GUIDELINES

ON

ADVANCE PASSENGER INFORMATION

(API)

WCO/IATA/ICAO

2014

GUIDELINES ON ADVANCE PASSENGER INFORMATION

TABLE OF CONTENTS

Appendices to the API Guidelines are published as separate downloadable files

APPENDIX I: DIAGRAMS ON MACHINE READABLE ZONES OF MACHINE READABLE TRAVEL DOCUMENTS

APPENDIX IIA: WCO/IATA/ICAO PASSENGER LIST MESSAGE (PAXLST) IMPLEMENTATION GUIDE

APPENDIX IIB WCO/IATA/ICAO API RESPONSE MESSAGE (CUSRES) IMPLEMENTATION GUIDE

APPENDIX III: INSTRUMENTS OF THE WCO AND ICAO ON API

*
*   *

INTRODUCTION

1.1.   In recent years there has been a dramatic growth in passenger numbers on scheduled and charter flights in all regions of the world. In spite of recent events there is every indication that this strong growth in passenger traffic will be sustained for the foreseeable future.

1.2.   Customs and other Border Control Agencies (Immigration, Police, Quarantine, Health and Safety, Agriculture, etc.) are therefore being faced with a greatly increased workload. In normal conditions shouldering this increased burden would not pose insurmountable problems. However, two additional factors have combined with the increase in passenger numbers to make the task of the Border Control Agencies very difficult indeed. These factors are the increased compliance risk posed by the growth in, for example, trans-national organized crime and a manpower shortfall within the Border Control Agencies themselves.

1.3.   While the demands on the Border Control Agencies continue to grow and the manpower resources within which they must operate tighten, a number of very valuable opportunities have arisen, which, if taken advantage of, could allow these Agencies to maintain or even enhance their effectiveness. These opportunities are mainly in the following fields:

-     Information Technology,
-     Greater co-operation between Border Control Agencies domestically,
-     Greater international co-operation between Customs and with other Border Control Agencies,
-     Greater co-operation between Border Control Agencies and carriers.

1.4.   Co-operation, particularly in relation to intelligence exchange, is extremely important. As it is recognized that success in the enforcement of Customs and other laws relies more on carefully targeted efforts, based on high quality intelligence, than it does on random or systematic action, Border Control Agencies have been making significant efforts to ensure their resources are directed toward those areas where they are most likely to produce noteworthy results.

1.5.   Having underlined the role of intelligence as a key ingredient in effective enforcement, it is also important to stress the benefits that can be gained from the efficient use of Information Technology (i.e. computerized passenger screening/clearance systems). The deployment of such systems, incorporating passenger selection criteria developed on the basis of high quality intelligence, can and do have a very positive effect on enforcement activities. Information Technology can be further harnessed to ensure that details of arriving passengers are received in advance of the arrival of the flight - thus allowing the Border Control Agencies adequate time to utilize their resources more efficiently. This advance notification to the Border Control Agencies by carriers (or other parties) using electronic data inter-change (EDI), is the topic of this Guideline. Advance Passenger Information (API) is already in use at a number of locations around the world and has brought benefits to all concerned (Border Control Agencies, Passengers, Airport Authorities, Carriers). These benefits are discussed in greater depth in Section 6 of this Guideline.

1.6.   Although much of the content of this Guideline is focused on the discussion of the many issues which surround API, there is one part of the Guideline that is more in the nature of a joint recommendation of the World Customs Organization (WCO), International Air Transport Association (IATA) and the International Civil Aviation Organization (ICAO). That part concerns the data to be transmitted from the carrier in the airport of departure to the Border Control Agency(ies) in the country of departure, in countries where the flight will transit and in the country of final destination. The data requirements shown in that part of the Guideline should be the maximum required by a Border Control Agency in respect of an inbound or outbound flight. Further details may be found in Section 8.

1.7   Ultimately, the goal of this Guideline 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.

1.8.   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.

1.9.   If the Guideline gives rise to any questions on the part of implementers, please do not hesitate to contact either the Secretariat of the WCO, IATA or the ICAO. Although this paper focuses on the use of API for air passengers, it is clear that the technique can also be used for passengers using other modes, particularly cruise liner traffic. The material in this Guideline also applies mutatis mutandis to the other modes of transport.

PROBLEM DEFINITION

Growth in passenger numbers

2.1.   As mentioned in the introduction, there are a number of factors influencing the manner in which passengers are processed by Border Control Agencies at international airports around the world. Perhaps the principal factor is the sheer volume of passengers travelling on international flights. The rate of growth varies in the different regions of the world, between 5% and 7%. In a region with a 5% growth rate, passenger numbers will double in 14 years, while in regions with a 7% growth rate numbers will double in 10 years. In addition, the introduction of new very large aircraft, most notably in airports already operating at or at near capacity, will only further exacerbate congestion and the associated demand on inspection processes during peak arrival and departure times

Expanded airport facilities

2.2   This increase in passenger numbers is having a substantial effect on airport facilities. In order to cater for the growth in traffic, Airport Authorities in many parts of the world are being required to dramatically expand their facilities and supporting infrastructures. New runways and new terminals are being built, and in some cases, complete new airports are being constructed to cope with the growth in numbers. Apart from the enormous expense involved in these projects, there are frequently many environmental problems associated with such large-scale developments.

International terrorism and security

2.3.   The threat posed by international terrorism is also one which must be faced not only by the Border Control Agencies, but also by the carriers and airport operators. Additional security checks/risk assessments on passengers prior to departure have added considerably to the time required for the check-in process. Checks by Border Control Agencies prior to departure have also had to be increased, or, in some cases, reinstated based on changing risk factors. Because of the threat from terrorism, the arrival processing of passengers by the Border Control Agencies has had to be intensified, with additional delays being experienced.

Threats from Serious Crime

2.4.   Over the past decade or more, Border Control Agencies have been faced with a number of threats which, if not entirely new, have certainly been increasing in their intensity. The phenomenal growth in drug trafficking is one that is most in the public eye. Drug smuggling by passengers is a substantial part of the problem. Customs at international airports are a country's first line of defence against this type of activity and their responsibilities have increased as the drug problem has worsened. The increased compliance risk posed by passengers has meant that Border Control Agencies have had to be more vigilant and more intensive in their processing of this traffic. The result has shown an impact on the overall passenger clearance process.

