



API-PNRGOV FOR SECURING CROSS-BORDER TRAVEL FACILITATION



INDONESIAN CUSTOMS



WHAT IS API-PNR ?



Advance Passenger Information (API)

Passenger Name record (PNR)

Collected from Departure Control System (DCS):

Collected from Airline/Computer Reservation System

1. Name
2. Sex
3. Date of Birth
4. Nationality
5. Passport No.
6. Date of Issuing Passport
7. Place of Issuing Passport
8. Origin
9. Inbound
10. Outbound
11. Booking code
12. Baggage (Amount, claim tag, weight)
13. Seat no
14. Flight no

1. PNR record locator code.
2. Date of reservation/ issue of ticket.
3. Date(s) of intended travel.
4. Name(s).
5. Available frequent flier and benefit information
6. Other names on PNR, including number of travelers on PNR.
7. All available contact information (including originator of reservation).
8. All available payment/billing information
9. Travel itinerary for specific PNR.
10. Travel agency/travel agent.
11. Code share information
12. Split/divided information

13. Travel status of passenger (including confirmations and check-in status).
14. Ticketing information, including ticket number, one way tickets and Automated Ticket Fare Quote (ATFQ) fields.
15. Baggage information.
16. Seat information, including seat number.
17. General remarks including Other Service Indicated (OSI), Special Service Indicated (SSI) and Supplemental Service Request (SSR) information.
18. Any collected APIS information
19. All historical changes to the PNR listed in numbers 1 to 18.



BACKGROUND



TRAVEL FACILITATION VS TRAVEL SECURITY

INTERNATIONAL
CONSENSUS:
APEC, UNWTO, WTTC,
IATA & ICAO

ECONOMIC INTEREST:
BUSINESS, TOURISM, &
CONNECTIVITY

TRAVEL
FACILITATION

EMERGING GROWTH OF
PASSEGER

CUSTOMS & BORDER AGENCIES
RISK MANAGEMENT SYSTEM
PAU (API and PNR)

TRAVEL
SECURITY

LIMITED NUMBER OF
OFFICER & FACILITY

NATIONAL SECURITY & SAFETY:
Trans-National Organized Crime
(TOC) : Terrorist, Drugs, Fire-arms,
Money Laundry, CITES, & Invaluable
Cultural Heritage

Customs Fraud : Duty Evasion & IPR
Immigration fraud : Illegal Migration &
Travel Doc. Fraud

Public Health : Virus and Disease
Quarantine Protection on Plant,
Agriculture and Animal

Travel Facilitation will never walk alone without Travel Security
The only choice is “**SECURING TRAVEL FACILITATION**”



WHAT IS PNRGOV ?



International Civil Aviation Organization (ICAO) together with International Air Transport Association (IATA) & World Customs Organization (WCO) have developed standard message of PNR data exchange from Airline to Government for harmonized and cost effective approach in passenger data reporting and transmission from airlines to government.

PNRGOV

PNR FOR GOVERNMENT

<http://www.iata.org/publications/Pages/api-pnr-toolkit.aspx>

<http://www.icao.int/Security/FAL/Pages/Publications.aspx>





INTERNATIONAL INSTRUMENTS



- **Convention on International Civil Aviation**
 - International Treaty, Conference, Chicago, 1944
 - 191 Member States
 - Annex 9; Standards & Recommended Practices
 - PNR Manual (Document 9944)
- **API/iAPI**
 - Guidelines on Advance Passenger Information
 - WCO/IATA/ICAO
- **PNRGOV Standards**
 - PNRGOV: Principles, Business & Functional Requirements
 - PNRGOV: Message Implementation Guidelines
- **Revised Kyoto Convention**
 - Specific Annex J
 - Seeks international co-operation to standardize Advance Passenger Information
- **WCO Recommendation on API and PNR**
- **UN Security Council (UNSC) Resolution 2178, September 2014**
- **G7 Foreign Minister Meeting Communique, April 15, 2015**

STANDARD & GUIDELINES

ICAO Annex 9
and Doc. 9944
on API/PNR

IATA
Recommended
Practice 1701a



DEVELOPMENT



- 2008 - Implementation of Advance Passenger Information (API) transmission system via SITA communication network
- 2009 - The new API system, non-interactive batch-style system, according to the API guidelines developed by the WCO, IATA and ICAO
- 2012 - Introducing the need of PNR for Border Management System in national level
- 2013 - Introducing the importance of PNR in APEC Meeting
- 2014 - Starting to build the PNR system based on PNRGov
- 2016 – At fourth quarter, fully implementation of PNRGov



DIFFERENCE IN BUILDING BETWEEN API & PNR SYSTEM



- Data volume – up to 76 data elements for PNR compared to only 14 basic data elements for API;
- Data standardization – the API data standard is almost the same across airlines whereas PNR data differs widely;
- Frequency and timing of data transfer – data is provided only once for API, but five times for PNR;
- Communication to exchange data – most airlines in Indonesia use the SITA Network for API while different global distribution services (GDS) are used for PNR.



