SITA

INFORMATION SYSTEM TO RECEIVE ADVANCE PASSENGER INFORMATION (API) AND PASSENGER NAME RECORD (PNR) IN CHISINAU INTERNATIONAL AIRPORT FOR REPUBLIC OF MOLDOVA

General Inspectorate of Border Police of Moldova

Company Name and Contact Information

Company Details

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Introduction and Cover Letter

This is SITA's proposal in response to Inspectoratul General al Poliției de Frontieră Request for Proposal for "API / PNR" Information System.

Key sections in this document:

1.   Functional Requirements (point-by-point response)

2.   Non-Functional Requirements (point-by-point response)

3.   Observations and comments on the Draft Contract (Annex 24), for your consideration.

This document is complemented by supporting documents that we have included in the appendix section at the end.

The Challenge

We recognise the importance of this project to Inspectoratul General al Poliției de Frontieră, and have understood the key objectives of implementing API-PNR are:

- Compliance with the law, and to support Government initiatives in respect of National Security.
- Enable the 'goTravel AIR' system to facilitate the prevention of terrorist activities and to fight crime by having access to essential traveller data.
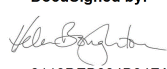
How SITA can help

For over 25 years, SITA has been successfully addressing border control challenges for the air transport industry. With extensive resources and expertise, we ensure secure borders and efficient passenger journeys. As the global leader in border solutions, we have a strong delivery record and 24/7 global support.

Our API-PNR service can be rapidly implemented using a standard design and by using existing infrastructure for a cost-effective and robust solution. Our ongoing investments in product development guarantee its long-term technical and operational effectiveness.

We look forward to your feedback and the opportunity to collaborate on this important project.

Yours faithfully,

DocuSigned by:

8119DEB884B84FA...

Signed :

1. Response to:
IV. Functional requirements for the technical aspects of the "API-PNR" IS

SITA proposes to deliver our product SITA API/PNR Gateway to provide the requirement to provide the Information System for Advance Passenger Information (API) and Passenger Name Record (PNR) for Chisinau International Airport.

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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 [l 1.1 or later]; PNRGOV XML versions [13.1 or later];*

SITA Response	Compliant

Message Formats

API and PNR data can be received using industry standards and transmitted to IGPF in various formats. This means:

The SITA API PNR Gateway provides IGPF with a data feed that is easy to integrate into your security systems.

Both data providers and data receivers are insulated from system and format changes at either end.

International standards issued by IATA / ICAO / WCO are widely established for the submission of API data, with the message type being UN / EDIFACT PAXLST. As new versions of this format are released every year, carriers submit data in varying versions of the format depending upon their system and supported version. Our API PNR Gateway supports receipt of API data in multiple versions of multiple formats.

For PNR, the IATA PADIS (Passenger and Airport Data Interchange Standards) group has defined and published the IATA PNRGOV EDIFACT specification and will also shortly approve a PNRGOV XML specification. The PNRGOV message format accommodates both PNR and DCS data.

The following data types and message formats are supported:

Data Type	Message Formats Supported from Carriers	Message Formats to be sent to Moldova
API Data	• UN PAXLIST 2003 (02B), 2010 (05B) and 2013 (12B) • US/UN EDIFACT v1.02, v1.03, v1.04 and v1.05 • Via Online Manual Submission	• UN EDIFACT PAXLST 2003 (02B), 2010 (05B) and 2013 (12B) • US/UN EDIFACT PAXLIST v1.02, v1.03, v1.04 and v1.05

Data Type	Message Formats Supported from Carriers	Message Formats to be sent to Moldova
PNR Data / DCS Data	• PNRGOV EDIFACT v11.1, v12.1, v13.1 and v15.1 • PNRGOV XML v13.1 and v15.1 • Via Online Manual Submission	• PNRGOV EDIFACT v11.1, v12.1, v13.1 and v15.1 • PNRGOV XML v13.1 and v15.1

2. *SI "API-PNR" must transmit data to IGPF through the following protocols informational:*
    a) *IBMMQ;*
    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).*

SITA Response	Compliant

Data Acquisition Transmission

The table below shows data acquisition methods from airlines supported by the API PNR gateway to be transmitted to IGPF.