Manpower resources

2.5.   Manpower resources available to Border Control Agencies and carriers, assigned to deal with these additional responsibilities and threats have not been able to keep pace with the demand. In most countries, the recruitment of additional manpower to cope with the increased workload has simply not been an option. Indeed, in some countries the number of public servants and carrier's staff have been declining.

Inter-agency co-operation

2.6.   There are a variety of Border Control Agencies in place at most international airports. These include Customs, Immigration, Police, Quarantine, Health and Safety, Agriculture etc. The level of co-operation between these Border Control Agencies varies from place to place. Different agencies frequently operate their own automated systems for passenger processing without any sharing of

information. The strict division of responsibilities between the agencies means that passenger processing is often unnecessarily prolonged.

Penalties

2.7.   Furthermore, carriers are also responsible for ensuring the passengers they are carrying are properly documented. Heavy financial penalties are frequently imposed on carriers who transport a passenger whose official travel documents are not valid for the country of destination. In addition, the carrier is usually required to repatriate any improperly documented passengers at carrier's expense, and may also incur costs for any period during which the passenger is held in detention.

CURRENT PASSENGER PROCESSING TECHNIQUES

Selective approach to passenger clearance

3.1.   The responses of the Border Control Agencies to the challenges explained in the previous section have been many and varied. In terms of Border Control Agency response, it became clear many years ago that the routine examination of all passengers and their possessions was no longer a suitable way of processing the ever increasing passenger numbers. The emphasis for Border Control Agency has turned from a high percentage of passenger examinations, to a more selective approach based on risk assessment, intelligence, behavioural patterns, etc., as well as randomly applied inspection processes. It is now well recognized that such an approach yields significantly better results, proportionate to the manpower employed, than purely random or intensive examination. So based on purely pragmatic considerations, Border Control Agency has already gone some considerable way towards greater facilitation of passengers.

Red/Green Channels

3.2.   Another element in this change of approach by Customs has been the advent of the Red/Green channel system. This technique of passenger streaming, which is now in use at a large number of airports around the world, is recommended in the Convention on the Simplification and Harmonization of Customs Procedures (as amended) (otherwise known as the revised Kyoto Convention), adopted by the WCO in 1999. Choice of the Red or Green channel is deemed to be the equivalent to making a formal declaration to Customs as to the goods being brought into the country. In spite of the existence of this provision in the Kyoto Convention, it still remains the practice in some countries to require a written Customs Declaration from each individual passenger upon entering the country.

Pre-departure passenger clearance

3.3.   Another approach to passenger facilitation on arrival is the transfer of the Border Control Agencies activities to the airport of departure. Flights arriving from that international point can then be treated as domestic, requiring no further processing. This process (pre-clearance of flights) alleviates some of the pressure at the arrival airport, and can conceivably eliminate the need for staff at small airports with little traffic. Although this approach has had some success, it is not in widespread use and presents some practical, financial and political issues.

Inter-Agency co-operation

3.4.   Although the level of co-operation between the various Border Control Agencies has been variable in a number of countries, there are several examples of co-operative efforts taking place in order to rationalize procedures, save on manpower and other resources, and facilitate passengers. Such co-operation can result in the clearance process for passengers being reduced in complexity to the level where a single Border Control Officer will be able to process the vast majority of arriving passengers. The Officer, representing the various interested agencies, is tasked with conducting a primary inspection of each arriving passenger, and referring those requiring additional examination to the appropriate service. In addition, with increasing inter-agency co-operation, the case for the development of single inter-agency automated systems, serving the needs of two or more agencies becomes more compelling. The advent of the concept of a single Border Control Officer for all initial and simple controls has been a major passenger facilitation improvement, avoiding the complexity of a passenger queuing separately to pass multiple border inspections.

Passenger streaming

3.5.   A number of other initiatives have been undertaken by the Border Control Agencies in order to facilitate arriving passengers. These mainly involve variations on the passenger-streaming concept.

For instance, citizens of the country of arrival may be separated from non-nationals, and streamed through a simplified immigration process. Citizens who travel frequently may be accorded a facilitated service if they agree to comply with certain conditions, and passengers on designated flights may be subject to either intensive or cursory examination depending on flight risk assessments developed by the Border Control Agencies.

Other facilitation initiatives

3.6.   In addition to the use of automated systems, the Border Control Agencies generally, and Customs in particular, have instituted new techniques to help them identify potential or likely offenders. Training for Customs officials who process arriving passengers now routinely includes behavioural analysis.

Electronic Data Interchange (EDI)

3.7.   While the use of all the above procedures and techniques have brought about considerable advances in the passenger clearance process, it is clear that there is always room for improvement - both from the facilitation point of view and from the compliance perspective. The recent upsurge of interest in EDI, and the capabilities it offers for transmission of passenger details to the point of destination well in advance of the passengers' arrival, is seen as a very positive step towards achieving both facilitation and compliance goals.

Advance Passenger Information (API)

3.8.   Advance Passenger Information (API) involves the capture of a passenger's biographic data and other flight details by the carrier prior to departure and the transmission of the details by electronic means to the Border Control Agencies in the destination country. 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 and crew of interest including those subject to United Nations Security Council sanctions lists and travel bans. 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 which carriers can use to comply with relevant legislation of the countries they fly to including legislation implementing travel bans against those on United Nations Security Council sanctions lists.

ORGANIZATIONAL POLICY

4.1. WCO policy

4.1.1.   As an International Organization responsible for Customs matters, the WCO has, as its goals, the simplification/ harmonization of Customs formalities and the promotion of efficient means of Customs control. This covers passenger movements as well as movements of commercial cargo across international boundaries.

4.1.2.   Due to the increased risk, such as trans-national organized crime and international terrorism, Customs have had to enhance their controls on passengers in order to apprehend offenders and to minimize the risk posed on global security.

4.1.3.   The combined effect of the need to enhance controls together with the growth in passenger traffic has placed a severe strain on the resources of Customs and other Border Control Agencies. The result has been delays and increased pressure on airport facilities, many of which were designed to cater to much lower passenger volumes.

