREA: BORDER MANAGEMENT



Border Control Management (BCM) consists of the laws, regulations, procedures and practices, including technologies, of a State that are applied by border control, law enforcement and security agencies relating to the admission to, stay within, and departure from its territory of travellers, including passengers and crew. Such measures are designed to achieve security and facilitation objectives throughout the journey of travellers, consistent with international standards, recommended practices and obligations.

Border controls generally relate to the movement of goods and persons across borders, while under the TRIP Strategy, the focus is on persons travelling.

Two elements of the TRIP Strategy relate to Border Control Management: national border Inspection Systems and Tools and Interoperable Applications. Those elements rely on MRTDs to verify identity and nationality to regulate the travel, entry and stay of foreigners, and in some instances, record the travel of citizens and residents.

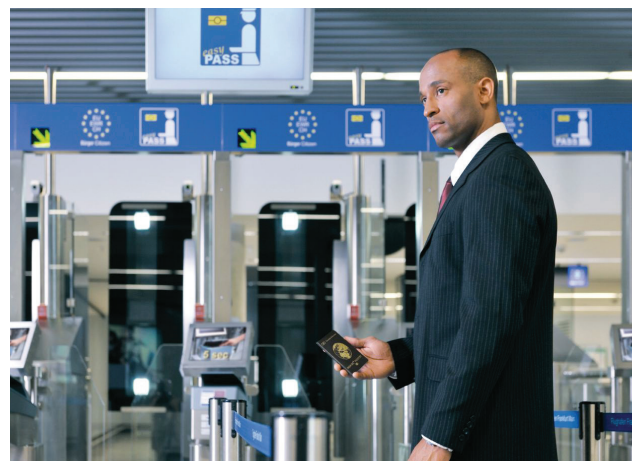
Travel documents enable border and immigration authorities to determine admissibility and legitimacy of travellers. The controls on the holders of a travel document can be performed at different points in time during their journey, supported by mechanisms such as national border Inspection Systems and Tools and Interoperable Applications. Those

mechanisms enable States to obtain information about travellers prior to travel, to inspect travel documents and to perform risk assessment on the travellers.

About 120 ICAO Member States are currently issuing ePassports. As ePassport implementation expands, the possibility of a Standard requiring ePassports arises, following the example of Standards that have assisted with the move from handwritten to machine-readable passports. ICAO leadership in travel documents matters is therefore essential. Work will progress on an ePassport roadmap which identifies the challenges and conditions that must be met by Member States when implementing ePassports systems and for ICAO over the long-term with a view to creating an ePassport Standard.

With regard to travel document inspection using Automated Border Controls (ABCs), according to industry reports, the expansion of ABCs increased between 2014 and 2015 from availability in 134 airports in 40 States to 179 airports in 60 Member States. Border agencies involvement is a key focus for the ICAO TRIP Strategy. Further development of an ABC-related regulatory framework, such as the Recommended Practices proposed during the Ninth Meeting of the Facilitation Panel (FALP/9, April 2016), will encourage Member States to expand the use of ABCs.

Based on the main findings, in response to the survey addressed in the ICAO State Letter EC6/8 – 16/04, 27 January 2016, regarding document issuance and





control, 60 per cent of the reporting States (44) are using the ICAO Guide for Assessing Security of Handling and Issuance. Therefore, there is a need to further promote the guide in order to encourage States to use it, together with adapting cost-effective state-of-the-art technology for Travel Document Security.

The level of ICAO PKD participation has constantly increased, bringing the current number of PKD participants to 58. To encourage participation in the ICAO PKD, Amendment 25 to Annex 9 – *Facilitation* presented a revision to the PKD Recommended Practice 3.9.1, which is divided into two Recommended Practices: one aimed at documents issuers and one for border control authorities. The expected outcomes for this specific element of the TRIP Strategy are the development of an assessment tool for States willing to implement PKD in line with ePassport issuance and ABC gates implementation and also to further improve the involvement of border officials in the work of the TAG/TRIP on border management.

A survey was sent to Member States, ICAO State Letter EC6/8.3 – 16/70, issued on 25 July 2016, to urge Member States to join the PKD and to reply to the questionnaire on the use of PKD at Border Control. As at 31 August 2017, out of 37 replies to the State letter, 35 replied to the questionnaire.

A preliminary analysis of the replies to the Questionnaire on the use of the PKD at Border Control demonstrated that 82% of Member States that replied have an IT infrastructure to conduct ePassport validation and that 43% obtain the required certificates from the ICAO PKD. Also, the questionnaire highlighted that 53% of respondents use Automated Border Controls (ABCs) at borders and 40% agreed that it had impacted wait time. In fact, as an outcome from this analysis, it appears that from 2011 to 2015 there has been a constant increase of the number of travellers using ABCs and that the average processing time is about 26.33 seconds.

## SUGGESTED APPROACH FOR IMPLEMENTATION OF THIS ELEMENT

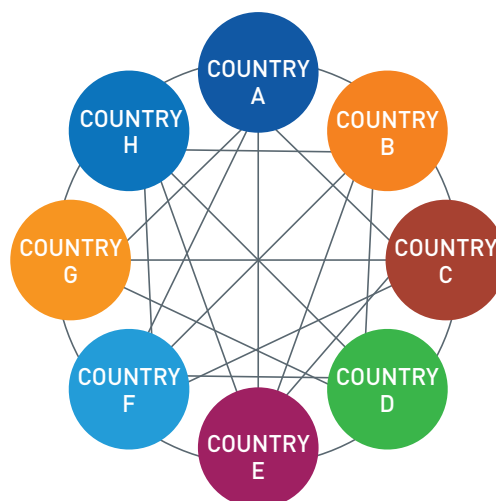


The ICAO PKD was created to facilitate the sharing of public key information between States as it is a central repository of certificates, ensuring interoperability while minimizing the volume of digital information being exchanged. Border control authorities and other interested entities have an interest in joining the PKD to gain access to a reliable source of information to assist in validating ePassports. Through the PKD, they are provided with real time assurance that ePassports are genuine and unaltered, while facilitating the passenger travel process.

### OPTION 1: DOWNLOAD FROM THE ICAO PKD



### OPTION 2: BILATERAL EXCHANGE





The mandate provided by the 39<sup>th</sup> Session of the Assembly in Assembly Resolution A39-20 reflects the importance of using the ICAO PKD as an inspection system and tool for the efficient and secure reading and verification of Machine Readable Travel Documents (MRTDs) at borders and an action plan for border control engagement has been developed, as follows:

- In the context of the Border Engagement Strategy developed by the ICAO PKD Board, PKD Border Days are organized on a regular basis during the annual PKD board meeting.
- A cost benefit analysis (CBA) template for States to join the PKD is being developed as part of the development of an action plan targeting border control authorities. Exchange of the PKI certificates is part of the responsibility of each State toward contributing to the overall security and facilitation of their nationals travelling by any mode of transport.
- A State which is not participating in the PKD but willing to set up a robust border control infrastructure would have to establish the diplomatic exchange needed to install and operate its national information technology platform. Participation in the PKD is only one small element in the whole system to be implemented at the borders.
- Although some costs may be difficult to estimate and are significantly different from one State to another, the initial methodology development is showing that some potential benefits are closely related to the simultaneous implementation of ePassports and of ABC inspection systems and cannot be directly measurable only by the use of the PKD. Therefore, it is proposed to develop a CBA template for the package of ePassports, ABCs and PKD through the definition of possible key performance indicators (KPIs) such as measurement based on queue time and increase in number of passengers versus increase in number of border officers.

While improved Border Control Management relies in part on the application of technology, the foundation for BCM lies within legal and administrative frameworks. The regulatory framework of the ICAO TRIP is found in the Standards and Recommended Practices (SARPs) of Annex 9 – *Facilitation*, specifically in Chapter 3, Entry and Departure of Persons and their Baggage and in Chapter 9, Passenger Data Exchange Systems.

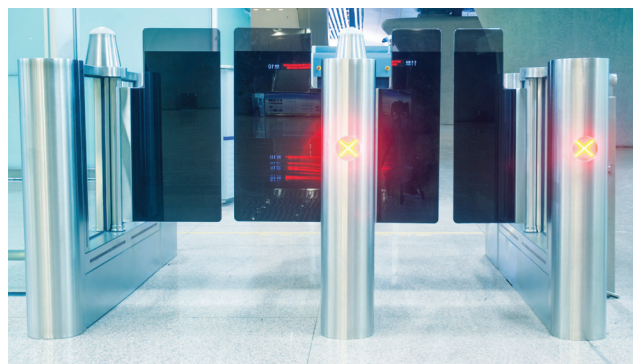
The Standards and Recommended Practices (SARPs) of Annex 9 – *Facilitation* and the technical specifications for MRTDs contained in Doc 9303 ensure that the national border inspection systems and tools employed by States can efficiently capture, verify and record data about travellers entering and departing States.

To be effective, traveller identification and national identification arrangements must be complementary and mutually supporting. Traveller identification in Border Control Management (BCM) is the critical initial step that allows the risks and threats posed by a traveller to be identified and assessed.

Traveller identification contributes to Border Control Management by providing States with:

- A foundation for assessing the intent of travellers so that States can decide whether the benefits of allowing travel outweigh the assessed risks and threats; and
- A framework for recording travel, entry and exit to manage the traveller's stay. Accurate recording of travel is also key to managing investigations following incidents or attacks in order to neutralize security and criminal threats presented by travellers who have entered or departed.

## CHALLENGES AND SOLUTIONS



Best practice in Border Control Management involves integrating national border inspection systems and tools with interoperable applications so that data can be shared with the objective that the risks and threats associated with individual travellers can be identified and mitigated by States and the international community. Successful integration blurs the distinction between national border inspection systems and tools, which primarily operate at a national level, and interoperable applications which support the national and international sharing of traveller data.



National border Inspection Systems and Tools streamline and automate the verification of identity and the watchlist searches that support risk identification and ensure that relevant information is shared seamlessly between border agencies. ICAO-compliant MRTDs help establish the standardized data foundation for border management systems. More recently, standardized eMRTD specifications are providing a basis for interoperability supporting Automated Border Control (ABC) systems using eGates.

Traveller identification is managed at borders in a two-step process. In the first step, agencies responsible for the immigration clearance of travellers capture, verify and record data about travellers at their arrival and departure. In the second step, the verified identity information is used by agencies responsible for national security, law enforcement, customs clearance of goods and baggage, health, quarantine and immigration to assess the intentions of travellers.

The decisions and interventions made by States in Border Control Management are sovereign in nature and are undertaken to regulate the flow of people in the national interest. The flow of people overwhelmingly benefits States and as such, arrangements should facilitate timely and cost-efficient processing of genuine travellers while, at the same time, identifying, managing and mitigating risks, and responding to threats.

However, these decisions and interventions are reliant on information on identity and nationality provided by other States, and are subject to international norms and formal obligations. States operating outside the norms and not meeting their treaty obligations suffer damage to their reputation.

## INSPECTION SYSTEMS AND TOOLS

PURPOSE	Capture, verify and record data about travellers.
OBJECTIVE	Manage risk and threat at arrival, transit and departure.
WHERE	Mostly at the national level, within and between BCM agencies.
WHO	Primarily agencies performing the immigration and customs clearance functions at international airports; and National security agencies when used for analysis and investigation activities.
FUNCTIONS AND RELATED TOOLS	<p>Obtaining Information about travellers prior to travel commencing:</p> <ul style="list-style-type: none"> <li>• Visas and Electronic Travel Systems</li> </ul> <p>Travel document inspection:</p> <ul style="list-style-type: none"> <li>• Interface with National Identity and Passport Databases, including the National Public Key Directory (NPKD);</li> <li>• National MRTD and eMRTD Interoperability;</li> <li>• Biometric Identity Verification.</li> </ul> <p>Traveller Risk Assessment:</p> <ul style="list-style-type: none"> <li>• National Watchlists;</li> <li>• Airport Operations – Access Control and Border Control Management.</li> </ul> <p>Other National Border Inspection Tools:</p> <ul style="list-style-type: none"> <li>• Recording of Traveller Exit/Entry;</li> <li>• Automated Border Controls (ABCs) – Including Kiosks and eGates.</li> </ul>



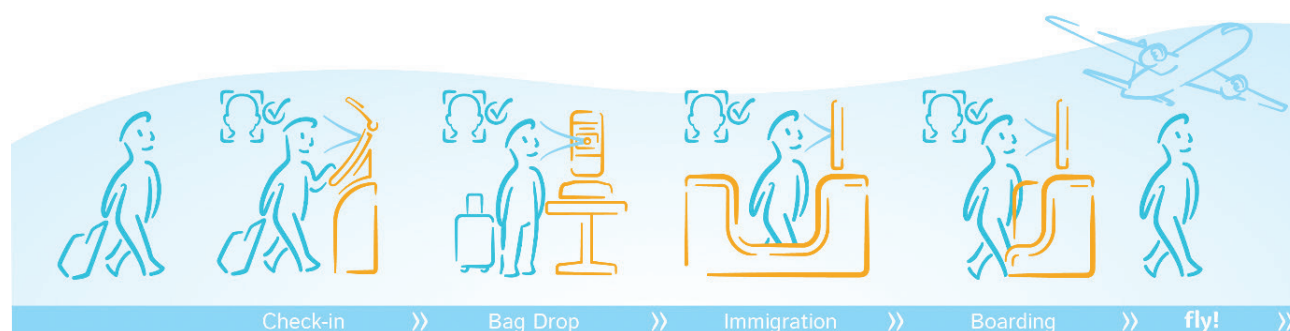
## SUCCESS STORIES ON THE IMPLEMENTATION OF THIS ELEMENT

### THE ARUBA “HAPPY FLOW”

“The Aruba Happy Flow is the first seamless flow, from check in to boarding, using a single biometric token. It is the result of a next level, public private, multi stakeholder cooperation, working on shared goals and banking on a one reliable ID check. It improves security end-to-end and through intelligent data services. Initiated in Aruba’s Airport, this initiative is designed to make passenger processing more secure and seamless. It is the result of cooperation between the Aruban government, the Aruba Airport Authority, Schiphol Group and KLM. Through

the use of facial recognition, passengers can check in, drop their luggage, cross the border and board the aircraft without showing a passport or boarding pass again. Thanks to this process, clearing each checkpoint takes only a few seconds. Aruba Happy Flow merged the border control process with the private passenger process at the airport.”

Source: Annet Steenberghe, the Government of Aruba



Source: Aruba Airport Authority

### AUTOMATED BORDER CONTROL – THE AUSTRALIAN EXAMPLE USING SMARTGATE TECHNOLOGY

Because of the growing traffic demand impacting the security systems at Australian airports, Australian Customs chose Sagem Sécurité in 2004 to help it set up, on a trial basis, a new automated border control system based on the security recognition and confirmation of a facial biometric (now more commonly known commercially as SmartGate). The Australian SmartGate solution was designed both to deal with security concerns and to take advantage of the more automated passenger flows that ePassport technology and RFID identifiers now make available. Employing facial recognition measures using a photo embedded in the ePassport chip, SmartGate meets all ICAO biometric specifications and enables automated border control when passengers arrive on international flights. The entire process takes about 40 seconds, compared to 15 minutes or more using a manual process.

Source: “Australia’s approach to automated border control” (ICAO MRTD Report, Vol. 9 No. 2, 2009)

#### TWO-STEP PROCESS IN SMARTGATE; A KIOSK AND A GATE



Source: Australian Customs



## ICAO BEST PRACTICE GUIDELINES FOR OPTICAL MACHINE AUTHENTICATION – PART I

The “Best Practice Guidelines for Optical Machine Authentication” was first developed by the Subgroup of the New Technologies Working Group (NTWG) of the ICAO Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP), and was released in November 2015. It was designed to address the lack of harmonization and standardization of the processes in place, as well as the lack of coordination between the main parties involved in these processes, which has led to system parts and components being developed independently without consideration for the major implications resulting from their inability to interact.

In the field of machine assisted authentication of Machine Readable Travel Documents (MRTDs), considerable progress has been made over the last decade. Technical innovations in the security design of MRTDs and in the development of authentication systems (readers, software, etc.) have allowed for machine-based document authentication to become an integral part of several control infrastructures and processes (e.g. Border Control). However, new challenges have arisen for experts, manufacturers and authorities involved in the field, as technical improvements achieve higher security and efficiency in operational processes. Furthermore, the complexity and diversity of the systems currently available on the market make it especially difficult to evaluate and/or compare them.

This first part of the Best Practice Guidelines aims to provide a set of recommendations and methods for improving the design of security documents as well as integration and operation of systems and processes involved in optical machine assisted authentication of MRTDs. To achieve this goal, this guide:

- proposes a modular definition of the key components of a generic document inspection system;
- defines and structures the steps of the inspection process for MRTDs;
- defines a universal catalogue that allows for a common generic specification of all feasible check routines and processes across different inspection systems;
- provides recommendations for all parties involved, namely security document designers, manufacturers of full page readers, programmers of authentication software and databases, and operating authorities; and
- addresses monitoring and logging issues, especially privacy considerations including methods of providing anonymity.

Part II of the Guide will focus on the methods and tools of evaluating machine authentication systems, based on the analysis and insights gained from real-life setups and operative border control systems. It will act as a guideline for evaluating optical authentication systems, from planning the test setup and selecting the evaluation components to analysis based on defined error rates.

This publication can be found at [www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx](http://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx)





# ICAO TRIP STRATEGY COMPENDIUM



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## INTEROPERABLE APPLICATIONS

## MESSAGE FROM THE WCO SECRETARY GENERAL



**KUNIO MIKURIYA**

The World Customs Organization (WCO) is a specialized inter-governmental organization focused on Customs matters. It is dynamically engaged in the simplification, harmonization and standardization of Customs procedures, as well as the development and implementation of security and compliance programmes, in order to facilitate and secure the international movement of cargo and passengers.

In an international environment characterized by instability and the ever-presented threat of violent extremism, the WCO's mission is to enhance the protection of society and the national territory of States, among other initiatives.

The key foundation of Customs' contribution resides in its powers of control, which impact cross-border trade and travel.

Following the escalation in global terrorist activity, the WCO Policy Commission issued the Punta Cana Resolution which readdresses and highlights Customs' role and contribution in the context of border security and counter terrorism. The significance of Customs' role in border security has been reiterated in various United Nations Security Council Resolutions and through other high-level political commitments, such as G7 and G20 Declarations.

The WCO and ICAO have worked as partners to secure and protect the international movement of cargo and passengers across borders based on a holistic approach supported by a wide range of joint activities through working groups, conferences, workshops and the implementation of our respective standards in a harmonized and efficient manner.

The WCO is committed to working with its Members to raise awareness and build capacity to deliver more effective identification and control of high risk travellers while facilitating the flow of low risk travellers. In so doing, we will continue to emphasize the importance of a coordinated approach based on partnership between Customs, partner border control agencies and industry, at both the national and international levels, as well as the implementation of efficient passenger risk management aided by pre-arrival passenger data.

**Kunio Mikuriya**  
Secretary General  
World Customs Organization (WCO)





## THE WORLD CUSTOMS ORGANIZATION: THE FRONT LINE OF BORDER SECURITY

The World Customs Organization (WCO) was established in 1952 as the Customs Co-operation Council (CCC) and is an independent intergovernmental body whose mission is to provide leadership, guidance and support to Customs administrations to facilitate legitimate trade, realize revenues, protect society and build capacity.

Today, the WCO represents 182 Customs administrations across the globe that collectively process more than 98% of world trade. As the global centre of Customs expertise, the WCO is the only international organization with competence in Customs matters and can rightly call itself the voice of the international Customs community.

As a forum for dialogue and exchange of experiences between national Customs delegates, the WCO offers its Members a range of Conventions and other international instruments, as well as technical assistance and training services provided either directly by the WCO, or with its participation. The WCO also actively supports its Members in their endeavours to build capacity within their national Customs administrations.

In an international environment characterized by instability and the ever-present threat of violent extremism, the WCO's mission to enhance the protection of society and the national territory, and to secure and facilitate international trade, takes on its full meaning. The WCO has been investing considerable resources to meet this border security challenge by enhancing the capacity of Member administrations and initiating global and regional operations to prevent illicit movements of terrorism-related materials.

### THE SAFE FRAMEWORK OF STANDARDS (FOS)

In the aftermath of the 9/11 terrorist attacks, the WCO adopted the SAFE Framework of Standards (FoS) to Secure and Facilitate Global Trade in June 2005 as a global Customs instrument to deter international terrorism, secure revenue collection and promote trade facilitation worldwide. To prevent cross-border flows of terrorism-related materials and at the same time facilitate legitimate trade in a secure supply chain, the WCO and its Members promote and encour-

age: the utilization of electronic pre-arrival and departure information; the systematic use of automated risk management practices; greater focus on outbound controls based on non-intrusive inspection technologies; and partnerships between Customs and trade as well as Customs and other governmental agencies, through the SAFE FoS.

The key foundation of Customs' contribution is its control powers that impact cross-border movements of cargo and passengers. Traditionally, the above-mentioned control powers have been utilized for revenue collection and trade rule enforcement. However, due to the evolution of Customs' operating environment, administrations all over the world have also been given responsibility for fulfilling other objectives such as protection of society (e.g. drug enforcement), environmental protection (prevention of trafficking in wildlife and hazardous waste, etc.) and, more recently, national security (enforcement of restrictions and prohibitions related to dangerous materials, such as weapons and explosives).

### RISK MITIGATION

Customs, as the first line of defence at the border, must and does play a significant role in mitigating security risks. Many criminal organizations exploit international boundaries to profit from their illicit activities of trafficking and smuggling of contraband. The same applies to terrorist and violent extremist organizations. There is plenty of evidence that these organizations are trying to fund their activities through contraband and, moreover, that international supply chains are being used to facilitate an attack or to transport weapons or hazardous materials to be used in an attack. When looking at government defences against these risk scenarios, the importance of Customs' role is inescapable. No other government agency possesses a similar level of understanding of international trade flows. Customs, using modern intelligence, information-based risk assessment and targeting scenarios, can identify high and low risk consignments in international supply chains.

Customs powers, which often are very broad in relation to goods controls, have not traditionally been used for security purposes. However, given the elevated threat level countries are facing after the surge in terrorism, an increasing



number of Customs administrations are including security as part of their core mandate. The greater focus on national security is a natural continuation of the broadening mandate of Customs at the border.

#### PASSENGER CONTROL IN SWEDEN



Following the recent escalation in global terrorist activity, the WCO Policy Commission issued the Punta Cana Resolution in December 2015, which readdresses and highlights Customs' role and contribution in the context of border security and counter terrorism. The significance of Customs' role in border security has been reiterated in various United Nations Security Council Resolutions and through other high-level political commitments, such as G7 and G20 declarations.

### THE WCO SECURITY PROGRAMME

The WCO Security Programme is now well recognized in the international community and in the "G7 Action Plan on Countering Terrorism and Violent Extremism" adopted at the G7's Ise-Shima Summit held in Japan in 2016. At the Summit, G7 Members committed to border security action to: "Strengthen cooperation among border agencies and support greater use of existing border security programmes such as the World Customs Organization (WCO)'s Security Programme."

Under the auspices of the WCO Security Programme, five key areas of work are now underway to develop policy, tools, networks and operations. Those are:

- Programme Global Shield (PGS) aimed at preventing diversion of explosives pre-cursor chemicals and detonators in the international supply chain;
- Assisting Customs to use Advance Passenger Information (API) and Passenger Name Record (PNR) as part of their passenger risk assessment processes;
- Small Arms and Light Weapons (SALW) initiative to help implement measures to prevent illicit trafficking of firearms;
- Strategic Trade Controls Enforcement (STCE) Programme which is focussed on the prevention of illicit trafficking of items used in weapons of mass destruction; and
- Terrorist Financing, a project aimed at preventing the smuggling of cash and bearer negotiable instruments.

Implementation of those activities is supported by the WCO Border Security initiative which aims at building and enhancing the border security capacity of Customs administration.

### IDENTIFICATION OF FOREIGN TERRORIST FIGHTERS (FTFs)

One of five key areas of work now underway under the auspices of the WCO Security Programme, is focused on greater utilization of API and PNR by Customs administrations to improve and develop risk analysis and targeting methods for effective traveller control, including for the identification of the movement of Foreign Terrorist Fighters (FTFs).

The phenomenon of FTFs is increasingly becoming a global security threat. The global security landscape has changed substantially over the past few years. Conflicts around the globe have fuelled violent extremism and led to a dramatic increase in the number of terrorist attacks. Over 100,000 people, mostly civilians, have been killed or injured as a result of these incidents. The threat of terrorism has become a major challenge for the international community.

Huge numbers of countries around the world are currently supplying FTFs. Among the various Al-Qaida affiliates around the world and groups allied to ISIL, the flow of FTFs and other individuals supporting terrorism continues to grow. By means of the latest communication technology, such as internet and social media, terrorist groups are working to radicalize individuals and incite them to leave their homes and join violent extremist organizations. Those



who have returned, or plan to return, to their home country or to third countries also pose a threat to national and international security.

Bearing in mind the ever-growing number of travellers and the need to respond effectively to high-risk passengers such as FTFs, Customs administrations acknowledged the requirement to use other information streams to advance and refine the risk assessment process. API and PNR include a wealth of information about travellers and their journey and have consequently become key information sources for Customs administrations in the screening and detection of high-risk passengers.

#### PASSENGER CONTROL IN AUSTRALIA



The WCO and its Member administrations have been involved for some years in the use of API and PNR for passenger risk management and targeting and to improve overall facilitation of travel. Together with the International Air Transport Association (IATA), the WCO crafted the API Guidelines in 1993 and subsequently, together with ICAO and IATA, established the API PNR Contact Committee. The Contact Committee meets annually to develop, maintain and promote passenger information standards to facilitate the submission of pre-arrival passenger information by aircraft operators to Customs and other border agencies. In addition, the Contact Committee discusses challenges, lessons learned and good practices related to the implementation of API and PNR systems by its Members.

## API AND PNR GLOBAL STANDARDS

The establishment of global standards is essential for the implementation of API and PNR systems to foster uniformity of the information aircraft operators are required to submit to Customs and other border agencies. It ensures API and PNR systems are implemented in a resource effective manner and increases data quality with the use of internationally standardized data requirements and message format. To this end, the Contact Committee has included the API PAXLST Message Implementation Guide (MIG) as the technical standard for API data. In addition, in cooperation with the PNRGOV Working Group, a technical Working Group under the auspices of IATA, the Contact Committee developed the PNRGOV MIGs as technical standards for PNR data.

To encourage the implementation of API and PNR programmes by Members, the WCO issued a Recommendation<sup>1</sup> concerning the use of API and PNR for efficient and effective Customs control in 2012, which was amended in June 2015. The Recommendation encourages Customs administrations to, inter alia, ensure the detection and suppression of serious transnational crime, seek cooperation of airlines and other aviation businesses, utilize advance information, promote cooperation with other Customs administrations, as well as support the implementation of UN travel bans against sanctioned individuals.

In March 2015, the WCO and its Members decided to develop guidance on “How to use API/PNR” to provide policy and technical direction on the finer points of PNR and its risk management applications. In parallel with this work, the WCO and its Members have been working since March 2016 on developing new guidance on “How to build API/PNR systems”. The objective of this new guidance is to provide practical information on important prerequisites and reference to the existing international standards relating to API and PNR for Customs administrations and other border agencies for establishing systems to receive passenger information. The two sets of guidance are expected to complement each other.

<sup>1</sup> Recommendation of the Customs Co-Operation Council Concerning the use of Advance Passenger Information (API) and Passenger Name Record (PNR) for efficient and effective Customs control (June 2015). [www.wcoomd.org/-/media/wco/public/global/pdf/about-us/legal-instruments/recommendations/facilitation/transport/api-pnr-en.pdf?la=en](http://www.wcoomd.org/-/media/wco/public/global/pdf/about-us/legal-instruments/recommendations/facilitation/transport/api-pnr-en.pdf?la=en)



## A COORDINATED APPROACH BY ALL STAKEHOLDERS

The WCO is strongly supportive of the proposition at the centre of the ICAO TRIP Strategy that a coordinated approach needs to be taken by all stakeholders to the management of the interdependent elements of traveller identification. The Machine Readable Travel Document (MRTD) for instance, contains traveller biographic information which is the main element of the API dataset. This information is normally captured at the time of check-in before being transmitted to border control authorities. MRTD specification enables automated data capture that has been proven as the most efficient data capture that could significantly enhance the accuracy of API data.

For Customs administrations and other agencies exercising controls at the border, having trust in the identity stated in an MRTD enables the confident use of alerts and watch-lists as well as risk analysis and targeting tools to identify both known and unknown high risk travellers. This in turn enables greater facilitation of low risk travellers including the use of automated border controls systems. This trust is generated by the existence of secure and reliable civil registry and travel document issuance systems.

Border control authorities also play a key role in the identity chain with the border being a key control point in the travel continuum where identities can be verified through validating that travel documents that are presented belong to the holder, are genuine and unaltered. Robust inspection systems, participation in the ICAO Public Key Directory (PKD) and border officials well trained in detecting document fraud and imposters can provide the required level of assurance.

Border agencies also work closely with airlines, airports and aviation security authorities who may identify travellers of possible security concern through their own processes.

The WCO is committed to working with its Members to raise awareness and build capacity to deliver more effective identification and control of high risk travellers while facilitating low risk travellers. In doing so, we will emphasize the importance of a coordinated approach based on partnership between Customs, partner border control agencies and industry at both the national and international levels.

**The Compliance and Facilitation Directorate,**  
World Customs Organization (WCO)







JEAN-PAUL LABORDE

## MESSAGE FROM THE ASSISTANT SECRETARY-GENERAL, EXECUTIVE DIRECTOR, UNITED NATIONS SECURITY COUNCIL, COUNTER-TERRORISM, COMMITTEE EXECUTIVE DIRECTORATE (UNCTED)

Terrorism is a global threat that requires a global response. No country is immune to the threat of terrorism. This is why international co-operation is more important than ever.

Civil aviation has long been one of the preferred targets of terrorists, generating the worst known types of terrorist crimes, from the attacks against aircraft in the 1970s to the attacks of 11 September 2001. This has resulted in the development of specific international legal instruments regarding the definition of crimes against civil aviation, but also, as you are aware, ultimately in the adoption of specific resolutions related to counter-terrorism, foremost among which are resolutions 1373 (2001), 1624 (2005) and 2178 (2014), two of which are under Chapter 7 of the Charter.

The work undertaken by ICAO and its initiatives to enhance civil aviation security through improved traveller identification represent, in this context, one of the best current responses in counter-terrorism.

Among the most reliable instruments in existence today, the Traveller Identification Programme (TRIP) Strategy is the one to be mentioned first and foremost. This programme aims to improve the efficiency, facilitation and security of air transport – a sector essential to international trade, which includes approximately 3.5 billion passengers per year.

The very close co-operation that exists between ICAO and the United Nations Security Council Counter-Terrorism Committee Executive Directorate (CTED) allows us to jointly assess the capacity of Member States during Committee visits. It also offers the opportunity to facilitate the provision of technical assistance to Member States in order to strengthen travel document security, identification management and border controls.

Following the CTED Conference held in Rabat, Morocco, in March 2013, Member States and the international organizations participating in this event identified gaps, challenges, as well as a list of 12 follow-up activities and potential technical assistance projects. One of which, inter alia, on counter-terrorism capacity building related to travel documents, identification management and border controls within airports, was identified in particular and was approved by the participants from Member States, as well as by the representatives from the Executive Directorate and ICAO.



THE SECRETARY-GENERAL  
OF ICAO AND THE ASSISTANT  
SECRETARY-GENERAL  
EXECUTIVE DIRECTOR, CTED



As a response, ICAO and CTED decided to jointly organize, within the framework of the TRIP Project, a Canadian-funded workshop, in Niamey, Niger, in January 2015, on strengthening travel document security, identification management and border controls in the Sahel and neighbouring States. Additionally, co-operation between ICAO and CTED also took shape through the increased involvement of ICAO experts responsible for TRIP within the Counter-Terrorism Committee's assessment missions, carried out by CTED.

ICAO experts thus joined the CTED team in Chad in December 2014 and in Tunisia in March 2015. This contributed to a better understanding of the gaps and challenges faced by those States and to identifying recommendations. It should be emphasized that this work is essential in the process for facilitating the provision of technical assistance and the equipment required to implement and issue, on a more robust basis in terms of identification, more secure travel documents. It is carried out, in particular, through the identification management system and computerized procedures for civil status registration.

The ICAO TRIP Strategy, for its part, is a project required for strengthening travel document security and ICAO specifications and standards. It provides the targeted public with a comprehensive approach to Annex 9 to the Chicago Convention on Standards and Recommended Practices (SARPs) for traveller identification and border controls. TRIP places particular emphasis on ICAO standards and specifications for machine-readable passports, electronic passports (ePassports), biometric passports, the ICAO Public Key Directory (PKD), as well as a robust national identification management system.

The TRIP initiative also emphasizes the need to establish a genuine identification management chain, also for the security of travel documents, to be consistent, as such, with the recommendations of the Counter-Terrorism Committee. Thus, with the new Canadian-funded project "Strengthening Border Control Management in the Caribbean Region," – ICAO is now able to replicate this TRIP initiative in the Caribbean region in partnership with CTED.

It is very clear that CTED intends to pursue its partnership with ICAO on the TRIP initiative in order to enable States to build their counter-terrorism capacity. On behalf of the Counter-Terrorism Committee, it will conduct a visit to Trinidad and Tobago and another to Jamaica in 2017 and will involve ICAO TRIP experts, taking as a model the actions taken together in Chad and in Tunisia. We will certainly include these experts in other visits to the region, should such visits take place.

It is absolutely necessary to further and strengthen the co-operation between ICAO and CTED. On 23 June 2016, the ICAO Secretary General addressed the importance of the issue of civil aviation to the Counter-Terrorism Committee. She recalled the importance of our co-operation within the framework of the Committee assessment visits. CTED, for its part, also participates in some of the meetings of the Council of ICAO. Beyond the TRIP project, it is essential for ICAO and CTED to seek additional synergies through, inter alia, projects such as "AIRCOP", the Air Travel Cycle model, developed with other UN entities within the Working Group on Border Management and Law Enforcement of the Counter-Terrorism Implementation Task Force (CTITF).

Finally, it is the full intent of Resolution 2309, adopted on 22 September 2016 by the Security Council, to request that the Counter-Terrorism Committee hold, within twelve months, a special meeting on the issue of the threat of terrorism against civil aviation and to also invite your Secretary General and the Committee Chairman to present the findings from this special meeting to the Council within 12 months. This work will undoubtedly include the TRIP Strategy, as well as these findings, as a major contribution to building the capacity of States to counter terrorism more effectively, in particular, with regard to the fraudulent use of travel documents, as well as to prevent the mobility of terrorists and to reduce the flow of foreign terrorist fighters.

**Jean-Paul Laborde**  
Assistant Secretary-General  
Executive Director  
United Nations Security Council Counter-Terrorism  
Committee Executive Directorate (CTED)





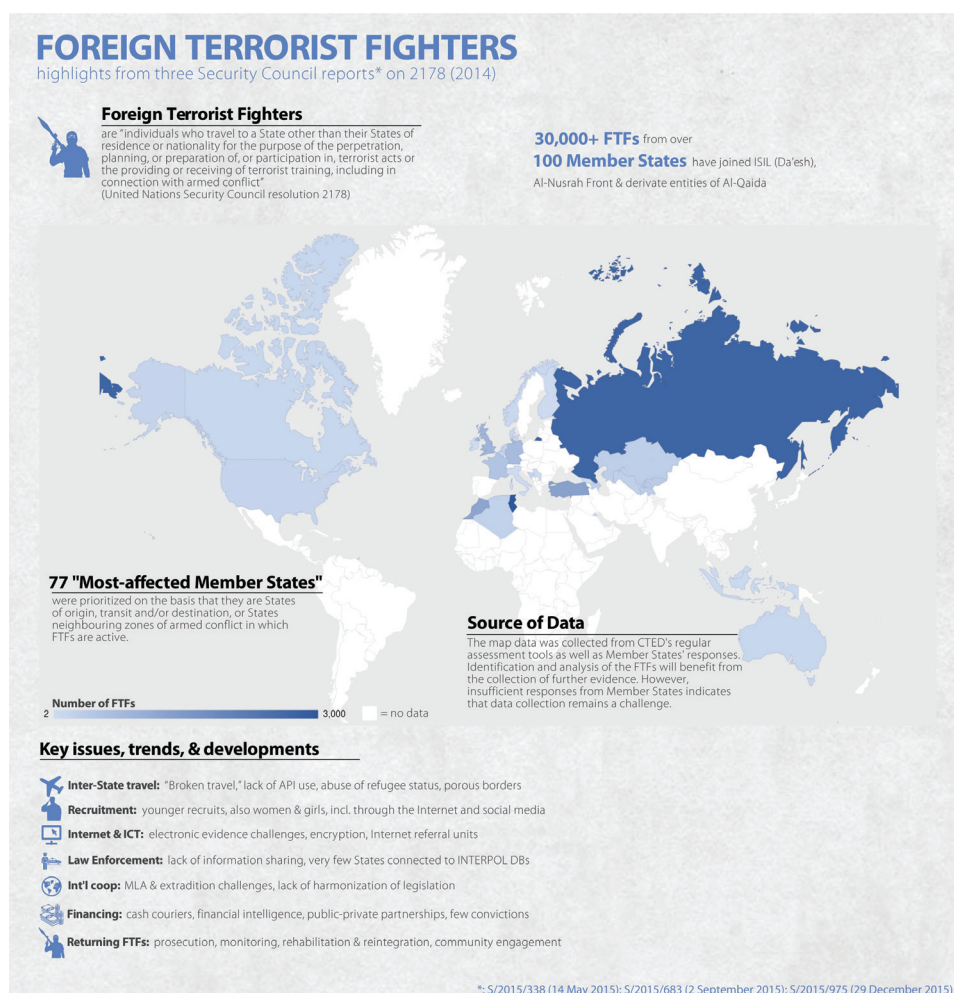
## CTED'S FACILITATION OF TECHNICAL ASSISTANCE ON BORDER SECURITY

Effective border security is key to the effective implementation of the counter-terrorism measures provided for in Security Council resolution 1373 (2001). It is the first line of defence against the movement of terrorists across borders and the illegal cross-border movement of goods and cargo.

Maintaining secure maritime, land and air borders is, however, extremely challenging for many Member States. Land borders, for example, can be lengthy, porous, and difficult to monitor. Other challenges can result from lack of financial and human resources, lack of equipment and specialized skills, and lack of intra-State and inter-State cooperation.

The significant threat posed by foreign terrorist fighters (FTFs) has increased the pressure on Member States and the international community to strengthen border security. In this regard, Security Council resolution 2178 (2014) requires the Counter-Terrorism Committee and its Executive Directorate (CTED) to assess States' counter-terrorism capacities, including in relation to border security, in order to stem the flow of FTFs. A preliminary analysis conducted by CTED in 2014 revealed major gaps in many States' implementation of the border-security requirements of Council resolutions.

### FTFs MAP



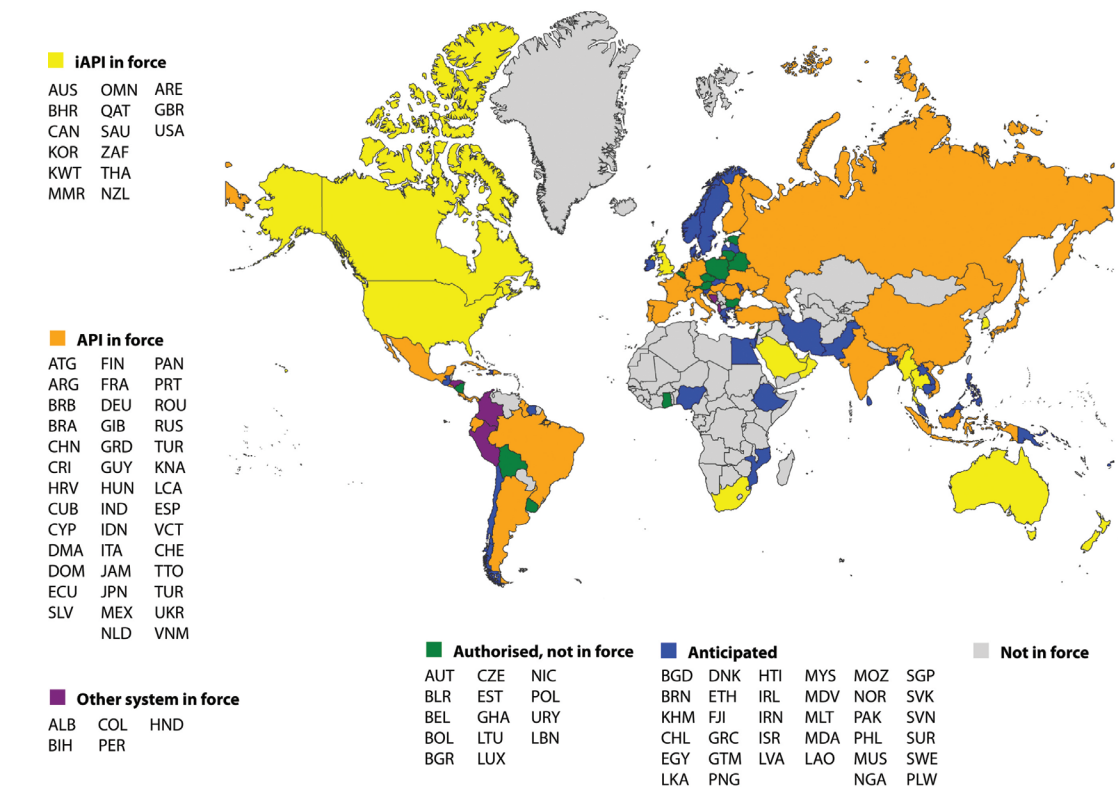


A more recent CTED analysis found that many States had taken steps to strengthen border security and prevent FTF travel. Those steps include passport confiscation, the introduction of a requirement for transit visas, and more effective use of the databases of the International Criminal Police Organization (INTERPOL) to screen for potential FTFs. Some States have connected their immigration screening processes at the frontline to the INTERPOL database on stolen and lost travel documents and more States are populating the INTERPOL list of FTFs.

Another important tool in enhancing border security is advance passenger information (API). In its simplest form, API is an electronic communications system that collects biographical passenger data and basic flight details from airline carriers and transmits the data to border-security authorities in the destination country prior to the flight's arrival. This gives border-security authorities additional time to perform checks of all in-bound passengers against relevant sanctions and watch lists while minimizing delays in the processing of inbound passengers.

Pursuant to Council resolution 2178 (2014), Member States are called upon to require that airlines operating in their territories provide API in order to detect the departure from their territories, or attempted entry into or transit through their territories, of individuals designated by the ISIL (Da'esh) and Al-Qaida Sanctions Committee. However, only some States currently require airlines to do so, and only 51 States – or slightly more than a quarter of the United Nations membership – have implemented API systems. Of those 51 States, only 12 have interactive API (iAPI), which facilitates passenger risk assessments in near real-time and alerts border-security agencies and airline carriers to the potential presence of an FTF before they can board a flight. There is therefore an urgent need to strengthen the sharing of information by airlines and governments through the use of API systems that enable States to detect the arrival or departure of FTFs. Compliance with existing international standards, supplemented by passenger name records (PNR), would assist in the detection of FTFs attempting to cross borders by air.

API & PNR COMPLIANCE MAP





Further ways to prevent the movement of terrorists or terrorist groups include strengthening control of the issuance of identity papers and travel documents and the introduction of measures to prevent counterfeiting, forgery, or fraudulent use of identity papers and travel documents. However, many States lack clear policies and measures to ensure the security and integrity of the identity and travel-document issuance process, and many have not yet put in place security measures at airports and other border crossings designed to ensure the effective screening of travellers.

In this regard, CTED and ICAO have been working together to strengthen travel document security in accordance with Annex 9 of the Convention on International Civil Aviation. In January 2015, in Niamey, CTED and ICAO organized a joint workshop on “Strengthening Travel-Document Security, Identification Management and Border Controls in the Sahel and Neighbouring States”. This was the first event on implementing the ICAO Traveller Identification Programme (ICAO-TRIP) held in this region.

CTED then secured the funding for a number of further projects aimed at addressing the gaps identified both in Niamey and at a workshop on border controls held in Rabat in March 2013 by CTED and the Counter-Terrorism Implementation Task Force (CTITF). In this context, it should also be noted that the findings of ICAO’s TRIP assessment missions were integrated into the recent assessment visits to Chad and Tunisia conducted by CTED on behalf of the Counter-Terrorism Committee.

ICAO and CTED are engaged in a similar awareness-raising initiative in the Caribbean, and ICAO experts participate in the Committee visits to the region. An ICAO TRIP regional seminar was held in Antigua and Barbuda in February 2017, and an ICAO TRIP Workshop on Air Travel Border Control Management (BCM) in the Caribbean Region was held within the framework of the Canada-funded project “Strengthening Border Control Management in the Caribbean Region” implemented by ICAO in cooperation with CTED. ICAO TRIP experts will also participate in the Committee’s forthcoming visits to Jamaica and to Trinidad and Tobago. The ICAO TRIP Guide on BCM will be made available to Member States and the international community by the end of 2017.

## COORDINATED BORDER MANAGEMENT (CBM)

Spaces between official border crossings often include vast open spaces and difficult terrain, and are therefore vulnerable to potential crossing by terrorists. This vulnerability is often compounded by lack of equipment and lack of professionally trained border-security personnel.

Coordinated border management (CBM) strategies, which require close coordination among border authorities, have proven to be a highly effective tool for efficiently and effectively managing national borders. CBM strategies provide for coordination of policies, programmes, and delivery among cross-border regulatory agencies with the aim of strengthening the management of trade and travel flows while also addressing security concerns. At a special meeting of the Counter-Terrorism Committee, held in Madrid in 2015, the participants drafted the Guiding Principles on Stemming the Flow of Foreign Terrorist Fighters, which call on States to consider incorporating CBM principles to enhance the effectiveness of border security aimed at stemming the flow of FTFs.

Ensuring effective border security is an integral part of any comprehensive and integrated national counter-terrorism strategy and requires collective action by States and relevant international and regional organizations. The Committee and CTED can assist States to identify and share good practices in this area and facilitate the delivery of technical assistance and financial support to ensure implementation of the relevant Council resolutions and of the Committee’s related recommendations.

Cooperation between CTED and ICAO in the facilitation of technical assistance delivery might take one of two forms. First: regardless of whether or not ICAO has participated in a particular country assessment visit, CTED would share the Committee’s recommendations on aviation security with ICAO so that ICAO could either identify areas in which it might provide technical assistance (e.g., with respect to travel-document security) or direct CTED to a Member State or entity able to do so. Second: if an ICAO audit revealed a priority need in a particular Member State affected by the FTF phenomenon, CTED would provide political support or help identify possible funding opportunities.



All such cooperation would be promoted and supported by the CTED-chaired CTITF Working Group on Border Management and Law Enforcement, whose members (including the International Organization for Migration (IOM), the International Criminal Police Organization (INTERPOL), the United Nations Office on Drugs and Crime (UNODC) and the World Customs Organization (WCO)) have expressed interest in cooperating with CTED and ICAO to assist States to meet ICAO standards in accordance with Council resolution 2309 (2016). Use of this mechanism would also help avoid duplication of effort. CTED would also seek to strengthen its cooperation with regional and national aviation-security entities that might be in a position to assist with capacity-building initiatives.

## CTED AS KEY IMPLEMENTING PARTNER OF THE ICAO TRIP STRATEGY

It should be recalled that the Counter-Terrorism Committee itself is not an assistance provider. Instead, the Committee facilitates delivery of technical assistance to States by disseminating best practices; identifying existing technical, financial, regulatory and legislative assistance programmes; promoting synergies between the assistance programmes of international, regional and subregional organizations; and (through CTED), serving as an intermediary for contacts between potential donors and recipients and maintaining an online directory of assistance providers. These activities offer an excellent opportunity to promote the ICAO TRIP Strategy in relation to border and aviation security.

In accordance with the Committee's guidelines and action plan and the revised CTED organizational plan, CTED also analyses Member States' assistance needs in the context of their implementation of resolution 1373 (2001), helps the Committee to prioritize States' requests for assistance, and recommends potential sources of assistance in the areas highlighted during the review process.

In facilitating the delivery of technical assistance, CTED identifies States in need of priority technical assistance, focuses on their high-priority needs, and develops assistance strategies together with the State concerned and with potential donors. This work involves informal sub-regional meetings (which help generate donor interest),

outreach, and the development of performance benchmarks. CTED has also developed a database to strengthen and promote the exchange of targeted information internally and enhance engagement with donor focal points in the tracking of technical assistance needs, assessment, and process timelines. This work could include efforts to raise awareness of the benefits of implementing the ICAO TRIP Strategy in relation to border and aviation security.

## STRENGTHENING COLLABORATION ON ICAO TRIP IMPLEMENTATION

CTED and ICAO will continue to cooperate in promoting the ICAO TRIP Strategy in relation to border and aviation security. They will cooperate, inter alia, within the framework of the Committee's assessment visits, meetings, special meetings and open briefings; the inclusion of relevant ICAO data in the Committee's Technical Guide to the Implementation of Security Council resolutions 1373 (2001), 1624 (2005) and 2178 (2014); and cooperation among the entities of the CTITF Working Group on Border Management and Law Enforcement. CTED fully supports the ICAO TRIP Strategy and its aim to develop a holistic and systematic model for traveller-identification management aimed at ensuring that all States have the capacity to verify the identity of individuals prior to the issuance of secure travel documents that are compliant with international standards.

CTED will continue to support the ICAO TRIP Strategy and work with ICAO to promote its implementation in all regions and subregions. CTED will also facilitate dialogue and cooperation aimed at ensuring that the Strategy is available to all Member States and generating further donor support. It should be recalled that Council resolution 2309 (2016) requests the Committee to hold a special meeting, in cooperation with ICAO, on the terrorist threats to civil aviation and invited the ICAO Secretary General and the Chair of the Committee to brief the Council on its outcomes.

**Jean-Paul Laborde**

Assistant Secretary-General

Executive Director

United Nations Security Council Counter-Terrorism

Committee Executive Directorate (CTED)







JÜRGEN STOCK

## ADDRESS BY THE SECRETARY GENERAL OF INTERPOL

Travel has never been as easy as it is today. In our increasingly globalized and connected world, it is easier than ever before for people and goods to cross international borders.

This is also the case for criminals, whether terrorists and foreign terrorist fighters (FTFs) travelling to conflict zones, or child sex offenders travelling from their home countries to exploit vulnerable victims on the other side of the world.

Smugglers and traffickers also take advantage of this increasing flow across borders to transport their cargos of illicit goods and desperate migrants.

In this context, effective border security is an essential part of combating transnational crime.

In today's world, the cross-border movement of criminals requires a coordinated and global response involving all stakeholders at both the national and international levels playing a collaborative role in securing borders.

As the world's largest international police organization, INTERPOL is strongly committed to border management initiatives which encompass identity management, travel document security, information sharing, training and capacity-building, public and private partnerships, and operations – underpinned by INTERPOL's global policing capabilities, including its range of databases containing information on crimes and internationally wanted criminals.

Ensuring global border security requires INTERPOL to maintain close coordination with a wide range of stakeholders across many different sectors, working together to improve data-sharing capabilities and border management expertise in the field.

INTERPOL is therefore fully aligned with ICAO's TRIP Strategy as part of our efforts to implement robust cooperation with all relevant actors and develop effective global interoperability among different national and international border inspection systems for efficient global screening of travellers crossing borders.

Greater cooperation, information sharing and frontline access to information are key to INTERPOL's mission. Through its global network and capabilities, INTERPOL is in a pivotal position to maintain the highest level of cooperation and accurate information sharing on border security.

With this in mind, INTERPOL and ICAO have enhanced their cooperative efforts. Together, we are undertaking joint activities to make identity management easier for stakeholders, especially at borders, within the framework of United Nations Security Council Resolutions 2178/2014 on the use of passen-



ger name records for preventing, detecting, investigating and prosecuting terrorist offences and serious crime, and 2309/2016 on aviation security.

This cooperation also includes developing and standardizing policies, activities and best practices to improve the quality of, and access to, the information that Member States share via INTERPOL's databases.

By sharing information globally, countries extend their national security perimeter, potentially enabling the identification of a threat far away from their own borders, as well as closer to home.

Our partnership with ICAO helps ensure global border security as we work together to improve information sharing capabilities, and border and travel identification management in order to help make our world a safer place.

**Jürgen Stock**  
Secretary General  
INTERPOL





## THE INTERPOL STOLEN AND LOST TRAVEL DOCUMENTS DATABASE (SLTD)

Stolen and lost passports are among the most valuable assets for terrorists and international criminals. In several major terrorist attacks over recent decades, the perpetrators had travelled internationally using invalid passports to conceal their identity.

This was the case for the World Trade Center bombings in the USA (1993) and the assassination of Serbian Prime Minister, Zoran Djindjic (2003). Meanwhile, a suspect wanted internationally in connection with the Westgate Mall attacks in Nairobi, Kenya (2013), and who is known to have travelled extensively on fraudulent passports, remains at large.

Lost, stolen and fake travel documents are used by fugitives to escape justice, by foreign fighters to travel to conflict zones, and by organized criminal networks to traffic vulnerable individuals and illicit commodities across borders.

### SLTD – A UNIQUE GLOBAL REPOSITORY

On 8 March 2014, Malaysia Airlines flight 370 disappeared, seemingly without a trace. As the international community desperately looked for answers, it was discovered that two Iranian nationals had boarded the flight using stolen Austrian and Italian passports. With this revelation, the attention of the world was directed to a fact that INTERPOL has long understood: the use of stolen and altered travel documents is a daily reality around the world.

This is the reason that in 2002 INTERPOL, the world's largest international police organization, created its Stolen and Lost Travel Document (SLTD) database as a tool for law enforcement to detect and prevent the use of fraudulent identity documents. Today, the database includes more than 70 million records from 175 countries. In 2016 alone, the database was checked more than 1.59 billion times, generating more than 100,000 alerts where individuals tried to use travel documents registered as stolen or lost.

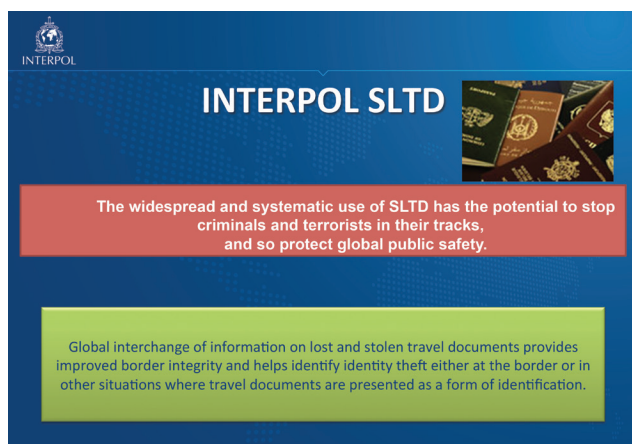


**INTERPOL SLTD**

*"For terrorists, travel documents are as important as weapons."*  
*Final Report of the National Commission on Terrorist Attacks Upon the United States (2004)*

175 countries contributing to SLTD	74.6 mil records
183 countries checking documents on SLTD	Over 1.1 billion consultations
148 countries making hits on SLTD	106,964 alerts

Each INTERPOL member country issuing travel documents can record its stolen or lost, stolen blank or revoked travel documents in the SLTD. Details of stolen and lost passports are submitted directly to the SLTD database via INTERPOL's I-24/7 secure police communications system through either ASF Mail (EasyForm or EDIPOL format) or WISDM – a web based solution to manage national data. The SLTD contains the Document Identification Number, information on the type of travel document (whether a passport, identity card or visa) and travel document status (whether stolen or lost, stolen blank or revoked).



**INTERPOL SLTD**

The widespread and systematic use of SLTD has the potential to stop criminals and terrorists in their tracks, and so protect global public safety.

Global interchange of information on lost and stolen travel documents provides improved border integrity and helps identify identity theft either at the border or in other situations where travel documents are presented as a form of identification.



## SLTD – AN INTERPOL TOOL FOR SUPPORTING BORDER COOPERATION

Sharing SLTD information across a global law enforcement network is key to combating the threat of terrorism and border security. Therefore, member countries should consider active participation in the SLTD for information to be shared with other countries.

With the cooperation of international partners, INTERPOL leads and coordinates key border security operations in a variety of specialized crime areas, with the aim of disrupting criminals who seek to cross borders using fraudulent documents to conceal their true identity. This is done both by extending permanent or temporary access to INTERPOL's databases to airports, sea and land borders, and by utilizing INTERPOL's expertise in forensics, specialized training and investigative skills.

The database is searchable in real time using fixed or mobile network database solutions (FIND/MIND). No matter which solution is used, search results are available to authorized law enforcement and border security users in mere seconds.

Law enforcement officials at INTERPOL National Central Bureaus and other locations with access to INTERPOL's databases through the I-24/7 system – such as airports and border crossings – can query the passports of individuals travelling internationally against the SLTD database, and immediately determine if the document has been reported as stolen or lost so that they can take appropriate action.

When travelling, a passenger produces their passport, which is scanned by the border control officer. Then the passport is checked against the national database and against SLTD at INTERPOL's General Secretariat headquarters through integrated solutions which include FIND, MIND and I-Checkit.

In case of a match and before taking any further action, the information must be validated by the data owner through the National Central Bureau of the requesting country. The validation process must be completed within the time limits set by national laws with the operational assistance of INTERPOL's 24/7 Command and Coordination Centre.

Implementation of INTERPOL's dedicated policing capabilities strengthens national border security by helping to prevent the misuse of the stolen travel documents reported all over the world.

## ANY HIT CAN SAVE LIVES

When INTERPOL's SLTD database is accessed and used effectively, it can make a significant difference in detecting the use of fraudulent travel documents and preventing serious crimes often associated with concealed identities. When a hit occurs, the results can be consequential, as a man travelling by the name of Yecid Parra discovered. A check against the SLTD database at Lisbon airport revealed that Parra's Mexican passport had been stolen and altered to camouflage his fugitive status. That single 'hit' resulted in Guillermo Perez Trujillo (his true name) being detained, arrested and extradited to Colombia to serve a 15-year sentence for grievous bodily harm and possession of illegal weapons.

Sadly, there are frequent instances of internationally wanted criminals who travel freely from country to country, using a fraudulent passport to obtain services and cross borders. One such example is Samantha Lewthwaite, known as the 'White Widow' – the wife of one of the London July 2005 suicide bombers. Under the alias of Nathalie Webb, she was able to travel, obtain employment, sign leases for apartments and secure loans, all thanks to the use of fraudulent identity documents. She is still wanted by Kenya for possession of explosives and weapons, but she could be anywhere, operating under a new stolen identity. Many dangerous individuals use fraudulent identity documents to operate with full impunity.

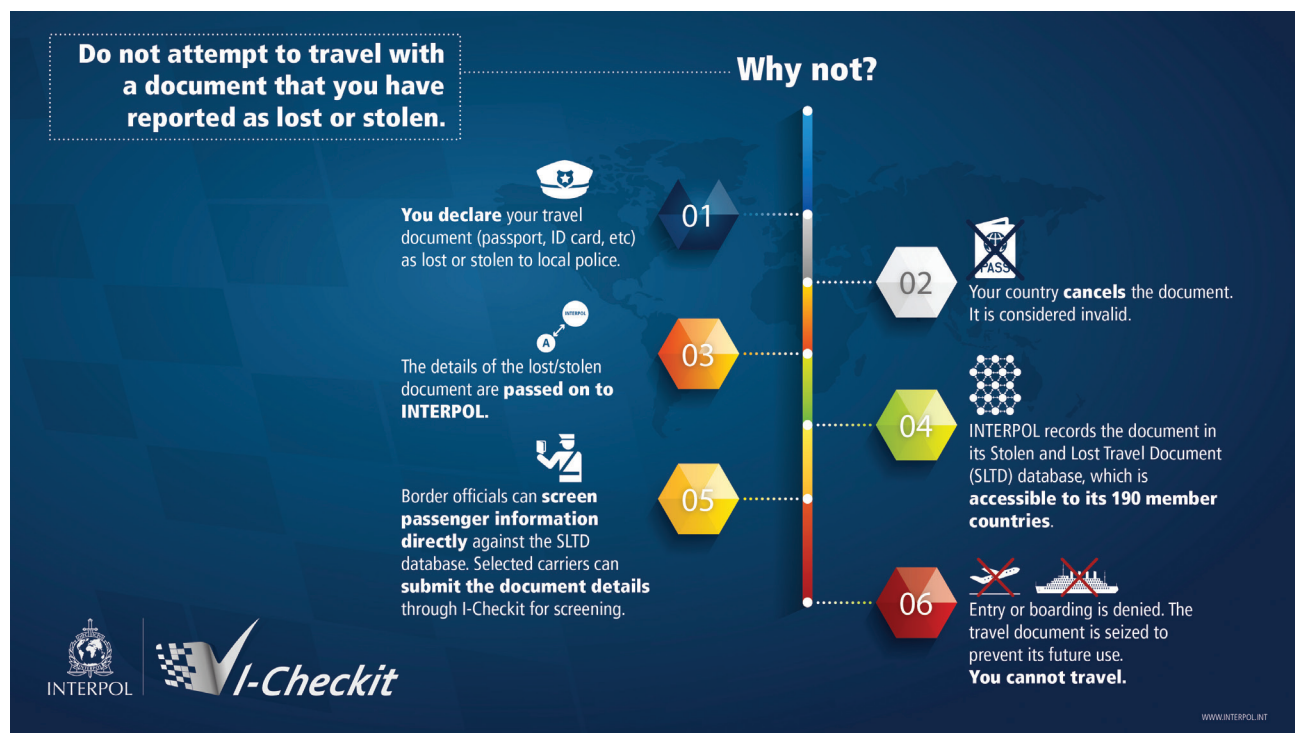
## INTERPOL TOOLS FOR TRAVEL DOCUMENT VERIFICATION

**INTERPOL TOOLS FOR TRAVEL DOCUMENTS VERIFICATION**

- **EDISON TB** – genuine travel documents
- **Dial-Dec** – Digital INTERPOL Alert Library on counterfeited travel documents
- **DISCS** – Document Information System Civil Status

The graphic also displays several national passports, including those of Ecuador, Canada, Argentina, and others, alongside a small inset image of a digital alert interface.





In addition to the SLTD, INTERPOL maintains a variety of databases related to border security that are consolidated within the INTERPOL Travel and ID Document Reference Center. These include databases utilized for first-line inspection, including a Nominal database containing crime-related information on internationally wanted individuals, and the Travel Document Associated with Notices (TDAWN) database that enables authorities to detect persons who are the subject of INTERPOL notices.

For second-line inspections, multiple forensic databases are made available to member countries and partners in different sectors – including airlines and cruise lines – serving as a valuable reference capability for authorities at border points to better detect fraudulent documents and use biometric controls including facial recognition, DNA and fingerprints.

## TRAVEL DOCUMENTS: A CIVIC RESPONSIBILITY

National authorities should encourage their citizens to report the recovery of a travel document previously declared lost or stolen without delay before they attempt to travel using it.

Citizens should treat their travel documents in the same way they would a credit card or mobile phone which has been stolen or lost. In case of the loss or theft of a travel document, they should report it immediately.

If they retrieve it after having declared it stolen or lost, they should not attempt to travel with it and should immediately advise their national authority.

Find out more at the INTERPOL public website:  
[www.interpol.int/INTERPOL-expertise/Border-management/SLTD-Database](http://www.interpol.int/INTERPOL-expertise/Border-management/SLTD-Database)





**MARIA TIBULCA** is currently leading INTERPOL's SLTD, one of the major components of the organization's border management applications.

For the last five years, she was involved in the INTERPOL border security initiative, assisting INTERPOL's member countries in enhancing their border screening and detection capabilities, delivering capacity building and training as well as developing and implementing INTERPOL dedicated border management capabilities and participating in field operations.

## THE INTERPOL I-CHECKIT PROGRAMME

### WHY I-CHECKIT?

Experience has shown the international law enforcement community that, as travel documents become more sophisticated and harder to duplicate, criminals often rely on stolen and altered identity documents to move across borders, open bank accounts, purchase plane tickets and register at hotels. Fraudulent travel documents can be used to perpetrate serious crimes such as money laundering, human trafficking and, significantly, terrorist activities.

The United Nations Security Council Resolution (UNSCR) 1617 of 2005 recognized this reality by urging countries "to ensure that stolen and lost passports or other travel documents are invalidated as soon as possible and share information on those documents with other Member States through the INTERPOL Stolen and Lost Travel Documents (SLTD) database".

Since its creation in 2002, the SLTD database has evolved into one of INTERPOL's most used and valued tools for member countries. It now contains more than 70 million records from 175 countries and was searched more than 1.7 billion times in 2016. SLTD has been endorsed as an important policing capability by international organizations including the G8, the Asia Pacific Economic Cooperation (APEC), the European Union (EU) and the International Civil Aviation Organization (ICAO).

In 2009, INTERPOL created a Travel Documents Associated with Notices (TDAWN) database. TDAWN helps identify criminals subject to INTERPOL notices when checking their travel documents. It includes genuine travel documents belonging to known criminals subject to INTERPOL notices.

Despite these valuable police resources, there still exists a significant security gap to be filled when it comes to the movement of people – a gap which is expected to grow as more people undertake transnational travel. The increase in travellers puts an even greater burden on countries that do not have the resources to screen every person who enters their territory. Indeed, very few countries have the mechanisms in place to screen passengers leaving their territory or travelling within it. Moreover, many border points are becoming increasingly permeable to facilitate international travel.

If nothing is done and the number of international travellers increases as expected, the amount of unscreened passengers will continue to grow. It only takes one successful criminal or terrorist to jeopardize the safety of the public at large.

INTERPOL developed the I-Checkit programme as an additional identity management capability to address this gap.



## WHAT IS I-CHECKIT?

I-Checkit is a screening service that complements and enhances existing national border security systems. It allows trusted partners in the private sector to conduct advanced passenger screening in real time, in collaboration with the law enforcement community.

Currently, I-Checkit is operating in the travel industry, with airlines and, more recently, cruise lines. I-Checkit enables carriers to submit passenger travel document information for screening against the SLTD database.

A database match triggers an instant alert which is then investigated. Notifications are sent to the INTERPOL General Secretariat's Command and Coordination Centre (CCC), INTERPOL National Central Bureaus in the countries concerned, and other relevant national law enforcement entities and, in some cases, the carrier's security teamsto enable them to carry out a secondary check of the document in question at the boarding gate.

## I-CHECKIT SCREENING SERVICE – HOW DOES IT WORK?

The I-Checkit screening solution is embedded into the travel carrier's check-in system.

**STEP 1:** Passengers check in online or at an airport and enter their travel document details into the airline check-in system.

**STEP 2:** The passengers' travel document information, Document Identification Number, type of document and issuing country, are automatically screened against the INTERPOL SLTD Database, hosted in the INTERPOL Secure Cloud (I-24/7).

**STEP 3:** In case of a match in the SLTD database (also called a 'hit'), an automated notification message is disseminated to the following entities:

- the INTERPOL Command & Coordination Centre (CCC);
- the National Central Bureau (NCB) of the country that issued the travel document (NCB data owner);
- the NCB of the country of port embarkation (NCB of departure); and

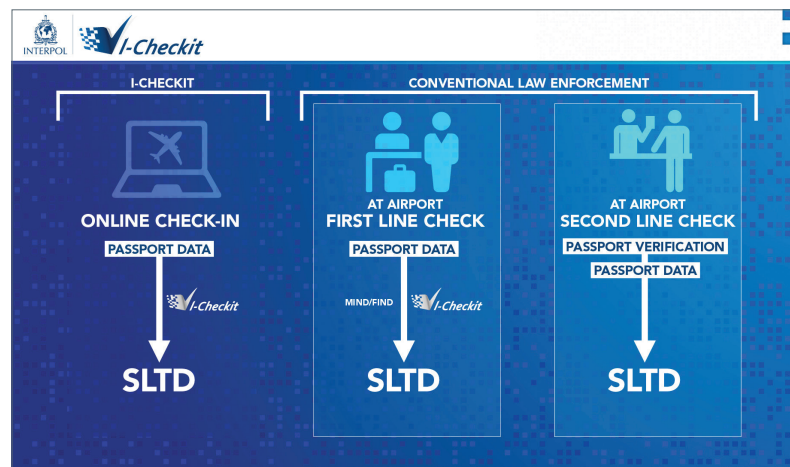


FIG 1. I-CHECKIT PERFORMS ADVANCE CHECKS IN COMPARISON TO OTHER CONVENTIONAL LAW ENFORCEMENT CAPABILITIES.

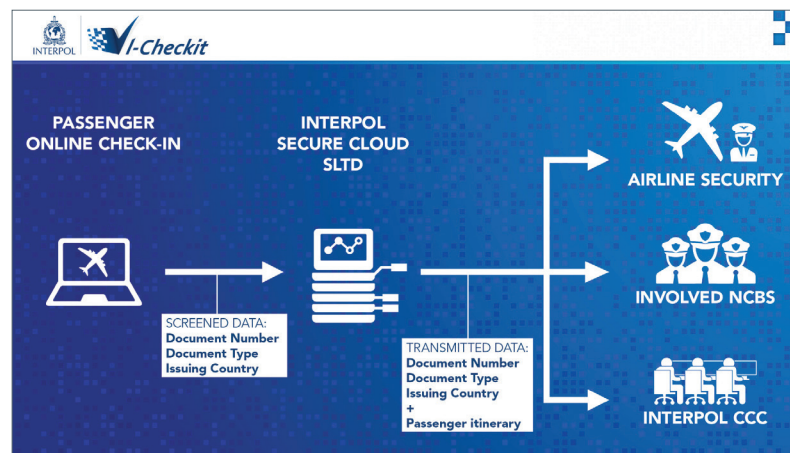


FIG 2. I-CHECKIT SCREENING PROCESS.

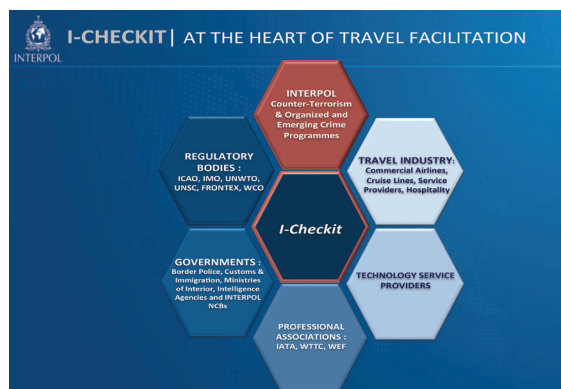


- the designated point of contact within the carrier's security team (if no restrictions are imposed by the country owning the data).

**STEP 4:** Following a positive query result, the NCB data owner, together with the NCB of departure, will closely liaise with the designated point of contact in the carrier's security team to ensure that the document in question is inspected either by immigration authorities at the airport or the airline security profilers at the departure gate prior to boarding to determine whether the subject is the genuine bearer of the reported lost, stolen, or revoked travel document.

## THE VALUE OF I-CHECKIT

I-Checkit is at the heart of travel facilitation. It interacts with a large number of stakeholders such as governments, regulatory bodies, the travel industry, professional associations and technology service partners in the private sector.



The value of I-Checkit can be demonstrated in the following ways:

- It provides early identifiers and alerts law enforcement and carriers on passengers travelling with stolen or lost documents and, in the future, those identified as criminal or terrorist threats through the 'TDawn' solution.
- Checkit enables member countries which do not have integrated border solutions to increase screening against INTERPOL's databases through the private sector, permitting advanced detection and deterrence of identity fraud, illicit cross-border movement and associated terrorist and criminal threats.
- Checkit is well-positioned to effectively respond to UNSCR 2178 concerning foreign terrorist fighters (FTFs) as well as to UNSCR 2309 to Ensure Safety of Global Air Services and Prevent Terrorist Attacks to civil aviation.

- For airlines, it mitigates the risks associated with repatriation costs for passengers travelling with stolen or lost travel documents. Hence, it improves the chances of compliance with national legislation and may help reduce the risk of infringement costs and financial liabilities associated with non-compliance and security breaches. It can assist in ensuring that flight operations remain optimized by limiting disruptions to departures from undocumented or illegal travellers.
- A partnership with INTERPOL is likely to be perceived favourably by customers and may positively impact carriers' business operations, image and reputation.

## TARGETED INDUSTRIES

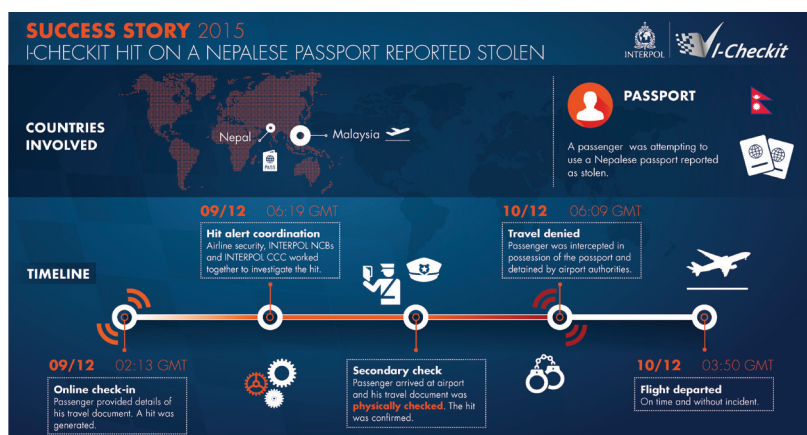
I-Checkit has been operational in the aviation industry since June 2014. The infographic below summarizes key statistics for 2016:



Below are some examples of success stories from deploying I-Checkit to the aviation sector:







## I-CHECKIT IN THE MARITIME SECTOR

In November 2016, following the completion of a three-month pilot project with Carnival Corporation, INTERPOL's member countries endorsed I-Checkit as a screening capability for the maritime sector.

This complements existing partnerships with airline companies and reinforces the importance of I-Checkit as a key component of INTERPOL's global border management strategy.



## DEVELOPING I-CHECKIT FOR OTHER INDUSTRIES

Research and development continues in the bank and hotel industries, along with testing with a small number of companies in these sectors.

Over the course of 2017-2018, I-Checkit will be assessed in line with the concept of Smart Cities (the use of digital technologies to improve traditional networks and services for the benefit of citizens and businesses).

**Maria Tibulca**  
Border Management Capabilities,  
SLTD Manager  
INTERPOL



## WORKING AREA: BORDER MANAGEMENT



This element of the ICAO TRIP Strategy refers to globally interoperable applications (including API and PNR) and protocols that provide for timely, secure and reliable linkage of MRTDs and their holders to available and relevant data in the course of inspection operations. Interoperable applications have been developed to enable data about travellers to be shared, subject to appropriate privacy and data protection legal frameworks, within and between national border agencies and internationally with counterpart border agencies, airlines and international organizations.

Under Article 13 of the Convention on International Civil Aviation (Chicago Convention, 1944), the laws and regulations of a Contracting State as to the admission to or departure from its territory of passengers, crew or cargo of aircraft, such as regulations relating to entry, clearance, immigration, passports, customs, and quarantine shall be complied with, by or on behalf of such passengers, crew or cargo upon entrance into or departure from, or while within the territory of that State. Consequently, a State has discretion over the information it requires relating to persons wishing to gain entry into its territory.

A growing number of States require airlines to provide information on passengers who intend to travel to their territories. The information usually exists in a carrier's reservation system and departure control system operated by the carrier. Some States also require passenger-related infor-

mation from other modes of transport. Taking into account the increasing number of air passengers, the increase in security-related measures, the environmental and efficiency-driven innovations which result in bigger airplanes, together with the need for more efficient passenger flows at airports, it is necessary to develop more intelligent and efficient methods to check passengers and their baggage.

Physical inspection of a traveller and a travel document is today only a small part of border controls on passengers arriving by air. The rest of the border control process relies on secure electronic data, some being provided at the time the passenger buys a ticket and some at the time the passenger boards an aircraft. Controls, in any case, have to be applied before the arrival of the passenger in the country of destination, to enable relevant border agencies to perform risk-based targeted controls on passengers and the goods they are carrying.



Advance Passenger Information (API) is an electronic communications system whereby required data elements are collected and transmitted to border control agencies prior to flight departure or arrival and made available on the primary line at the airport of entry. API data can be divided into two distinct categories: a) data relating to the flight available to air transport operators from their own automated systems; and b) data relating to each individual passenger, corresponding to those items of data that currently appear on machine readable passports and other official travel documents.



A standard electronic message, called the UN/EDIFACT PAXLST message, was developed specifically to handle such passenger manifest transmissions. The basic concept of the PAXLST message is that there is one message (“legacy” or “batch” transmission) for all passengers on the specified flight and there is another message for crew members on that flight. The message may be transmitted separately or combined into one transmission. UN/EDIFACT stands for “United Nations rules for Electronic Data Interchange for Administration, Commerce and Transport.” The rules comprise a set of internationally agreed standards, directories and guidelines for the electronic interchange of structured data, and, in particular, that relate to trade in goods and services between independent, computerized information systems.

API data can also be transmitted as individual records for each traveller, a configuration which supports interactive API (iAPI). iAPI is an electronic system that transmits, during check-in, API data elements collected by the aircraft operator to public authorities. Within existing business processing times for passenger check-in, public authorities return to the airline operator a response message for each passenger and/or crew member. The message confirms either that the traveller is “OK to board” or “refer to national authorities”; the latter effectively denying boarding authority.

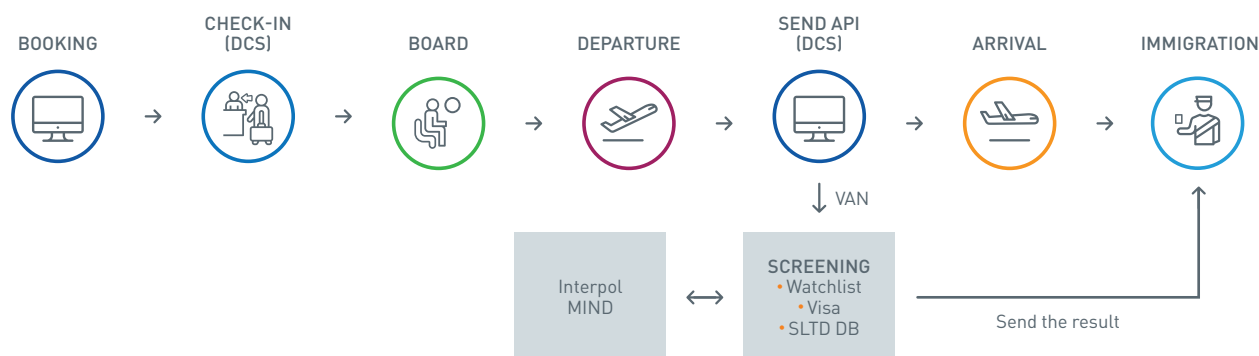
API can also act as a decision-making tool that Border Control Agencies can employ before a passenger is permitted to board an aircraft. Once passengers are cleared for boarding, details are then sent to the Border Control Agencies for screening against additional databases and

can identify passengers of interest. While this technique is beginning to be used by more and more Border Control Agencies, it has been used by a number of countries for some time. API has the potential to considerably reduce inconvenience and delays experienced by passengers as a result of necessary border processing. It also provides a system that carriers can use to comply with relevant legislation of the countries they fly to.

The World Customs Organization (WCO), the International Air Transport Association (IATA) and ICAO have jointly agreed on the maximum set of API data that should be incorporated in the PAXLST message to be used for the transmission of such data by the carriers to the border control agencies at the destination. With respect to the message format for API data transmissions, ICAO mandates, through Annex 9 – Facilitation to the Convention on International Civil Aviation, that API information required by States is to conform to specifications for the PAXLST message. This harmonized approach to data collection and its transmission to border agencies via a single and globally interoperable message structure and format avoids the unnecessary complexity in systems needed to support multiple data exchange processes.<sup>1</sup>

The use of passenger-related information is often challenged by persons and organizations concerned about the protection of the privacy of personal information. In most jurisdictions, the use of passenger-related information for law enforcement purposes is not permissible without proper guarantees for the protection of information received by border control authorities guarding against misuse and the proper safeguard of the privacy of passengers.

#### API SYSTEM FLOW



<sup>1</sup> Advance Passenger Information Guidelines, Version 3.0, WCO/IATA/ICAO, October 2013, [www.icao.int/Security/FAL/SitePages/API%20Guidelines%20and%20PNR%20Reporting%20Standards.aspx](http://www.icao.int/Security/FAL/SitePages/API%20Guidelines%20and%20PNR%20Reporting%20Standards.aspx)



The term “Passenger Name Record” (PNR) refers to data about travellers from airline reservation systems collected at the time that flight bookings are made. Because the reservation systems of each airline and their associated global distribution systems need to communicate with each other, the systems are interoperable. The basis of this interoperability is the PNR unique record locator, a string of six alphanumeric characters. Data collected varies in scope and completeness between systems.

PNR data reveals and allows information to be inferred about when and how reservations were made:

- the number of travellers;
- their identifying details;
- the method of payment;
- passenger contact information;
- routing;
- class of travel;
- meal selection; and
- other details about the traveller and intended travel.

Consequently, PNR data reveals sensitive, personal and financial information about travellers which, by its nature, requires adequate protection against misuse.

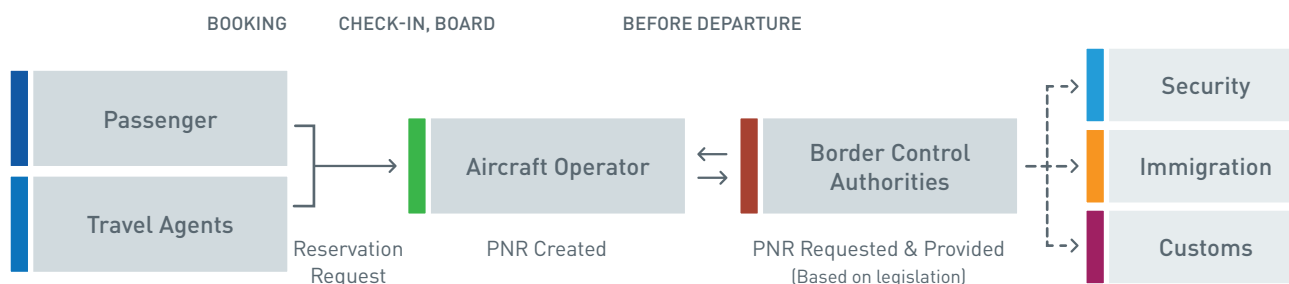
States requiring PNR information from airlines need a clear national legislation describing which data elements can be obtained, how and to where the data should be de-

livered, who can access the data, how it will be used and in what form and for how long it will be retained. This legislative authority for the collection, use, retention and disposal of PNR data in turn needs to be supported by a national framework of legislation, policy and practice for privacy and data protection.

The primary legal jurisdiction for airlines is the State in which they are incorporated. Airlines are also subject to the laws of the States in which they operate, including transit and flightpath, in respect to their operations in and over those countries. The net impact of these overlapping legal jurisdictions is that for an airline to provide PNR data, the legal requirements of all States of origin, transit and overflight need to be met.

PNR data can also include Advanced Passenger Information (API) data elements. This is achieved by the airline booking system requiring travel document details corresponding to the data elements in the Machine Readable Zone (MRZ) of Machine Readable Travel Documents (MRTDs) to be entered at the time bookings are made, or subsequently, prior to travel commencing. These API details are required by law in certain countries, to better enable border authorities to identify travellers and assess risk and threat, even before they travel.

## PNR WORKFLOW<sup>2</sup>



<sup>2</sup> Based on: ICAO Doc 9944, Guidelines on PNR Data; ICAO/WCO/IATA 'Umbrella Document'; IATA API-PNR Toolkit



The involvement of border officials in the work of the TAG/TRIP on border management is therefore essential, along with an increased outreach to States on Advanced Passenger Information (API) and Passenger Name Records (PNR) programmes through collaboration with the World Customs Organization (WCO), the International Air Transport Association (IATA) and the United Nations Counter-Terrorism Committee Executive Directorate (UNCTED).

Following the ICAO State Letter disseminated in January 2016, the latest information received from Member States on progress towards implementation of the ICAO TRIP Strategy with respect to Interoperable Applications reveals that approximately 60 per cent of the reporting States (45) are using the Interpol Stolen and Lost Travel Document (SLTD) database to prevent cross-border terrorism and other crimes.

## SUGGESTED APPROACH FOR IMPLEMENTATION OF THIS ELEMENT



API can be used for risk-based targeting and to complete watchlist checks – either manually or automatically – since it contains the full names (except where the full name contains more than the available number of characters in the first line of the MRZ), dates of birth and nationalities of all passengers and crew on a flight. Since names are read from the MRZ, the transliteration from non-Latin alphabets may reduce matching performance with national or international watchlists.

Watchlist responses will either be negative, possible or positive. Care should be taken to ensure name matching in watchlist systems are configured to search variations in name-order, the number of names and alternative spelling and transliteration. Variations in spelling may be a result of transliteration from other alphabets, issuance errors or attempts to avoid detection.

Typical API messages for passengers consist of the following data elements:

- full name (as it appears on the MRTD);
- date of birth;
- MRTD number;
- State or organization issuing the MRTD;
- MRTD expiry date;
- nationality;
- sex; and
- data relating to the flight containing, inter alia, flight number, departure/arrival date and time, and airport of origin and destination.

Some States require additional API data elements from airlines.

Where States do not have an entry-exit recording system at both in and outbound controls, API can be used to reconcile entries and exits of travellers. Biographic data for API is typically captured either from travel documents or, as is becoming more common, from declarations made by passengers themselves when making reservations or checking in online via the internet. In the latter case, the data is confirmed by the airline when the passenger turns up to take the flight. Airlines might store API for frequent flyers so that it does not need to be captured before each flight.

Where airlines fail to send API data for some or all passengers, this will in general result in fines being levied by States. States can achieve facilitation benefits by using the traveller information provided by API to undertake pre-clearance or partial pre-clearance of flights.

API data can be used by border agencies to search MRTD document numbers which have been reported as lost or stolen, to check their expiry date, to search watchlists to identify suspect travellers, and to profile traveller attributes according to risk. iAPI makes it possible to prevent travel. API can be analysed to provide entry and exit statistics (e.g. by nationality, sex, age, period of travel), and a basic reconciliation between the entry and exit of individual air travellers. The appreciation of the traffic by border



agencies can be informed by analysis of API. Intelligence analysts can examine traffic profiles and trends to identify emerging risks and threats. API can be used to restrict the use of automated border control (ABC) kiosks or eGates only to passengers previously notified by API who have been risk-assessed by the national border inspection authorities.

For all these reasons, where implemented, API should be used for all incoming and outgoing airlines so that API information is available on all travellers – whether arriving, departing or in transit.

PNR is most effective when it is obtained for all travellers on all flights. Therefore, in practice, States intending to obtain and use PNR can do so only after establishing national frameworks of legislation, policy and practice that meet international privacy and data protection norms. Foreign airlines will, in general, only provide PNR after Memoranda of Understanding (MOU) or other inter-governmental agreements are in effect.

Depending on local legislation and the legislative obligations of operating airlines to other States, border agencies will need to enter into a legal agreement or an MOU with the airlines or reservation system owners to access PNR data. PNR data can be accessed via a dedicated airline terminal, or can be pulled or pushed via airline telecommunications systems to the border agency's own system. There are commercially available systems which offer PNR access, together with a set of processing and analysis tools.

PNR is also most effective when used in combination with other data about travellers such as travel history and API.

PNR can be used:

- Actively:
  - to identify travellers whose combination of attributes suggests they pose a risk or threat, or
  - to search data elements against those associated with known suspects (e.g. credit cards, telephone numbers); and
- Passively:
  - as a reference database for the investigation of known suspects.

## CHALLENGES AND SOLUTIONS



Collecting, formatting, transmitting, processing and storing API – 24 hours a day, 365 days a year – are not trivial issues. A professionally designed system needs to be procured to handle these operations consistently and reliably. The investment required is significant. API should be received at a single point, and seamlessly distributed by the receiving agency to the other border agencies that require it (“Single Window” concept). Provision needs to be made in national budgets for the procurement of the system and its ongoing support and maintenance for at least five years. API infrastructure can be shared at the regional level in order to extend access to API to Member States who might not otherwise have been able to make the required investment.

API relies on standardized, interoperable interfaces between airline and border agency systems. Several Information and Communication Technology (ICT) systems integrators and communication providers specialize in procuring API and iAPI solutions. States should seek vendor independent, solution neutral advice prior to decisions to implement API or iAPI. There will need to be a contract with a technical vendor, and day-to-day operation should be monitored to ensure compliance with technical and contractual standards. Reviews should take place from time to time to check that the contract delivers value for money, especially if other vendors are available.



iAPI requires 24/7 365-day operational support to manage the “OK to board” government responses to airline queries about every individual traveller. API and iAPI processing centres need to be in a secure location with a backup power supply and reliable and secure communication links.

Particularly in the case of travellers that do not require a visa, API data collected and transmitted by airlines is the first instance when border agencies are informed of the intent of a traveller to travel. A good relationship between border agencies and each airline, supported by a clear legal framework and effective operating protocols, is required.

Border agencies should have in place a system to receive, store securely, analyse and act upon API data. Failure to manage an API system properly could lead to a breakdown of cooperation with airlines and place the airline and possibly the border agency at risk of litigation, especially if data is lost or disclosed in an unauthorized or illegal manner. Border agencies should carefully consider how API is delivered and by whom. There may well be transaction charges for each API message received. There is always a cost in information transfer and processing, and the fees could be significant if the contracts are not managed well.

The active analysis of PNR data is a complex task requiring specialized skills, knowledge and experience. Vendors offer solutions with rules-based algorithms to search for profiles or particular combinations of data elements. However, these profiles need to be checked for effectiveness and continually updated and tuned as new suspect travel patterns emerge and as known patterns change.

Airlines hold personal data relating to travellers, and details about their travel plans. PNR is the mechanism by which airline reservation systems share details about passengers who travel on more than one airline during their journey (i.e. interlining passengers). In a competitive business environment there is sensitivity about sharing such data unless there are enforceable guarantees about confidentiality. In addition, data sharing of the sensitive personal information is covered by data protection and privacy legislation and is only allowed once enabling legislation is in place.

Airline collection of PNR is for their commercial purposes using long established networks and protocols. The variation in the data elements available between airlines is a feature of PNR that is not easily or economically changed to suit border control agencies. Certain PNR elements (for

example credit card numbers and telephone numbers) can be compared against intelligence databases to identify known suspects or methods of offending. Consistent with ICAO's Standards and Recommended Practices (SARPs), it is important that border agency use of PNR minimizes the commercial impact on airlines.

The analysis of PNR data can link travellers to organized criminal activity, for example by looking for shared attributes with past patterns of travel such as those identified in the smuggling of drugs and other contraband, human trafficking and people smuggling. These indicators can include unusual and illogical travel attributes such as tickets booked at short notice and paid for in cash, indirect travel routings and short stays following long haul travel.

PNR is used by Customs agencies in many States as an effective tool to identify drug smugglers. PNR projects require multi-disciplinary expertise. Vendors offering PNR solutions can offer integration of Information and Communication Technology (ICT), and can assist in developing human capability, but are less able to assist in establishing the necessary legal frameworks.

The analysis of PNR data requires sophisticated human capability to identify patterns, develop targeting hypotheses and tune algorithms. For PNR data to be used effectively, this analysis capability needs to be sustained and developed over time. The analysis of PNR data takes time. PNR is consequently less effective for short haul flights with a high proportion of late ticketing of travel. PNR projects, like any application of technology, need to fit local circumstances.

PNR can be expensive to implement and operate. While the benefits can be significant, they can be difficult to realize and sustain. A careful analysis of likely costs and expected benefits should be undertaken prior to any decision to invest in PNR, and States should seek solution neutral, vendor independent sources of advice.

Preventing and deterring the travel of persons who represent an unacceptable risk or threat is the preferred intervention in Border Control Management. These interventions can only be made where traveller identity can be verified and the assessments of traveller intent can be made. By sharing data, interoperable applications play a crucial role in assessing the risk at pre-departure and at departure.



## INTEROPERABLE APPLICATIONS

PURPOSE	Share verified data about travellers
OBJECTIVE	Attempt to manage the risks and threats related to travellers throughout the journey
WHERE	National, regional and international
WHO	Traveller data is used by multiple border agencies in many States and by international organizations
FUNCTIONS AND RELATED TOOLS	<p>Obtaining Information about travellers prior to travel commencing:</p> <ul style="list-style-type: none"> <li>• Advance Passenger Information</li> <li>• Passenger Name Record</li> </ul> <p>Travel document inspection:</p> <ul style="list-style-type: none"> <li>• ePassport PKI Authentication and the ICAO Public Key Directory</li> <li>• ePassport Biometric Identity Verification</li> <li>• INTERPOL SLTD database</li> </ul> <p>Traveller risk assessment:</p> <ul style="list-style-type: none"> <li>• International Watchlists</li> </ul>

Verified traveller identity data is available through visa systems and from border management systems at entry and exit controls – the ICAO PKD extends and strengthens this verification. Unverified traveller identity data is available from airline departure control systems – the Advance Passenger Information (API). Additional unverified information about travellers is available from airline reservation systems – the Passenger Name Record (PNR). When combined with verified identity data and government intelligence, airline data (API and PNR) can be analysed to identify risks and threats. In the countries where exit controls are performed, terrorist watch lists and INTERPOL Red Notice and Stolen and Lost Travel Document database applications can be integrated with border management systems to prevent travel.

Airlines and transport industry stakeholders are therefore encouraged to enforce any efforts in order to transmit, in a timely manner, passengers' information prior to takeoff to effectively support screening at the destination airport, while preserving their individual rights, as well as to develop and improve compatible systems for the collection and use of API and PNR information, which are both integral components of the fifth element of ICAO TRIP Strategy, and to commit to report on a regular basis, lost and stolen passports, to the extent possible, to the INTERPOL Lost and Stolen Travel Document Database.



## SUCCESS STORY ON THE IMPLEMENTATION OF THIS TRIP ELEMENT

### KOREA'S i-PRECHECKING SYSTEM

The Ministry of Justice of the Republic of Korea developed the i-PreChecking System, and interactive advance passenger information processing system (i-API), which ensures passengers and aircraft entering the Republic of Korea are secured from terrorist activity:

The system is based on the Guidelines on Advance Passenger Information and is an interactive system that provides a response message back to the airlines. There are two distinctive features of Korea's i-API system that differ from the i-API system used by 16 other countries:

1. The i-PreChecking system operates in real-time with the Mobile Interpol Network Database (MIND) technical solution. This vets against the Interpol SLTD with all airline reservations at the booking stage, as well as

passenger information at the check-in stage, a method which was used by the immigration authorities for the first time.

2. The i-PreChecking system includes UN data on terrorists and terrorist organizations, as well as data on lost or stolen passports, including those listed in the Interpol SLTD. The information is checked in real time with the airline's systems at check-in as the traveller is waiting to receive his/her boarding pass and ineligible persons are determined before the boarding pass is printed.

Source: "International Aviation Travel Safety: Korea's i-PreChecking system", Kim Woo-Hyeon and Lee Deok-Ryong, the Ministry of Justice, Korea (ICAO TRIP Magazine, VOL. 12 No. 1, 2017)

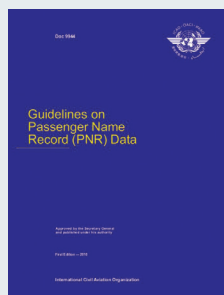
#### i-PRECHECKING





## DOC 9944, GUIDELINES ON PASSENGER NAME RECORD (PNR) DATA, FIRST EDITION, 2010 – SHORT OVERVIEW

Passenger Name Record data is generated during the booking or buying of an air ticket. Aircraft operators could face legal, technical and financial issues if they have to respond to multiple, unilaterally imposed or bilaterally agreed PNR data transfer requirements that differ substantially from one another.



Passenger Name Records (PNRs) are collected by airlines solely for their business purposes. PNRs contain information about bookings made which can include as little as a name, an itinerary and a ticket indicator. Accuracy is not guaranteed and PNRs can contain sensitive personal data.

The PNR Guidelines were developed by ICAO in close cooperation with IATA and the WCO. The first version of the PNR Guidelines was published in 2006. The latest edition of the PNR Guidelines was published in 2010 as ICAO Doc 9944.

The PNR Guidelines include an explanatory text for the use of PNR information and an Annex with a maximum list of PNR data. The PNR Guidelines also include a standardized message for the exchange of PNR information. The purpose of these guidelines is to establish uniform measures for PNR data transfer and the subsequent handling of these data by the States concerned, based on the principles of:

- minimization of the cost to industry;
- accuracy of information;
- completeness of data;
- protection of personal data;
- timeliness; and
- efficiency and efficacy of data management/ risk management.

These guidelines also seek to assist States in designing data requirements and procedures in order to minimize technical burdens that may impair the implementation of these uniform measures.

These guidelines address the issue of PNR data transfer from an operator's system to a State, and the management of these data, including arrangements for storage

and protection. A harmonized set of guidelines for PNR data transfer should benefit requesting States and aircraft operators by assisting States to design systems and establish arrangements that are compatible with these guidelines, but do not impair a State's ability to enforce its laws and preserve national security and public safety.

If implemented uniformly, these guidelines would provide a global framework allowing:

- all States to benefit from the value-added analysis of PNR data for shared security/safety purposes;
- aircraft operators to benefit from one set of common requirements for PNR data transfer; and
- all passengers to benefit from basic protection of their PNR data.

This publication can be found at: [www.icao.int/Security/FAL/SitePages/API%20Guidelines%20and%20PNR%20Reporting%20Standards.aspx](http://www.icao.int/Security/FAL/SitePages/API%20Guidelines%20and%20PNR%20Reporting%20Standards.aspx)

## GUIDELINES ON ADVANCE PASSENGER INFORMATION (API), WCO, IATA/ICAO, 2010

The Guidelines include new provisions to address issues such as security, data protection, mutual administrative assistance and "Interactive API", a more advanced method of passenger processing at airports.

The goal of these Guidelines is to establish an agreed best practice, to which States and aircraft operators seeking to implement API systems can, to the greatest extent practicable, adhere. Non-standard API programme implementation may lead to operational and financial implications for both government and aircraft operators. This document does not cover the provisioning of Passenger Name Record (PNR) data to Border Control Agencies. PNR is explored in other WCO/IATA/ICAO instruments.

The API Guidelines are comprised of an explanatory section for the use of API, including iAPI details. The API Guidelines consist also of a full list of API data and an Annex with the internationally recognized electronic UN/EDIFACT message (PAXLST) and an implementation guide for the PAXLST message. The iAPI response message details for an UN/EDIFACT message (CUSRES) are also included in a separate Annex to the API Guidelines.

This publication can be found at [www.icao.int/Security/FAL/SitePages/API%20Guidelines%20and%20PNR%20Reporting%20Standards.aspx](http://www.icao.int/Security/FAL/SitePages/API%20Guidelines%20and%20PNR%20Reporting%20Standards.aspx)





# ICAO TRIP STRATEGY IMPLEMENTATION AND AVAILABLE ASSISTANCE





## ICAO TRIP IMPLEMENTATION ROADMAP FOR MEMBER STATES

The 39<sup>th</sup> Session of the Assembly endorsed the priorities for the ICAO TRIP Strategy and expected outcomes for the 2017-2019 triennium. Assembly Resolution A39-20, *Consolidated Statement of Continuing ICAO Policies Related to Facilitation*, identified national and international action in ensuring the security and integrity of traveller identification and border controls. Specifically, the Assembly urged Member States, through their travel document and border control programmes, to uniquely identify individuals to maximize security and facilitation benefits, including preventing acts of unlawful interference and other threats to civil aviation. Furthermore, the Assembly endorsed the development of a roadmap for the implementation of the ICAO TRIP Strategy.

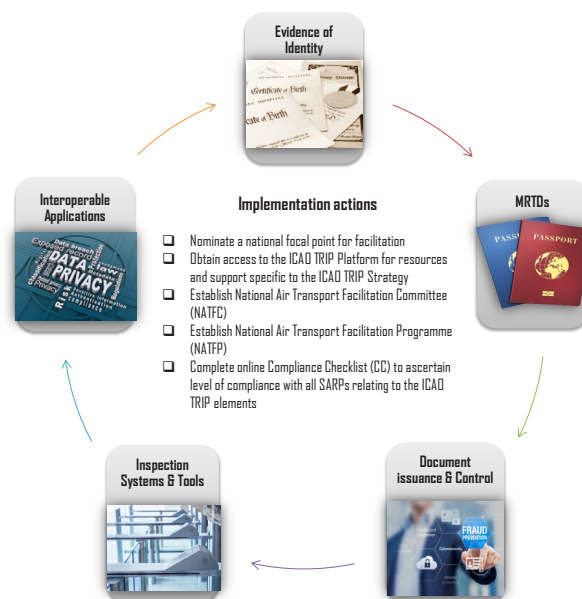
Consequently, a structured action plan – or roadmap – for the implementation of the ICAO TRIP Strategy at the national level by States was developed by the ICAO Secretariat and was reviewed and approved by the ICAO Air Transport Committee during its 210<sup>th</sup> Session in January 2017. In July of 2017, ICAO published the first version of the ICAO TRIP Implementation Roadmap for Member States on the ICAO public website: [www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx](http://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx) and on the ICAO TRIP Platform.

Subsequently, an ICAO State Letter was issued, EC 6/8 – 17/96, in August of 2017 informing Member States that the new roadmap provides guidance on the entities responsible at the national level for the implementation of the ICAO TRIP Strategy. Civil Aviation Authorities were requested to share the roadmap with the responsible entities within their State and to consider organizing implementation action through their National Air Transport Facilitation Committee or similar coordinating body.

The ICAO TRIP Implementation Roadmap for Member States is designed to serve as guidance for Member States in their implementation effort while also providing target milestones for States. Amongst other things, the roadmap is based on the responses received from Member States to the questionnaire which accompanied State letter EC 6/8 – 16/04, dated 27 January 2016, on ICAO TRIP Strategy Implementation and Assistance, as well as on

the global analysis of the ICAO Universal Security Audit Programme Continuous Monitoring Approach (USAP-CMA) results for Annex 9 security-related Standards and Recommended Practices (SARPs) from 178 audits conducted from 2008 to 2013.

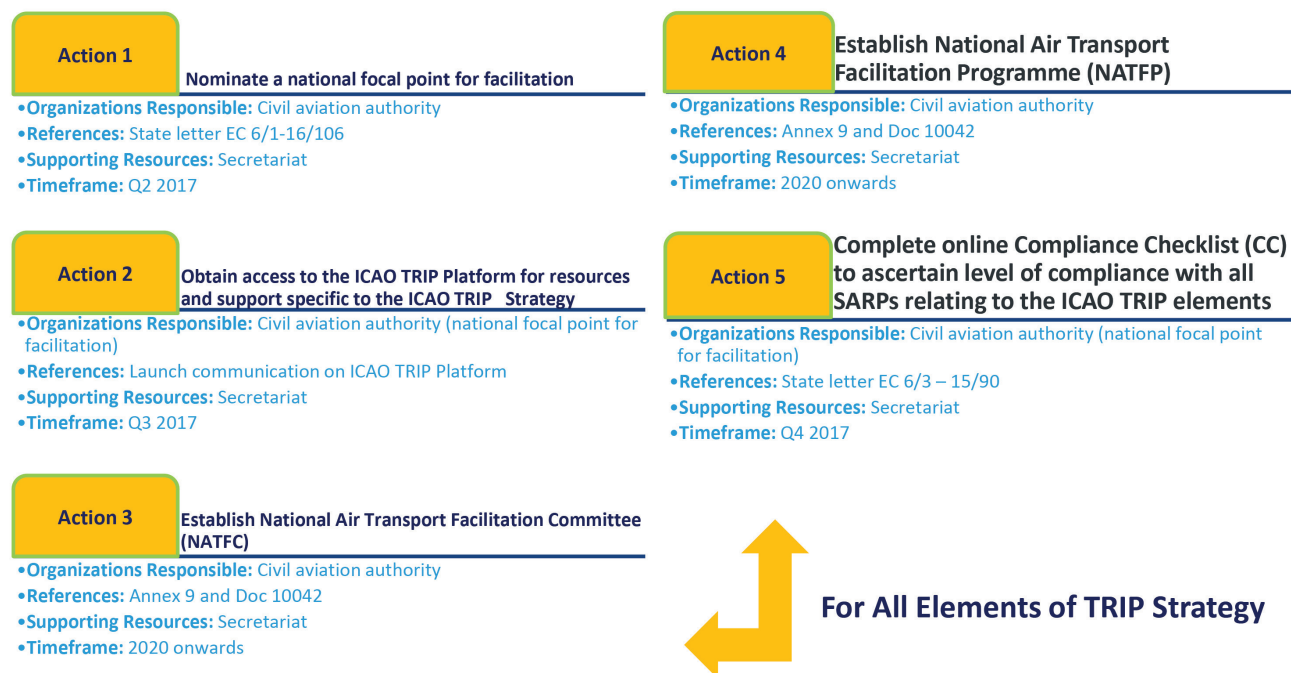
### ICAO TRIP STRATEGY IMPLEMENTATION ACTIONS FOR MEMBER STATES



In implementing the TRIP roadmap, Member States will first need to continue focussing on implementing the TRIP-related Standards and Recommended Practices (SARPs) in Annex 9 and the associated technical specifications for machine readable travel documents contained in Doc 9303.

The ICAO Secretariat has identified 48 SARPs in the fourteenth edition of Annex 9 that relate to the elements of the TRIP Strategy.





Based on this, the following actions have been determined for 2020 onwards:

- **Evidence of Identity<sup>1</sup>:** “credible evidence of identity, involving the tracing, linkage and verification of identity against breeder documents to ensure the authenticity of identity.”



<sup>1</sup> It should be noted that A39-20 provides a framework for “evidence of identity”.



- **MRTDs:** “the design and manufacture of standardized MRTDs, including ePassports, that comply with ICAO [Doc 9303] specifications.”

**Action 1:** Completion of Machine Readable Passports implementation

**Organizations Responsible:** Travel document issuing authority; civil aviation authority

**References:** Annex 9 and Doc 9303 **Supporting Resources:** Secretariat and TAG/TRIP

Q4 2019

**Action 2:** Implementation of ePassports, when a State chooses to do so

**Organizations Responsible:** Travel document issuing authority; civil aviation authority

**References:** Annex 9 and Doc 9303 future ePassport roadmap **Supporting Resources:** Secretariat and TAG/TRIP

On-going

**Action 3:** Assessment of compliance with travel document Standards and specifications

**Organizations Responsible:** Civil aviation authority; travel document issuing authority

**References:** Annex 9 and Doc 9303 future Compliance Program **Supporting Resources:** Secretariat

On-going 2018

**Action 4:** Implementation of machine readable Convention Travel Documents

**Organizations Responsible:** Travel document issuing authority; civil aviation authority

**References:** Annex 9, Doc 9303, ICAO/UNHCR Guide for Issuing Machine Readable Convention TDs for Refugees and Stateless Persons **Supporting Resources:** Secretariat and United Nations High Commissariat for Refugees (UNHCR)

2020 onwards

**Action 5:** Implementation of Logical Data Structure Version 2.0 (LDS2), to allow notably the digitization of visas and travel stamps.

**Organizations Responsible:** Travel document issuing authority

**References:** Doc 9303 and associated guidance **Supporting Resources:** Secretariat and TAG/TRIP

2019 onwards

- **Document Issuance and Control:** “processes and protocols for document issuance by appropriate authorities to authorized holders, and controls to prevent theft, tampering and loss.”

Application of processes and protocols for document issuance and controls to prevent theft, tampering and loss

- **References:** Annex 9 and Guide for Assessing Security of Handling and Issuance of Travel Documents

Use of biometrics for travel document entitlement adjudication

- **References:** Guide for Assessing Security of Handling and Issuance of Travel Documents

Determine vulnerabilities in issuance processes and identify measures to rectify such deficiencies

- **References:** ICAO Guide for Assessing Security of Handling and Issuance of Travel Documents

**Organizations Responsible:** Travel document issuing authority and other agencies or departments  
**Supporting Resources:** Secretariat and TAG/TRIP

Issuance of Emergency Travel Documents (ETDs)

- **References:** ICAO Guidance on Emergency Travel Documents

On-going



- **Inspection Systems and Tools:** “inspection systems and tools for the efficient and secure reading and verification of MRTDs, including use of the ICAO PKD.”

Organizations Responsible: **Border control authorities**



Use of inspection systems and tools for the secure reading and verification of MRTDs  
Participate in the ICAO Public Key Directory (PKD)  
Use PKD to validate ePassports at border control  
Use of facial recognition comparison capability of ePassports

**On-going**

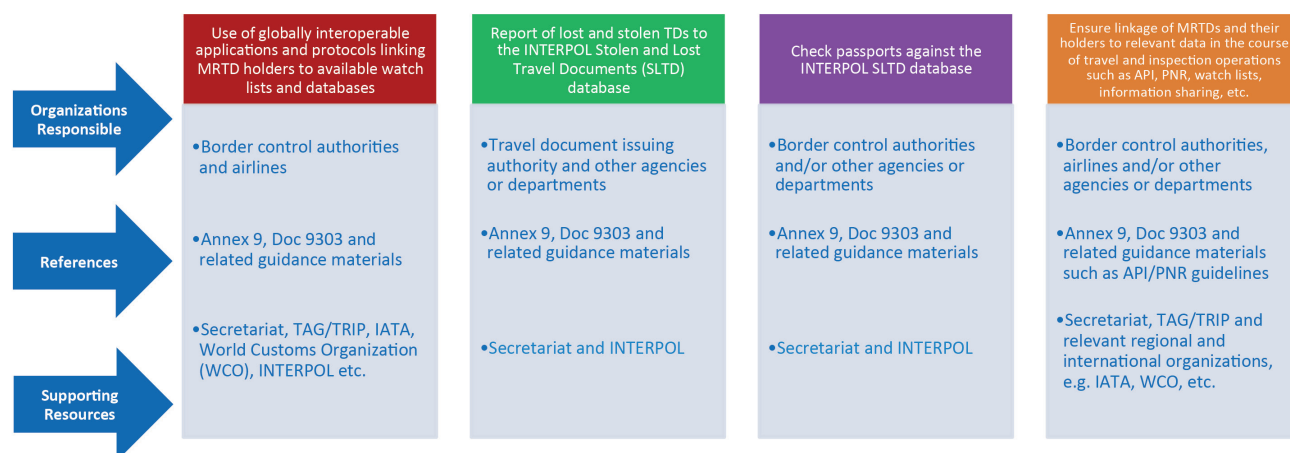
- References: Annex 9, Doc 9303 and related guidance materials
- Supporting Resources: Secretariat and TAG/TRIP

Implementation of travel document inspection using Automated Border Controls (ABCs)

**2020 onwards**

- References: Annex 9, Doc 9303 and cost-benefit analysis template for ABC gates in coordination with ePassports and the PKD
- Supporting Resources: Secretariat, TAG/TRIP, IATA

- **Interoperable Applications (including API and PNR):** “globally interoperable applications and protocols that provide for timely, secure and reliable linkage of MRTDs and their holders to available and relevant data in the course of inspection operations.”



**On-going**



**At the national level**, implementation of the roadmap will require coordinated action between many government and industry entities, such as passport issuing offices, aviation security authorities, civil registries, border control and law enforcement agencies, airlines, airport authorities, the travel document industry, immigration authorities and other interested parties. The mechanism and requirement for such coordination on matters relating to facilitation already exist in Annex 9 through national air transport facilitation programmes and their related committees.

Governments, pursuant with their laws, regulations and national programmes on aviation security and facilitation, and in accordance with the relevant ICAO SARPs, will seek to develop appropriate legislation enabling them to effectively implement the ICAO TRIP Strategy.

**In the international context**, the aim is to systematically collaborate with all interested stakeholders to implement each element of the TRIP Strategy. Importantly, ICAO's leadership is essential to the success of the achievement of this roadmap, focusing on enhancing aviation security and improving facilitation with the objective to provide States with a blueprint that sets out the elements that must be in place in order to move, for example, from Machine Readable Passports (MRPs) to ePassports, and possess excellent breeder documents and sufficient financial resources. To this end, there is a need to ensure both national coordination and international cooperation for each action linked to the effective implementation with a view to achieving the following objectives of the roadmap:

- strengthen relevant national authorities to accomplish these objectives;
- promote effective application of ICAO SARPs of Annex 9 – *Facilitation*;
- develop a policy framework that will address all the elements of the ICAO TRIP Strategy;
- establish a National Air Transport Facilitation Programme and associated committees;
- strengthen, as appropriate for each State, breeder and travel document security, passenger screening procedures and biometric information systems;
- nominate a national focal point for the exchange of information on facilitation matters;
- assure systematic collaboration between the authorities on points of departure and arrival with a view to developing compatible and efficient border control management;

- evaluate the creation of specialized operation centres in each State for timely information exchange, with full respect for domestic laws on protection and confidentiality of personal information;
- encourage the development of joint efforts at the sub-regional, regional, interregional and global levels to support the development of institutional capacity for facilitation matters, and share best practices in a range of areas related to civil aviation, such as document security and fraud detection, and inspection techniques;
- broaden existing cooperation mechanisms among Member States, international and regional organizations and the civil aviation industry, for information exchange in order to allow early detection of security threats to passenger security and the industry's well-being;
- transmit, in a timely manner, passengers' information prior to takeoff to effectively support screening at the destination airport, while preserving their individual rights, and to develop and improve compatible systems for the collection and use of API and PNR information;
- commit to report, on a regular basis, lost and stolen passports, to the extent possible, to the INTERPOL Lost and Stolen Travel Document Database;
- exchange studies and evaluations on investigative techniques and professional training;
- undertake significant and coordinated outreach actions with neighboring States to improve facilitation measures, methods, and frameworks; and
- provide appropriate training to the specialized personnel dealing with travel facilitation.

In the context of the *No Country Left Behind* initiative, it will be important to develop, in parallel, a resource mobilization strategy involving Member States, international and regional organizations, manufacturers and stakeholders, in order to provide States, on request, with technical assistance including funding, capacity-building and technology transfer, enabling them to effectively implement this roadmap.

The ICAO Secretariat will continue to undertake existing activities to support Member States, the roadmap will be adjusted with inputs from the Facilitation Panel and the TAG/TRIP experts, as appropriate, and a follow-up mechanism on the status of States' implementation of the principles expressed above for the TRIP roadmap will need to be further developed.



## TRIP STRATEGY OUTREACH ACTIVITIES

Travel document security and border management are a crucial component of international efforts to create a sustainable security foundation while fostering economic development and good governance. As a result, identification management and border controls continue to be central to the current global security agenda, especially considering the continuous rise of irregular migration and trans-border crime and terrorism.

The ICAO TRIP Strategy assists Member States in developing their border controls and national identification management arrangements, with the objective of enhancing security and efficiency at borders in order to expedite the movement of legitimate travellers while identifying high-risk individuals. To be effective, border controls and national identification management must be complementary and mutually supporting.

Various events were organized in 2014, 2015 and 2016 to promote best practices for managing secure passport issuance and border control systems while emphasizing the importance of both issuing ICAO-compliant MRTDs and participating in the ICAO Public Key Directory (PKD). In particular, they underscored the importance of meeting the 24 November 2015 deadline set out in Standard 3.11 (previously 3.10.1) of Annex 9 – *Facilitation*.

The Tenth Symposium and Exhibition on MRTDs, Biometrics and Border Security was held in Montréal from 7 to 9 October 2014 and was attended by 505 participants. Similarly, the Eleventh edition, held in Montréal from 14 to 16 October 2015 attracted more than 500 participants. Both agendas explored all components of the ICAO TRIP Strategy with particular reference to their use in combatting terrorism and trans-border crime. Watchlists, smart border controls, and inter-agency information sharing were also presented as part of the best practices.

The focus of the Twelfth Symposium and Exhibition on TRIP/MRTDs, held in Montréal in November 2016, was strengthening aviation security through improved traveller identification. Discussions took place on how the TRIP Strategy can help to combat travel document fraud, the importance of evidence of identity to border control management, technology innovations to support the TRIP Strategy, assistance and capacity-building success stories, inspection systems and tools and interoperable applications.

**OVER 500 PARTICIPANTS REPRESENTING 81 STATES, 15 INTERNATIONAL ORGANIZATIONS AND 50 INDUSTRY PARTNERS ATTENDED THE TWELFTH SYMPOSIUM AND EXHIBITION ON ICAO TRIP HELD IN MONTRÉAL IN NOVEMBER 2016.**

### WORKING SESSIONS DURING THE TWELFTH SYMPOSIUM AND EXHIBITION ON TRIP





Two MRTD Regional Seminars held in Tashkent, Uzbekistan (8-10 April 2014) and in Madrid, Spain (25-27 June 2014) attracted a high number of participants and provided an opportunity to explore the ICAO TRIP Strategy with aviation and border control experts from Europe and Central Asia. The Regional Seminar in Madrid included the first-ever ICAO conformity and interoperability/crossover tests arranged in collaboration with the Host State, Member States and industry partners.

Regional TRIP seminars were held in Nairobi, Kenya (10-12 November 2015) and in Kish Island, Islamic Republic of Iran (9-11 May 2016), which served to highlight the relevance of the ICAO TRIP Strategy to reinforce national and international security and combat trans-border crime and terrorism by preventing the movement of terrorists, by implementing effective border controls, and by controlling the issuance of identity and travel documents.

In 2017, two ICAO Traveller Identification Programme (ICAO TRIP) Regional Seminars on traveller identification management took place from 31 January to 2 February 2017 in St. John's, Antigua and Barbuda, hosted by the Ministry of Public Utilities, Civil Aviation and Transportation of the Government of Antigua and Barbuda, and from 11 to 13 July 2017 in Hong Kong SAR, China, hosted by the Civil Aviation Department, Government of the Hong Kong Special Administrative Region. Both Seminars addressed the five elements of the ICAO Traveller Identification Programme (ICAO TRIP) Strategy, including: machine readable travel document (MRTD) standards; specifications and best practices; secure travel document issuance; robust evidence of identity processes; and information sharing technologies highly relevant to the execution of the United Nations Security Council Resolutions 2178 (2014) and 2309 (2016) on combatting foreign terrorist fighters, with a special focus on effective border control management.

#### 2015 TRIP SEMINAR IN NAIROBI, KENYA



#### 2016 TRIP REGIONAL SEMINAR IN KISH ISLAND, ISLAMIC REPUBLIC OF IRAN



#### 2017 TRIP REGIONAL SEMINAR IN ST. JOHN'S, ANTIGUA AND BARBUDA



#### 2017 TRIP REGIONAL SEMINAR IN HONG KONG, CHINA



**OVER 200 PARTICIPANTS REPRESENTING 37 STATES AND 6 INTERNATIONAL ORGANIZATIONS ATTENDED THE TRIP REGIONAL SEMINAR IN HONG KONG IN JULY 2017**





PRESIDENT OF THE ICAO COUNCIL, OLUMUYIWA BENARD ALIU (CENTRE) WITH NAMIBIA'S MINISTER OF WORKS AND TRANSPORT THE HONOURABLE ALPHEUS G. NARUSEB, (2<sup>nd</sup> FROM RIGHT) AND THE MINISTRY'S PERMANENT SECRETARY, WILLEM GOEIEMAN (FAR RIGHT), ACCOMPANIED BY ICAO'S REGIONAL DIRECTORS FOR WESTERN/CENTRAL AFRICA AND EASTERN/SOUTHERN AFRICA RESPECTIVELY, MAM SAIT JALLOW (2<sup>nd</sup> FROM LEFT) AND BARRY KASHAMBO (FAR LEFT).

In terms of the international cooperative effort that underpins the TRIP Strategy, ICAO encouraged Member States to come together at the regional and sub-regional levels to agree on action plans to implement aviation security and facilitation programmes, including all of the elements of the TRIP Strategy.

Such efforts are:

- The Ministerial Conference on Aviation Security and Facilitation in Africa, Windhoek, Namibia, in April 2016, during which a Declaration was adopted, urging African States, inter alia, to implement the ICAO TRIP Strategy and to participate to the ICAO PKD while recommending the set-up of an Advanced Passenger Information (API) system.
- The Global Ministerial Aviation Summit in Riyadh, Saudi Arabia, in August 2016, during which a Declaration was adopted on Aviation Security and Facilitation in the ACAC and ICAO MID Regions. It urged States to implement the ICAO TRIP Strategy, encouraged States to participate in the ICAO Public Directory (PKD) and to support and participate in the Cooperative Aviation Security Programme Middle East (CASP-MID). This collaboration is in line with the Regional SECFAL plan to foster collaboration among States and concerned stakeholders on matters agreed globally such as information sharing, training, and matters specific to the Region.



ICAO COUNCIL PRESIDENT, OLUMUYIWA BENARD ALIU, ADDRESSED THE DELEGATES TO THE GLOBAL AVIATION MINISTERIAL SUMMIT IN RIYADH, SAUDI ARABIA, WHICH CONCLUDED BY AGREEING ON A NUMBER OF NEW COOPERATIVE COMMITMENTS FOR AVIATION SAFETY AND SECURITY.







**BOUBACAR DJIBO** was appointed Director of the Air Transport Bureau of ICAO in November 2011. His current duties include the management of programmes to achieve three of the five strategic objectives of the Organization, namely security and facilitation, economic development of air transport, as well as environmental protection.

Before joining ICAO, Mr. Djibo, who has more than 35 years of experience in aviation, was Secretary General of the African Civil Aviation Commission (AFCAC).

In his aviation career, he has occupied a number of key positions, including Director of Civil Aviation of Niger and ICAO Project Coordinator. He also served on the Boards of Directors of Air Afrique and the Agency for Aerial Navigation Safety in Africa and Madagascar (ASECNA).

## IMPLEMENTING THE ICAO TRIP STRATEGY TO ENHANCE SECURITY AND FACILITATION – THE VIEW FROM THE DIRECTOR OF ICAO’S AIR TRANSPORT BUREAU

As Director of the Air Transport Bureau with responsibility for the ICAO Traveller Identification Programme (TRIP) Strategy, I am very pleased to present to you the first edition of the ICAO TRIP Strategy Compendium, the new ICAO planning and implementation guide for secure traveller identification management.

The Traveller Identification Programme (TRIP) falls under the Strategic Objective, *Security and Facilitation* with the majority of the work of TRIP being linked to the provisions of Annex 9 – *Facilitation* and to the international specifications for machine readable travel documents (MRTDs) which are contained in ICAO Doc 9303, *Machine Readable Travel Documents*.

The five elements of the ICAO TRIP Strategy address Evidence of Identity, MRTDs, Document Issuance and Control, Inspection Systems and Tools and Interoperable Applications (including Advance Passenger Information (API) and Passenger Name Record (PNR)).

In 2016, the 39th Session of the ICAO Assembly endorsed the continued development and implementation of the ICAO TRIP Strategy, including travel document enhancement, the expansion of the ICAO Public Key Directory (PKD), and the continued provision of assistance and training to States.

The First Meeting of the Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP/1) was held in early 2016 and reviewed, in detail, the work underway to support the implementation of the ICAO TRIP Strategy, including a roadmap to guide States in their implementation of the TRIP Strategy at the national level, which was reviewed and approved by the ICAO Air Transport Committee in January of 2017.

In order to raise the awareness of stakeholders on the holistic traveller identification management concept, events are organized every year to promote best practices for managing secure passport issuance and border control systems and increased participation in the ICAO Public Key Directory (PKD). The ICAO TRIP Magazine, published by ICAO bi-annually supports and informs the global TRIP community. A secure online ICAO TRIP Platform has also been launched and is now being used by officials and experts to assist them in implementing the TRIP Strategy.



The ICAO Public Key (PKD) is seen as an essential tool enabling the verification and authentication of ePassports during border controls. Membership of the ICAO PKD has now reached 58 participants and continues to grow. A survey conducted in 2014 indicated that 636 million ePassports were in circulation with more than 80 per cent of which are issued by Member States participating in the PKD. In order to update these figures, another survey is planned for late 2017.

Requests for MRTD, PKD and ePassport technical assistance increased considerably from 2014 to 2016 and additional resources, in terms of expertise and funding, are being sought through international cooperation and/or voluntary funds.

ICAO continues to encourage States to come together at the regional and sub-regional levels to agree on action plans to implement travel facilitation programmes, including all of the elements of the TRIP Strategy, such as the Ministerial Conference on Aviation Security and Facilitation in Africa held in Windhoek, Namibia, in April 2016 and the Global Ministerial Aviation Summit held in Riyadh, Saudi Arabia, in August 2016. The use of false identities and fraudulent travel documents, in addition to systemic weak-points in the identification management framework of many Member States remain major vulnerabilities which continue to be exploited by criminal and terrorist networks. In Resolution 2178 (2014), the UN Security Council called upon Member States to require airlines to provide passenger lists, re-

ferred to as Advanced Passenger Information (API) in Annex 9 - *Facilitation*. API is an integral component of the fifth element of the ICAO TRIP Strategy, Interoperable Applications.

On 25 September 2015, the UN Member States adopted a set of goals for a new sustainable development agenda for the 2030 horizon. It is noteworthy that when assisting ICAO Member States in implementing some Annex 9 SARPs and related specifications, this directly supports the achievement of six of 17 UN Sustainable Development Goals (SDGs). A specific target (16.9) to be reached under Goal 16 is: "by 2030, to provide legal identity for all, including birth registration", which is directly linked to the first element of the ICAO TRIP Strategy, Evidence of Identity.

The deadline for the expiry of non-machine readable passports was reached on 24 November 2015. As of July 2017, 146 States have reported to ICAO that their non-machine readable passports have expired. ICAO will continue to work closely with those States who have yet to achieve full compliance in this area.

In summary, there is much work ahead for all stakeholders involved in strengthening aviation security and traveller identification. Success will depend on the continued collaboration between States, industry, donors, international organizations and within States (between authorities and agencies involved). ICAO looks forward to continuing to lead this work through the mandate provided by its Assembly.







**SYLVAIN LEFOYER** became the Deputy Director of Aviation Security and Facilitation in the Air Transport Bureau of the International Civil Aviation Organization (ICAO) on 1 March 2017.

He leads teams responsible for developing Aviation Security and Facilitation policy and Standards and Recommended Practices (SARPs), conducting audits of Member States' aviation security activities, assisting States that are unable to address serious security deficiencies highlighted by those audits, and implementing the Traveller Identification Programme (ICAO TRIP) Strategy.

Sylvain has extensive experience at the senior executive level in policy and regulations development, strategy, oversight, critical incident management and organization development in aviation security and facilitation.

Previous to his role in ICAO, Mr. Lefoyer's career in transport safety and security spans more than 25 years. He held various positions, including a Deputy Regional Director for Ground Transport Safety, Security and Defence in the Regional Directorate for Equipment and Urban Planning in the Paris metropolitan area and the Deputy Head of Aviation Security and Defense in the French Civil Aviation Authority (DGAC). Prior to that, he was enhancing his career in air traffic management from 2005 to 2011, in risk prevention and management from 2002 to 2004, and in maritime transport safety and security from 1992 to 2001.

## THE DEPUTY DIRECTOR, AVIATION SECURITY AND FACILITATION OF ICAO DESCRIBES THE SUPPORT ICAO CAN OFFER TO ITS MEMBER STATES TO HELP THEM IMPLEMENT THE TRIP STRATEGY

In October 2016, the 39th Session of the ICAO Assembly came to a successful conclusion in Montréal. In Assembly Resolution A39-20, *Consolidated Statement of Continuing ICAO Policies Related to Facilitation*, the ICAO Council was urged to explore ways of intensifying assistance and capacity-building support to Member States in the traveller identification and border control areas, including a proactive leadership role for ICAO in facilitating and coordinating such assistance at the international level.

One of the most important ways in which ICAO provides assistance to Member States is through the ICAO Traveller Identification Programme (TRIP) Regional Seminars which take place twice a year in different regions. The seminars provide a unique opportunity to exchange information and enhance national expertise; and to benefit passport issuing offices, aviation security authorities, civil registries, border control and law enforcement authorities, as well as airline companies, airport authorities, and other interested parties. Speakers and facilitators include top-level experts in the field, policy makers and senior managers, practitioners and researchers. Every year in Montréal, ICAO organizes the TRIP Symposium which is open to authorities and industry from around the world with the aim of sharing the very latest information on policy, operational and technical aspects related to the implementation of TRIP. Participants have the opportunity to hear from, and interact with, leading experts in the field and also to view the latest technologies on display in the exhibition area.

The wealth of specifications and guidance material that underpin the TRIP Strategy are developed by experts in the ICAO Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP) and its two sub-groups. While the New Technologies Working Group (NTWG) maintains and develops the technical requirements relating to travel documents and their use in the operational domain, the Implementation and Capacity Building Working Group



(ICBWG) develops guidance materials to help States in the practical aspects of implementation and supports assistance activities at the national and regional levels. Similarly, the ICAO Technical Cooperation Bureau (TCB) assists States with the sourcing of expertise to support implementation activities.

Other areas of information are the TRIP Magazine published biannually, which brings the latest developments – and case studies – on the many and varied aspects of the TRIP strategy to readers around the world. Articles in the magazine span the range of issues from strategy and policy through to the detailed technical aspects of front-line implementation.

Training and assistance projects are enabled at the national and regional levels through the generous support of donor States. Most recently, the Government of Canada has supported assistance projects in the Sahel and in the Caribbean regions. Alongside technical assessment missions to States to help shape their implementation programmes, the Canada-funded projects have produced a new ICAO Training Package (ITP) entitled *Control of the Authenticity and Validity of Travel Documents at Airport Borders – Level 1* for front-line inspection officers from immigration and border control authorities. The current project in the Caribbean will also yield a new ICAO Guide on Border Control Management – a key function that draws on all of the elements of the TRIP Strategy.

In support of UN Security Council Resolutions designed to counter the threats from terrorism, ICAO actively participates in the UN's Counter-Terrorism Implementation Task

Force (CTITF) and its related groups. Alongside work to combat the use of fraudulent documents for travel, increasing focus is being given to support States with the implementation of Advance Passenger Information (API) systems at the national level and in accordance with the provisions on passenger data exchange found in ICAO's Annex 9 – *Facilitation*.

To supplement the guidance and other technical documentation relating to all aspects of TRIP accessed through the ICAO public website, a new online secure ICAO TRIP Platform has been launched.

To help guide States in implementing all of the TRIP Strategy elements, a structured action plan - or roadmap - for the implementation of the ICAO TRIP Strategy at the national level has been approved by the ICAO Air Transport Committee in January 2017. This new document - The ICAO Traveller Identification Programme (TRIP) - Implementation Roadmap for Member States (Version 1, July 2017) – has been made widely available through all of the ICAO communication channels.

The 39th Assembly urged Member States, through their travel document and border control programmes, to uniquely identify individuals to maximize security and facilitation benefits, including preventing acts of unlawful interference and other threats to civil aviation. With this clear and important set of objectives in mind, it is my hope that the many actions, resources and initiatives described above will go a long way toward helping all of our Member States in their efforts to fully implement the ICAO TRIP Strategy.





## VOLUNTARY CONTRIBUTION PROJECTS FUNDED BY THE GOVERNMENT OF CANADA



Building on UN Security Council Resolutions 2178 and 2309, efforts to link the needs of States with ICAO expertise and the donor community have been successful and a number of capacity-building activities were conducted starting July 2014, with the continued implementation of the Canada-funded technical assistance projects of the ICAO TRIP Strategy:

### 1. STRENGTHENING TRAVEL DOCUMENT SECURITY AND IDENTIFICATION MANAGEMENT IN THE SAHEL AND NEIGHBORING STATES:

Funded by the Government of Canada, Department of Foreign Affairs, Trade and Development (DFATD), Counter-Terrorism Capacity Building Program (CTCBP), the project has been implemented from 2014 to 2016 with the following participating States (12): Algeria, Burkina Faso, Cameroon, Chad, Guinea, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal and Tunisia.

Focused on the national identification management and civil registry; travel document issuance and airport border controls, the project included the following activities:

1. two regional seminars:
  - a) ICAO TRIP Implementation Regional Seminar (Niger, January 2015); and
  - b) ICAO TRIP Regional Seminar and Exhibition (Kenya, November 2015).

2. four technical assessment missions: Chad (December 2014), Mali (March 2015), Tunisia (March 2015 and a follow up technical assistance mission in November 2015), and Cameroon (March 2016); and
3. development of an ICAO (TRAINAIR PLUS) Training Package (ITP) on travel document examination and document fraud entitled "Control of the Authenticity and Validity of Travel Documents at Airport Borders – Level 1" and training of ICAO Qualified Instructors.

