

The logo for ACI Europe is a light blue square containing the letters 'ACI' in a large, white, serif font. Below the letters, the word 'EUROPE' is written in a smaller, white, sans-serif font. A thin, dark blue diagonal line crosses the square from the bottom-left to the top-right.

**THE USE OF AUTOMATED
MEANS FOR BORDER CONTROL
AT EUROPEAN AIRPORTS**

TECHNICAL ANNEX

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1 Summary

ACI EUROPE recommends that government authorities of EU Member Countries work together with international border control agencies and airports, in order to minimise risk, expedite passenger flow, and develop efficient and intelligence-driven operations for automated border control. ACI EUROPE member airports strongly believe that making use of innovative technology for controlling airport borders throughout the European Union is essential for continuous safety and security.

This norm to be deployed at all EU airports, to be used by all EU citizens and later expanded to third country nationals, must incorporate nationally financed automated border control systems that can read MRTD's.

In particular, the developments with the e-Passport need to be taken into account. This combined paper and electronic personal travel document, uses biometrics to authenticate the identity of travellers by providing a digital facial image and fingerprints (or iris information) stored on a contactless chip.

Managing these border control processes by the use of highly automated means, and setting a unified standard for all EU Member States, will allow governments and airport operators to restructure and optimize their existing resources and make better use of their available capacity.



2 Definitions

ABC: The Automated Border Control is a biometric recognition system that smoothly facilitates passengers through border controls without the need of a manual identity check with a border control authority. The system operates by either comparing the captured biometric from the e-Passport against a biometric database containing many templates in an attempt to identify the unknown person (identification), or by directly comparing the captured biometric with a stored template to verify that the person is who he or she claims to be (verification).

API/APIIS: The Advance Passenger Information System (APIS) is an Electronic Data Interchange system involving identification details from the passport and basic flight information between the airline's computer system and that of the destination state. Required information includes: full name, gender, date of birth, nationality, country of residence, travel document type (normally passport), travel document number (expiry date and country of issue for passport).

Biometrics: Measurable, unique physical characteristics or personal behavioural traits used to recognise the identity and verify the claimed identity, of an enrollee.

Biometric Data: The information extracted from the biometric sample and used either to build a reference template or to compare against a previously created biometric template.

Biometric Passport: See e-Passport

EEA: The European Economic Area was established on 1 January 1994 following an agreement between member states of the European Free Trade Association (EFTA), the European Community (EC), and all member states of the European Union (EU). It allows these EFTA countries to participate in the European single market without joining the EU.

e-Passport: Also referred to as an MRTD or a biometric passport, it is a combined paper and electronic identity document that uses biometrics to authenticate the identity of travellers. The passport's critical information is stored on an RFID computer chip, much like information stored on smartcards.

FAR: False Acceptance Rate is the probability that the biometric security system will incorrectly accept an access attempt by an unauthorized user and therefore match the input pattern to a non-matching template in the database. It measures the ratio of the number of false acceptances divided by the number of identification attempts.

Frontex: Frontières extérieures – English for "external borders": European Agency for the Management of Operational Cooperation at the External Borders



of the Member States of the European Union is the European Union agency for external border security. With its headquarters in Warsaw Poland, it is responsible for co-ordinating the activities of the national border guards in ensuring the security of the EU's borders with non-member states.

FRR: False Rejection Rate is the probability that a biometric system incorrectly rejects an access attempt by an authorized user. It measures the percentage of valid inputs which are incorrectly rejected.

Global Interoperability: The capability of different systems in different locations around the world to exchange data, to process data received from other systems and to utilize that data in the identification and verification process.

IATA: The International Air Transport Association is an international industry trade group of airlines. IATA's mission is to represent, lead and serve the airline industry. IATA represents some 230 airlines comprising 93% of scheduled international air traffic. With its main office in Montreal Canada, IATA is currently present in over 150 countries covered through 101 offices around the globe.