4.1.4.   The interest of the WCO in API stems mainly from its responsibility to help its Members target their scarce resources, and at the same time, improve their service to the travelling public. The WCO sees its role as:

(a) Providing its Members with information concerning API programme development, and the benefits it can bring;

(b) Providing a forum in which the constraints on API can be discussed and hopefully resolved; and,

(c) Seeking to jointly agree standards with the Airline industry so that API does not develop and proliferate in an inconsistent or unstructured way.

4.1.5. The WCO sees API as a very useful technique to enhance border integrity[1], while maintaining facilitation for low risk passengers, which benefit Customs and other Border Control Agencies, Carriers, Airport Authorities (and other passenger facility operators) and Passengers themselves. The revised Kyoto Convention took this into account and API is now included in the Specific Annex J1 (Travellers) of the Convention as "Recommended Practice". The technique has already been used with great successes and is likely to expand in the future. The WCO would like to see API develop in an orderly and disciplined manner, and to that end, would like to see standards and jointly agreed principles put in place so as to facilitate the development and spread of API.

4.1.6. Where countries identify the need for additional API elements, and these are agreed in accordance with the WCO's Data Maintenance Request procedures, these Guidelines will be updated accordingly. Additionally, any necessary changes to the UN/EDIFACT passenger list message (PAXLST) structure must be developed concurrently and any amendments shall be submitted by the WCO to the appropriate UN body prior to adoption.

4.2. IATA policy

4.2.1. As the globally recognized representative of more than 240 scheduled carriers that account for approximately 83% of passengers transported by air worldwide, IATA's interest in API essentially focuses on enhancing and streamlining the control processes applied in respect of arriving and departing international passengers as they pass through Customs, Immigration and other border controls.

4.2.2. Like the WCO and ICAO, IATA has constantly sought to eliminate unnecessary forms and procedures in international air transport, and the abolition of the passenger manifest in paper formats has long been an important policy objective for the Association. Additionally, IATA – in cooperation with other interested stakeholders – has continued to look toward globally aligned processes which can assist in mitigating the impact that enhanced security requirements adopted in response to emerging threats can have on passenger processing at the border. As more States seek to automate border control processes, the concept of API and its potential to facilitate efficient border clearance processing remains a primary focus.

4.2.3. Collection of passenger details at the time the passenger checks in for the flight in question, presents a problem of additional workload for carriers at a point in the system where staff and facilities are frequently already stretched to maximum capacity. Consequently, carrier support for API depends heavily on there being truly realizable benefits for aircraft operators and for passengers who are departing the State, or upon arrival at the final destination, or both depending upon regulations in effect.

4.2.4. Furthermore, given the practical constraints and financial ramifications associated with data capture and transmission, IATA strongly supports the concept that required information should be limited to that which can be captured by automated means from an official travel document, and, where required under national legislation, from the transporting carrier's own reservation and/or departure control systems. This passenger-specific information can then be augmented by basic flight details, also retrieved from the carrier's systems by automated means. With this in mind, IATA sees particular benefit in co-operating with the WCO and ICAO to define the data and message sets for API systems under UN/EDIFACT PAXLST message standards that have been internationally

---

[1] Border Integrity is defined in Annex 9 of the Chicago Convention.

agreed and widely adopted by participating countries. IATA, through its Security and Travel Facilitation team and its Passenger Experience activities, is also committed to establishing mutually agreed principles, which can expand the benefits of automating and integrating all elements of the passenger process from origin to destination.

4.2.5.   IATA believes the true value to this Guideline is derived from its focus on a harmonised approach to data collection and transmission to all interested Border Control Agencies via globally interoperable message structures and formats. In today's environment, Public Authorities in the country of origin, in transit countries and at the final destination may individually mandate provision of advance passenger information for a given flight, Failure to adopt a common globally recognised approach will result in unnecessary complexity for systems needed to support multiple data exchange process requirements.

4.2.6   The costs associated with developing and managing multiple applications may be unsustainable for many stakeholders involved in the process. IATA fears that the impact of these unaligned requirements on airport and airline operations is far greater than the benefits to any single party derived from implementing a program outside the confines of this Guideline.

4.2.7   The majority of proprietary systems developed by international airlines providing scheduled service continue to rely upon the use of UN/EDIFACT PAXLST messaging transmitted via existing airline communication networks to comply with API data provision requirements. Other entities, such as Charter Carriers, Air Taxi operators, and Executive Air Carriers operate using a differing business model, and may not have the technical infrastructure in place to support PAXLST message generation.

4.2.8   IATA fully endorses States' adoption of these Guidelines, including the use of the UN/EDIFACT PAXLST message format and transmission via existing airline communication networks, to support a common and globally aligned approach to national API data provision requirements. At the same time, IATA also urges States to recognize that, in addition to UN/EDIFACT PAXLST messaging, alternative methods for transmitting required passenger data will need to be considered as part of any national program implementation.

4.2.9   Ultimately, it is IATA's view that to achieve the greatest possible efficiency, passenger data exchange processes must evolve to the point where a common and globally agreed data set is collected one time from each person for whom it is required, transmitted once to all having the legal authority to request and view that data, and then used in the most efficient way possible based on clearly established risk analysis criteria and consistent with acceptable data privacy norms.

4.3.   ICAO Policy

4.3.1   The International Civil Aviation Organization (ICAO) is an intergovernmental organization established by the Convention on International Civil Aviation (Chicago Convention) in 1944. A specialized agency of the United Nations, ICAO serves as the medium for establishment of standards and recommended practices by its 191 Contracting States, in the fields of safety, security, aviation environment protection and facilitation.

4.3.2   ICAO's interest in API systems stems from the Chicago Convention's mandates for Contracting States to prevent unnecessary delays by facilitating border clearance formalities and to adopt internationally standard Customs and immigration procedures. Moreover, national programmes of travel document issuance and security, and the efficacy of inspection systems in controlling smuggling and illegal migration, can have a significant effect on the security of civil aviation.