MOMENTUM



- Initiative in APEC Sub-Committee on Customs Procedures on 2013 : Support for Standardization of PNR Data among Airlines in the Asia-Pacific Region
- APEC workshop on Passenger and Airline Data Interchange Standards and PNRGOV Message Standards : “Securing Travel Facilitation through PNRGOV” in Bali, Indonesia, in October 2013
- In third quarter of 2016 there will another APEC Workshop on implementation of API-PNRGov initiated by Indonesia, along with the progress that Indonesia has and experience from other countries in implementing PNRGov for risk assesment and travel facilitation.



TRANSMISSION



- PNR Data to be transmitted in PNRGOV Format
- The operating airline is also responsible for the provision of **code share** passengers carried to and from Indonesia
- PNR data elements need to be transmitted a total of five times :

PERIODS	PUSH	RESERVATION DATA	CHECK-IN DATA
1	(-) 72 Hours		
2	(-) 24 Hours		
3	(-) 2 Hours		
4	(-) 1 Hours		
5	At Time of Departure		



PNR data transferred in pushes 2, 3 and 4 may contain only changes to previously transmitted data as agreed between the airline and Customs



NETWORK LAYER PROTOCOL



❑ Internet Protocol Virtual Private Networks (IP VPN)

IP VPN is a collection of technologies that ensure the privacy of data over a shared IP network infrastructure. IP VPN provides secure intranet using a Multi Protocol Label Switching (MPLS);

❑ Internet Protocol Security (IP Sec)

IP Sec is defined as a protocol suite for securing Internet Protocol (IP) communications by authenticating and encrypting each IP packet of a communication session.

❑ Secure Sockets Layer (SSL)





APPLICATION LAYER PROTOCOL



- ❑ **HyperText Transport Protocol Secure (HTTPS)**

Indonesian Custom can provide data upload facilities via http protocol using secure http

- ❑ **Simple Mail Transfer Protocol**

SMTP is the Internet standard email protocol with Message Layer Security implemented.

- ❑ **IBM WebSphere MQ**

- ❑ **Other Protocols**

And any other protocols as bilaterally agreed with airlines.





MESSAGE FORMATS



- ❑ **Electronic Document Interchange (EDI) in S/MIME;**
EDI wrapped in an S/MIME structure to provide signing and/or encryption;

- ❑ **Electronic Document Interchange (EDI) in Web Services;**
A web service is defined as a software system designed to support interoperable machine-to-machine interaction over a network.
Indonesian customs will accept web service calls that are secured using Web Services Security (WSS) WS-Security and Simple Object Access Protocol (SOAP) with attachments (SWA).

- ❑ **Extensible Markup Language (XML);**
Indonesian Customs will implement XML document handling based on mutually agreed XML Schema's





PROGRESS



- **AMADEUS (ready)**
 - Network protocol : IP Sec
 - Application protocol: IBM MQ
 - Message Format : type B message
- **SABRE (ready)**
 - Network protocol : IP Sec
 - Application protocol: IBM MQ
 - Message Format : type B message
- **EDIfly (ready)**
 - Network protocol : internet
 - Application protocol : http with AS2 EDI data protection;
 - Message Format : type B message
- **Travelsky, Navitaire & others (preparation)**

