

Reference terms

for the purchase of information services for receiving passenger data in advance from airlines through a secure information channel, called the "API-PNR" Information Service of the "Data as a Service (DaaS)" type (SI "API-PNR")

I. General information

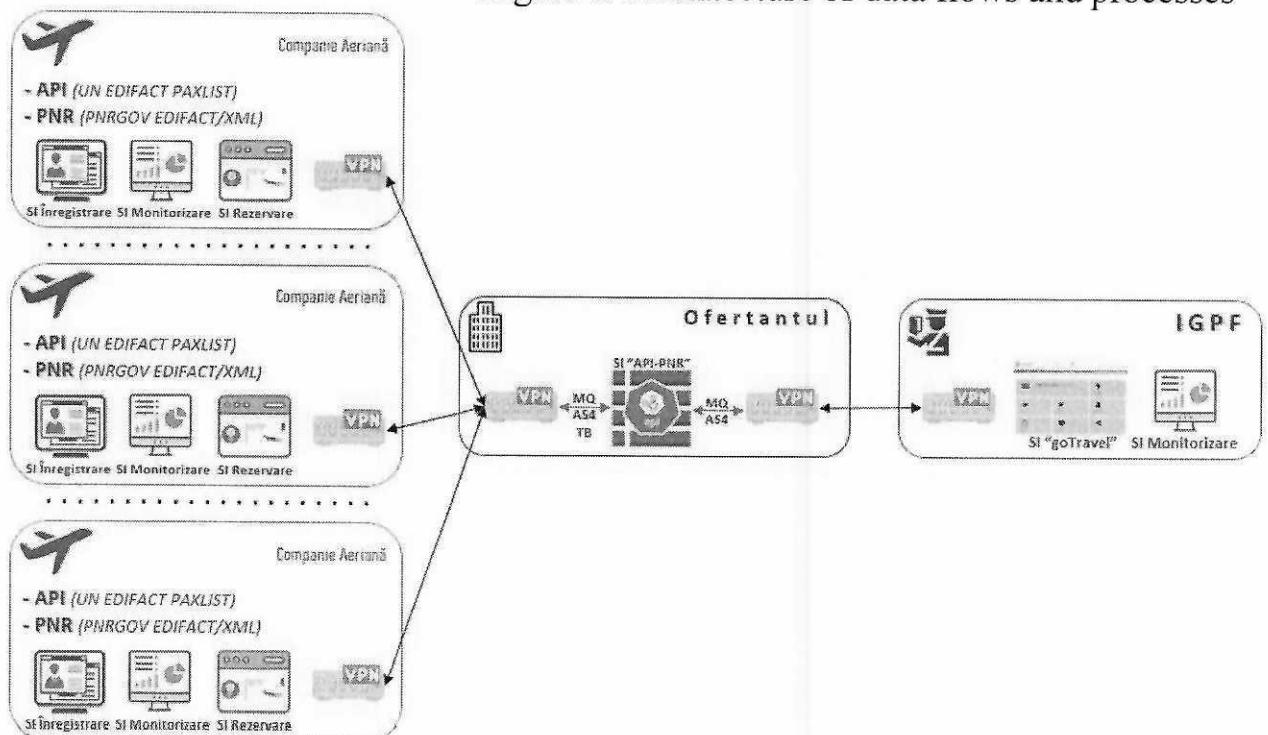
In the context of the implementation of Law no. 379 of December 7, 2023 regarding the use of data from the passenger name register, as well as Government Decision no. 834 of July 07, 2008 regarding the Integrated Information System of the Border Police (information outline F), the General Inspectorate of the Border Police obtained and installed on the government platform MCloud SI "goTravel AIR" (see the section Notions used).

At the same time, for the IS "goTravel AIR" to provide tangible results to prevent terrorist activities and the fight against crime, it is necessary that the API and PNR data be registered (to be transmitted) in the database of this System.