4.3.3   Equally, the application of technology and modern management science to control systems, in order to facilitate international traffic flow, is increasingly important in the present climate of intensified security controls. Increased congestion and lengthened processing times caused by the sudden imposition of unfamiliar procedures can be counterproductive to security, as the confusion and disorder that result can be exploited by those seeking to evade inspection.

4.3.4　　In recent years, projects in the facilitation programme have aimed at a strengthened and more efficient system of border controls at airports, addressed at raising the level of general security and at the same time yielding measurable improvements in facilitation for the vast majority of travellers.

4.3.5　　Consequently, the following specific recommendations are proposed for adoption by States, at the least:

(a)　States should consider adoption of API in the context of a total system approach to border management, encompassing the issuance of machine readable passports and visas including electronic visas, migration to automated entry/exit records to replace embarkation/disembarkation cards, and interoperability among the API systems of other participating States.

(b)　Future configurations of API-based border control systems should include the deployment of biometric technology to assist with the identification and identity confirmation of passengers.

API PROGRAM DIFFERENTIATION: BATCH OR INTERACTIVE API

5.1 Advance passenger information systems currently used by governments and those planned for future implementation can be placed in two distinct processes, each having unique features and delivering specific results.

Non-interactive Batch Style API Systems

5.2 Non-interactive batch style API data covering all passengers and, in many cases, all crew members on board a specific flight are gathered during the check-in process and then transmitted in a single manifest message at or immediately following flight reconciliation or departure. Typically non-interactive batch-style API is received by the requesting government well in advance of the flight's arrival, allowing the receiving government to perform adequate checks of all inbound passengers and crew. The primary benefit of this approach is an expedited inspection processes at the primary Immigration booth, for the majority of travellers. Advance information also affords Border Control Authorities the ability to identify legitimate travellers from travellers who may be of interest. As passenger data under a non-interactive batch style API system is normally transmitted at flight reconciliation or after departure of the flight in question, the ability to enhance aviation security is limited.

5.3 Non-interactive batch style API systems traditionally utilize airline based Type-B messaging protocols transmitted via existing airline communication networks. Message construction is based upon the UN/EDIFACT "PAXLST" message format (see Appendix IIA), which has been adopted as the globally interoperable message standard for API messages. Governments' ability to receive and process non-interactive batch style API passenger manifest data is specific to each individual government's system.

Interactive API Systems (i-API)
5.5 An alternative to the batch style approach to API is an interactive API (iAPI) system allowing two way communication, in near real-time, on a passenger-by-passenger or transaction by transaction basis, which is initiated during check-in. Such interactive systems may be developed by or at the direction of a Border Control Agency and may be proprietary. ..

5.6 Upon receipt of the transaction message, the receiving government can perform sufficient checks and return a response to the carrier which may indicate approval to board/do not board or where required, indicate further Border Control Agency checks required for the identified traveller. Timely evaluation and response to interactive API messages is critical to ensure the airline check-in processes are not negatively impacted. In many existing systems today, the goal for submission, evaluation and response to individual transmissions is 4 seconds or less per transaction.

5.7 The iAPI message exchange incorporates the use of both the UN/EDIFACT PAXLST and CUSRES standard messages. For the Message Implementation Guidelines for CUSRES message, please see Appendix IIB. Communication networks utilized do vary. However iAPI systems require a more robust network protocol than the non-interactive batch API message. Governments should establish best practices when working with individual carriers and service providers, to ensure adequate network protocols are available.

5.8 Adoption of an iAPI system can result in greater and more immediate benefits to both governments and carriers:

5.8.1 Persons known or believed to pose an unacceptable level of risk may be identified prior to a flight or even entry in to an airport sterile area, therefore directly enhancing Border -Integrity.

5.8.2 Persons who are known to be inadmissible may be identified prior to travel, thereby reducing the incidence of inadmissible arrivals.

.5.8.3 Carriers can expect to benefit through the identification of persons whom the receiving government may declare to be inadmissible and can be prevented from boarding at the point of departure. These benefits would be associated with cost avoidance for detention and return, in the case of

inadmissibility, avoidance of possible fines for transporting persons with improper documents and avoidance of potential security-related incidents within airport facilities or in aircraft cabins.

5.8.4   Benefits for the passenger could be to prevent an unnecessary trip, loss of time and expenses when a determination of inadmissibility would be made upon arrival.

5.9   iAPI systems are far more complex than non-interactive batch style systems and therefore costs associated with their development; implementation and ongoing operation are significant for both governments and airline operators.   Many airline operators have already established iAPI capabilities to meet current active iAPI systems. Timeframes for implementation of iAPI systems may require a significant amount of time for full implementation.

5.10   API systems need to be supported by best practise business process to realise the benefits to governments and carriers. This should include an identity check by aircraft operators, ensuring that individual travel document data reflects the data collected from the travel document and that the passenger's identity conforms with the passengers current document at the time of embarkation.

COSTS AND BENEFITS OF API

6.1.   In deciding whether to adopt API, potential providers of the passenger data (the carriers) and potential users of the data (the Border Control Agencies), will need to examine and then determine if the benefits which this technique can provide can justify the costs involved both from a start-up viewpoint and for on-going operation.

6.2.   The costs, which will be incurred by both carriers and Border Control Agencies, can be measured with some confidence. The benefits which API can bring are less easy to quantify. This section of the Guideline seeks to identify those areas where costs will likely be incurred, so that potential API users are aware of the cost implications of API and can measure these in their own company or administration.

6.3   The Guideline also identifies the potential benefits of API. Some of these benefits are tangible in nature; e.g. staff savings. However other benefits, such as "greater convenience for the travelling public", are more difficult to quantify in purely monetary terms but may be competitively very valuable.

COSTS

6.4.   Border Control Agencies:

6.4.1   Where no single Border Control database currently exists, there will clearly be a significant cost involved in developing a working system. Ideally, establishing a single inter-agency database, for passenger clearance, would be most desirable.   This is not only a more efficient means of processing passenger list data received by API, it is also more economical, since the development cost would be spread over a number of Border Control Agencies which could contribute in accordance with their projected use of the system.

6.4.2.   Where a Border Control database already exists, yet only available to a single agency, there may be a cost incurred if the decision is made to share information with or between multiple agencies. It is technically feasible to have API data feeding one or more Border Control Agency systems independently. However, it seems prudent and cost efficient to adopt a co-ordinated approach to API amongst the Border Control Agencies, having the API data processed by one single system rather than simultaneously by several different systems.