Data Type	Source	Acquisition Method
API	Departure Control System	Type-B AS4 via Internet SFTP Via Online Manual Submission
PNR Data	Reservation System (ARS) or Global Distribution System (GDS)	MQ AS4 via Internet SFTP Via Online Manual Submission
DCS	Departure Control System	MQ AS4 via Internet SFTP Via Online Manual Submission

Carriers and governments may use secure SOAP web services via AS4 over the Internet.

This table shows the data transmission methods to send data to IGPF :

Data Type	Source	Transmission Method to IGPF
API	Departure Control System	MQ,
PNR Data	Reservation System (ARS) or Global Distribution System (GDS)	AS4 via Internet, or SFTP
DCS	Departure Control System	

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);*

SITA Response   **Compliant**

To use the API PNR Gateway, Border Police does not need to install any computer systems (software components) that require a licence fee. IGPF will need an MQ client, AS4 interface, or SFTP client to receive the API PNR data, all of which are available under a free license.

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);*

SITA Response   **Compliant**

SITA will ensure secure information channels for data transmission between the airlines and the API PNR Gateway using SITA secure global network. This in turn provides a single secure channel between SITA and IGPF.

It is expected that in most cases the airlines will already have a secure connection to the SITA network. In the event that an airline does not have an existing connection from the airline to the SITA network, this will be implemented.

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;*

SITA Response   **Compliant**

To maintain a stable and secure connection to support the transmission of API PNR data, we will implement a resilient IPSec Virtual Private Network (VPN) between the SITA API PNR Gateway and IGPF.

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 SIIM, provided by the Bidder;*

SITA Response	**Compliant**

The API-PNR Gateway allows for the collection (reception) of passenger data (API and PNR) and crew members from all types of flights (passenger, cargo, charter) in both automated and manual modes. If the airline, for technical reasons, cannot transmit the data in automated mode (from the ticket reservation system or the departure system then the data can be registered manually by the airline using SIIM.

API PNR Gateway Data Processor

The high-level data flow diagram is shown below.
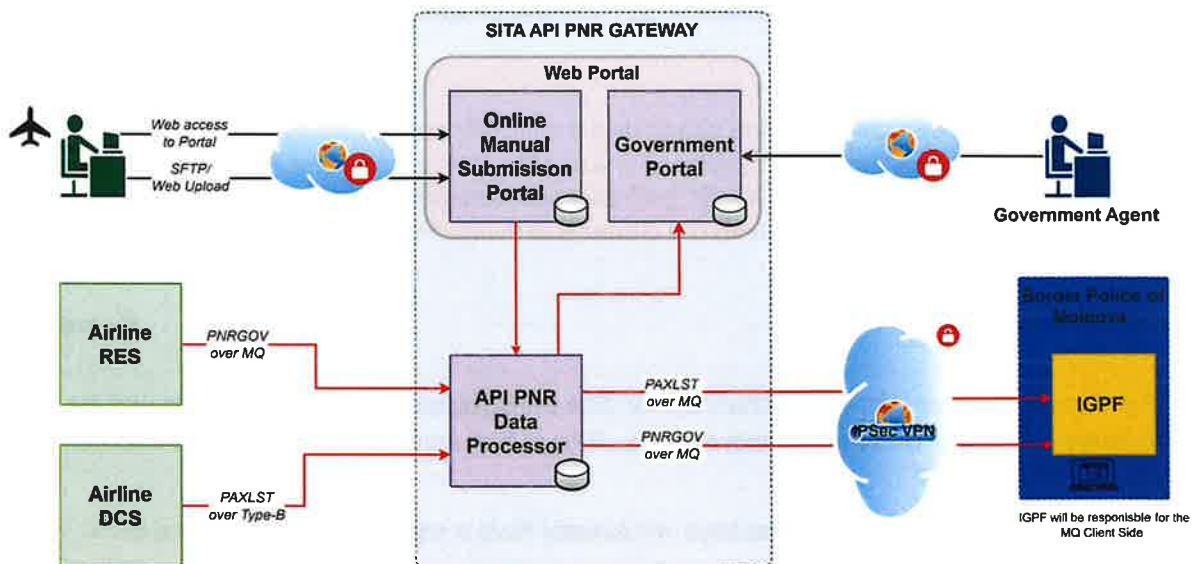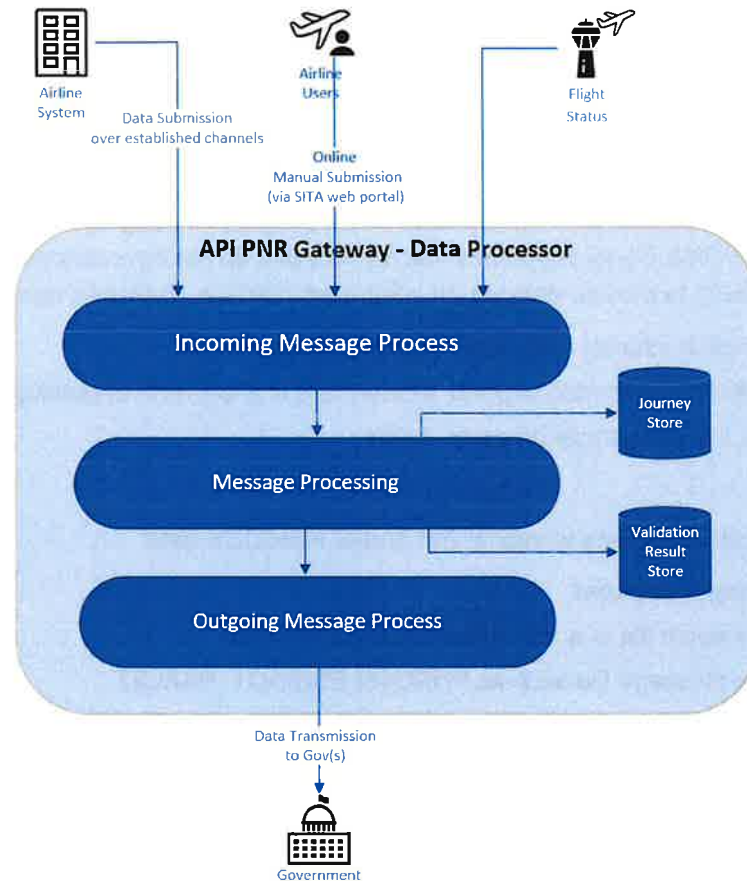
The sequence of data flow is described as follows:

- The process starts when the system receives its first message for a journey. This message is pushed by a host to the API PNR Gateway.

- The message is parsed, validated, and checked to confirm it is for a service, country or route configured in the system. The data is discarded if it is for a service, country or route not configured in the system. The data is then stored in the Journey Data Store.

- The message is checked against the Journey Data Store to determine.
    - if message contains a new journey, then a new journey record is created.
    - if the message contains a journey for which data has already been received, this data is then correlated and linked to the existing record.

The flight will also be checked against the code share table and flagged.

- When data for a journey is received, all travellers across the different data types (API, PNR and DCS) are correlated and linked for that journey.

- The data also is sent to the API PNR Gateway Government Portal for data quality analysis. At the required drop times, a trigger is sent to the output process to generate and send the message to an external system.

- The System always sends the complete flight data available at the drop time to an external system.

Online Manual Submission Portal

SITA will implement the SIIM using our Online Manual Submission Portal. The Online Manual Submission Portal (OMS Portal), part of the API PNR Gateway, allows carriers to submit API and/or PNR/DCS for passengers and/or crew via a web portal.

The OMS Portal provides extensive functionality for entering and managing API and PNR/DCS data via the Internet. The OMS Portal supports those carriers that do not have automated systems (Reservation and DCS) to provide data via an integrated interface. Typically, such carriers include:

- General aviation, charter, and other smaller airlines.
- Airlines operating at remote airports, where there is a low level of automation.
- Flight crew, including those on cargo flights.

The OMS Portal enables carriers to submit API and/or PNR/DCS data:

- By completing a webform.
- Uploading a batch file in a pre-defined XLS/CSV format
- Uploading a message file such as PNRGOV EDIFACT, PAXLST

Batch files are uploaded either via HTTPS or SFTP.

Once submitted, the data received via the OMS Portal is sent to the API PNR Gateway Data Processor and is processed in the same manner as messages received from carriers with integrated DCS or Reservation systems. Carriers can check the OMS portal to view the success or failure of the messages that have been submitted.

