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Agenda Item 7: The role of the Machine Readable Travel Document (MRTD) Programme, Advance Passenger Information (API) and Passenger Name Record (PNR)

ADVANCE PASSENGER INFORMATION (API) AND ITS ROLE IN AVIATION SECURITY

(Presented by the Secretariat)

SUMMARY

Advance Passenger Information (API) involves the capture of a passenger's biographic data and flight details by the carrier during the check-in process. This information is electronically transmitted to the border control agencies at the destination after the flight departs. These agencies can then screen details of passengers against their database(s), identifying those travellers requiring more detailed examination upon arrival. It also enables the efficient and expedited clearance of low-risk persons. For aviation security purposes, however, API normally permits identification of potentially high-risk travellers only after a flight has departed. Identification could potentially be greatly enhanced by "Interactive API (iAPI)" programmes that allow destination States to prevent such persons from boarding flights at the place of departure. A lack of uniformity in API/iAPI systems can adversely affect the viability of the air transport industry and reduce the effectiveness of utilizing such data for the purposes it is required. It is essential, therefore, that States worldwide standardize their data requirements and adopt a standard format for the electronic transmission of such data.

Action: The High-level Conference on Aviation Security is invited to endorse the conclusions and recommendations in paragraph 6.

1. INTRODUCTION

1.1 The concept of an Advance Passenger Information (API) system was first developed to meet the needs of the Customs services of certain States, in order to address problems of drug trafficking and threats to national security, as well as to respond to growing international traffic. The use of such systems has increased worldwide in recent years. While various systems might operate along wholly different lines, the ultimate goal is the same – the authorities obtain necessary information concerning inbound passengers ahead of arrival so that much of the vetting process can be completed in advance.

1.2 ICAO's interest in API systems stems from Articles 22 and 23, in particular, and Articles 13 and 37, generally, of the Chicago Convention. Additionally, national programmes of travel

document issuance and security, and the efficacy of data exchange systems in controlling smuggling and illegal migration, can have a significant effect on the strengthening of civil aviation security.

2. API DATA AND ITS TRANSMISSION

2.1 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 such as visas, if any, and other data that may be available in the transporting carrier's Departure Control System (DCS).

2.2 It is this data that is transmitted. A standard electronic message, called the 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.

2.3 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.

2.4 With respect to the message *format* for API data transmissions, the three organizations recommend that the UN/EDIFACT standard should be used to ensure that global interoperability is achieved and to avoid difficulties caused by the use of local national standards. 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.

3. WCO/IATA/ICAO GUIDELINES ON API

3.1 The WCO, IATA and ICAO jointly publish a set of best practice guidelines aimed at assisting States seeking to implement national API programmes. The latest version was released in late 2010 and is available on the ICAO Public Website at:

http://www2.icao.int/en/AVSEC/FAL/Pages/Publications.aspx.

3.2 The guidelines address the technical aspects of API, and the operational costs and benefits, as well as the factors relevant to planning an API system. Most importantly, they contain a PAXLST Message implementation guide, aimed at assisting border control agencies and aircraft operators in understanding the PAXLST message before beginning detailed development and implementation.

4. API: POLICY AND REGULATION

4.1 The success of API in facilitating air transport depends on a common approach by all concerned (airlines and border agencies) to the question of data standards. In effect this means that border agencies worldwide must standardize their data requirements for API, and must adopt a standard format for the electronic transmission of such data. In addition, if one or more agencies within the same Government require passenger data, a single portal/window for the receipt of such data would not only enable both States and air transport operators to make effective use of their resources, but it would also further inter-agency coordination within Governments in the areas of facilitation, border integrity and aviation security.

4.2 Annex 9 — *Facilitation* to the Chicago Convention contains Standards and Recommended Practices (SARPs) requiring such standardization. These SARPs are reproduced in the Appendix to this paper. The key provisions, with regard to international uniformity, are paragraphs 3.47, 3.47.1 and 3.47.2. In summary, these Standards require States to: a) adhere to international recognized standards for the transmission of API; b) require only data elements that are available in machine readable travel documents (MRTDs), and all information is to conform to the PAXLST message structure; and c) ensure that only data elements found in the PAXLST message are included in API requirements, and if additional elements are required, then a special WCO "Data Maintenance Request" process is used.

4.3 International standardization of such data exchange programmes has also been re-iterated in ICAO Assembly Resolutions. Extracts from the 37th Session of the Assembly in 2010 are also provided in the Appendix.

4.4 Finally, on 5 December 2011, ICAO issued State Letter EC6/3-11/76 on the implementation of Standard 3.47 of Annex 9 to remind States to ensure adherence to international recognized standards for API transmission, if such a system is introduced.

5. INTERACTIVE API (I-API) AND AVIATION SECURITY

5.1 From the point-of-view of aviation security, batch API only permits the identification of possible high-risk travellers after a flight has departed, as this is the first opportunity the border control agencies in the State of destination or departure have to examine the details of passengers. As a result, action can only be taken after the flight has landed. In rare instances, a flight may be required to turn back and return to the place of departure, to the detriment of other passengers, and to the operations and economics of the airline concerned.