6.4.3.   Apart from the system related costs involving the development of new systems or the merging of existing systems, there will be costs incurred on the system development side associated with the electronic receipt of passenger data. Incoming data will need to be converted to a format that is compatible with and can be processed by the receiving system. There will be a cost involved in enhancing existing systems to perform this function. The system may also need to produce certain additional outputs associated with the processing of API passengers; e.g. lists of passengers for closer investigation, statistical reports, performance evaluations, etc.

6.4.4.   Depending on decisions made by Border Control Agencies, there will be some costs incurred when connecting their system to one or more selected data networks used to receive passenger data electronically.

6.4.5.   In some instances, the Border Control Agencies in the country of arrival have provided Machine Readable Passport readers to the carriers in the airport of departure. Where this is done, there will clearly be a cost involved that can be quite substantial.

6.4.6.   As with all systems, costs will be incurred in respect of on-going maintenance and upgrading.

6.5   Carriers:

6.5.1   The principal costs for carriers are associated with system development/integration and capture of passenger details for transmission to the origin and/or destination country of a flight. Costs may be

incurred in other areas as well; e.g. additional check-in staff to cope with the extended period of time required to complete check-in formalities, additional check-in desks, hardware acquisition, etc. Various techniques can be used to offset these costs to some degree; e.g. agreements with governments, as is the case in Australia, machine-readable passports, "up-stream" capture of passenger data at the time of booking, etc. These issues are examined further in Section 8.2.

6.5.2   The adaptation of carriers' automated reservation systems and/or departure control systems (DCS) to collect, convert, and transmit API data, and to respond to expanding data requirements will also give rise to significant cost.

.
6.5.3   On-going maintenance costs may also be incurred in respect of the above-mentioned systems.

6.5.4.   Finally, there will be the recurring cost of data transmission in respect of the passenger data for each API flight.

6.6   Airport Authorities:

6.6.1   Depending on the current layout of the arrival and passenger processing area, there may be a requirement to re-structure this area to cater for API passengers; i.e. a special stream for API passengers with designated baggage carousels, etc.

   BENEFITS

6.7   Passengers:

6.7.1   One of the main benefits of API, and one of the principal reasons for undertaking the advance transmission of passenger data, is the potential benefit to the travelling public. The time saved by the legitimate (non-targeted) passenger while undergoing normal arrival formalities will, of course, vary from airport to airport. However total clearance times should be significantly reduced, and in normal circumstances, should not exceed the ICAO goal of 45 minutes.

6.8   Carriers:

6.8.1   The additional passenger data captured at the time of check-in primarily through automated scanning of the passenger's official travel document could, in some instances, enhance carrier security and help to ensure that all passengers carry valid official travel documents required for admission to the destination country. This has the potential of reducing carrier exposure to penalties for transporting passengers that are not properly documented.

6.8.2   Where States have implemented interactive API programmes, and are able to provide "Board / Do Not Board" responses at time of check-in, carriers may be more readily able to avoid costs associated with the detention and/or removal of persons who might otherwise be determined, based on specific factors available to the Border Control Agencies, to be inadmissible upon arrival at the final destination.

6.9   Border Control Agencies:

 6.9.1.   One of the major benefits of API for the Border Control Agencies is the enhanced enforcement capability realised through advance notification of the arrival and departure of potential or known offenders or inadmissible persons. API permits a thorough and rigorous screening of inbound and outbound passengers to be accomplished, identifying those passengers that present the highest risk, and allowing for the faster throughput of low risk passengers.

6.9.2   The use of automated alert lists is particularly effective in taking preventive measures in case of travel by individuals against whom there are legally sanctioned UN travel restrictions or prohibitions. Border Control Authorities and Carriers may use publicly available lists of individuals who are subject to travel bans

6.9.3   Since passenger data will be provided in an electronic, readily processed format, there should be a data capture saving, as the Border Control official will not be required to perform a normal data entry operation when the passenger arrives at the entry or departure point.

6.9.4   API provides for more effective allocation of border control and law enforcement resources. In addition, the increased automation of passenger processing can result in reduced staff costs.

6.9.5   API has the potential to be a catalyst for greater interagency co-operation at both the national and international level.

6.10   Airport Authorities:

6.10.1.   API also assists the growth in passenger traffic being accommodated through improved use of technology rather than additional infrastructure.

6.10.2   Consequently, there should be a reduced need to expand or upgrade current facilities in response to increased traffic, provided data capture can, for the most part, be accomplished through automated means

6.10.3   Greater passenger satisfaction with facilities, fewer complaints, etc.

6.10.4   Better public image nationally/internationally, good for tourism etc.

NATIONAL PASSENGER PROCESSING STRATEGY

7.1   In most countries, the responsibility for the implementation of national law regarding persons and goods entering or leaving a country rests with a number of different agencies. These agencies; include Customs, Immigration, Police, Quarantine, Health and Safety, Agriculture, Food and Drug and various combinations of these. Although Customs, Immigration and/or national Border Police are usually in the front line in respect of processing an arriving passenger into the country, representatives of the other agencies are sometimes present and may be available on a referral basis. In other cases, the functions of some of the other agencies may, in fact, be carried out by Customs.

7.2   Regardless of the arrangements that are in place, it is clear that there must be a high degree of co-ordination among all Border Control Agencies involved in passenger clearance in order to eliminate unnecessary process duplication and delays to the travelling public. The degree of co-ordination that already exists varies from country to country, and there are some excellent examples of inter-agency co-operation which result in a speedy service to passengers and savings for the taxpayer.

7.3   Inter-agency co-ordination and co-operation are sometimes difficult to achieve in the airport environment. Attempts to streamline the process may not be welcomed by agencies whose vested interests may not be served by a rationalization of current procedures. It will be necessary however, if there is to be progress in this area, to ensure that all agencies work together to bring about the type of passenger processing system which both serves the passenger and ensures compliance with national and international law.