ICAO: The International Civil Aviation Organization is an agency of the United Nations that codifies the principles and techniques of international air navigation and fosters the planning and development of international air transport to ensure safe and orderly growth. Operating from Montreal Canada, the ICAO Council adopts standards and recommended practices concerning air navigation, prevention of unlawful interference, and facilitation of border-crossing procedures for international civil aviation.

Identification/Identify: The one-to-many process of comparing a submitted biometric sample against all of the biometric templates on file to determine whether it matches any of the templates. The one-to-many approach seeks to find a single identity from a database rather than to verify a claimed identity.

ISO: International Organization for Standardization, an international standard-setting body composed of representatives from various national standards organizations. Founded on 23 February 1947, the organization promulgates worldwide proprietary industrial and commercial standards.

MRTD: Machine Readable Travel Document is a passport or visa with the data on the identity page encoded in optical character recognition format. It contains the owner's name, passport number, two check digits, nationality, date of birth, sex, passport expiration date and personal identity number.

RT: Registered Traveller is an Individual who has voluntarily supplied biographical and biometric data to the authorities with the intent of expediting border control processes



SPT: Simplifying Passenger Travel is an initiative that focuses on the passengers and facilitating their journey while emphasising the security benefits of processing 'known' passengers automatically, thereby freeing-up resources to concentrate on 'unknown' passengers. The SPT Programme, now led by the PFWG, is part of IATA's Passenger Experience Structure, which is managed by the Passenger Experience Management Group (PEMG), and composed of the Fast Travel Working Group (FTWG), the Common Use Working Group (CUWG), the 2-D Bar Coding Border Pass Work Group (BCBPWG), and the Passenger Facilitation Work Group (PFWG). Source: www.iata.org/whatwedo/passenger/spt and www.iata.org/sp/areas/passenger-experience.htm

Token: A physical device that contains information specific to the user/holder
Verification/Verify: The process of comparing a submitted biometric sample against the biometric template of a single enrollee whose identity is being claimed, to determine whether it matches the enrollee's template.

VIS: A European Council Decision of 8 June 2004 (VIS) (2004/512/EC). The European Visa Information System will be a database of fingerprints and facial scans consisting of all applicants for an entry visa into the Schengen group countries. The implementation date for VIS is currently planned for December 2010.

3 Available technology

3.1 Biometric Systems

At airports, biometric identification systems use some unique physical human characteristic to determine the identity of the traveller wanting to use an automated system to cross borders. Typical features are the face, veins, fingerprints, hand shape, and the eye's iris and retinal patterns.

These systems record a biometric sample from an enrollee for an MRTD. Furthermore, they measure and analyse the value(s) of that specific data, comparing it with that contained in the reference template, and then indicate whether or not an identification or verification of identity has been achieved.

ACI EUROPE recognises the benefits of a biometrically enabled automated border control system, in accordance with the standards set by ICAO, to improve the passenger processing time and enhance the through-put of passengers.

In regards to the choice of biometric technology for automated border control, ICAO recommends that face recognition should be the **primary** and the iris and/or fingerprint an optional **secondary** biometric identifier, assuring global interoperability. Furthermore, in addition to the biometric identifiers contained in the e-Passports, the issuing state may also choose additional biometric identifiers, such as iris scanners. The use of such multi-biometric technology however, will be more complex for both passengers and operators, and increase the costs.



On 26 October 2004, the EU Justice and Home Affairs Council agreed on the inclusion of fingerprints as a second mandatory biometric identifier in future passports issued by Member States

3.2 Microchips and MRTDs

Machine Readable Travel Documents, such as e-Passports and visas contain the passenger's required personal data, which can be read by border control authorities. This information is furthermore embedded in a contactless integrated circuit or microchip that a machine can read. The MRTD is intended for global use and provides governments, airlines and airports with the opportunity to:

- allow passengers to travel hassle free
- facilitate pre-travel procedures
- improve processing for airlines
- enable airports to manage their resources more efficiently
- permit secure processes, and
- better protect against counterfeit and fraud

MRTDs allow compatibility and global interchange. The ICAO standards publication Doc 9303 provides further guidelines.

