

FINANCOVÁNO EVROPSKOU UNIÍ FOND PRO VNITŘNÍ BEZPEČNOST









Passenger Information Unit National Counter-Terrorism Contact Point National Organized Crime Agency **Criminal Police and Investigation Service** Police of the Czech Republic

PIU CZ – Guide for airlines

PNR data requirements

General instructions

Working draft – August 2019

TABLE OF CONTENTS

Τa	able o	f Contents	2	
1.	Ke	y points of EU PNR Directive (2016/681)	3	
2.	PN	IR Data Elements	3	
3.	PN	IR Message Formats and versions	5	
4.	Re	quired data exchange model	5	
5.	Da	ta channels for data exchange	6	
	5.1.	Web Application	6	
	5.2.	Inhouse Web Service	6	
	5.3.	ARINC	6	
	5.4.	SITA	6	
	5.5.	Active MQ	7	
5.6. IBM MQ Client Connectivity		IBM MQ Client Connectivity	7	
	5.7.	AS/4 Profile of ebMS	7	
6.	Ai	r Carrier enrollment and connection process	7	
7.	PI	U CZ contact	8	
8.	. Legislation9			

1. KEY POINTS OF EU PNR DIRECTIVE (2016/681)

The European parliament and the Council have set on 27 April 2016 the Directive 2016/681 on the use of passenger name records for the prevention, detection, investigation and prosecution of terrorist offences and serious crime.

Air carriers already collect and process PNR data of passengers for own commercial purposes. According to this Directive air carriers should share PNR data of travellers with law enforcement agencies and the Directive does not impose any obligation on air carriers to collect or retain any additional data from passengers or any obligation on passengers to provide any data in addition to that already being provided to air carriers.

There are two possible methods of PNR data transfer – pull method (the competent authorities of EU Member States access the air carrier's reservation system and extract a copy of required PNR data) and push method (air carriers transfer the required PNR data to the competent authorities of EU Member States). The push method is preferred.

2. PNR DATA ELEMENTS

The PNR data elements contain reservations and check-in data.

- 1. PNR locator code (PNR number, any GDS codes reservation code)
- 2. Date/dates of reservation (booking date, ticketing date/issue of ticket)
- 3. Date/dates of travel (intent to travel date, dates of cancelled itinerary)
- 4. *Name/names* (full name of all passengers travelling on PNR, including name at birth and given name/names, doctoral degree)
- 5. Frequent flyer information (number, type)
- 6. Other names on PNR (number of travellers, travel group name)
- 7. All contact information of passengers (telephone numbers, address, email)
- 8. *All payment/billing information* (payment mode cash, credit card, electronic transfer, MPD; breakdown of payment taxes, fees, charges; billing address)
- Travel itinerary (all flight, ferry, train, bus segments, all hotel segments, open segments, arrival not known segments, class code, travel date/dates, arrival and departure time/times, all car segments, no show segments, go show segments, on-carriage information, inbound connection information, cancelled PNR, cancelled segments within PNR)
- 10. *Travel agent information* (travel agency name, booking agent name, booking city, tour group information, IATA code/codes, contact details)
- 11. *Code share information* (marketing airline/airlines, operating airline/airlines, flight number/numbers)
- 12. Split/divided information (primary PNR, split PNR details, date of change/changes)