7.4   One approach to successful co-operation among all the Border Control Agencies may be realized through the development of a plan that outlines a joint passenger processing strategy. This plan should be the blueprint for future activities and initiatives aimed at facilitating passengers and ensuring a higher degree of compliance.

7.5   Some considerable thought and effort should be devoted to the development of this plan and it should have the support of the senior management of all the agencies concerned during its development and implementation.

7.6   The following is a checklist of topics which should be covered in this plan :

7.6.1   A description of the current passenger processing environment must be agreed. This should contain a narrative and diagrammatic description of the current flow of passengers through the airport. It should identify any areas of difficulty and any actual or potential bottlenecks. Current times taken for passenger processing (Minimum, maximum and average) should be indicated.

7.6.2   The plan should describe the demands being placed on the Border Control Agencies and on carriers as well. These demands include the legislation that must currently be administered or observed and any future changes anticipated in such legislation. The demands should also include trends in the growth of such things as drug smuggling or illegal immigration and other similar threats. The plan should give statistics on passenger numbers - including peaks and troughs - and projections for future growth/decline in these numbers.

7.6.3   The constraints under which the Border Control Agencies and carriers operate should be fully identified. Constraints can exist in the areas of physical airport and/or systems infrastructure, manpower and/or material resources. Such limitations can often have an adverse effect on passenger clearance times.

7.6.4   Numerous opportunities exist which can help the Border Control Agencies to carry out their obligations in a more effective and efficient manner. The possibilities afforded by advanced information exchange capabilities can be used to help identify suspect passengers by checking passport details against data stored on enforcement databases. This has proven to be a major benefit to Border Control Agencies. A variety of technical aids are now available which can also prove to be very effective tools for these agencies. Improved training methods offer the possibility of

enhancing the performance of existing staff. All of these should be considered and included in the plan.

7.6.5   Having described the overall situation, the plan should go on to analyze current practices. Are the Border Control Agencies properly fulfilling their obligations insofar as the application of the law is concerned? If not, what are the factors which prevent or inhibit the Border Control Agencies? Are passengers being facilitated to the greatest extent possible? If not, why is this so? The analysis should thoroughly explore all measures of performance, identify any shortcomings and pinpoint any deficiencies. This part of the plan should be an impartial assessment of the actual level of service provided by the Agencies concerned.

7.6.6   The plan should then seek to establish certain targets in respect of their activities. Obviously it is very difficult to set enforcement targets which specify numbers unauthorized travellers apprehended or number of seizures or quantities of illegal products/substances seized. Increases or decreases in seizures do not necessarily reflect success or failure of the enforcement effort.   Increases in seizures could be an indication of increased illegal traffic and not a higher real success rate while decreases in seizures could simply mean a reduction in traffic and not a lower real success rate. One area where it is possible to set targets is in the time taken for passenger processing. ICAO has set a target of 45 minutes from disembarkation to final clearance. The plan should aim to at least conform to this recommendation, or if possible, to better it. Obviously, not all of the time spent between disembarkation and final clearance is attributable to the Border Control Agencies. Inefficient baggage handling systems can be the cause of considerable delay. There can also be substantial delays prior to disembarkation due to such factors as unavailability of jet-ways and ground transport. All of these factors should be considered when setting targets. It is prudent to set relatively ambitious targets. When some experience has been gained with the new procedures then the targets can be revised if appropriate.

7.7   Having described the current position, analyzed the existing practices, identified problems and opportunities and then set realistic targets, the plan should then outline the means necessary to attain those goals. This part of the plan should address the following areas:

7.7.1   Re-organization of passenger processing procedures. Where the analysis of current practices has identified delays in the process which could be rectified by a change of procedures, such changes should be described.

7.7.2.   The introduction of API requires close collaboration amongst all the Border Control Agencies, including sharing of responsibilities and information.   A description of how a joint passenger clearance process would operate should be agreed and implemented.   The role and responsibility of each agency should be clearly identified.

7.7.3   Co-operation with carriers is clearly a key to API's success. In preparing and implementing the plan, the Border Control Agencies will need to have close contact with the carriers. The plan should describe the part to be played by the carriers in the   clearance processes that would be implemented.

7.7.4   The Airport Authorities also have a critical role. There is a clear need to involve these authorities in all planning for revision of the passenger processing procedures, particularly with respect to physical infrastructure modifications that might be necessary.

7.7.5   The opportunities afforded by international co-operation with Border Control Agencies in other countries should be explored. Advance Passenger Information can originate from these agencies as well as from carriers. In addition, supplementary information to the basic passport details which are foreseen to be transmitted by API may also be provided by overseas counterparts. The mechanism for obtaining this information will need to be examined in the plan.

7.7.6   Finally, there should be a detailed description of the use of Information and Communication Technology in the processing of passengers. Here, it will be necessary to explore such matters as automated systems for passenger screening (e.g. computerized alert lists/suspect databases). The potential joint use of such systems is another area to be explored.

API DATA CAPTURE AND TRANSMISSION

8.1   Data to be captured and transmitted

8.1.1   For API to function successfully and on a widespread basis, it is essential that there be a limitation and a very high-degree of uniformity in relation to the data required by the Border Control Agencies which will receive and process that data. From the perspective of the Border Control Agencies, the limitation and harmonization of this data may be somewhat restrictive to their operations. However it is clear that for carriers to capture and transmit passenger data on a large scale to a large number of Border Control Agencies, this limitation and harmonization is essential.

8.1.2   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 the carriers to the Border Control Agencies. It is important to note that countries should limit their data requirements to the minimum necessary and according to national legislation. This data can be divided into two distinct categories:

(8.1.4) Data relating to the Flight (Header Data)

(8.1.5) Data relating to each individual passenger (Item Data).

(a)   Core Data Elements as may be found in the Machine Readable Zone of the Official Travel Document

(b)   Additional data as available in Airline systems.

(c)   Additional data not normally found in Airline systems and which must be collected by, or on behalf of the Airline.

8.1.3   Details of the individual data items for each of these two categories are given below. It should be noted that the Flight data should already be available to carriers from their own automated systems. The passenger data corresponds to those items of data that currently appear on machine-readable passports, other official travel documents or those which may be available in the transporting carrier's reservation system. From the point of view of promoting the use of API, extending the required data element set beyond that limit would hinder carriers' operation and could potentially impact airport throughput and passenger capacity. The WCO, IATA and ICAO recommend to their members that the API data must not exceed that given in this guideline.