3.3 Innovative and intelligent solutions

ACI EUROPE supports the use of systems which can read multiple biometrics. Various Member States have begun to include two fingerprints and a facial image within e-Passports and travel documents. Incorporating further biometrics, such as the iris, will promote a greater accuracy in confirming identity, and thus reduce the probability of tricking the system. Furthermore, travellers having e-Passports with multiple biometrics, quickly recognizing the potential advantages, will tend to favour the use of ABC systems.

It is essential that ABC systems are monitored so airport and border control authorities are immediately alerted to any failure in the performance of the system. Contingency plans that will enable a smooth continuation of processing passengers manually, while ensuring that the integrity of the border is maintained, must be made accessible for everyone, and be required knowledge to all personnel.

ACI EUROPE suggests that in order to reduce unnecessary hassle for both the governmental agencies and the travelling public, the ABC systems should be designed to enable linkage to various databases, such as SIS or VIS, for authentication and verification purposes.

3.4 Document verification and use of e-Passports

The main purpose for using e-Passports with integrated biometric identification is to achieve a high level of accuracy when confirming the identity of any given person, and to minimize the:



- incorrectly matching a sample biometric representation of one person with the reference biometric representation for another person (**False Acceptance Rate**).
- occurrence of failing to recognise a match between a sample biometric representation of a person with the reference biometric representation of the same person (**False Rejection Rate**).

ACI EUROPE notes that the ideal facility would be a gate or booth that is capable of reading and capturing a single or multiple ICAO standard biometrics which may be included in a passenger's passport.

Airports request that the regulatory agencies consult them and coordinate with them on the costs and design of the systems to be implemented. The introduction of automated systems to accommodate the e-Passports, should not subject the airport to higher costs than conventional booths, such as the cost of additional or adjusted infrastructure.

Costs shall be borne by the relevant governmental agencies and not by airport managing bodies.

4 Security standards

ACI EUROPE recognises the benefits for the European Union, third party government authorities and airports, of adopting a common acceptable standard for automated border management.

ACI EUROPE calls for a harmonised approach, building upon international ICAO/ISO standards for scanning e-Passports, making use of the IATA's Simplifying Passenger Travel Program (SPT) to focus on the passenger flow process, including automated border control, and thus expediting the entire procedure.

While reaping the benefits of processing passengers automatically, ACI EUROPE encourages governments and airports to support a universally adaptable and recognisable standard for biometric passports with integrated radio-frequency identification (RFID) chips.

ACI EUROPE approves of governments bearing the costs for adapting infrastructure at airports for the use of e-Passports. Furthermore, ACI EUROPE strongly believes that this approach will reduce future operating costs, and at the same time enable control authorities and airport operators to facilitate a rapid and efficient clearance process of passengers through international gateways.

5 Automated Border Control Management

5.1 The goal

Border management is directly linked to passenger facilitation. Automating border controls and therefore, optimizing processes at airports will enhance the



user experience and help airports to overcome additional security measures, space restrictions, throughput and longer waiting times.

ACI EUROPE agrees that border control authorities must assure that the process for border controls, to include the use of e-Passports, biometrics and automated border control machines, are to be made as seamless as possible. To not confuse the user, these devices should be self-explanatory, simple to use and require limited or no instructions.

ACI EUROPE believes that making use of the e-Passports, in conjunction with biometrics, will permit a constant flow and high volume throughput of people. This translates to profitability for government officials and operators alike.

ACI EUROPE promotes the use of an internationally standardised globally interoperable and ICAO selected biometrics for automated border controls. Biometric data collected and e-Passports must be globally consistent and in a standardised format.

ACI EUROPE calls on Member States to facilitate travellers and allow them to self-process through ABC machines that can read e-Passports, and biometric data such as face, fingerprints and or iris. ACI EUROPE is convinced that this process will enable government authorities and airport operators to process a greater number of travellers within the existing floor space without compromising standards of border protection and facilitation.

Because the ABCs are most accurate, border control authorities will be able to better focus their resources on controlling the unknown “risky” passengers.

5.2 Challenges ahead

In the “Challenges of Growth Report 2008”, Eurocontrol depicts a planned 41% increase in airport capacity between 2007 and 2030. Included are new airports, 29 additional runways and new air- and ground-side infrastructures. Within the available capacity, the forecast shows that by 2030 there will be between 1.7 and 2.2 times the number of flights in Europe seen in 2007. This growth includes significant variations, for example: strong growth in Eastern Europe in percentage terms and limited growth in domestic traffic for many of the currently busier Member States.

Some passengers may hold Schengen Visas, EU Member States issued passports, and others may not require an entry visa. Millions of passengers passing EU borders daily belong to the categories described above. Both airport operators and border control authorities are restlessly contemplating and searching for innovative solutions to efficiently process these passengers while at the same time, having to consider how to properly separate and control that complex flow.

The new generation e-Passports have begun relieving some of the previously observed congestions at border control points. Considering the fact that



government authorities are well aware of how effective ABC systems can be, ACI EUROPE encourages them to properly address their public financing, and coordinate their implementation in close cooperation with the airport managing bodies.

Airports and border control authorities will have to work closely together to plan the best possible locations to install ABCs that will allow the monitoring of both entering and exiting passengers, as well as communication with the travellers when necessary. Furthermore, it is vital to design facilities and systems that consider all people. This includes persons with reduced mobility and, for legal reasons, young travellers.

For operational reasons and ease of use, ACI EUROPE supports a clear internationally recognisable signage that will provide maximum exposure of the ABC.¹

Most importantly, all documentation and personal data, from the time of collection to storing and throughout the processing stages, must be handled securely and in accordance with data protection and privacy laws, both EU and Member States. The ABC systems must not allow personal data they are reading to be copied, manipulated or passed on to a third party without the permission of the individual concerned.

EU Directive 95/46/EC lays out the legal framework in regard to the processing of personal data and the free movement of such data². We note and fully support the legal and legitimate requirements regarding the treatment of personal data. National regulators should adopt a policy which balances the goals of protecting personal data when used and processed for biometric systems with the potential benefits that such systems can deliver in terms of increasing security for the passenger and facilitating more efficient passenger flows.

5.3 Geographical spread (Schengen, Non Schengen and Third Country Nationals)

The name Schengen derives from the agreement originally signed in the town of Schengen (Luxembourg) on 14 June 1985 by five Member States of the European Community (France, West Germany, Belgium, Luxembourg and the Netherlands) providing for the removal of systematic border control between them.

The Schengen Area, with a population of over 400 million people, currently consists of a group of 25 European Union Member States and three non EU countries, which have abolished all border controls between each other.

¹ For further details on airport deployments please refer to ICAO Guidelines for Electronic Machine Readable Travel Documents & Passenger Facilitation, April 2008.

² As indicated in the European Commission's Directorate-General Joint Research Centre technical report « Biometrics at the Frontiers : Assessing the Impact on Society » for the European Parliament Committee on Citizen's Freedoms and Rights, Justice and Home Affairs.

These countries are: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland. Except for the United Kingdom and Ireland, all are required to apply Schengen laws. Bulgaria, Cyprus, Liechtenstein and Romania have not yet implemented Schengen.

The Schengen Agreement provisions – incorporated into the European Union law by the Amsterdam Treaty – require the affiliated countries to eliminate their border controls with other Schengen members while simultaneously reinforcing border controls with non-member states. The agreement establishes of a common policy regarding the temporary entry of persons (including the Schengen visa), the harmonisation of external border controls, and cross-border police and judicial co-operation.

5.4 Types of documents/immigration classification

The types of immigration classifications are:

- EU citizens
- Third Country Nationals
- Visa
- Visa waiver

5.4.1 E-Passport

It is a combined paper and electronic identity document, also known as a biometric passport, using biometrics to authenticate the identity of travellers. All critical information within the passport is stored on an RFID computer chip. Today, all e-Passports issued within the EU include fingerprints and face information as a biometric identifier.

5.4.2 The Schengen Visa

The Schengen Visa is issued to citizens of countries who are required to obtain a visa before entering Europe. It is for leisure, tourism, or business only. Schengen Visa holders are not allowed to live permanently or work in Europe.

The Schengen Visa expedites travelling between the Schengen Member States. The visa holder may travel to any or all Member States using one single visa, thus avoiding the hassle and expense of obtaining individual visas for each country.

On October 9th 2009, the EC laid down specifications for the resolution and use of fingerprints for biometric identification and verification in the Visa Information System. This decision requires Schengen Visa applicants to provide not only face, but now also 10 fingerprints for biometric identification.

5.4.3 Means of control

ACI EUROPE calls on European Union Member States, in full compliance with data protection regulations, to cooperate and to register travellers encouraging them to self-process through automated border control machines. ACI EUROPE strongly believes that this approach will enable government authorities and



airport managing bodies to process a greater number of travellers within the existing limited airport space without compromising standards of security, border protection and facilitation.

Automated border control systems should require limited instructions and be simple to operate. In order to further facilitate the user, a universally recognisable symbol depicting an automated border control point shall be concurrently established.

5.5 System interoperability

An “international user” interface approach for e-Passports will benefit not only the control authorities, airport managing bodies and carriers, but most importantly the passengers. Conformity with ICAO and ISO standards will allow the relevant authorities to read and verify electronic e-Passports from various issuing authorities. A proliferation of different systems and travel documents would be highly damageable by creating confusion for both the immigration authorities and the travelling public.

6 Passenger Flow Management

In order to facilitate passenger flow at an airport, it is important to identify and differentiate the departing, arriving, transfer and transit passengers. Many of these passengers, depending on their citizenship and or visa status, and even if only travelling within the European Union, will need to be processed through a border control.

To effectively manage the ever growing number of passengers, airports must tend to the needs of individual travellers. ACI EUROPE believes that innovative solutions should be promoted in order to avoid bottlenecks at border control check points. These must reduce future operating costs, and at the same time enable control authorities and airport managing bodies to better evaluate potential risks in a coordinated way while facilitating a rapid and efficient clearance process of passengers through international gateways.

6.1 Passenger Types

In order to be in compliance with ICAO Standards and Recommended Practices Annex 9, and IATA Simplified Passenger Travel (SPT), airports must adapt their facilities and infrastructure to meet the needs of the various types of travellers.

6.1.1 Originating departing passengers

These are persons who are now flying, and whose starting trip has not been with an airplane. **Arriving passengers** however, have flown to their final destination airport, and will not continue their journey by airplane. Both originating departing and arriving passengers, travelling to or coming from a non Schengen country, must process through a border control at first point of entry into a Schengen country.

ACI EUROPE urges member airports and border control authorities, to form partnerships with third country airports and their border control authorities, to



develop a passport and visa control standard for allowing the use of a common system for automated border management.

6.1.2 Transfer passengers

Passengers arriving at an airport, and on the same day, boarding a different airplane (with another number), to continue their journey are referred to as Transfer. The originating departure airport and final destination must be different. For statistical purposes, transfer passengers are always counted twice (once for inbound and again for outbound).

Travellers arriving from a non Schengen country, within the EU or outside, regardless of whether they hold an e-Passport, must proceed through a border check point before being allowed to enter a Schengen area. ACI EUROPE urges all member countries to adapt an automated border control system that applies one standardised technology for reading e-Passports.

6.1.3 Transit passengers

Any travellers that interrupt their travel, and then continue with the same flight they arrived. Transit passengers, unless they wish to exit the transit areas, do not require passing any border controls.

6.2 Passenger travelling classes

One of the biggest challenges a European airport faces is providing fast and effective control points, speedy processing from check-in to departure gate, and enable its facilities to effectively separate Schengen and non-Schengen passengers. Airports must adapt their facilities to allow passengers to process through border controls that include some extraordinary locations such as airline lounges.

6.3 Legal framework

Border control at airports requires having to control all arriving, transferring and departing EU and non-EU passengers, as well those that are Schengen and non-Schengen. Furthermore, these controls must comply with national and international laws, and be based on EU, ECAC and ICAO regulations and recommendations.

6.4 Essential processes

The most important processes for a smooth passenger flow are the check-in, boarding pass control, border control, security control, API check (where applicable), document check, boarding, de-boarding, baggage claim and customs.

When we closely examine the border control process in a Schengen Country for departing, arriving and transferring passengers, we can conclude that it is in fact one of the procedures that requires the most time. Long queues filled with anxious passengers are a regular daily occurrence that authorities must face.



Border controls however, are necessary for checking non-Schengen passengers at time of departure and upon arrival. Furthermore, when transferring, Schengen to non-Schengen, as well as non-Schengen to Schengen passengers must also proceed through a border control.

This process can be accelerated by allowing travellers to self-process through EU-wide standardised automated border control machines that can read e-Passports and authenticate their registered biometric data. This data can then be used at the processes of the various stakeholders, for reconciliation purposes across the airport.

ACI EUROPE is confident that this approach will enable government authorities and airport operators to process a greater number of travellers within the existing limited airport space without compromising standards of security, border protection and facilitation.

7 Financial Implications

The relevant costs of implementing automated border controls, apart from the investment in equipment, equally concern:

- Its integration in the operational processing procedure (interfaces);
- The infrastructure required for enrolment (if required) and control, kiosks, marketing schemes, networks, particularly at airports where the availability in space is often limited;
- The costs of qualified personnel, including training, and
- Maintenance-related costs.

ACI EUROPE strongly believes that the border control function is, primarily, a national security and immigration issue. As such that function falls within the responsibility of State authorities. The costs associated with the development and the implementation of the technical solutions needed in order to install and operate performing border control equipment in the European Union airports should, therefore, be borne by the relevant public authorities in each European Union Member State. ACI EUROPE strongly encourages other European nations to follow a similar path and allow, via a public financing mechanism, the installation and operation of highly performing, automated border control systems in their international airports.

8 Existing Programmes

Whenever controls are mandatory for crossing borders, e-Passports will assist border control authorities to channel a considerable number of passengers through automated control systems.

Many passengers have begun enrolling in “fast track” or “frequent traveller” programmes. Control authorities are using these person’s biometrics, such as facial images, fingerprints or iris patterns (also combined) to allow them to cross borders through automated means.



The systems used for such programmes typically require pre-enrolment during which the personal data and documentation of enrollees is verified by border control staff in order to minimize the risk of fraud. Although a few States have negotiated business partnerships, most systems are not interoperable. Therefore, enrolment to use one system will not automatically allow use of any other system.

Numerous EU and non-EU countries have begun implementing ABC systems at their borders, most using the e-Passport as the token of choice. EU countries are currently only issuing e-Passports, and it is estimated that all other types of passports will have been phased out by 2016. ACI-EUROPE and other experts predict that ultimately, as additional biometrics are added to the e-Passport, and passenger numbers continue to rise, more states will opt for the e-Passport in future semi or fully ABC systems.

Currently there are registered traveller programmes for EEA citizens, for Third Country Nationals, and there are automated border control programmes for e-Passport holders.

ACI EUROPE believes that in order to achieve the desired high level of technical harmonization in the European Union, the research and development of the relevant solutions should be coordinated at EU level by EU agencies such as the Joint European Research Facility, and evaluated in cooperation with FRONTEX.

In this context; FRONTEX, together with the relevant national authorities should evaluate and ensure compliance with the strict immigration law requirements such as those imposed under the Schengen Treaty.

Only under such conditions would a European, and later an international standard be reached.

The various ABC and RT programmes provided below, both as pilots and systems in operation throughout the world, may possibly be incomplete. The details listed will certainly change as technology improves and knowledge grows from experience gained.

8.1 ABG – Automated, Biometric-supported Border control

Initiated in February 2004, this automated border passage (emigration and immigration) controls passengers using an iris scanning device. It is for passengers possessing machine-readable passports from the EU, EEA and Switzerland. Participants are required to register prior to using this machine. The passenger's biometric templates are stored in a database at Frankfurt airport.