- 13. *Travel status information* (accepted indicator, boarded indicator, boarding sequence, check-in sequence, standby/staff indicator)
- 14. *Ticketing information* (all ticket number/numbers, all coupon number/numbers, ticketing date/dates, exchange/reissue/upgrade information, ticketing city, ticketing agent, e-ticket/paper ticket indicators, remarks, reservations or check-in comments, one-way tickets, ticket without reservation, automated ticket fare quote ticket fields)
- 15. *Baggage information* (bag tag number/numbers, number of bags, weight/weights total and individual, head of pool, member of pool, baggage destination, baggage boarding point)
- 16. Seat information (seat number, seat changes, SSR comments on seat requests)
- 17. General remarks (all available information on unaccompanied minors under 18 years, such as name and gender of the minor, age, language/languages spoken, name and contact details of guardian on departure and relationship to the minor, name and contact details of guardian on arrival and relationship to the minor, departure and arrival agent)
- 18. Any collected API information (full name, date of birth, gender, travel document number, country of issue of the travel document, date of expiry of the travel document, nationality, destination address, airline, flight number, departure date, arrival date, departure airport, arrival airport, departure time, arrival time, total number of travellers etc.)
- 19. All historical changes (full history of PNR for elements 1 to 18)

3. PNR MESSAGE FORMATS AND VERSIONS

The following message types and versions are supported in communication between PIU CZ and air carriers.

Direction	Data	Format	Version	Note
Air Carrier →	PNR	PNRGOV EDIFACT	12.1, 13.1,	Passenger reservation data
PIU CZ			14.1, 15.1	w or w/o check-in data
	PNR	PNRGOV XML	13.1., 14.1,	Passenger reservation data
			15.1, 16.1	w or w/o check-in data
	API	UN/EDIFACT	3.0	Passenger list message
		PAXLST		
PIU CZ → Air	PNR	ACKRES	acc. to	Confirmation
Carrier			PNRGOV	
			versions	
	PNR	GOVREQ	acc. to	Request for data
			PNRGOV	
			versions	
	API	UN/CONTROL	acc. to PAXLST	Confirmation/Special
			versions	purpose

4. REQUIRED DATA EXCHANGE MODEL

The air carrier is obliged to send the data in the following scheme.

	STD –24 to 48 H	Flight closure/ADT	Flight closure
Passenger data	PNR	PNR	API
Crew data	N/A	N/A	API

(STD – standard time of departure)

(ADT – approved departure time)

5. DATA CHANNELS FOR DATA EXCHANGE

PIU CZ offers the following communication channels / interfaces / means of communication for bidirectional data exchange.

5.1. WEB APPLICATION

Channel name	Air Carrier Web application – PNR portal
Description	Interactive web application for air carriers with GUI, enables even smaller data providers to fill-in complete passenger list based on PNRGOV standard. Beside the simple data submission, the application provides basic access to messaging history (Sent messages, Inbox for messages from PIU CZ), draft editing. Application supports Import / Export features. Import formats: PNRGOV EDIFACT, PNRGOVXML, EDIFACT PAXLST. No provider is engaged in the data exchange between PIU CZ and air carrier/reservation host.

5.2. INHOUSE WEB SERVICE

Channel name	Air Carrier Web Services (REST / WCF / SOAP)
Description	Inhouse developed, yet easy-to-integrate web services for basic operations (submit data, access data from PIU CZ, check Sent items). No provider is engaged in the data exchange between PIU CZ and air carrier/reservation host.

Full developer documentation is provided in ANNEX 1 (which is not public).

PIU CZ provides a free-of-charge demo software (Microsoft .NET¹, C#), including full source code. The demo software is provided within ANNEX 2 (which is not public).

PIU CZ provides a sample SOAP UI² project for easy integration.

5.3. ARINC

Channel name	IBM MQ via ARINC
Description	Hosted data interchange services provided by Rockwell-Collins Automation platform. Technical details to be aligned with provider.

5.4. SITA

Channel name	Type X / Type B / IBM MQ via SITA
Description	Hosted data interchange services provided by SITA Inc. platform. Technical details to be aligned with provider.

¹ https://dotnet.microsoft.com

² https://www.soapui.org

5.5. ACTIVE MQ

Channel name	Apache Active MQ (client to server connection only)
Description	Open source alternative for MQ connection – Apache ActiveMQ ³ technology, hosted on PIU CZ PNR platform. No provider is engaged in the data exchange between PIU CZ and air carrier/reservation host. PIU CZ = server, air carrier = client.