8.1.4   Data relating to the flight (Header data):

Flight Identification

(IATA Airline code and flight number[2])

Scheduled Departure Date

(Date of scheduled departure of aircraft (based on local time of departure location)

Scheduled Departure Time

(Time of scheduled departure of aircraft (based on local time of departure location)

Scheduled Arrival Date

(Date of scheduled arrival of aircraft (based on local time of arrival location)

Scheduled Arrival Time

---

[2] Where the aircraft operation is not represented by an IATA airline code (such as a private aircraft movement), then information to be provided for this element will be determined by the implementing authority.

(Time of scheduled arrival of aircraft (based on local time of arrival location)

Last Place/Port of Call of Aircraft

(Aircraft departed from this last foreign place/port of call to go to "place/port of aircraft initial arrival")

Place/Port of Aircraft Initial Arrival

(Place/port in the country of destination where the aircraft arrives from the "last place/port of call of aircraft")

Subsequent Place/Port of Call within the country

(Subsequent place/port of call within the country)

Number of Passengers

(Total number of passengers on the flight)

8.1.5 Data relating to each individual passenger:

Data relating to a passenger based on the following list of elements will not be available from a single source, and may instead require collection from several sources as detailed below:

(a) Core Data Elements as may be found in the Machine Readable Zone of the Official Travel Document

- **Official Travel Document Number**

(Passport or other official travel document number)

- **Issuing State or Organization of the Official Travel Document**

(Name of the State or Organization responsible for the issuance of the official travel document)

- **Official Travel Document Type**

(Indicator to identify type of official travel document)

- **Expiration Date of Official Travel Document**

(Expiration date of the official travel document)

- **Surname/Given Name(s)**

(Family name and given name(s) of the holder as it appears on the official travel document.)

- **Nationality**

(Nationality of the holder)

- **Date of Birth**

(Date of birth of the holder)

- **Gender**

(Gender of the holder)

(b) Additional Data elements normally found in Airline systems

- **Seating Information**

  (Specific seat assigned to the passenger for this flight)

- **Baggage Information**

  (Number of checked bags, and where required, the baggage tag numbers associated with each)

-
- **Traveller's Status**

(Passenger, Crew, In-transit)

- **Place/Port of Original Embarkation**

  (Place/port where traveller originates foreign travel, refer to 8.1.6)

- **Place/Port of Clearance**

(Place/port where the traveller is cleared by the Border Control Agencies)

- **Place/Port of Onward Foreign Destination**

  (Foreign place/port where traveller is transiting to, refer to 8.1.7)

- **Passenger Name Record Locator Number (or unique identifier)**

- (As available in the traveller's Passenger Name Record in the carrier's airline reservation system)

(c) Additional data not normally found in Airline systems and which must be collected by, or on behalf of the Airline

- **Visa Number**

(Number of the Visa issued)

- **Issue Date of the Visa**

(Date of the Visa issuance)

- **Place of Issuance of the Visa**

(Name of the place where the Visa was issued)

- **Other Document Number Used for Travel**

(The other document number used for travel when the official travel document is not required)

- **Type of Other Document used for Travel**

(Indicator to identify type of document used for travel)

- **Primary Residence**

- **Country of Primary Residence**

(Country where the traveller resides for the most of the year)

- **Address**

(Location identification such as street name and number.)

- **City**

(City)

- **State/Province/County**

(Name of the State, Province, County, as appropriate)

- **Postal code**

(Postal code)

- **Destination Address**

  - **Address**

  (Location identification such as street name and number.)

  - **City**

  (City)

  - **State/Province/County**

  (Name of the State, Province, County, as appropriate)

  - **Postal code**

  (Postal code)

- **Place of Birth**

(Place of birth such as city and country)

8.1.6.   It should be noted that API transmissions will contain data for passengers carried into a country (initial place/port of arrival) from the last place/port of call of that aircraft abroad. API transmissions may provide information of passengers' originating foreign port of embarkation based on the information contained in the transporting carrier's passenger reservation or departure control system. Where countries identify the need for additional API elements, please refer to paragraph 4.1.6.

8.1.7   The onward foreign destination port may be required for those passengers not intending to enter the territory of the country of transit.

8.1.8   Some countries may prefer to receive identifying passenger data elements from a machine-readable visa they have issued. In these situations that information should be collected in addition to the passport information. Countries seeking to obtain additional information for specific passengers may utilize internal linkage of government systems that is based upon data provided by the carrier.

8.1.9.   Complete specifications of the data items mentioned in 8.1.5 (a) are contained in ICAO Doc 9303, Machine Readable Travel Documents. Parts 1, 2 and 3 of Doc 9303 set forth specifications for

machine-readable passports, visas and official travel documents, respectively. Diagrams of the machine-readable zones of such documents are found in Appendix I to this Guideline.

8.1.10   It is recommended that standard message formats (such as UN/EDIFACT PAXLST and CUSRES) be used to avoid difficulties and significant additional costs that would be caused by the introduction and use of local national standards.

8.1.11   The UN/EDIFACT PAXLST message has been adopted specifically to handle airline passenger manifest transmissions to governments. Additionally, UN/EDIFACT CUSRES message has been adopted to facilitate governments' response. Implementation guides for both messages are included as Appendices to this Guideline. These Appendices will be amended regularly to reflect latest developments. Administrations and airlines should contact the WCO, IATA or ICAO to ensure they obtain the most up-to-date version of the API Guidelines.

8.2   Data capture methods:

8.2.1   Perhaps the most critical aspect of API is the means by which the data to be transmitted to the Border Control Agencies is captured. Manual data capture can be costly, time consuming, labour intensive and error prone. The capture of data concerning passengers at the airport of departure introduces a delay in the check in process that could, if not managed properly, offset the potential advantage to passengers provided by efficient API applications. If the check-in process in unduly prolonged, API will simply shift much of the delays and congestion, away from the arrival area, to the departure area.

8.2.2   Machine Readable Travel Documents

Machine Readable Travel Documents (MRTD) and Document Readers are an important component in API. The use of this technology for data capture at the airport can greatly reduce delays. It is estimated that manual keying of API data from an official travel document takes approximately 45 seconds per passenger. On a flight of 200 people, the total additional time for check-in formalities is estimated to be 150 minutes. Assuming that there are 5 check-in counters dedicated to that flight, it would take approximately 30 minutes longer overall to check-in all passengers. This means passengers reporting at the airport 30 minutes earlier than normal or the flight being delayed by 30 minutes.

8.2.3   In addition to the normal flight data provided in paragraph 8.1.4, it is essential that States limit their API programme requirements to those elements that can be captured by automated means from the MRTD. Additional data elements not contained in the Machine Readable Zone should normally be limited to data which the issuing authority has included in the MRTD's visible zone. Except where specified by the national legislation, States should normally avoid data elements that require airline personnel to question travellers and record their verbal responses.

8.2.4   Using an MRTD and document reader, integrated with the airport check-in process, minimizes disruption and the time required for data capture. Capture of data elements in Machine Readable Form is both quick and avoids manual input errors. The MRTD specifications have been adopted by ICAO and endorsed by the International Organization for Standardization (ISO) as ISO Standards 7501-1, 7501-2 and 7501-3. Travel Documents which do not conform to the ICAO specifications cannot be read by the document reading devices which are programmed to read MRTDs. (Note: Additional consideration will be required to ensure data collection and its accuracy when check-in is accomplished outside of the airport facility itself e.g. web check-in and tele-check-in.)

8.2.5   "Up-stream" data capture

Another mechanism which might be useful in reducing time spent on data capture at check-in and thus further facilitate the passengers would be to consider what use might be made of data captured when the reservation is made. Such data is still speculative and must be manually verified or even re-captured at check-in to prevent manipulation and avoid substitution and/or input error.

8.2.6   However, it should be noted that most countries requiring API hold the carrier transporting an individual to their territory responsible for the accuracy of API data transmitted, and may impose significant financial penalties for inaccuracies or omissions. Accordingly, many carriers are unable to make use of data captured at time of reservation or that which is captured by another carrier at point of origin.

8.3   Data transmission:

8.3.1   Since API uses Electronic Data Interchange (EDI) techniques, there will clearly be a need for participating carriers and Border Control Agencies to have their automated systems connected to one or more data transmission networks so that passenger details can be transmitted and received electronically. While alternative transmission methods (such as web-based applications) are being developed, many airlines are currently unable to support this mode of transmission.

8.3.2.   API data can be sent or received utilizing a number of organizations capable of providing reliable and secure data transmission services. The choice of data network will ultimately be determined by cost and other considerations, such as existing business relationships with a data network provider.

8.3.3   Border Control Agencies should consider establishing systems, as secondary alternatives that are capable of receiving secure API data transmissions, as a means of reducing data transmission costs for carriers that do not operate with traditional reservation and/or departure control systems.

LEGAL ASPECTS OF API[3]

9.1   Generally speaking, API provides Border Control Agencies with data they could otherwise access upon the passenger's arrival and presentation at an immigration inspection desk. API data simply provides data at an earlier time and through different means with the aim of expediting the passengers' clearance.

9.2   However, airlines may collect, store and transmit passengers' API information to Border Control Agencies only in accordance with applicable national legislation.

9.3   Privacy and data protection legislation has been enacted in many countries in recent years in order to protect the individual's right to privacy and to allow individuals to exercise their rights relating to the use of their personal data. .

9.4   This legislation can vary from country to country. However, there is a large degree of commonality within the provisions of such legislation. Privacy and data protection legislation typically requires that personal data undergoing automated (computer) processing:

   - should be obtained and processed fairly and lawfully;
   - should be stored for legitimate purposes and not used in any way incompatible with those purposes;
   - should be adequate, relevant and not excessive in relation to the purposes for which they are stored;
   - should be accurate and, where necessary, kept up to date;
   - should be preserved in a form which permits identification of the data subjects for no longer than is required for the purposes for which that data is stored.

9.5   Such legislation also incorporates provisions concerning the rights of individuals regarding their personal data. There may also be provisions regarding disclosure of personal data to other parties, and about transmission of such data across national borders and beyond the jurisdiction of the country in which it was collected.

9.6   It is clear from the above the existence of such legislation may well have an impact on a carrier's ability to capture personal details of passengers and to transmit this data to a foreign government. However, it is also clear the nature of API data (basic personal information that appears in an official document) and the use to which it is put, should conform to the national law of most countries. The long-term archiving of passenger manifests on computer media and the use of such data for purposes other than national security or passenger clearance may pose problems in certain countries.

9.7   Because of the differences in the provisions and interpretation of privacy and data protection laws from country to country, carriers required to participate in API should enquire on a case-by-case basis whether the capture, storage and transmission of the passenger details mentioned in this Guideline is in contravention of applicable national law. Where such contravention is determined, the country requiring the API data should, to the best of its abilities, seek to address and resolve those legal concerns.

---

[3]The EU reserves its position with regard to Section 9 on Legal aspects on API, in view of on-going discussions on the transfer of API data to third countries within the framework of the Article 29 Data Protection Working Party (gathering of national data protection authorities at EU level), in order not to jeopardize in any way the outcome of these discussions and a possible follow-up which the Commission may consider.

CONCLUSIONS

10.1   API is a technique that has the capability of bringing substantial advantages to all involved in the movement of passengers. The WCO, IATA and ICAO **fully support the effectiveness of API data exchange processes, where adopted in accordance with these guidelines.**

10.2   The cost-effective and efficient use of API depends on a common agreement by all concerned, Carriers and Border Control Agencies, to adopt and implement harmonized data standards, formats and transmission processes.   To facilitate this objective, Appendices to this paper contain jointly agreed data and messaging standards that are recommended by the WCO, IATA and ICAO.

10.3   Through the efficient use of API data received from carriers and the close co-operation between multiple agencies concerned, API can be the catalyst for increased contact between these agencies and the development of common programmes which can be of benefit from the perspectives of compliance, facilitation and security.   Agreement on a joint national passenger processing strategy, in which API plays a central role, is of critical importance.

_____