5.2 Therefore, a more sophisticated form of API — interactive API (iAPI) — addresses the increasing needs of aviation security and immigration, and to combat illegal migration, drug smuggling, and other threats to national security. The distinguishing feature of iAPI is that it provides for passenger-by-passenger online interchange of electronic messaging between the aircraft operator and the border control agency in the State of destination (as opposed to one API message for all passengers on a flight). When a passenger checks-in for a flight, his/her information flows from the airline's departure control system to the destination's border control authorities. They, in turn, send a *real time* electronic message response to the carrier, allowing or disallowing the passenger to board the flight in question. This type of system is known, for example, as a "Board/No Board" or "Red Light/Green Light" system or "Authority to Carry." This allows aviation security to be substantially enhanced as destination States can proactively prevent potentially high-risk passengers from boarding flights at the place of departure. API can also be

implemented such that authorities in the State of departure also provide real-time approval or disapproval for a passenger. However, only one State, to date, has such a plan in place.

5.3 Finally, iAPI also serves as an enhanced facilitative process, as the use of an iAPI system reduces the exposure of airlines to penalties associated with transporting inadmissible passengers, in addition to permitting efficient border clearance at the destination.

5.4 The WCO, IATA and ICAO have already jointly agreed to and endorsed guidance on iAPI. The PAXLST message has also been amended to incorporate standard specifications for the implementation of iAPI, as required, with an additional message ("CUSRES") becoming the standard response from governments. New SARPs in Annex 9 would aim at ensuring global uniformity in the use of iAPI by States, similar to the existing provisions in the Annex (paragraph 4 above, refers).

5.5 Finally, it is important to note that the aforementioned WCO/IATA/ICAO guidelines on iAPI only apply to Government-developed iAPI systems and not to proprietary interactive API systems used by some States.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 The HLCAS is invited to conclude that:

a) international uniformity in the use of API and iAPI systems would contribute to the operational and economic viability of the air transport industry;

b) a lack of uniformity in API/iAPI systems can reduce the effectiveness of utilizing such data for the purposes for which it is required; and

c) it is essential that Governments standardize their data requirements and adopt a standard format for the electronic transmission of passenger data.

6.2 The HLCAS is invited to recommend that:

a) States seeking to achieve enhanced aviation security and to prevent illegal migration and the movement of potentially inadmissible persons, consider implementing interactive API (iAPI) systems;

b) ICAO supplement the existing API SARPs of Annex 9 — *Facilitation*, by incorporating additional provisions that are aimed at enhancing global uniformity in passenger data exchanges;

c) States develop a single API or iAPI reporting requirement based on international standards, and a single agency be identified to receive all data and be responsible for internal dissemination to other agencies; and

d) States align the various data exchange systems that currently exist with the international data transmission standards adopted by relevant United Nations agencies, while ensuring the protection of the privacy and civil liberties of passengers.

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APPENDIX

A. EXTRACTS from Annex 9 — *Facilitation* (13th Edition, 2011)

a) Standard 3.47: 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.

Note 1.— API involves the capture of a passengers 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.

Note 2.— 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.

Note 3.— Under its current format structure the UN/EDIFACT PAXLST message will not accommodate general aviation usage.

b) Standard 3.47.1: 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 (series), *Machine Readable Travel Documents.* All information required shall conform to specifications for UN/EDIFACT PAXLST messages found in the WCO/IATA/ICAO API Guidelines.

c) Standard 3.47.2: When seeking to implement a national Advance Passenger Information (API) programme, Contracting States that are unable to comply fully with the provisions contained in 3.47.1 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.

d) Recommended Practice 3.47.3: *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 3.47.1 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.*

e) Recommended Practice 3.47.4: *Contracting States should seek to minimize the number of times API data is transmitted for a specific flight.*

f) Standard 3.47.5: 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.

g) Recommended Practice 3.47.6: *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.*

h) Standard 3.47.7: 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.

B. DECISIONS OF THE 37TH SESSION OF THE ICAO ASSEMBLY (28 SEPTEMBER TO 8 OCTOBER 2010)

A37-17: Consolidated statement on the continuing ICAO policies related to the safeguarding of international civil aviation against acts of unlawful interference

In Appendix C, *Implementation of technical security measures*, the Assembly, at Operative Paragraph 7, called upon Contracting States "to examine information exchange mechanisms including the use of liaison officers and further use of Advance Passenger Information (API) provided by air carriers, to reduce the risk to passengers, while ensuring the protection of privacy and civil liberties."

In the ***Declaration on Aviation Security***, the Assembly recognized the need to strengthen aviation security worldwide and urged Member States to take action to enhance international cooperation to counter threats to civil aviation by, *inter alia*, promoting "the increased use of cooperation mechanisms among Member States and with the civil aviation industry . . . for early detection and dissemination of information on security threats to civil aviation, including through the collection and transmission of advance passenger information (API) . . . as an aid to security, whilst ensuring the protection of passengers' privacy and civil liberties."

A37-20: Consolidated statement of continuing ICAO policies in the air transport field

In Appendix D, Facilitation, at Section III, *National and international action and cooperation on facilitation matters*, the Assembly noted that cooperation amongst Contracting States and with the various national and international parties interested in facilitation matters "has become vital in the light of the proliferation of non-uniform passenger data exchange systems that adversely affect the viability of the air transport industry." Therefore, the Assembly urged Contracting States, in their use of electronic data interchange systems "to ensure that their passenger data requirements conform to international standards adopted by relevant United Nations agencies for this purpose."

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