Full developer documentation is provided in ANNEX 1 (which is not public). PIU CZ provides a free-ofcharge demo software (Microsoft .NET⁴, C#), including full source code. The demo software is provided within ANNEX 2 (which is not public).

5.6. IBM MQ CLIENT CONNECTIVITY

Channel name	IBM MQ (client connection to air carrier infrastructure only)
Description	IBM MQ ⁵ (formerly WebSphere MQ) connectivity option using IBM MQ Client (XMS) connection from the PIU CZ side, via Server connection channel provided by air carrier on air carrier's infrastructure.

Detailed connectivity information for IBM MQ Client option is provided within ANNEX 3 (which is not public).

5.7. AS/4 PROFILE OF EBMS

Channel name	AS/4 Profile of ebMS
Description	The AS4 Profile of ebMS 3.0 Version 1.0, OASIS Standard, published on 23 January 2013. Implementation of AS4 according to the e-SENS AS4 Profile developed by the e- SENS Large Scale Pilot, current identifier and version: eDelivery AS4 - 1.14. The specification of the e-SENS AS4 Profile is published here: http://wiki.ds.unipi.gr/display/ESENS/PR+-+AS4 The products conformant to the profile can be found here: https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/e- SENS+AS4+conformant+solutions

Detailed connectivity information for AS/4 Profile of ebMS option is provided within ANNEX 4 (which is not public).

6. AIR CARRIER ENROLLMENT AND CONNECTION PROCESS

Step	Name	Description	
Step 1	Registration	Air carrier fills in the registration form and submits the data to PIU CZ. Beside other facts chooses communication channels to be activated, type of authentication and preferred way of connectivity set up.	

³ http://activemq.apache.org

⁴ https://dotnet.microsoft.com

⁵ https://www.ibm.com/products/mq

Step 2	Data review and update	PIU CZ checks the validity of the data provided and eventually updates missing or incomplete information. If the air carrier uses the service provider for interconnectivity and service provider is already certified, the connectivity set up process will be easier.
Step 3	Channel establishment	Based on the carrier selection one or more communication channels are configured and enabled first for the TEST environment. In case VPN is required, the IPSEC Site-to-Site VPN is configured.
Step 4	Certification testing	Prior to being allowed to send messages to PIU CZ - PNR production environment, all operating airlines and service providers will undertake certification testing to ensure that test messages meet the message structure and format standards as well as the content required. Certification testing will also ensure that all messages for a single flight are easily matched together and that the process to notify reject, successful with errors and successful without errors is in place.
Step 5	Production	The production system credentials and endpoints, or identification of the sender (in case of service provider) are issued to the air carrier / reservation host / service provider. Standard operations are started.

7. PIU CZ CONTACT

On July 10th 2017, Government of the Czech Republic concluded on establishing PIU⁶ within National Counter Terrorism Contact Point of the National Organized Crime Agency of the Criminal Police and Investigation Service. On January 1st 2018, PIU CZ was officially established.

Contacts: Passenger Information Unit National Counter Terrorism Contact Point National Organized Crime Agency Criminal Police and Investigation Service Police of the Czech Republic P. O. BOX 41/NCOZ Prague 156 80 Czech Republic

Email: piucz@pcr.cz SIENA connection: Czech Republic PIU

⁶ Resolution no. 510.

8. LEGISLATION

EU PNR Directive was fully transposed to Czech legislation. New paragraphs related to PNR agenda are mentioned below.

- Civil Aviation Act (49/1997) paragraphs 69a, 93, 94
- Police Act (273/2008) paragraphs 84a, 84b, 84c, 84d
- Customs Act (17/2012) paragraph 58

Air carriers are obliged to share with PIU CZ PNR data of flights with departure, arrival or stop-over in Czech Republic. The PNR data will be masked after 6 months and deleted from the PNR information system after 5 years.