The OMS Portal is an internet service hosted and managed by us in the SITA global data centres (located in Frankfurt) and provides an English language user portal for carriers to submit data. The OMS Portal is accessed by carriers via the internet.

SITA will provide an administrator User Id that will allow IGPF to Create User Ids for carriers to submit the required data. It is expected that IGPF will manage the Carrier User Ids for the OMS Portal.

Carriers will contact IGPF to request a User Id and need to provide an email address that will be used to create the User Id for that carrier. Each carrier will have a separate User Id. User Ids are created, activated, and deactivated by IGPF as required.

There is no restriction on the number of Carrier User Ids that can be created and there is no cost to the carrier for accessing (and submitting data via) the OMS Portal.

7. *SIIM 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. SIIM must have multi-factor authentication and the process of recording / transmitting data / files must be safe and secure; At the same time, SIIM 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 SIIM;*

SITA Response	**Compliant**

SITA SIIM (Online Manual Submission Portal) allows airlines to efficiently and surely register and transmit API PNR data/files with non-disruptive functionality. To minimize informational errors in the data registration/transmission process. SITA provides templates and operations/user manual for the airlines. The Online submission portal includes Multifactor authentication to ensure the safety and security of recording/transmitting data/files. Additionally, SITA SIIM provides airlines the capability to view and monitor successful recording/transmission of data as well as identifying informational and correctness errors if they occur.

Overview of OMS Portal Functions

The Online Manual Submission Portal (OMS Portal), part of the API PNR Gateway, allows carriers to submit API and/or PNR/DCS for passengers and/or crew via a web portal.

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There is no restriction on the number of Carrier User Ids that can be created and there is no cost to the carrier for accessing (and submitting data via) the OMS Portal.

Flight List

Flight List screen is the landing page for the manual data submission service. The Flight List screen allows the user to search for a flight and view the API/PNR data submission status of a flight.
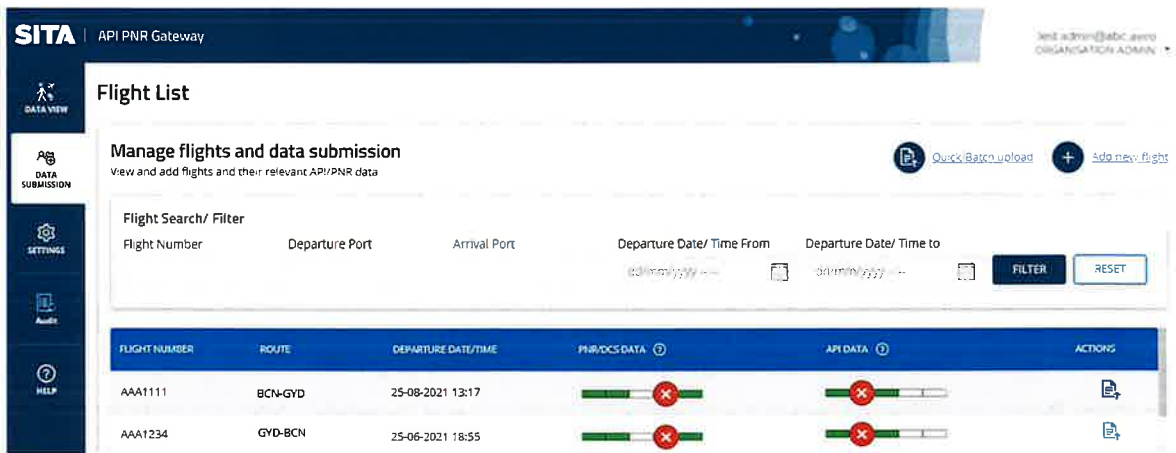
Add New Flight

Add New Flight allows users to create a flight for which data is to be submitted.

Note: 'Quick Batch Upload' feature of the OMS service does not require users to perform the add new flight step.

Once done, the newly added flight is now be displayed in the Flight List screen under the Flight List Search Results as shown below.

Add Passenger Details

The Carrier user then adds the Passenger Details for a flight using an online form.

The Carrier user can then save, submit, or cancel the form.

View Passenger Details

The Passenger Details screen provides a single view of all the travellers added using the online form or via batch file upload of the flight.

Using the Passenger Details screen a user can:

- View Passenger Data
- Delete Passenger Data
- Edit Passenger Data
- