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Passenger/Cabin Baggage Screening Task Force (AVSEC/PAX/BAG/TF/1)
Montego Bay, Jamaica, 31 January- 1 February 2008

Agenda Item 1:   **PAX/BAG Screening Systems**
                    1.1   PAX Screening Systems

Advance Passenger Information (API) in Aviation Security

(Presented by the International Air Transportation Association (IATA))

SUMMARY
More and more government authorities are considering implementing Advance Passenger Information (API) programmes as a tool to improve border control and facilitate passenger movement across the borders.
The implementation of API can be highly beneficial provided it is implemented according to globally recognized guidelines and format.
Further, there are two different types of acceptable API transmission, in batch and in an interactive, real-time format. The interactive format has far greater potential, especially if API is intended to be used for more than border control.
Conceptually, API, if implemented in its interactive format, can also provide an additional layer of security for passenger screening identifying passengers that may require additional screening, based on threat assessment, before they access the screening checkpoint.
References: - The IATA/Control Authorities Working Group (IATA/CAWG) Interactive Advance Passenger Information (iAPI) Statement of Principles – 17 May 2007 **(Appendix 1)**   - WCO/ICAO/IATA Guidelines on Advance Passenger Information (API) – March 2003

1.   Introduction

1.1   Increasingly, government authorities require Advance Passenger Information (API) - detailed information from airlines about passengers travelling on flights arriving into or departing from their country. This information is used for a number of different purposes, including immigration, customs, serious crime and aviation security.

1.2   Advance passenger information usually consists of information contained in the machine readable zone of a passport. Some authorities (notably the United States) require further information, including address of first night's stay in the US and country of residence.

1.3   Some states use Advance Passenger Information to check against one or more 'watch lists' of people who should be subject to additional screening (selectees) or should not be allowed to fly as they are felt to pose a threat to aviation. In general, name, date of birth and gender are required to make a positive identification against a watch list. Other states use API for immigration purposes only; checking that a passenger has a right to enter the country and is correctly documented.

1.4   The provision of passenger information to Government Authorities has a number of potential facilitation benefits to the passenger, depending on how the system is implemented and used

2.   Interactive API (iAPI)

2.1   There are fundamentally two ways of submitting API data; in batch or in real time. Most regimes require a batch of data to be transmitted either before or after the departure of the flight. Detailed guidelines already exist regarding the API that can be collected and the format in which it can be transmitted. **(Appendix 1)**

2.2   However, interactive systems are becoming increasingly common, in recognition of the enhanced security they bring and the potential facilitation benefits. An interactive system provides a "cleared" or "not cleared" response to an individual message for a single passenger submitted before or during the check in process.

3.   Benefits to the Industry

3.1   There are some significant potential benefits to the carriers in the use of a real-time interactive system.

- Mitigation of the risks above;
  - Potential delays due to incomplete transmission or failure to transmit entire batch on time
  - Potential turnaround of aircraft due to identification of watch list match post departure
  - Carrier liability penalties due to carriage of inadmissible person
- The removal of the responsibility for watch list checking from the airline to the Government authority

3.2   There are also some potential benefits to be gained from integrating a real time API check with other Government databases. The benefits to be realised here depend on the specific implementation in question, and the willingness of the Government Authority to provide additional functions.

- Potential to use system to check against other databases such as lost or stolen passports or national visa databases to verify validity of travel documents
- Potential to use system to validate passenger data – to match against a national passport database. This would provide validation that the passport data has been correctly entered and exists for the name and date of birth given; only an identity check is then needed at the airport to verify API data
- Potential to automate checking of airlines own passenger watch lists

3.3   Alternatively, some of the features described above may be accessible using 'middleware'. For example, if the API request is sent via a third party provider, the third party may be able to provide look up facilities on other databases. In addition, and airlines' DCS may be integrated with other solutions such as Timatic for document checking, or automated PNR screening.

4.   Benefits to Authorities

4.1   From a Government Authority perspective, interactive API brings real benefits

- Earlier provision of data, giving more time for vetting
- Data provision spread over time so fewer spikes of activity when flights depart
- Prevention of entry into an airport secure area and boarding for undesirable passengers
- Certainty about who is arriving on which flights, achieved through reconciliation messages

5.   Benefits to Aviation Security

5.1   The Simplifying Passenger Travel (SPT) Program has developed a concept for passenger travel from reservation to destination called the Ideal Process Flow (IPF), based on international standards. The IPF demonstrates the passengers experience at various touch points during air travel with airlines, airports and governments, and how these steps can be enhanced or improved through the use of new technologies and concepts.

5.2   One key area that IPF mandates as crucial to success of a secure and facilitated air travel experience is the collection of passenger data well in advance of the actual trip.

5.3   The IPF recommends that a passenger provide API data at time of reservation. This data will then be transmitted to governments (origin, transit and destination) for review purposes and to flag any travelers that maybe of interest.

5.4   This information is re-transmitted on the day of travel by the passenger in an interactive format (iAPI) whereby governments are able to re-validate a passenger's eligibility to:

1) leave country A
2) transit through country B
3) arrive at country C; and provide real-time response to allow the passenger to board or not board the flight to a given destination.

5.5   At departure, passenger data and iAPI can enable risk-based screening of departing passengers based on the level of threat (or lack of it) that a passenger poses. Passenger baggage can also be screened based on passenger data received.

5.6   At transit and arrivals, advance passenger data would enable immigration and customs officials to be better prepared to intercept passengers that could be of interest to them based on personal activities and/or the goods they are carrying.

5.7   In today's dynamic air travel environment, risk-based approach to passenger screening is fundamental. A key element of success is early receipt of passenger data, so that governments may conduct screening and vetting as required by that state; and have the ability to permit a passenger to travel or not. This will provide immense security benefits to any given country by pushing the borders way beyond their own.

5.8   Legacy (batch transmissions at departure) API does not provide any direct aviation security benefits to airlines. Instead, governments receive benefits to enhanced border clearance processing due to additional time to vet names against watch lists.   As data is normally transmitted after passengers gain access to the aircraft – and in many cases – after the aircraft has departed, there is no chance for governments to identify and advise carriers of a perceived threat. On the other hand, interactive, passenger-by-passenger API would allow governments to vet information at time of check-in and, in case of identified known or suspected risk, prevent such individuals from gaining access to aircraft or sterile airport areas. That ability leads to directly enhancing aviation security.

6.   Recommendations

The Passenger/Cabin Baggage Task Force is invited to:

a)   note the information and guidance on Interactive Advance Passenger Information (iAPI) implementation **(Appendix 1)**

b)   note the benefits of Interactive Advance Passenger Information (iAPI) implementation rather than batch API

c)   note the importance that implementation of API process is in line with globally accepted standards (WCO/ICAO/IATA Guidelines on API)

d)   note the potential benefits of iAPI to aviation security and passenger screening especially regarding the concepts proposed by the Simplifying Passenger Travel Interest Group (SPTIG)

For a copy of the WCO/ICAO/IATA Guidelines on Advance Passenger Information (API) – March 2003, please contact Mr. Yannick Lachapelle, Manager, Security & Facilitation, Latin America and the Caribbean (lachapelly@iata.org)

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APPENDIX

The IATA/Control Authorities Working Group (IATA/CAWG) Interactive Advance Passenger Information (iAPI) Statement of Principles – 17 May 2007

This Statement of Principles for Interactive Advance Passenger Information (iAPI) Systems was endorsed by the IATA/CAWG at its 37th meeting in Chicago on 20-21 April 2005 and should be read in conjunction with the IATA/CAWG Statement of Principles for Advance Passenger Information (API) Systems which was adopted by IATA/CAWG following its 34th meeting in London on 5-6 November 2003.

Guidelines on Advance Passenger Information (API) systems were originally produced in October 1999 with the aim of establishing a framework under which standardised API systems could be developed. However, events since the publication of the 1999 Guidelines, including 11 September 2001, forced some Control Authorities to quickly introduce API systems not completely in accord with the original guidelines. IATA/CAWG thus determined that the original API Guidelines needed to evolve to meet the growing threat to border security and, as a result, a Statement of Principles for API systems was developed and formally adopted by the 34th IATA/CAWG in November 2003.

During this process it was also recognised that some Control Authorities were adopting 'Interactive API' systems as an additional means of improving border security and providing clear and measurable facilitation benefits to the travelling public. As a result, it was agreed during plenary discussion at the 34th IATA/CAWG that there was also a need for an 'Interactive API' Workgroup to develop a separate Statement of Principles in respect of Interactive API systems. This paper seeks to deliver that objective.

These principles provide a general framework for the development of Interactive API systems. The development of individual systems will involve close interaction between implementing Control Authorities, carriers and service providers. The question of the allocation of costs, the implications and meanings of boarding messages, and the relationship between Interactive API systems and any relevant or applicable legislation, have to be taken into account.

A standardised Interactive API system should include the following Key Elements:

(a)   An Interactive API system should be user-friendly and seamless and facilitate the travel of bona fide passengers via data analysis carried out by the receiving Control Authority in advance of the passenger approaching the primary inspection point at the port of entry.

(b)   Provision of required Interactive API data by carriers to Control Authorities, should be limited to the data contained in the machine-readable zone of travel documents (see ICAO Document 9303 Part 1) and the Common Interactive API Flight Information (as listed in Annex A of this document).

(c)   An Interactive API system should take into account the interests of stakeholders. Stakeholders should be consulted before development and implementation of an Interactive API system.

(d)   Requests for Interactive API data and responses back to carriers should originate from only one representative agency of the requesting Control Authority.

(e)   Stakeholders should work together to respect the data requirements of different Control Authorities and, to the extent possible, should minimise the impact upon carriers of providing different data to different Control Authorities on individual flights.

(f)   A primary function of an Interactive API system is to provide a message response to the carrier. To facilitate this, Control Authorities should work with carriers to develop Interactive API systems that are integrated into carriers' departure control interfaces.

(g)   Interactive API systems should provide carrier check-in staff with real-time, unambiguous "OK to Board/Not OK to Board" type messages, thereby minimising the impact upon carriers of complying with different requirements across different states. Message response times should, as far as possible, fit within existing business processes. The meaning and implications of this message for carriers in regard to the carriers' liability will depend on the arrangements entered into by Control Authorities and carriers.

(h)   Interactive API systems should be capable of round-the-clock operation and Control Authorities should supplement these systems by providing carrier staff with 24/7 call centres, systems and technical support. Carrier staff should receive appropriate training on procedures to be followed when the various messages (e.g. 'OK to Board', 'Not OK to Board' etc) are received for each passenger. Transparent business continuity plans should also be in place.

(i)   Interactive API systems should seek to minimise the impact on existing carrier system and technical infrastructure.

Benefits of a standardised Interactive API system

- Interactive API provides enhanced border security and improved border control capabilities and has the capacity to stop people of concern boarding a plane.
- Implementing Control Authorities also have the opportunity to optimise data accuracy through Interactive API.
- Interactive API facilitates passenger clearance and may provide a measurable improvement in passenger processing time on arrival.
- The ability to check passengers' authority to travel prior to boarding has the potential to decrease carrier infringement penalties and should reduce 'turnaround' costs.
- Control Authorities and carriers who choose to implement Interactive API have the opportunity to minimise costs through cooperation.

Other issues:

- Interactive API systems may be less than 100% accessible in all locations.
- Stakeholder systems may require further developments to accommodate transit or through check passengers.
- The effectiveness of Interactive API systems is greatly enhanced where Control Authorities can access pre-processed data (such as passport and visa data) held in their own databases, at the time the passenger checks in. Such provisions allow for the minimum necessary data to be transmitted by carriers.
- Control Authorities acknowledge that certain travellers may be dual or multinationals, and will therefore use the passport that provides the traveller with the greatest convenience on a particular sector. Control Authorities also acknowledge that this means that inbound and outbound API data may differ according to the passport legitimately presented for travel to and from a state.

ANNEX A – DEFINITIONS

Advance Passenger Information System (APIS)
A unilateral system whereby required data elements are collected and transmitted to Control Authorities prior to flight arrival and made available on the primary line at the port of entry.

Interactive API
This type of system – also known as "Advance Passenger Processing"[1], "Board/No Board" "Red Light/Green Light System" and "Authority to Carry" – is a system whereby required data elements are collected and transmitted by carriers to border control agencies at the time of check-in. A response message for each passenger and/or crewmember (eg "OK to Board" or "Not OK to Board") is, within existing business processing time, transmitted back to the carrier.

Location of Data Elements
Departure Control System (DCS)
Passenger Name Record (PNR)
Machine Readable Zone (MRZ)
Government Database such as Passport and Visa

Machine Readable Interactive API Data Elements (as per ICAO Document 9303)
Document Type
Document Number
Nationality
Country of Issuance
Date of Document Expiration
Family Name
Given Name
Gender
Date of Birth

Common Interactive API Flight Information
Airline
Flight Number
Departure Date
Arrival Date
Departure Port
Arrival Port
Departure Time
Arrival Time

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[1] ® Proprietary program developed by SITA and CPS.