ABG was introduced with the aim to save time at the check points while keeping operational costs constant. Processing time is about 7 s to 10 s per person, in comparison to 20 s needed with a standard manual passport control. ABG is currently only available in Frankfurt and is linked to SIS (Schengen Information System).



8.2 EasyPASS

In cooperation with the German Federal Ministry of the Interior, Federal Police, Fraport, this automated border control apparatus (immigration only) is being tested from October 2009 until February 2010. It is designed to assist passengers with e-Passports from the EU, EEA and Switzerland ages 18 years and over. Applying face recognition technology, the system compares the encrypted template from chip in e-Passport with the live image of the user. Passengers must not be enrolled to use the system.

During this test phase, the goal will be to evaluate the processing time and performance of the biometric system (FAR, FRR). Furthermore, the ratio of supervising personnel to number of automated lines will be analysed.

Currently, processing time per passenger has been approx. 15 s in comparison to approx. 20 s by standard manual passport controls. Four automated lines are supervised by two border officers.

Any decision regarding further expansion will depend on the results of this trial, and is expected to be announced by the German Ministry of the Interior in 2010.

8.3 FLUX

A governmental partnership that uses biometric data from passengers of participating countries for identification. The registered traveller programme is intended to link existing ABC RT programmes from individual countries on a reciprocal basis and to offer a network of interconnected fast lane facilities to registered international travelers.

The United States of America and the Netherlands are the first countries to join the joint venture, and only citizens of these countries can apply during the testing period. After this initial period, which is scheduled to end in April 2010, FLUX will be available for other countries to test or join. Currently, an application fee of €100 and an annual fee of €159 are charged for membership.

8.4 PARAFES

An acronym for: Passage Automatisé RApide des Frontières Extérieures Schengen (Automated fast passage of the Schengen outer borders). Formerly known at Paris Roissy Airport by its pilot name PEGASE, it was tested between Summer 2005 and Summer 2007. It is a joint project between the French Home Office and the French International Airports.

The system architecture consists of a central system and uses the EU passport as the entry token. It scans fingerprints, and is available, free of charge, for all EU, EEA and CH citizens.

8.5 Lessons learned from existing programmes

Though many countries have begun applying automated border controls at borders, they have not yet taken the opportunity to begin a large scale cooperation with other European and third country authorities.



ACI Europe warns that this lack of communication and reluctance to share information will ultimately conclude in failure to reach a common standard for applying automatic control measures at border check points.

See Annex A (Overview of Existing ABC and Registered Traveller Programs)

9 ACI EUROPE'S Proposed Way Forward

Europe's airports consider that the role of national and EU regulators must be to simply determine the objectives for a common universal standard for automated border controls. It has long been discussed and long overdue. The time is now ripe for EU regulators to take the first step and reach out to third country border control authorities and agree to a list of control requirements which will be an acceptable standard for all borders and countries.

ACI EUROPE recommends EU regulators comply with IATA's Simplifying Passenger Travel (SPT) Programme and its Ideal Process Flow (IPF), which prescribes automation of traveller processes for air travel including border controls, in order to cope with predicted growth in travel and to effectively tackle current and potential border concerns related to air travel. IPF was developed by the SPT Interest Group (SPTIG) to provide guidance to airlines, airports, ground handlers, government authorities and technological suppliers.

An agreement must be reached regarding the information to be shared from the e-Passport. ACI EUROPE is of the opinion that the traveller's three biometric features (face, fingerprint and iris recognition) should be made available to the country the person wishes to visit. The data collected, and the manner in which it is stored in the e-Passport must be identical by all countries. Furthermore, data collection and storage must be in accordance to existing EU privacy protection laws.

The choice of biometric scanning systems to be implemented at automated border control check points, as long as the preferred system can read and equally validate the information contained in the e-Passport, regardless of its originating country, must be left to airport operators and border control authorities.

The benefits of automated border control systems are overwhelming. They have proven to save airports space, and control authorities time, manpower and money, while simultaneously providing a more accurate and secure method for identifying the actual person passing the country's borders.