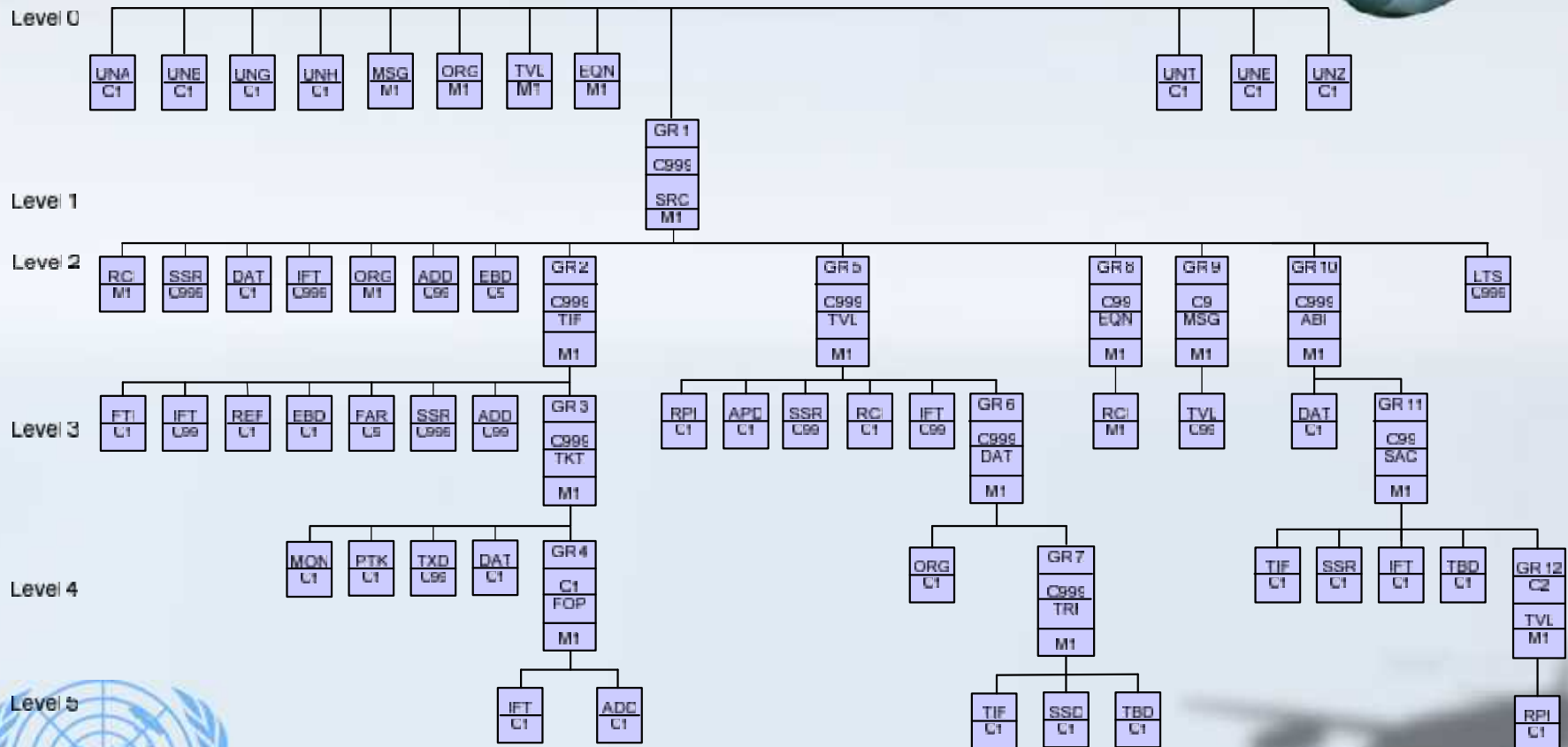




MESSAGE PAYLOAD



PNRGov Message Structure



PNRGOV 11.1 / 12.1 EDIFACT



PRIVACY & SECURITY OF DATA



- Both the airline and Customs commit themselves to safeguarding PNR data that is stored, transferred, processed, used or disclosed
- Customs will handle that PNR data in a manner that complies with National legal and policy requirements for storage, security, privacy, use and official disclosure
- Access to PNR data is restricted to a limited number of Customs Officers
- PNR data will be stored within the Customs Data Centre, which complies with the ISO 27001-Information Security Management Standard





CASE STUDY



Simple Example of Case by API-PNR analysis Soekarno-Hatta Airport, Jakarta 2014

City of departure	Nationality
Given name	Family Name

Passport & Booking Reference Tracking

1. Searching by history of passport

Line	City of departure	Nationality
1

2. Searching by booking reference

Line	City of departure	Nationality
1



Collaboration



- Join operation with relevant partner government agencies
- Join risk analysis with partner government agencies
- Connectivity with Immigration (travel document information)
- Relevant partner government agencies:
 - Police
 - Immigration
 - National Narcotic Agency
 - National anti Corruption Commission
- Indonesia Customs as leading agency establishing API- PNR Programme in Indonesia.



SUCCESS STORY OF USING API-PNR



- Around 60 % of Indonesian Customs seizure of high risk passenger coming from API-PNR analysis, even PNR is still by hard copy and some have been electronically.
- The biggest one in last August 2015, from 6 kgs of Methamphetamine seizure at Soekarno-Hatta Airport, by joint investigation & CD collaboration with the Police have managed to reveal 94 kg of Meth and 112,189 pills of Ecstasy.





SUCCESS KEY



- RAISING AWARENESS OF THE IMPORTANCE OF API-PNR NOT ONLY FOR GOVERNMENT BUT ALSO FOR AIRLINES
- INTRODUCING WCO-IATA-ICAO RECOMMENDED PRACTICE OF API-PNR TO AIRLINES AS THE IMPLEMENTATION STANDARD
- CREATING REGULATION & DATA REQUIREMENT DOCUMENT, AS A GUIDELINE FOR AIRLINES
- CREATING PROTOTYPE OR ROLE MODEL WITH SELECTED AIRLINES AND ITS GLOBAL DISTRIBUTION SERVICE (GDS) TO SET UP NETWORK CONNECTIVITY
- ENCOURAGING OTHER AIRLINES AND GDS TO FOLLOW THE ROLE MODEL
- CREATING APPLICATION SYSTEM FOR ANALYSIS, RISK MANAGEMENT & TARGETING
- CREATING MANAGEMENT AND OPERATIONAL SYSTEM



CONTACT US :

API-PNRGOV Team

Agung.krisdiyanto@customs.go.id

+62818694424