Through these Terms of Reference, the IGPF proposes to acquire passenger data from airlines, with the possibility of monitoring them, by means of a "DaaS" type information service (information services already existing on the European/global market regarding the reception/transmission of data) intended to receive API and PNR passenger and crew member data in advance from airlines through a secure information channel using the Bidder's technical solution.

This information service (SI "API-PNR") must use an efficient technical solution to obtain data about passengers and crew members (API/PNR) from airlines and transmit through a single secure "channel/counter" this data to IGPF as recommended by IATA and ICAO, Figure 1.

Figure 1. Architecture of data flows and processes



The tasks of configuration, continuous warning (preventive) maintenance, improvement and support for the "API-PNR" SI will be assigned to the Bidder, with the aim that the IGPF will primarily focus on the aspect of processing and analyzing passenger data through the "goTravel AIR" SI ", as well as optimize implementation costs.

The Bidder shall provide a team of specialists with experience in the implementation of such projects, as well as at least one project manager who will be responsible for communication with the employees appointed by the IGPF.

By implementing this project IGPF will receive a number of advantages, such as:

a) all activities related to collaboration with airlines (creation of secure information channels, development of information systems for receiving, processing, storing and transmitting passenger data) will be undertaken by the Bidder;

b) receiving passenger data through a single secure information channel, using one or two protocols, as well as in data formats predetermined by ICAO/IATA;

c) the possibility to check through an application/graphical interface (preferably on a web portal; the web server/database part must run on the servers to the Bidder) the correctness of the data transmitted by the companies, as well as the visualization of various statistical reports, air route monitoring and data extracts grouped according to various criteria;

d) the possibility of integration with IT systems managed by IGPF (data processing and transmission to SI from IGPF management);

e) in the absence of an automatic data transmission mechanism, put to the disposition of SIIM airlines, provided by the Bidder;

f) other;

II. Notions used

- **API** – (advance passenger information) is advance information about passengers. Air carriers collect information about travelers while they are checking in for their flight and store this information in their departure control system. The information can be collected at the airport or provided by the passengers themselves if online check-in is allowed. This API data is transmitted by carriers to government-designated law enforcement agencies that request information, usually at the end of registration. The API contains information about each passenger and is defined by IATA, ICAO and WCO. The data fields collected about each traveler in the API are: first name, last name, date of birth, nationality, gender, type of document used for travel, travel document number, travel document expiration date, boarding airport, destination airport, any stopover on this trip, time - date of scheduled departure, time - date of scheduled arrival, reference number of the reservation, details regarding checked baggage;

- **PNR** – (passenger name register) represents information about travelers' journeys. The PNR is created when a traveler makes a reservation with an airline, either directly or through a travel agent. The information contained in the PNR can be much more detailed than that in the API, but it can also contain mistakes or inaccurate information. APIs are collected and verified when a traveler registers and his travel

document is read electronically. The PNR is created by typing in information when making or updating a reservation and therefore may contain mistakes, old or inaccurate information. PNR information is collected by airlines and stored in their reservation system and transmitted to government-designated law enforcement agencies that request this data, usually at the end of check-in. PNR information can also be sent before check-in closes, usually 48 and 24 hours before departure. The fields, which are usually found in the PNR, are listed in Law no. 379 of December 7, 2023 regarding the use of data from the passenger name register, Annex 1;

- **SI "goTravel AIR"** (System) – information system intended for receiving (through "push" technology) and processing API and PNR passenger data using the one-stop shop principle (<https://www.un.org/cttravel/goTravel>). It is functional and runs on the government MCloud platform. System enhancement and maintenance support is performed by the United Nations Office of Information and Communications Technology (OICT) technical team;

- **Data as a Service (DaaS)** – is a model for providing and distributing information in which data is made available to customers through a secure network. The model uses a Cloud-based technology that supports Web services and SOA (service-oriented architecture);

- **SIÎM** – IT system for manual data registration (a web portal or a desktop application intended for the manual registration of passenger and crew data with online data transmission)

- **IGPF** – General Inspectorate of the Border Police;

- **AIC** – Chisinau International Airport.

III. Reference

- Law no. 283 of 28.12.2011 regarding the Border Police;

- Law no. 982-XIV of 11.05.2000 regarding access to information;

- Law no. 467-XV of 21.11.2003 regarding computerization and state information resources;

- Law no. 379 of 07-12-2023 regarding the use of data from the passenger name register;

- Government Decision no. 297 of 11.05.2017 for the implementation of Law no. 215 of 4 November 2011 regarding the state border of the Republic of Moldova;

- Government Decision no. 1145 of 21.11.2018 regarding the organization and the operation of the General Inspectorate of the Border Police;

- Government Decision no. 834 of 07-07-2008 regarding the Information System integrated of the Border Police;

- Government Decision no. 128/2014 regarding the common governmental technological platform (MCloud);

- MTIC Order no. 78 of 01.06.2006 regarding the approval of the technical regulation "Software Life Cycle Processes", RT 38370656 - 002:2006.

- Directive (EU) no. 2016/681 of the European Parliament and of the Council of April 27 2016 on the use of Passenger Name Record (PNR) data for the prevention, detection, investigation and prosecution of terrorist offenses and of serious crimes;
- Implementing Decision (EU) 2017/759 of the European Commission of 28 April 2017 on common protocols and data formats to be used by air carriers when transferring PNR data to passenger information units.

IV. Functional requirements for the technical aspects of the "API-PNR" IS

1. SI "API-PNR" must transmit (operate) data from the following to the IGPF types (formats):
 - a) for API data: UN EDIFACT PAXLST versions [2003 or later]; US/UN EDIFACT versions [1.02 or later];
 - b) for PNR data: PNRGOV EDIFACT versions [11.1 or later]; PNRGOV XML versions [13.1 or later];
2. SI "API-PNR" must transmit data to IGPF through the following protocols informational:
 - a) IBM MQ;
 - b) Type B;
 - c) AS4 profile of ebMS 3.0;
 - d) other secure protocols established by mutual agreement (such as: SOAP/REST type web services, SFTP).
3. the tenderer must provide an "API-PNR" SI so that the Border Police does not need to install computer systems (software components) licensed for a fee (other than those specified in p. 2);
4. the bidder must ensure the secure informational channels for data transmission between the airlines and the technical solution used (at the hardware level), then the API and PNR data, verified, must be transmitted to the SI "goTravel AIR" through a single secure informational channel (a secure channel between the Bidder and the IGPF);
5. the secure information channel for API and PNR data transmission between the Bidder and the IGPF can be implemented by creating a secure VPN through the global Internet network, or through a stable and secure connection provided by the Bidder;
6. SI "API-PNR" must allow the collection (reception) of passenger data (API and PNR) and crew members from all types of flights (passenger, cargo, charter) in automated and manual mode. If the airline for some technical reasons cannot transmit the data in automated mode (from the ticket reservation system or from the departure system to the technical solution developed and managed by the Bidder), then the data can be registered by the airline in manual mode using SIÎM, provided by the Bidder;

7. SIÎM provided by the Bidder, must allow airlines to register/transmit API and PNR data / files in an efficient and secure way (non-disruptive functionality). To minimize informational errors in the data registration / transmission process, the Bidder must provide templates and operation/use manuals. SIÎM must have multi-factor authentication and the process of recording / transmitting data / files must be safe and secure; At the same time, SIÎM must offer airlines the possibility to view/monitor if the data has been recorded / transmitted successfully, as well as informational and correctness errors if they have appeared in the given process. The Bidder must provide preventive, adaptive and corrective maintenance activities for SIÎM;
8. SI "API-PNR" must be provided with a graphical interface (a separate module, preferably on a web portal) for working with API and PNR data, such as: sorting, searching and filtering functionalities according to various parameters, such as: data type, airline, route/flight, unique flight code, passenger data, other; passenger list viewing functionality (personal data and those assigned to the passenger and crew members). At the same time, the solution must offer the possibility to check the quality of the recorded data, such as data completeness, timeliness, accuracy and semantics;
9. SI "API-PNR" must offer the possibility (a separate module, separate page in the web portal) to view/create statistics reports, information panel with data, analysis of received data;
10. SI "API-PNR" must offer a functionality for managing user accounts, such as: creation, deactivation, role setting, auditing of user actions;
11. SI "API-PNR" must have high availability. The minimum availability requirements are as follows: the software components of the "API-PNR" IS must run on the Bidder's hardware in an infrastructure based on virtualization (cloud) and tolerant to errors and interruptions; the software components of SI "API-PNR" must run on at least 2 "active" application servers located in a secure "cloud", or on separate (hardware) servers; in the event that an instance becomes non-functional, then the software components of the "API-PNR" IS continue to function without interruption (the functionality passes to the additional instance); the technical part responsible for creating the secure link channel must be tolerant of security errors and interruptions (implemented on virtualization or clusters/multiple nodes);
12. SI "API-PNR" must have the availability of integration with flight monitoring systems from/to the Republic of Moldova (in case of existence and availability);
13. SI "API-PNR" must have the ability to store data for a period of up to 6 months, as well as a functionality that would allow configuring the data retention period (from 1 day to 6 months).

V. Non-Functional Requirements

1. The bidder will present a list that will include at least 15 states (with the indication of the institutions) and at least 5 recommendations (with the indication of contact details) in which the offered solution (SI "API-PNR") has been implemented;
2. The tenderer will present in the technical offer summary data regarding the personnel involved in the project and their qualifications. The involvement of qualified personnel with experience in the implementation of the interoperability between the proposed solution (SI "API-PNR") and different informational systems for information analysis, especially with the SI "goTravel AIR" is welcome. At the same time, it is necessary to be staffed with key functions: project manager and technical coordinator;
3. The Bidder will present the list of airlines that operate in the AIC and are already connected to the information service (SI "API-PNR"), managed by the Bidder, intended for the first, processing, storage and transmission of API and PNR data;
4. The tenderer will present information about the number of working days, from the date of signing the information services contract, for all airlines operating in the AIC to be connected to the "API-PNR" SI for the transmission of API and PNR data (data transmission to the Bidder's system which in turn at the same moment or over a short time interval will re-transmit your data to the SI "goTravel AIR"). The time period must not exceed 50 working days;
5. The Bidder must describe the entire process of connecting an airline to the information service (IS "API-PNR") for receiving, processing, storing and transmitting API and PNR data, managed by the Bidder. Document templates must be attached/presented to the description of this process: contractual, legal, technical, intentions, security policy, certification, configuration, etc.;
6. The Bidder must have a Technical Support Service that operates according to the good practices of the ITIL model for 24/7. The Bidder will present detailed information about the Technical Support Service;
7. The bidder will present a detailed work plan for the implementation of this project. The project management methodology must comply with the PMI ® standard. At the same time, the bidder must describe/present the roadmap for the current year and for the contractual period;
8. The tenderer will present information on how to train IGPF employees regarding the use of the proposed solution;
9. The bidder is required to present the ISO 27001 (the standard that establishes the requirements for an Information Security Management System) and ISO 9001 (the standard that establishes the requirements for Quality Management) certificates;

10. Preferably, the Bidder should present the documentation on the technical offer in tabular form, which would include the requirements from the terms of reference and the deliverable/compliance information/references to annexes and documents/others, presented by the Bidder;

11. The tenderer is requested to present a detailed financial offer, which includes the estimated costs for each component of the project. The financial offer must be presented in Euros and include an estimate of the final total of the project, including any applicable fees and taxes. Also, the tenderer must provide additional information on payment methods, payment terms and possible conditions of financing or price adjustments during the course of the project;

12. The language of communication and documentation on the offer will be in Romanian or English;

13. The tenderer must provide services for a period established in the Framework Agreement, which will be signed between the contracting authority and the tenderer.