Based on the ICAO TRIP Strategy, the **regional seminars** had the following objectives:

- increase the awareness for participating Member States of their international obligations under Annex 9 — *Facilitation* and disseminate information on the ICAO TRIP Strategy and travel documents specifications contained in Doc 9303;
- identify challenges and best practices in three areas: identification management, travel document security and immigration control at borders, with the objective of aiding the Secretariat to develop a roadmap on future capacity-building projects; and
- strengthen communication and cooperation between national agencies and between States.

### TECHNICAL ASSESSMENT MISSIONS IN MALI AND CHAD



<sup>1</sup> Details on the technical assessment missions (TAMs) are provided in Chapter 6 of this publication.



The **technical assessment missions**<sup>1</sup> have been performed by a team of senior experts during a four to five day mission in-country with the goal of identifying best practices and vulnerabilities in the States' processes and systems related to the ICAO TRIP Strategy. These missions were not ICAO audits. Rather, they were an opportunity for the State to benefit from the expertise of the assessment team and obtain short to long-term recommendations to further implement the ICAO TRIP Strategy.

The objectives of the assessment missions were to:

- analyze the existing systems, procedures and capacities within ministries and agencies overseeing identification management and civil registration, travel documents issuance and security, and passenger border controls;
- identify current capacity gaps and challenges (Phase I) in order to develop future technical capacity-building initiatives, including training and equipment (Phase II);
- assist States to address, improve and determine ways to overcome the challenges they face in matters related to identification management systems, passport issuance and border control; and
- compile the findings and recommendations in a technical report for the benefit of the State.

#### PRACTICAL EXERCISES DURING THE TRAINING SESSIONS



The **Training Package** entitled “Control of the Authenticity and Validity of Travel Documents at Airport Borders – Level 1”<sup>2</sup> is a four-day competency-based course developed using ICAO’s rigorous TRAINAIR PLUS training development methodology. The purpose of this course is to consolidate the competencies of front-line inspection officers from immigration and border control authorities working in an airport environment to examine travel documents effectively, allowing them to expedite the movement of legitimate travellers while identifying high-risk individuals.

This course directly assists Member States in implementing the ICAO TRIP Strategy to enhance border and identity controls. By improving border security, the ITP also assists States in implementing the United Nations Security Council Resolutions related to terrorism, including Resolution 2178 (2014) on Foreign Terrorist Fighters, which calls on all States to “prevent the movement of terrorists or terrorist groups [...] through measures for preventing counterfeiting, forgery or fraudulent use of identity papers and travel documents”. This Resolution was officially launched in July 2016.

## 2. STRENGTHENING BORDER CONTROLS IN THE CARIBBEAN REGION

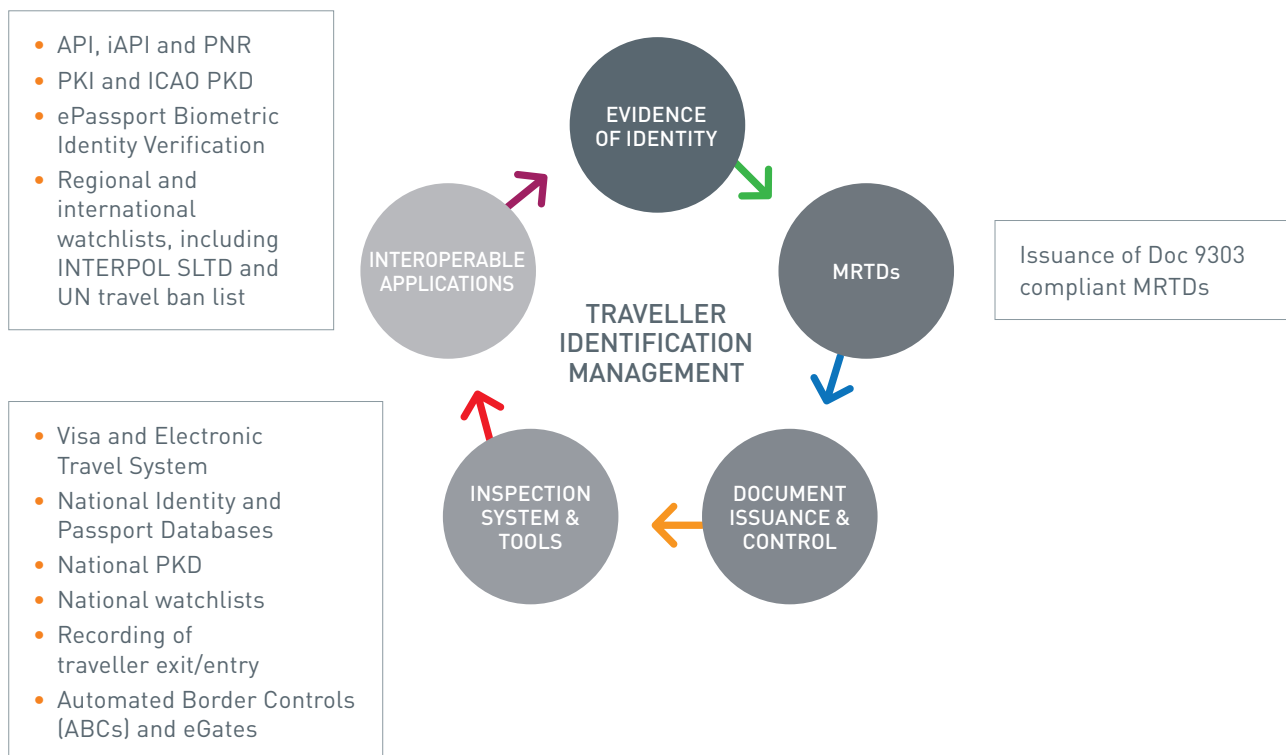
Strengthening Border Controls in the Caribbean Region (“The Caribbean Project”) was launched in 2016 and is currently on-going. It aims to assist Member States in the Caribbean Region in implementing the ICAO TRIP Strategy by enhancing their border control management (BCM) and in complying with their international obligations contained in Annex 9 – *Facilitation*, as well as complying with relevant resolutions of the UN Security Council. BCM encompasses mainly the fourth and fifth elements of the ICAO TRIP Strategy, namely Inspection Systems and Tools and Interoperable Applications used in the national, regional and international air travel environments, with the underlying matters of identification management and travel document security.

The Project is being implemented in cooperation with the United Nations Counter-Terrorism Committee Executive Directorate (CTED) and with the support of two Regional Organizations: the Caribbean Community (CARICOM) and the Organization of Eastern Caribbean States (OECS).

<sup>2</sup> Details on this training course are provided in Chapter 5 of this publication.



## ICAO TRIP STRATEGY AND BORDER CONTROL MANAGEMENT



## WORKING ACTIVITIES UNDER THE CARIBBEAN PROJECT





States (13) participating in the Caribbean Project are: Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Dominican Republic, Grenada, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines and Trinidad and Tobago.

The main objective of the Caribbean Project is the development of the ICAO TRIP Guide on BCM. The Guide will be largely based on Annex 9 – Facilitation, the ICAO TRIP Strategy and the UN Counter Terrorism Implementation Task Force (CTITF) Air Travel Cycle, a functional model covering the five phases of a passenger's journey (pre-departure, departure, pre-arrival, arrival and post-arrival). It will integrate border intelligence and risk assessment tools into a coherent framework that allows for the identification of high-risk persons of interest as they attempt to cross borders for illegitimate purposes.

The tools covered by the ICAO TRIP Guide on BCM include, but are not limited to: Advance Passenger Information (API), Passenger Name Record (PNR), watchlists, Electronic Travel Systems (ETS), exit controls, inter-agency and cross-border information and intelligence sharing.

This Guide aims to become guidance material for States to self-assess the current state of their border controls and identify ways of enhancing security, both nationally and regionally. It will also be available to experts and organizations when performing a country-assessment mission. Although it is being developed based on the Caribbean experience, the Guide will become available on the ICAO TRIP website for the benefit of all ICAO Member States. The Guide will be composed of two parts:

**Part 1 – Risk-based Model for Border Control Management;**

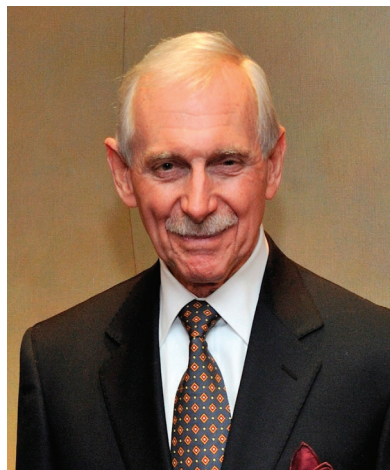
**Part 2 – Technical Assessment Methodology.**

The project's activities that are scheduled to be implemented throughout 2017 include:

- development of the ICAO TRIP Guide on BCM;
- conducting two workshops; and
- performing four technical assessment missions (TAMs).







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WILLIAM LACY SWING

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## FOREWORD FROM THE DIRECTOR-GENERAL OF THE INTERNATIONAL ORGANIZATION FOR MIGRATION (IOM)

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The International Organization for Migration (IOM) and the International Civil Aviation Organization (ICAO) signed a Memorandum of Understanding (MoU) in 2016, designed to bring the two UN organizations together to work on matters of common interest, specifically to enhance global mobility and security for travellers, including migrants moving across borders.

IOM is committed to strengthening cooperation between the organizations, particularly in movement facilitation and control. Wherever they are from and wherever they are going, international travellers expect to be processed at airports with a minimum of fuss. At the same time, governments wish to ensure that their borders are safe and secure at all times.

The link between these two sets of interests is effective identity management. The ICAO Traveller Identification Programme (TRIP) Strategy has proven to be an indispensable instrument for practitioners in this field and I commend ICAO for its scrupulous attention to thoroughness and accuracy of information.

IOM has been working on the five distinct areas of the ICAO TRIP Strategy for many years, but until now, we have not made direct contributions to the programme strategy.

I am pleased that the ICAO-IOM MoU offers the right platform for cooperative undertakings. It is very much our purpose to develop our mutual project development and operational capabilities for the benefit of our beneficiary and donor States and to enable the TRIP Strategy to fully meet its objectives.

**William Lacy Swing**  
*Director General*  
International Organization for Migration (IOM)







Since August 2014, **MR FLORIAN G. FORSTER** serves as the Head of IOM's Immigration and Border Management Division (IBM) at IOM Headquarters (HQ) in Geneva/Switzerland. He oversees a team of IBM specialists and support staff in HQ, provides technical oversight to the senior IBM specialists posted in IOM's 8 Regional Offices and the African Capacity Building Center (ACBC) in Moshi/Tanzania, and is responsible for developing and overseeing IOM's global approach to activities in the field of Border Management and Immigration.

Before his current posting, Mr Forster worked as IOM's Chief of Mission in Hanoi/Vietnam (2009/2014), Head of IOM's Special Liaison Mission in Paris/France (2005/2009), Head of Office of IOM Berne/Switzerland (2000/2005), and Program Officer and Acting Chief of Mission of IOM in Phnom Penh/Cambodia (1995/1998).

Prior to his work with IOM, Mr Forster served as Legal Officer and Head of Legal Unit for the City of Munich/Germany on refugee, migration and youth matters, and as Civil Servant for the Bavarian Ministry of Justice (1999 & 1991/1995).

## DELIVERING ASSISTANCE WHERE THE NEEDS ARE: IOM'S COMMITMENT TO INTENSIFIED ICAO TRIP STRATEGY IMPLEMENTATION

On 15 November 2016, the International Civil Aviation Organization (ICAO) and the International Organization for Migration (IOM) concluded a Memorandum of Understanding (MoU) that formalized enhanced collaboration on shared priorities, including traveller identification management. The MoU strengthens the two global agencies' efforts in responding in a coordinated manner to current and emerging challenges such as security requirements, accessibility to safe transport modes for migrants and refugees, increased international cross border mobility, health matters linked to international mobility, as well as security and facilitation in global air travel.



ICAO AIR TRANSPORT BUREAU DIRECTOR, AND IOM'S HEAD OF IMMIGRATION AND BORDER MANAGEMENT, FLORIAN G. FORSTER WITH THE SIGNED AGREEMENT DURING A SPECIAL CEREMONY.

In particular, the MoU highlights the common interest of IOM and ICAO to increase cooperation related to ICAO's work on security and facilitation and within the framework of the ICAO Traveller Identification Programme (TRIP) Strategy, including joint development and implementation of capacity-building projects.



For decades, IOM's global Immigration and Border Management (IBM) programme has been working on numerous areas within the scope of the ICAO TRIP Strategy, but without specific reference to the Strategy's goals. This article provides a summary of IOM's global implementation capacity, current technical assistance activities relevant to the TRIP Strategy, and TRIP-related areas to be expanded in the future.

## TOWARDS CLOSER COOPERATION ON TRIP STRATEGY IMPLEMENTATION

While both are UN Agencies, IOM and ICAO operate within different policy and legal frameworks, and each contributes with its own unique strengths. The IOM-ICAO MoU provides an opportunity to combine:

- ICAO's solid mandate rooted in the Chicago Convention, regulatory powers and excellence in developing global Standards and Recommended Practices (SARPs) with
- IOM's global operational project development and implementation capabilities in the field, fund-raising liaison with donors and its technical expertise on border and identity management.

This is a partnership with great potential for making global borders more secure while contributing to enhanced facilitation for the legitimate flows of travellers. The TRIP framework, and its successful implementation in practice, is of vital importance to assist in achieving both of these aims. The IOM-ICAO partnership offers a perfect strategic-operational nexus, with global coverage, for the intensified implementation of the ICAO TRIP Strategy.

## IOM AT A GLANCE

- The United Nations Migration Agency, 166 Member States (June 2017).
- IOM has proven capacity to implement large-scale technical assistance projects around the world.
- IOM scale of programmes: 2300 projects with total budget almost USD 1.4 Billion (2015).
- IOM worldwide presence: offices in over 150 States. With global presence in over 400 field locations, IOM has demonstrated ability to deliver results in States facing significant political, economic, social and security challenges.
- IOM's Immigration and Border Management (IBM) portfolio: 175 active projects in 2016 with a total budget of approximately USD 294 Million (includes multi-year budgets).

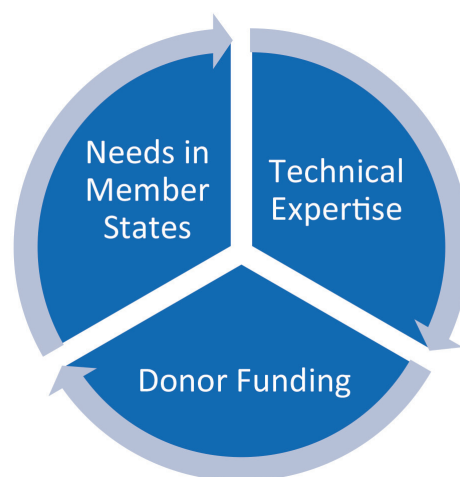
- As part of its IBM global portfolio, IOM has been implementing technical assistance projects covering many components of the ICAO TRIP Strategy.

## IOM'S BUSINESS MODEL

The model is based primarily on donor-funded international assistance projects. IOM has a 65-year history of experience in managing a solid trilateral partnership:

- Political and technical dialogue with Member States that need technical assistance. Hence IOM's comprehensive knowledge of IBM capacity gaps and needs in the field.
- Close working partnerships with donor States and programmes that fund international aid and development; and
- IOM's pool of technical expertise related to border management and travel documents, both in-house and externally.

### IOM'S INTERNATIONAL ASSISTANCE FRAMEWORK



IOM is well placed to use its global project implementation capacity to make ICAO TRIP Strategy SARPs and best practices a reality in Member States. Notably, this includes implementation of the Strategy in both developing and even more fragile States that face particular security and economic challenges but need to comply with international norms on border management and traveller documentation.



## IOM'S CONTRIBUTION TO SUSTAINABLE DEVELOPMENT

Through its technical assistance projects, IOM contributes to economic development through the provision of sustainable solutions:

- Effective border and identification management is a powerful tool for addressing trans-border crime (including terrorism) and enhancing national and regional security. Security is a pre-condition for sustainable development and stabilization for States in transition.
- Development without security is impossible, security without development would be only temporary. By recognizing and addressing the security-development nexus, IOM has the potential of strengthening the sustainability of the implementation of the TRIP Strategy globally.

## IOM'S CONTRIBUTION TO THE TRIP STRATEGY

IOM also adds the following to the implementation of the TRIP Strategy:

**The human and migrant dimensions:** IOM focuses on the needs of migrants, as travellers and the ultimate users of TRIP SARPs and new technologies in the fields of identification management, MRTDs and border controls.

**The humanitarian dimension:** extending the benefits of the TRIP framework and new technologies to vulnerable groups in need of protection: displaced persons, stranded migrants, victims of natural disasters or armed conflicts.

**Sustainable development:** adding the development dimension to providing technical assistance to States in need, ensuring that the results are more sustainable and long-term, in line with the UN Sustainable Development Goals.

**New funding opportunities:** IOM has a well-developed working relationship with the donor community and specializes in donor-funded international assistance projects.

**Regard for good governance:** having effective institutions and modern technologies in identity and border management is important but not sufficient. Good governance also calls for integrity, transparency and accountability as key principles along which government institutions operate. In its IBM technical assistance projects, IOM supports States in strengthening their executive control, parliamentary oversight, respect for human rights and the rule of law, and other key values of the United Nations.

**Going beyond aviation:** the TRIP Strategy and TRIP SARPs, while developed by ICAO with aviation in mind, can be extended to land and sea border controls at no or very little extra cost, enhancing security and facilitation benefits to Member States in these other sectors.

**Laying infrastructure foundations for TRIP implementation:** in many developing States, MRTD and border management institutions lack the basics, such as stable electricity, water, internet, dust-free premises ability to support IT systems, and telephone or radio connectivity. By supplying the basic infrastructure, IOM IBM projects create a durable foundation on which more advanced components of the TRIP Strategy can be built, such as MRTD issuance, proper reading of MRTDs/eMRTDs at the border, integration with Advance Passenger Information (API), Public Key Infrastructure (PKI), international alert lists, and others.

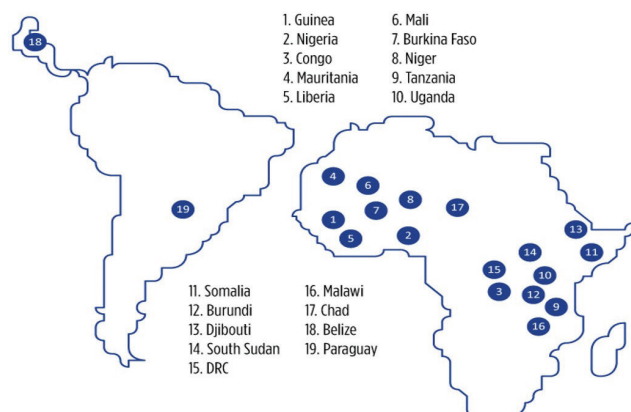
## IOM'S RESOURCES FOR BORDER CONTROL AND IDENTIFICATION MANAGEMENT

IOM offers state-of-the-art tools for use at various phases of border controls within the framework of the ICAO TRIP Strategy:

- IOM's Migration Information and Data Analysis System (MIDAS) is a high-quality solution for States in need of a cost-effective and comprehensive border management information system. Currently operational in 19 countries, MIDAS has been designed to be compliant with international standards. A fully customizable system, MIDAS is compatible with the ICAO Public Key Directory (PKD) and can be integrated with API, the INTERPOL's Stolen and Lost Travel Document (SLTD) database, alert lists, visa on arrival issuance, national passport databases and other border management tools.
- Travel document examination and combatting identity fraud is an area where IOM has developed significant in-house expertise and capabilities. IOM's Passport Examination Procedure Manual (PEPM 2<sup>nd</sup> edition) serves as a flagship training manual in the travel document examination and border management fields. The PEPM manual is complementary (with only minor overlap) to ICAO's STP *Control of the Authenticity and Validity of Travel Documents at Airport Borders – Level 1 Course*. IOM encourages the use of both these training tools simultaneously. In particular, the PEPM 2<sup>nd</sup> edition addresses in detail passport production and covers all border management environments (air, land and sea).



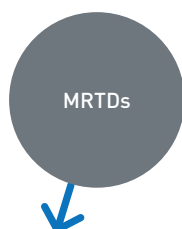
### IOM IN-HOUSE DEVELOPED BORDER MANAGEMENT INFORMATION SYSTEM



- IOM runs the African Capacity Building Centre (ACBC) in Moshi, Tanzania, which plays an important role in strengthening the technical capacities of immigration and border management in beneficiary States in the African continent. ACBC infrastructure, staff and trainer resources can support enhanced TRIP implementation in Africa, especially assistance components that require training, meetings and technical consultations.
- IOM has shown global leadership with the implementation of its internally developed concept of Humanitarian Border Management (HBM) – a framework that structures border management operations before, during and after humanitarian crises that trigger mass migration. This framework improves preparedness for sudden changes in cross-border movements in order to protect migrants and their human rights while maintaining national sovereignty and security. HBM overlaps with a number of TRIP components such as biometric registration of travellers in distress, issuing ID cards and emergency travel documents.

## IOM'S IBM WORK (CURRENT AND FUTURE) AS IT RELATES TO THE ICAO TRIP STRATEGY

**Note:** The names of States after work items indicate IOM's current or past involvement in this area (stand: January 2017). Work items without names of States indicate additional potential areas for IOM's future involvement in ICAO TRIP Strategy implementation.



- Tenders and roll out of Passports and ePassports (Afghanistan, Armenia, Timor Leste, Belarus, Belize)
- Tenders and production of compliant visa stickers (Afghanistan, etc.)
- Promoting best practices of MRTD procurement, to ensure ICAO compliance and document security – aligned with ICAO Guide for Collection of Best Practices For Acquisition of MRTD Goods and Services (East Timor, Afghanistan, Armenia, Belarus)
- Assessments of MRTDs – security and compliance issues (Nepal, Mongolia, Indonesia)
- Technical consultations and feasibility assessments for upgrading MRTDs to eMRTDs
- Tenders and roll out of ID cards (national and regional, e.g. ECOWAS region, Belarus, Cambodia, etc.)
- After ICAO Doc 9303 compliance mechanism is developed, promoting it to interested States for contacting ICAO Secretariat and having their MRTD compliance assessed
- (with UNHCR) providing assistance to States in producing ICAO-compliant Convention Travel Documents – aligned with ICAO-UNHCR Guide for Issuing Machine Readable Convention Travel Documents for Refugees and Stateless Persons
- Awareness raising about MRTD photo specifications – aligned with Doc 9303 provisions (Sri Lanka)





- Assessments of the integrity of MRTD issuance process – aligned with ICAO Guide for Assessing Security of Handling and Issuance of Travel Documents (Armenia, Belarus, Sri Lanka, Azerbaijan, Cambodia)
- Promoting good governance and preventing corruption through project activities (Georgia, Ukraine, Cambodia)
- Promoting international sharing of travel document samples to prevent travel document fraud – aligned with ICAO Guide for Circulating Specimen Travel Documents
- Facilitating visa applications on behalf of visa issuing governments (55 Visa Application Centres world-wide)
- Advocacy and training on best practices of handling SLTDs, including the reporting of national cases to the INTERPOL's SLTD (Armenia)
- Roll-out of a biometric registration system including at migrant retention centers, allowing the issuance of ID cards to undocumented migrants (Libya, Iraq, Jordan) to enhance their protection



- Installing MIDAS border information management systems (implemented in 19 beneficiary States – 125 border crossing points): Guinea, Nigeria, Congo, Mauritania, Liberia, Mali, Burkina Faso, Niger, Tanzania, Uganda, Somalia, Burundi, Djibouti, South Sudan, DR Congo, Malawi, Chad, Belize and Paraguay
- Integrating MIDAS system in beneficiary states with PKI (including ICAO PKD)
- Advocacy of joining ICAO PKD; projects supporting PKD membership for a number of years – aligned with ICAO PKD guidance materials
- Building border control infrastructure: providing border crossing points with electricity, information management systems, office equipment, transport (Armenia, Belarus, Ukraine, Haiti, Cambodia, Mali, Mauritania, Niger, Nigeria, Burkina Faso, Azerbaijan, Kenya, Georgia, Senegal, etc.)
- Providing border agencies with HF/VHF radio communications, VSAT and telephone connectivity (Haiti, Cambodia, Mali, Niger, Burkina Faso, Belarus, Kenya)
- Joint ICAO – IOM training initiatives on travel document examination and imposter recognition
- Providing professional training to border officials – especially on the basics of travel document production and in-depth training on travel document examination and imposter recognition. Ensuring sustainability through Training the Trainers and enhancing in-house training capacities on document fraud (Afghanistan, Armenia, Cambodia, Chad, Philippines, Egypt, Sudan, Thailand, Belarus, Trinidad and Tobago, Azerbaijan, Kenya, Uganda, Georgia, Ukraine, Turkmenistan)
- Establishing forensic labs for level-3 travel document examination and supplying them with passport reference systems (Cambodia, Trinidad and Tobago, Afghanistan, Azerbaijan, Uganda, Bangladesh, Burma, Thailand)
- Building capacity to control visas and related entry permits
- Installing eVisa and Electronic Travel Systems (ETS)
- Advocacy and technical consultations on ABC feasibility, including the prospects of linking ABCs to ICAO PKD and watchlists and the INTERPOL's SLTD
- Providing specialized English training for border control staff (Armenia, Haiti, Cambodia, Romania, Lithuania, Mauritania, Mali, Ukraine, Estonia)





- Integrating border systems in beneficiary States with the INTERPOL's SLTD and national, regional international watchlists (Belize, Paraguay, Armenia, Philippines, Sri Lanka, Bangladesh, Ukraine)
- Integrating border systems in beneficiary States with API
- Assistance to Member States in implementing PNR
- Advocacy of using traveller data (API and/or PNR) for enhancing security and facilitation – aligned with WCO-ICAO-IATA guidance material and UN SCR 2178
- Advocacy, technical consultations and workshops on inter-agency and cross-border cooperation and information sharing for border controls (over 100 States worldwide)



- Infrastructure building: civil registries and more secure birth certificates (Afghanistan, Ukraine)
- Promotion of best practices in identification management and Evidence of Identification framework, including social footprint, more secure breeder documents and prevention of identity fraud – aligned with ICAO Guide Towards Better Practice in National Identification Management (Afghanistan, Armenia, Belarus, Georgia, Ukraine)
- Building inter-agency cooperation and data sharing to combat identity fraud (Afghanistan, Ukraine, Georgia)
- Information campaigns encouraging population to participate in civil registration programmes
- Assessments of national identification management practices, producing recommendations – aligned with ICAO Guide for Assessing Security of Handling and Issuance of Travel Documents (Afghanistan, Armenia, Belarus)

## THE WAY FORWARD

The conclusion of the MoU between IOM and ICAO presents a strategic opportunity to intensify TRIP implementation world-wide. IOM has both the political will and operational capacity to boost TRIP implementation in its 166 Member States.

IOM, through its IBM programme, has already been implementing many activities globally that are relevant to the ICAO TRIP Strategy. IOM still has the potential of expanding its IBM work considerably in a more structured manner – through guiding its IBM staff in 150 missions worldwide to include priority TRIP elements into their project development and implementation.

Based on consultations with the ICAO Secretariat and Implementation and Capacity-Building Working Group (ICBWG) of TAG/TRIP, the **following thematic areas emerged for IOM's focus on enhancing TRIP implementation worldwide, subject to the mobilization of the necessary funding from donors:**

- **MRTD procurement** – passport tenders and roll out, also visa sticker and national ID card tenders. The main needs are ensuring ICAO compliance of new MRTDs, assisting States in getting good value for money, and promoting MRTD procurement best practices. IOM has strong procurement capacity and – with further expertise from ICBWG and relying on the ICBWG MRTD Procurement Guide – IOM can play a major assistance role in the MRTD procurement field. In coordination with UNHCR, this work item could also include tenders and implementation of Convention Travel Documents, where ICAO compliance rate is still low. A related area is ICBWG's ongoing work on developing a cost/benefit analysis framework for ePassport procurement for small and developing states, which could be integrated with future IOM IBM projects to mutual advantage.



- **Evidence of Identification (Eol).** ICBWG is developing Eol guidance materials which could guide and inform IOM's future advocacy activities related to Eol. But in addition to advocacy and awareness raising, IOM – in close cooperation with ICBWG experts – can assist States in setting up the right processes and workflows to strengthen Eol. A related area is IOM's IBM assistance to help States with strengthening civil registries, the security of breeder documents (birth certificates, etc.), digitizing manual civil registry records, and installing civil registry infrastructure and communication capabilities between offices.
- Supplying States with **border management information systems**, either MIDAS or others, depending on the needs and preferences of the beneficiary State. Installing border management systems also opens the door to related border control tools and the possibility of linking the border management information system with them – such as PKI including the ICAO PKD, the INTERPOL SLTD (and other watch lists) and API.
- **PKD promotion and increasing the number of active members** offers a broad range of assistance activities. Advocacy and awareness raising – national/regional workshops about PKD and its benefits – and technical consultations (only for states that have already expressed commitment to join PKD). Covering PKD membership fees for developing states for 1-2 years, within the duration of a project (in exchange for the commitment to budget the costs to carry on after the project is over). Study visits and technical consultations for senior decision-makers of ICAO to consult PKD staff directly, which can be combined with attending the TRIP Symposium. A related possibility under consideration is covering travel costs for developing States to participate in 2-3 meetings of the PKD Board during the time of the project.
- **Assessments** of national identification management practices and producing recommendations – aligned with ICAO Guide for Assessing Security of Handling and Issuance of Travel Documents. For border controls, a new assessment framework is being developed by the ICAO Secretariat as part of the Caribbean TRIP project, which also can be used for assessments in the future. Also, IOM has its own in-house border management assessment framework that is used in performing border assessments. Importantly, assessments provide not just recommendations about corrective action needed, but identify capacity gaps that can be addressed through future project development.
- Providing **professional training to border officials** on the foundations of travel document production and in-depth training on travel document examination and impostor recognition. Ensuring sustainability through Training the Trainers and enhancing in-house training capacities on document fraud. IOM's ACBC training centre in Tanzania, and its curricula and trainers resources, provide a solid foundation for delivering such training in Africa. Joint ICAO-IOM training initiatives on travel document examination and impostor recognition can also be explored.
- Helping States with **document issuance and personalization** and biometric data capturing, especially **in emergency and crisis environments to migrants in distress**, which is a major area on IOM's agenda.
- **Promoting other TRIP areas.** Some items on the TRIP agenda are important but sometimes are overshadowed by items of greater urgency. ICAO-compliance of passport photos, handling SLTDs, handling ePassports that fail to read, good practices in issuing Emergency Travel Documents, etc. – all such relatively minor yet important areas can be included into IOM IBM seminars and workshops globally to promote awareness and best practices.

The above focus areas do not exclude IOM from contributing to other ICAO Secretariat TRIP activities along the lines of the joint MoU, including ad hoc assessment missions, seminars and workshops, joint training or research events, and others.

While TRIP implementation challenges are global, certain regions are in far greater need of assistance for infrastructure and technical expertise. In developing TRIP-related IBM project proposals, IOM furthers the goals of the ICAO No Country Left Behind initiative and focuses on States where assistance needs are the greatest.

IOM continues working on building on the success of its Immigration and Border Management programme and becoming a key implementer of the elements of the ICAO TRIP Strategy for the benefit of its Member States around the world.

#### Florian G. FORSTER

Head, Immigration and Border Management (IBM)  
Department of Migration Management (DMM)  
International Organization for Migration (IOM)





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ICAO

GLOBAL AVIATION TRAINING  
TRAINAIR PLUS™



ICAO TRIP

TRAVELLER IDENTIFICATION PROGRAMME

CONTROL OF THE AUTHENTICITY AND VALIDITY OF TRAVEL DOCUMENTS  
AT AIRPORT BORDERS – LEVEL 1

# TRAINING

# 5



## “CONTROL OF THE AUTHENTICITY AND VALIDITY OF TRAVEL DOCUMENTS AT AIRPORT BORDERS” TRAINING COURSE

ICAO forecasts that scheduled global passenger traffic will increase from 3.5 billion in 2015 to 6.4 billion by 2030. Research undertaken by the World Travel Tourism Council (2016) focusing on the forecasted fastest growing destinations show that the most of the growth in international travel will come from beyond the traditional North American and European markets, from Africa, Asia and the Middle East, which means that the fastest growing destinations for leisure travel spending are all emerging markets.

Furthermore, the innovation and technological advancements of the past decades have led to unprecedented connectivity and raised the expectations of travellers who wish to have a seamless, secure and efficient journey, while the cross-border movement of people is highly complex and sensitive. This, along with the increased passenger volume, will impact an essential aspect of international air travel: travel document examination. Providing quality and relevant training for carrying out this task is critical for global security, border control and the facilitation of air transport.

There has been an increasing need worldwide for training in MRTD and Border Control areas. The need for increased skills and competencies in these areas exists both in government agencies worldwide (passport and immigration offices, Ministries of Immigration (MOI), border guards, consular departments of Ministries of Foreign Affairs (MFA) and visa-issuing offices overseas, the police and related national law enforcement agencies, etc.) and in the private sector (airlines, airport authorities, travel document manufacturers, aviation security companies).

The shortage of such skills and technical knowledge is particularly acute in fragile and developing countries. The causes appear to be somewhat fragmented, from differences in quality of training, to failures to address MRTD vocational training needs in a coordinated and standardized manner.

ICAO Facilitation undertook to develop an ICAO Training Package (ITP) for the purpose of assisting Member States in implementing the ICAO Traveller Identification Programme

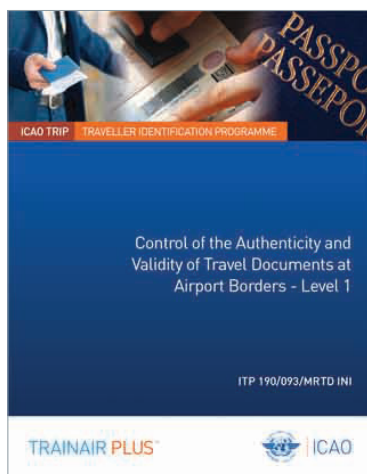
(TRIP) Strategy, endorsed by the 38<sup>th</sup> and the 39<sup>th</sup> Sessions of the ICAO Assembly in 2013 and 2016 respectively.

The Strategy emphasizes a holistic approach to traveller identification management in order to uniquely identify individuals. It promotes a robust identification management programme, modern, secure travel documents and effective border and identity controls that are powerful tools to be used to mitigate and counter threats posed by trans-border crime and terrorism. Also, through Annex 9 – Facilitation and Doc 9303, ICAO has adopted Standards and Recommended Practices (SARPs) related to travel document issuance and their control, hence the relevance for ICAO of providing training on matters pertaining to its core mission.

By enhancing border security and control at airports, the TRIP ITP also assists States in implementing the United Nations Security Council resolutions related to terrorism, including resolution 2178 (2014) on Foreign Terrorist Fighters, as well as 2309 (2016) on aviation security, which respectively call on all States to “prevent the movement of terrorists or terrorist groups [...] through measures for preventing counterfeiting, forgery or fraudulent use of identity papers and travel documents”, as well as 2309 (2016) “to strengthen their international and regional cooperation to strengthen information-sharing, border control, law enforcement and criminal justice to better counter the threat posed by foreign terrorist fighters and returnees”.

ICAO Facilitation partnered with the ICAO Global Aviation Training (GAT) Bureau to develop the ITP, using the TRAINAIR PLUS methodology. This presented many advantages including the standardized format that is known to the TRAINAIR PLUS network composed of over 95 training centres, the development of a formal roster of instructors and trainees, a greater follow-up with the trainees for continuous training purposes, a variety of existing tools for promoting the course (TPP website, TRAINAIR PLUS events, network of accredited training centres worldwide) and a rigorous methodology for training instructors to become ICAO Qualified Instructors.





## COURSE DETAILS

The new ITP entitled “Control of the Authenticity and Validity of Travel Documents at Airport Borders – Level 1” was launched in July 2016.

The ITP is a four-day course developed according to a standardized training methodology referenced in ICAO’s *Training Development Guide, Competency-based Training Methodology* (Doc 9941). The course builds upon ICAO’s leadership in developing travel document specifications contained in ICAO’s *Machine Readable Travel Documents* (Doc 9303), and in assisting its Member States in strengthening their national traveller identification programmes.

The aim of this course is to consolidate the competencies of airport front-line inspection officers from immigration and border control authorities, to **examine travel documents effectively**, allowing them to expedite the movement of legitimate travellers while identifying high-risk individuals.

Upon successful completion of the course, **the trainees will be able to:**

- describe the basic elements of a travel document;
- identify different types of fraud;
- examine a travel document manually and visually to detect whether it is fraudulent or not; and
- examine a travel document using an electronic document reader to detect whether it is fraudulent or not.

The development of this ICAO Training Package was funded by the Government of Canada and undertaken through the Canada-funded project “Strengthening Travel Document Security and Identification Management in the Sahel and Neighbouring States”.

The development of this ICAO Training Package  
was funded by the Government of Canada

**Canada**

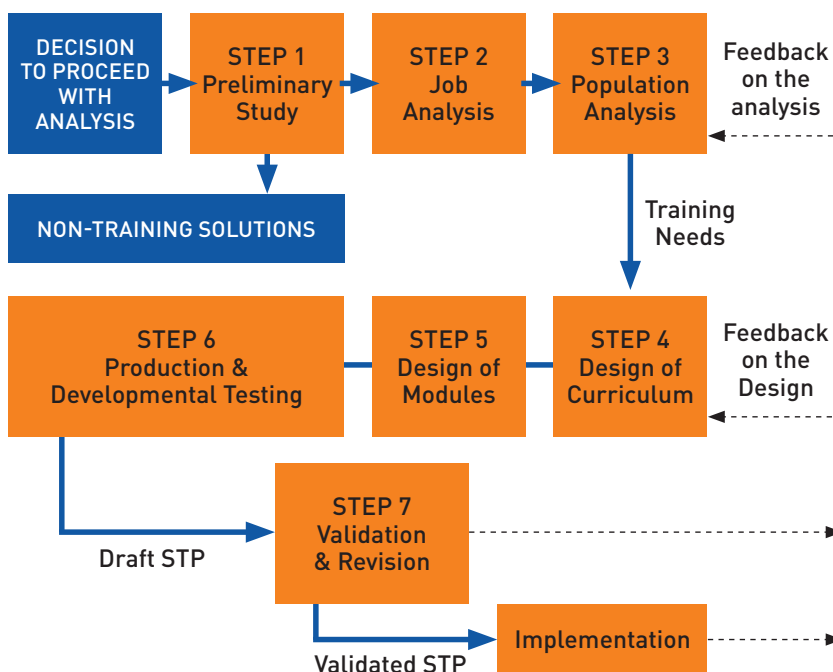


## DEVELOPMENT METHODOLOGY

ICAO developed its TRAINAIR programme in 1989, strongly supported by the UNDP Division of Global and Interregional Programmes (DGIP). The initial adaptation of the UNCTAD standards to suit civil aviation's particular applications resulted in the first edition of the Training Development Guide (TDG).

The methodology used to achieve the systematic preparation of this ICAO Training Package is the TRAINAIR PLUS methodology, as referenced in ICAO's Training Development Guide (TDG), Competency-based Training Methodology (Doc 9941). The development of competency-based training using the TRAINAIR PLUS methodology detailed in the TDG follows three stages: analysis, design and production, and evaluation. It involves a seven-step process (see Figure 1).

FIGURE 1 – TRAINAIR PLUS METHODOLOGY PROCESS



Between January 2015 and July 2016, the course development team, composed of the Course Development Unit (CDU) from the École Africaine de la Météorologie et de l'Aviation Civile (EAMAC) based in Niger, and a team of senior Subject Matter Experts (SMEs) jointly led by the ICAO Global Aviation Training (GAT) Office and the Facilitation Section, completed this process.

The development phase began during the ICAO Traveller Identification Programme (TRIP) Implementation Regional Seminar that took place in Niamey, Niger in January 2015. An analysis of the training needs to be addressed by this ITP was performed, in consultation with authorities in charge of border security in the Sahel.

The following months were dedicated to designing the training, through intensive collaborative work of the development team, in order to create a course that would assist border control officers in playing their critical role of performing the initial screening of all passengers crossing borders by identifying fraudulent travel documents.

## VALIDITY OF AN ITP AND QUALIFIED INSTRUCTORS

The validation delivery is the final step in developing the ITP. It was conducted with the valuable support of the École Régionale de Sécurité Incendie (ERSI) located in Douala, Cameroon, from 7 to 11 March 2016. The experimental group, selected by the general Delegation for National Security of Cameroon, was composed of 10 trainees: eight officers in charge of travel document control and two supervisors working for one of the international airports in Cameroon. The trainees were front-line agents who examine travel documents in their daily work and, as such, the group formed the genuine primary target population required for validation of the course.

The benchmark for validity in the TRAINAIR PLUS methodology is 80/80, which means the course is considered valid when 80% of participants achieve 80% in the mastery tests. This course was validated during its delivery in



Cameroon. The last day of the validation delivery is dedicated to listening to trainees express their opinions, reactions and suggestions about the course. These comments, along with information collected in a questionnaire, allow for modifications and adjustments. After integrating both trainee and instructor recommendations, the final version of the course was ready for launch in May 2016 through the TRAINAIR PLUS network.

The validation delivery also served to qualify the first two instructors to deliver this new course. After being selected for their expertise, one instructor from Canada and one instructor from Mali successfully completed the ICAO Instructor Qualification Process, to become the first ICAO Qualified Instructors for delivering this training. Other instructors will be trained during subsequent deliveries, in order to build a roster of qualified instructors for this course.

## BENEFITS OF THE ITP AND TRAINING PACKAGE DELIVERY

ICAO was praised by Member States and the CTITF for developing a training course on travel document examination for front-line officers, since modules covering this expertise are often absent from the training curriculum of the border police and numerous States do not have the capacity to develop such national training.

With this ITP, States can now provide training according to their national priorities and satisfy their international obligations, by enhancing border security and control at the airports. The TRAINAIR PLUS questionnaire distributed to the trainees at the end of the validation showed a percentage of satisfaction of over 95% for the content, the methodology and the conditions of instruction.







The course was appreciated by the trainees for its practical value, thanks to the use of real fraudulent documents (i.e. actual-sized documents) which makes physical examination of them from a number of perspectives possible. This course is a step-by-step examination using a method to physically examine documents within the very short timeframe that the agents have (about 2 minutes) to detect anomalies and send the passenger to the second level of examination (their supervisors). Comments received from the trainees mentioned that, prior to this course, they used to do their jobs by looking at passenger travel documents but they actually had no idea what they were looking for. The training provided is critical in order to properly perform their jobs.

Specifically, trainees remarked that the course was a positive learning experience due to the following:

- good balance between theory and practice;
- physical handling of fraudulent documents to determine the anomalies;
- the methodology to manually and visually examine travel documents;
- demonstrations by the instructor; and
- practical exercises.

Available in English, French, Spanish and Arabic, the ITP will soon be translated into all official languages of ICAO.

Member States have the opportunity to host this training course for their officers and are invited to send an email to [aviationtraining@icao.int](mailto:aviationtraining@icao.int). Training organizations that are Members of the TRAINAIR PLUS Programme, can apply to host the course through the [TRAINAIR PLUS Electronic Management System \(TPEMS\)](#). Detailed hosting and delivery requirements and instructions are available through the TPEMS and the Global Aviation Training Office.

For more information, you are invited to visit: [www.icao.int/Training/Pages/TDexam.aspx](http://www.icao.int/Training/Pages/TDexam.aspx)







AVAILABLE INSTRUMENTS  
TO CONDUCT A PROPER  
AUDIT OR EVALUATION  
ON AN IMPLEMENTED  
RECOMMENDATION  
FROM THE  
ICAO TRIP





## AUDIT

These are the available instruments to conduct a proper audit or evaluation on an implemented recommendation from the ICAO TRIP Programme.

### COMPLIANCE CHECKLISTS/EFOD

The 38<sup>th</sup> Session of the ICAO Assembly in 2013 resolved that Member States should be encouraged to use the Electronic Filing of Differences (EFOD) System that was developed to address the need for a more efficient means of reporting and researching differences to Standards and Recommended Practices (SARPs) and for replacing the existing paper-based mechanism.

The EFOD system is currently available on the restricted website ([www.icao.int/usoap](http://www.icao.int/usoap)) which is accessible by all Member States. Login credentials, with appropriate access rights, are managed by the Universal Safety Oversight Audit Programme (USOAP) National Coordinator designated by each Member State.

The Council, at its second meeting of the 206<sup>th</sup> Session on 4 November 2015, requested that Member States be reminded of the online Compliance Checklist (CC) in EFOD which allows for the recording of information on compliance with the Standards of Annex 9 – *Facilitation*. This will enable Council to consider the extent of the level of Annex 9 compliance and to determine if further action should be taken in this regard.

### UNIVERSAL SECURITY AUDIT PROGRAMME CONTINUOUS MONITORING APPROACH (USAP-CMA)

The 33<sup>rd</sup> Session of the International Civil Aviation Organization (ICAO) Assembly (Assembly Resolution A33-1 refers) requested the Council to consider the establishment of the ICAO Universal Security Audit Programme (USAP), comprising regular, mandatory, systematic and harmonized aviation security audits to be carried out by ICAO in all Member States to determine Member States' compliance with Standards of Annex 17 — *Security to the Convention on International Civil Aviation*, hereinafter referred to as the "Chicago Convention". Aviation security audits under this

first cycle of the USAP were launched in November 2002 and were completed in December 2007.

The 36<sup>th</sup> Session of the ICAO Assembly (Assembly Resolution A36-20 refers) requested the Council to ensure the continuation of the USAP following the initial cycle of audits at the end of 2007 focusing, wherever possible, on Member States' capability to provide appropriate national oversight of their aviation security activities through the effective implementation of the critical elements (CEs) of an aviation security oversight system and expanding future audits to include relevant security-related provisions of Annex 9 — *Facilitation* to the Chicago Convention. Aviation security audits under the second cycle of the USAP commenced in January 2008 and were completed in June 2013.

The 37<sup>th</sup> Session of the ICAO Assembly (Assembly Resolution A37-17 refers) requested the Council to assess the feasibility of extending the Continuous Monitoring Approach (CMA) being applied by the Universal Safety Oversight Audit Programme (USOAP) to the USAP after the conclusion of the USAP second cycle of audits. The Council at its 197<sup>th</sup> Session, after considering various options for the continuation of the USAP beyond 2013, formally approved the USAP-CMA. Subsequent to this Council decision, the 38<sup>th</sup> Session of the ICAO Assembly (Assembly Resolution A38-15 refers) endorsed the transition to the USAP-CMA. Full implementation of the USAP-CMA began in 2015.

The USAP-CMA audits assess States' aviation security performance, i.e. the level of implementation of the Critical Elements (CEs) of an aviation security oversight system, as described in ICAO Doc 10047 — *Aviation Security Oversight Manual — The Establishment and Management of a State's Aviation Security Oversight System*, and the status of implementation of Annex 17 Standards and security related provisions of Annex 9, associated procedures, guidance material and aviation security best practices.

**Under the USAP-CMA, the following security-related Standards from Annex 9 (Amendment 25) are audited:**

- Contracting States shall regularly update security features in new versions of their travel documents, to guard against their misuse and to facilitate detection of cases where such documents have been unlawfully altered, replicated or issued.



- Contracting States shall establish controls to safeguard against the theft of their blank travel documents and the misappropriation of newly issued travel documents.
- Contracting States shall establish appropriate controls over the entire travel document application, adjudication and issuance processes to ensure a high level of integrity and security.
- Contracting States shall promptly report accurate information about stolen, lost, and revoked travel documents, issued by their State, to INTERPOL for inclusion in the Stolen and Lost Travel Documents (SLTD) database.
- All passports issued by Contracting States shall be machine readable in accordance with the specifications of Doc 9303, Part 4.
- Contracting States shall ensure that travel documents for refugees and stateless persons ("Convention Travel Documents") are machine readable, in accordance with the specifications of Doc 9303.
- Contracting States shall assist aircraft operators in the evaluation of travel documents presented by passengers, in order to deter fraud and abuse.
- Aircraft operators shall take necessary precautions at the point of embarkation to ensure that persons are in possession of the documents prescribed by the States of transit and destination for control purposes.
- The public authorities of each Contracting State shall seize fraudulent, falsified or counterfeit travel documents. The public authorities shall also seize the travel documents of a person impersonating the rightful holder of the travel document. Such documents shall be removed from circulation immediately and returned to the appropriate authorities of the State named as issuer or to the resident Diplomatic Mission of that State.
- Each Contracting State that introduces an Advance Passenger Information (API) system under its national legislation shall adhere to international recognized standards for the transmission of Advance Passenger Information.
- If Contracting States issue Crew Member Certificates, then these shall be issued only in the form of machine readable cards in accordance with the specifications of Doc 9303, Part 5.
- CMCs shall be issued only after a background check has been carried out by or on behalf of the relevant public authority. In addition, adequate controls such as a certification of employment status of an applicant prior to issuance, controls on blank card stock, and accountability requirements for issuing personnel, shall be placed on the issuance of CMCs.

- Each Contracting State shall establish a national air transport facilitation programme based on the facilitation requirements of the Convention and of Annex 9 thereto.
- Each Contracting State shall establish a National Air Transport Facilitation Committee, and Airport Facilitation Committees as required, or similar coordinating bodies, for the purpose of coordinating facilitation activities between departments, agencies, and other organizations of the State concerned with, or responsible for, various aspects of international civil aviation as well as with airport and aircraft operators.

ICAO Member States, in their effort to establish and implement an effective civil aviation security oversight system, need to consider the CEs for aviation security oversight, which are required for the effective implementation of security-related policies and associated procedures. States are expected to implement the CEs in a way that assumes shared responsibility among government entities, with a management role provided by the appropriate authority for aviation security. The effective implementation of the CEs is an indication of a State's capability for security oversight.

ICAO has identified and defined the following CEs of a State's civil aviation security oversight system in the

#### STATE'S AVIATION SECURITY OVERSIGHT SYSTEM





ICAO Doc 10047, *Aviation Security Oversight Manual – The Establishment and Management of a State’s Aviation Security Oversight System*:

- **CE-1. Primary aviation security legislation.** The provision of a comprehensive and effective legislative framework, consistent with the environment and complexity of the State’s civil aviation operations, to effect the establishment and implementation of the State’s aviation security policies and requirements in conformance with Annex 17 SARPs and security-related provisions contained in other Annexes to the Chicago Convention.
- **CE-2. Aviation security programmes and regulations.** The provision of necessary national-level programmes and adequate regulations to address, at a minimum, national requirements emanating from the primary aviation security legislation and providing for standardized implementation procedures, equipment and infrastructures (including security management and training systems) in conformance with Annex 17 SARPs and security-related provisions contained in other Annexes to the Chicago Convention.  
 Note: The term “regulations” is used in a generic sense to include policies, requirements, rules, instructions, edicts, directives, orders, etc., that are enforceable in the State. The specific status given to a regulation when it is applied within the State and the penalty assigned in the event of non-compliance are internal matters subject to the discretion of individual States, taking into account their responsibilities under the Chicago Convention.
- **CE-3. State appropriate authority for aviation security and its responsibilities.** The designation of an appropriate national authority for aviation security supported by appropriate technical and non technical staff and provided with adequate financial resources. The State appropriate authority must have aviation security regulatory functions, objectives and policies. This element also includes the definition and allocation of tasks and coordination of activities between government agencies and airport-level entities concerned with or responsible for the implementation of various aspects of the NCASP, as well as arranging for the supporting resources and facilities required for aviation security to be available at airports serving civil aviation.
- **CE-4. Personnel qualifications and training.** The establishment of minimum knowledge and experience requirements for the technical personnel performing aviation security oversight functions and the provision of appropriate training to these personnel to maintain and enhance their competence at the desired level. The training should include initial, on-the-job and recurrent training. This element also includes the provision of

training to entities involved in the implementation of applicable aviation security requirements, measures and procedures.

Note: The technical personnel may be from an organization engaged by the appropriate authority to provide State oversight functions on its behalf.

- **CE-5. Provision of technical guidance, tools and security-critical information.** The provision of technical guidance (including processes and procedures), tools (including facilities and equipment) and security critical information, as applicable, to the technical personnel to enable them to perform their aviation security oversight functions in accordance with established requirements and in a standardized manner. This element also includes the provision of technical guidance by the appropriate authority to entities responsible for the implementation of applicable aviation security requirements, measures and procedures.
- **CE-6. Certification and approval obligations.** The implementation of processes and procedures to ensure that personnel and entities performing an aviation security activity meet the established requirements (such as certification systems for security screeners and aviation security instructors, and a system to ensure that entities responsible for the implementation of security measures and procedures have established security programmes consistent with all relevant national requirements) before they are allowed to conduct the relevant activity.
- **CE-7. Quality control obligations.** The implementation of processes, such as audits, inspections, surveys and tests, to proactively ensure that entities authorized and/or approved to perform an aviation security activity continue to meet the established requirements and operate at the level of competency and security required by the State. This includes the monitoring of designated personnel who perform security oversight functions on behalf of the appropriate authority.
- **CE-8. Resolution of security concerns.** The implementation of processes and procedures to resolve identified deficiencies impacting aviation security, which may have been residing in the aviation security system and have been detected by the appropriate authority or other appropriate bodies. This includes the ability to analyse security deficiencies, provide recommendations, support the resolution of identified deficiencies by implementing follow-up procedures to validate the effective implementation of corrective actions, as well as take enforcement action when appropriate.