Primarily, border control is a concern of national security and immigration. ACI EUROPE suggests that governments cover the costs needed in order to adapt the infrastructure at member airports and allow them the opportunity to make use of automated border control solutions.

10 ANNEX A

Overview of Existing ABC and Registered Traveller Programmes

(Presented alphabetically by country)

Country	Programme Name	Airport	Biometrics Technology	Status
Australia	SmartGate	BNE, CNS	Face e-Passport	- Introduced August 2007 - For Australian and New Zealand citizens - Entry only
Austria	ABC System	New terminal : VIE	Face	- Planned pilot
Canada, USA	NEXUS Air	JFK, LAX, ATL, ORD, SFO, MCO, YVR	Iris Smartcard	- Entry only - Operational - For US and CAN citizens, and permanent residents of at least three years
China	e-Channel, APC, AVC	HKG	Fingerprint Smartcard	- Entry and exit - Operational - For citizens and permanent residents
Czech Republic	ABC System	PRG	Face	- Planned Pilot : - Technical study available - Fall 2009 pilot
Dubai	E-Gate	DXB	Fingerprint Smartcard	- Entry only - Operational - available for all travellers with entry permit
Finland	ABC System	HEL Vantaa Airport + Pilot at Vaalima Land Border (Oct. 2009)	Face	- Pilot start: July 2008 - Operational since April 2009
France	PARAFES	CDG	e-Passport Fingerprint	- Pilot since August 2007 - Entry and exit - For EU/ EEA and CH
Germany	ABG	FRA	Databank Iris	- Entry and exit - For EU/ EEA and CH, and permanent residents
Germany	EasyPASS	FRA	e-Passport Face	- Pilot since October 2009 - Entry and exit - For EU/ EEA and CH
Malaysia	Immigration Autogate	KUL, PEN, BKI, MYY, KCH, LGK	Fingerprint e-Passport e-ID (MyKad)	- Introduced August 2000 - Entry and exit - For Malaysian citizens
NL	PRIVIUM	AMS	Iris Smartcard	- Introduced October 2001 - Entry and exit - Targets frequent flyers with an EU nationality
NL	No-Q	AMS	e-Passport Face	- Pilot Q1 2010 - Exit
Portugal	RAPID	LIS, FAO, FNC, OPO <i>Plans to expand to seaports</i>	Face e-Passports	- Introduced May 2007 - For EU/ EEA and CH - Entry and exit
Singapore	(eIACS) enhanced Immigration Automated Clearance System	SIN	Fingerprint Smartcard	- Operational since March 2006 - Entry and exit - For citizens and permanent residents

Annex A

– continued –

Overview of Existing ABC and Registered Traveller Programmes

(Presented alphabetically by country)

Country	Programme Name	Airport	Biometrics Technology	Status
Spain	ABC System	MAD	Face Fingerprint	<ul style="list-style-type: none"> - Planned pilot - 2009 finalizing technical solutions - 2010 pilot
Switzerland	Augreko	ZRH	Face e-Passport	<ul style="list-style-type: none"> - Planned pilot from mid 2010
UK	ABC System	MAN, STN + 10 other airports	Face	<ul style="list-style-type: none"> - Pilots
UK	IRIS	LHR, LGW, MAN, BHX, STN	Iris Databank	<ul style="list-style-type: none"> - Operational since January 2006 - For EU/ EEA and CH, permanent residents and Visa holders - Entry only
USA	Global Entry	20 major airports US	Databank Fingerprint	<ul style="list-style-type: none"> - Entry - Frequent travellers - Operational - For users of NEXUS, citizens of US & CAN, and pre-screened third countries citizens (currently only NL through FLUX)
USA/ NL	FLUX - Alliance	20 major airports US + AMS	US: Databank Fingerprint NL: Iris SmartCard	<ul style="list-style-type: none"> - Pilot until April 2010 - Combination of existing GlobalEntry and PRIVIUM programmes - Pre-registration & vetting (extensive background checks)