## TECHNICAL ASSESSMENT MISSIONS

Loopholes and weak points in traveller identification will be quickly exploited by criminal and terrorist groups. Regional, national and international security is only as good as its weakest component. Adherence to standards should help to improve the integrity of traveller identification and promote regional and international cooperation.

The primary objective of a Technical Assessment Mission (TAM) under the ICAO TRIP is to advise States on how robust **national identification arrangements**, the **security of issuance and handling of travel documents**, and **border control management** can better achieve effective traveller identification.



These TAMs do not dwell on apparent deficiencies or apportion blame. They help States to adopt ICAO Standards and Recommended Practices (SARPs) related to Annex 9 and other international best practices by establishing priorities for improvement.

### TECHNICAL ASSESSMENT MISSION METHODOLOGY

ICAO TRIP TAMs provide States with access to an independent source of advice on their specific concerns and best practices in traveller identification that is relevant, fully

informed and vendor and solution neutral. TRIP TAM reports reference ICAO Standards and Recommended Practices (SARPs) to put the elements of the global interoperable framework in an operational context that is relevant to the circumstances facing the State that is the subject of the assessment. A TAM ideally follows the following framework:

Traveller identification can only be achieved within a strategic framework that is focussed on benefits; is a response to the local environment; and which is supported by laws, procedures and practices appropriate for the State.

TAMs should commence with a short review of environment and the extant strategy, policy, legislation, procedures and practices.

Border controls cannot contribute to both security and facilitation outcomes unless traveller identification informs assessment of traveller intent (i.e. risk and threat).

TAMs should include advice on how traveller identification data can better inform decisions about whether travel should be allowed to commence or continue in addition to whether the entry of a traveller should be permitted.

Effective traveller identification also depends on good governance; the motivation, capacity and capability of staff; and adequate access control infrastructure.

TRIP TAMs examine the human resource issues in traveller identification faced by States.

ICAO TRIP TAMs are not part of ICAO's Universal Safety Audit Program (USAP). The distribution of TRIP TAM reports is agreed upon in advance in consultation with States. TRIP TAM reports are treated as confidential by ICAO. The decision to share the content of TRIP TAM reports, in part or in total, remains with the national authority identified as the primary interlocutor.



## CONDUCTING AN ASSESSMENT

TRIP TAMs are usually performed during a three to five day in-country mission performed by one ICAO representative and two subject matter experts (SMEs). The TAM can focus on one or more of the three main areas of the TRIP Strategy – national identification arrangements, issuance and handling of travel documents and border control management (BCM).

Prior to the visit, the TAM team conducts online research to identify documents relevant to strategy, policy and legislation available in the public domain or provided by States for their review. However, the primary basis for a TAM is observation of systems and practices and interviews with TRIP-related officials and air travel industry stakeholders that the ICAO Secretariat identifies with the State. The primary State interlocutors during the visit are representatives at both the decision-making and operational levels of agencies responsible for traveller identification and travel document issuance, as well as the border agencies that use data that identifies travellers, including:

- Ministry of Immigration
- Ministry of Public Safety/National Security/Border Police
- Agencies in charge of delivering breeder documents
- Ministry of Transportation
- Civil Aviation Authority
- Airport Authority
- Customs Authority
- Ministry of Foreign Affairs
- Visit to one or more International Airports
- Travel document issuance authority
- Airline companies
- Regional and International Organizations (where relevant and present)
- Main cooperation partners



This list is indicative and is subject to refinement according to the national context. The interview with the interlocutors will allow the TAM team to get a better understanding of:

- the environment, strategy, legislation and policy and the cooperation between and within national agencies and with the international community;
- the systems, tools, protocols and processes used in national identification arrangements, the issuance and handling of travel documents and border control management, and their integration; and
- the human factors that might contribute to, or constrain, more effective traveller identification including governance, staff training, motivation and professional standards.

Taken together, the responses and findings in these three areas should provide an overall picture of the readiness, capacity and effectiveness of a Member State's practices. The review of each component must be honest, straightforward and willing to challenge existing systems and priorities. However, clearly, only the governments of Member States are entitled to make the necessary changes.







# ICAO TRIP PLATFORM





## PURPOSE FOR USAGE AND OVERVIEW OF THE CONTENT AVAILABLE ON THE WEBSITE

### BACKGROUND

Governments need dependable information in order to develop and implement effective policies and programmes.

The ICAO Traveller Identification Programme (TRIP) Strategy is mandated to set specifications and best practices for the five elements of the Platform. The ICAO Facilitation Section is committed to work with Member States and partner agencies to assist them in compiling and disseminating TRIP-related information to address security deficiencies, prevent and combat trans-border crime, promote facilitation benefits of the strategy, and establish sustainable communication channels among agencies to share valuable information.

The work of the ICAO TRIP is supported by the Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP), formerly known as TAG/MRTD and the work implemented by the TAG/TRIP relies heavily on the resources of States (government and industry) and uses working group meetings and internet-based communications to achieve most of its outputs.

Following the TAG/MRTD/22 Meeting held in Montreal in May 2014, the ICBWG presented a proposal to set up a secure online ICAO Portal and Group – infoTRIP Group – in order to enable governments and international organizations to store, use and maintain their information in a secure setting that would allow for information sharing, in accordance with the subjects contained in the ICAO TRIP Strategy.

A sub-group to develop the infoTRIP Group has been set up and formed with representatives from Canada, the Netherlands, Portugal, the United Kingdom, the United States, the International Organization for Standardization (ISO) and ICAO. An editorial board was also established, with the members of the sub-group sitting on the board to perform the role of defining access rules for the infoTRIP Group while also monitoring the quality of the information provided by Members of the infoTRIP Group. The editorial group works closely with the ICAO Secretariat in Montreal who also have the responsibility for managing and administering the ICAO TRIP Platform.

The development and implementation phases have been supported by ICT experts at ICAO HQ in Montreal, who also installed the system and carry out technical maintenance as required.

### TARGET GROUP FOR USAGE OF THE ICAO TRIP PLATFORM

The stakeholder groups of the ICAO TRIP Platform are government bodies, working groups of the TAG/TRIP, international organizations, academia and NGOs, and private sector companies.

### OBJECTIVE, BENEFITS AND ADVANTAGES OF THE ICAO TRIP PLATFORM

Operational since March 2016, the ICAO TRIP Platform is a secure and collaborative web-based platform, with the following objectives:

- To provide the TAG/TRIP and its working groups with a robust, integrated and sustainable platform to support its work.
- To provide a worldwide network for effective and efficient communication among users.
- To help officials who work in the area of travel documents and border control to broaden their knowledge.
- To be a worldwide single point of reference for ICAO information on travel documents and border control issues.
- To share documents, experiences, best practices etc., providing secure and reliable information, via the Platform.

The unique design of the new system supports cross-group communications and provides the following benefits:

- An effective, free of charge mechanism for sharing knowledge and information on travel documents, border controls, identification management, etc. between ICAO Member States and international organizations.



The main users are detailed below:

Stakeholder Group	Main Users
Government Ministries and Agencies	<ul style="list-style-type: none"> <li>Ministry of Interior</li> <li>Passport Office</li> <li>Immigration Department/Border Control Authorities</li> <li>Ministry of Foreign Affairs (incl. consular departments and diplomatic missions overseas)</li> <li>Ministry of Transport</li> <li>Civil Registry/Elections Board (and other authorities issuing breeder documents)</li> <li>Police/Security/Law Enforcement Agencies</li> <li>National Civil Aviation Authorities</li> <li>Development agencies and donor programmes</li> </ul>
International Organizations	<ul style="list-style-type: none"> <li>UN and its Specialized Agencies (UNHCR, UNODC, UNCTED, etc.)</li> <li>Other International Organizations (INTERPOL, IOM, ILO, etc.)</li> <li>Regional Organizations (OAS, CSCE, the European Union, Frontex, ASEAN, CARICOM, etc.)</li> </ul>
ICAO Delegations and Secretariat Staff	<ul style="list-style-type: none"> <li>HQ and Regional Offices</li> </ul>
ICAO bodies	<ul style="list-style-type: none"> <li>Facilitation Panel (FAL Panel)</li> <li>TAG/TRIP</li> <li>NTWG</li> <li>ICBWG</li> </ul>
Industry	<ul style="list-style-type: none"> <li>Aviation industry, including airlines, airports etc.</li> <li>Travel document production and border control technology and infrastructure companies (e.g. inspection systems, document security reference systems, etc.)</li> </ul>
Academia and policy developers Non-governmental organizations (NGOs)	<ul style="list-style-type: none"> <li>Universities and research institutes</li> <li>Think tanks</li> <li>NGOs</li> </ul>

- Secure real-time channel of communication on sensitive matters.
- Easy and reliable access to ICAO Standards and Recommended Practices (SARPs), specifications, guidance materials, updates, events and other information on all elements of the TRIP Strategy, including travel documents, etc.
- Convenient reference to individuals working on TRIP-related matters and to their contact details.
- Enhanced networking opportunities.
- Building and consolidating trust between government institutions (inter-agency and cross-border).
- First-hand knowledge and information on challenges and capacity gaps faced by States, (particularly useful to government agencies providing overseas development assistance such as technical support and donor programmes).
- Access to enhanced knowledge and information-sharing opportunities by joining TAG/TRIP and its Working Groups.



Advantages of the TRIP Platform	
Access to Knowledge	All authorized Members of the Platform have real-time access to the information they are authorized to view. Instant notifications are sent to all authorized Members as soon as information (documents, pictures, media, etc) is posted on the Platform.
Consolidated Information, Expertise, and Intelligence	All MRTD and TRIP-related information, including resource libraries, are stored in one central place. This information can be tagged and is easily searchable.
Effective and Efficient Collaboration	Authorized Members are able to communicate and collaborate seamlessly, with the ability to chat and videoconference.
Promote Information Dissemination	Information dissemination is enhanced by the ability to send general information, messages, alerts and more to all (or to specific) Members.
Feedback Mechanisms	All forms of communications allow for feedback if needed. As well, all Members have the ability to create and disseminate surveys to all (or to specific) Members.

## HOW TO BECOME A MEMBER AND USE THE ICAO TRIP PLATFORM

Governments, international organizations and industry entities have been invited to join the TRIP Platform by appointing their own representatives. There are currently about **100 Members** – government & industry experts.

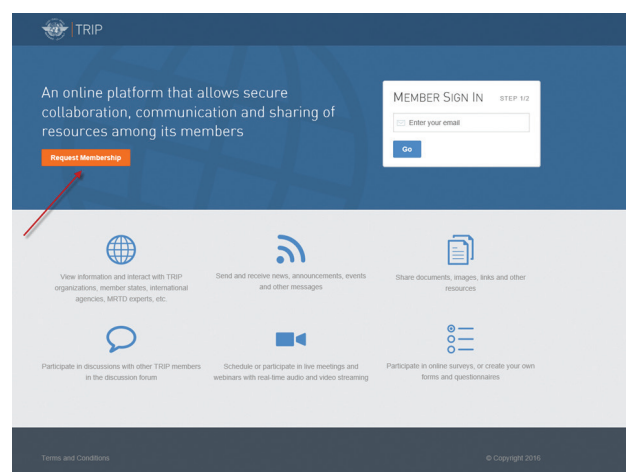
When the new infoTRIP Group is established on the ICAO TRIP Platform, governments will be invited to appoint infoTRIP focal points (POCs). The POCs will be responsible for recruiting experts within their State or organization who will input and maintain data in the infoTRIP Group on the ICAO TRIP Platform.

Before being granted access to the Platform, every user is required to accept the terms and conditions of use. ICAO reserves the right to control and restrict access to the Platform and, unless otherwise stated, ICAO and/or its licensors own the intellectual property rights for the material on the Platform and for the Platform itself.

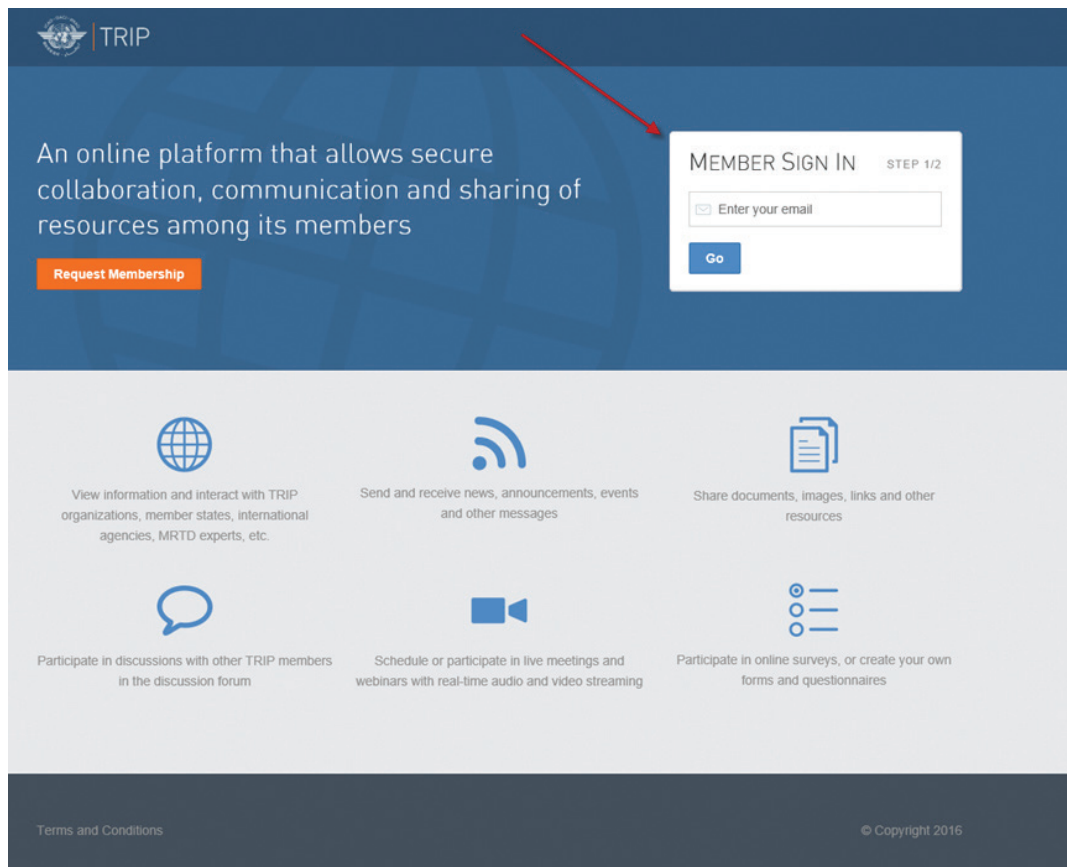
Once authorization is provided to access the Platform, infoTRIP POCs will be required to enter information in the infoTRIP Group regarding the status of implementation of the ICAO TRIP Strategy in their State. The provision of this information will help to ensure that up-to-date, reliable material on TRIP implementation is shared between all participating governments.

[Officials who are authorized as their State's infoTRIP POC will only have access to the data from other States when their own State has added over 50% of the required information on the Platform.] Information must be accurate and reliable and contact focal points must be assigned for each TRIP area or element. In the event that someone requires further information, they are able to contact the State nominated organization/expert listed in the infoTRIP Group or elsewhere in the ICAO TRIP Platform, to obtain practical and direct information.

Members States and TRIP stakeholders are encouraged to register for access to the TRIP Platform at: [www9.icao.int/trip](http://www9.icao.int/trip)







Many of the topics that are included in the ICAO TRIP Strategy are relatively dynamic. As such, they can change and develop as new solutions are explored and implemented. Consequently, it is important that the POCs adjust and renew the content for their State in the infoTRIP Group to ensure the latest information is available.

The new infoTRIP Group on the Platform is designed with the flexibility to accommodate several different scenarios and is structured as follows:

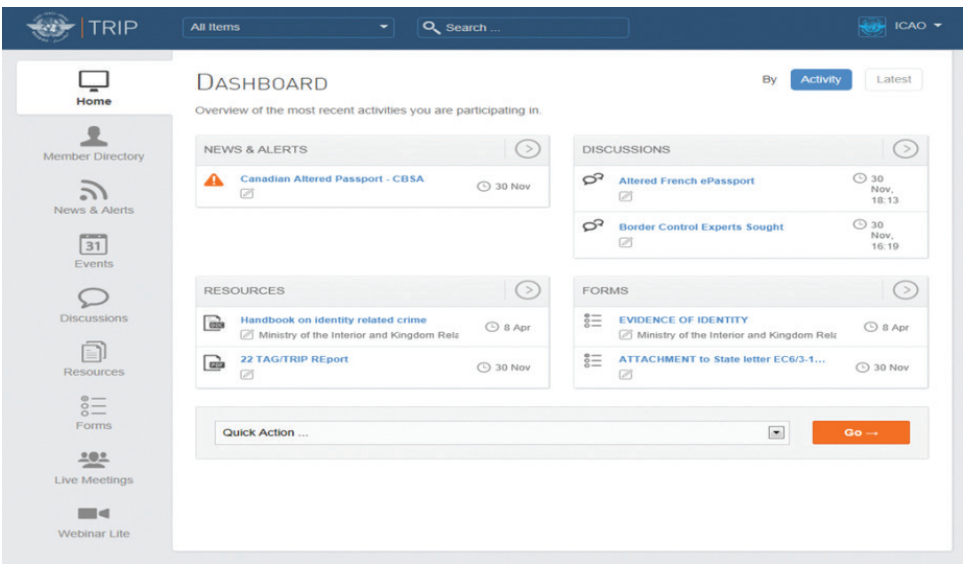
- The ICAO Secretariat provides the overall administration of the TRIP Platform, including the infoTRIP Group. At the same time, the national POCs assigned for each government are responsible for authorizing access to the relevant areas of the infoTRIP
- Group for organizations and appointed experts from their State.
- The Platform allows the formation of groups with related interests. National passport offices can, for example, be a part of a Passport Offices Group.
- Any entity can be a part of more than one group.
- Groups may share information among its private Members or with all the groups in the platform, depending on the level of privacy required.
- Groups may wish to be private. Alternatively, they can be public and therefore visible to all other Members on the Platform.



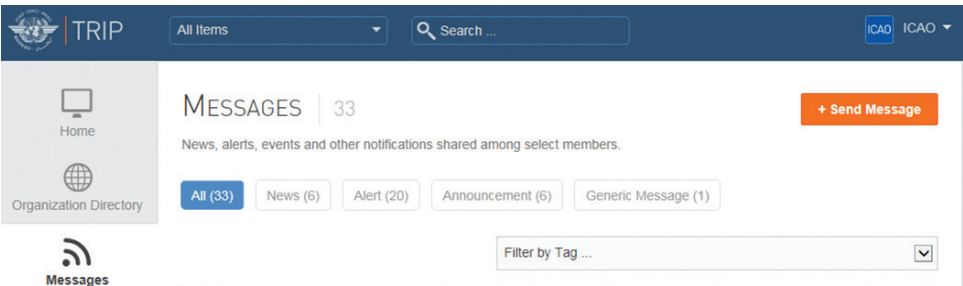
The ICAO TRIP Platform is built to be user-friendly and informative, and to offer extended communication capabilities:

- News and alerts
- Events (calendar)
- Discussions
- Forms (surveys, questionnaires)
- Resources (documents, reports, handbooks, guides, etc.)
- Live meetings
- Webinar Lite

All Members have their own dashboard where they can quickly see messages, alerts and shared content, as follows:

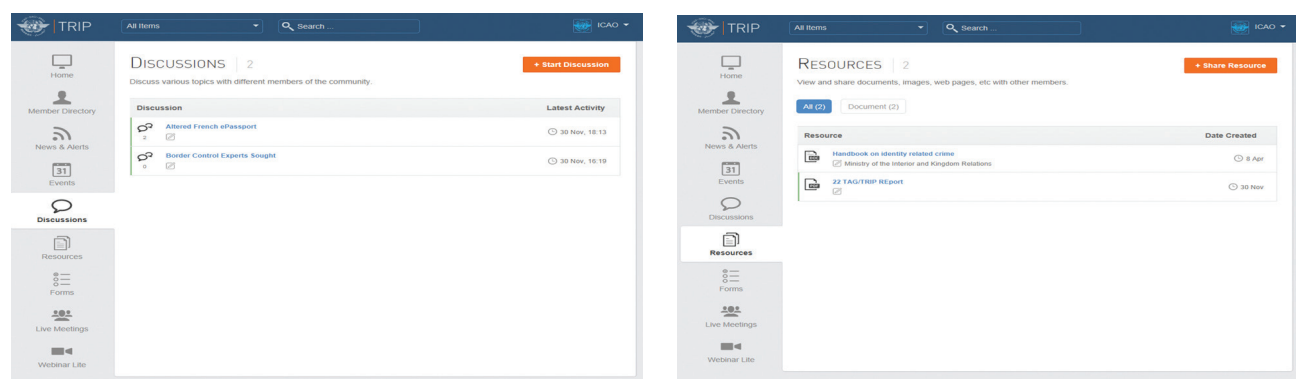


In the “Messages” section, as per the figure below, all Members receive news, alerts and announcements and are able to send similar messages to specific Members or Groups as required. Additionally, an e-mail is sent to each Member to alert them to any messages or postings, including a description of the change itself, thereby ensuring ease of communication and information retrieval:

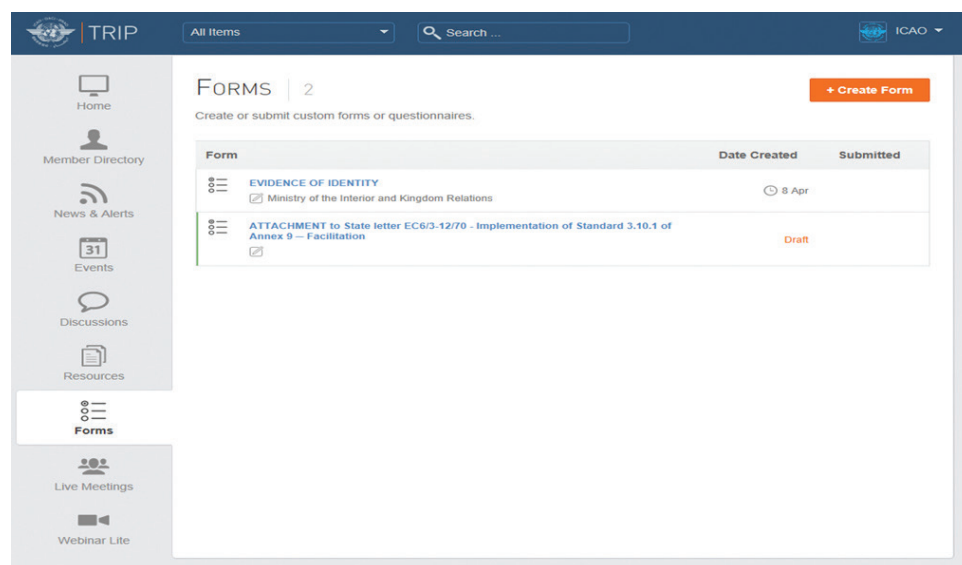




Members are able to follow, initiate and reply to discussions while in “Discussions” and “Resources” sections. Also, while in the “Resources” section, as per the figure below, they are able to open resources which have been shared by other Members and upload and share their own resources:



The “Live Meetings” section allows Members to communicate in real time, either through chat or videoconference. The “Forms” section allows all Members to easily create and send survey forms to other Members and data collection in such forms can then be aggregated and analysed by the owner of the form.



The ICAO Secretariat, led by the Facilitation Section, will continue to work diligently in order to maintain and upgrade the system based on the feedback received as the ICAO TRIP Platform is used by stakeholders from the global TRIP community.







# DOCUMENTATION REFERENCES





## LIST OF GUIDANCE MATERIAL AND PUBLICATIONS

- DOC 9303, MACHINE READABLE TRAVEL DOCUMENTS
- TECHNICAL REPORTS
- PROPOSAL FOR AN ICAO TRAVELER IDENTIFICATION PROGRAMME (A38-WP/11 EX/6)
- ICAO REPORT OF THE EXECUTIVE COMMITTEE ON AGENDA ITEM 19 (A39-WP/499 P/34)
- ICAO TRAVELLER IDENTIFICATION PROGRAMME (TRIP) IMPLEMENTATION ROADMAP FOR MEMBER STATES
- ICAO-UNHCR GUIDE FOR ISSUING MACHINE READABLE CONVENTION TRAVEL DOCUMENTS FOR REFUGEES AND STATELESS PERSONS
- ICAO GUIDE TOWARDS BETTER PRACTICE IN NATIONAL IDENTIFICATION MANAGEMENT V.3
- ICAO GUIDE FOR ASSESSING SECURITY OF HANDLING AND ISSUANCE OF TRAVEL DOCUMENTS
- ICAO GUIDE FOR MRTD PHOTO GUIDELINES
- ICAO GUIDE FOR COLLECTION OF BEST PRACTICES FOR ACQUISITION OF MRTD GOODS AND SERVICES
- ICAO GUIDE FOR CIRCULATING SPECIMEN TRAVEL DOCUMENTS
- ICAO GUIDE FOR BEST PRACTICE GUIDELINES FOR OPTICAL MACHINE AUTHENTICATION – PART I
- ICAO GUIDE FOR EMERGENCY TRAVEL DOCUMENTS
- ICAO GUIDE FOR ROADMAP FOR IMPLEMENTATION OF NEW SPECIFICATIONS



- RESOLUTIONS:
  - UN SECURITY COUNCIL S/RES/2178 (2014)
  - UN SECURITY COUNCIL S/RES/2309 (2016)
- DECLARATIONS:
  - DECLARATION OF RIYADH 31 AUGUST 2016
  - STATEMENT FOR INTERNATIONAL FORUM ON IMMIGRATION INSPECTION, GUANGZHOU 15 JUNE 2016
  - OUTCOMES OF MALABO SYMPOSIUM OF AVIATION SECURITY AND FACILITATION, 29 JUNE 2016
  - DECLARATION OF WINDHOEK, 7 APRIL 2016
  - DECLARATION OF BRAZZAVILLE, 23 MAY 2015 (FRENCH ONLY)
  - DECLARATION OF RABAT, 14 NOVEMBER 2013 (FRENCH ONLY)
- GTAC STATEMENT: POWERING TRAVEL & TOURISM INTO THE NEXT DECADE AN AGENDA FOR GROWTH AND DEVELOPMENT
- ASSEMBLY RESOLUTION – 39TH SESSION
  - A39-20 – CONSOLIDATED STATEMENT OF CONTINUING ICAO POLICIES RELATED TO FACILITATION
- TRIP MAGAZINE





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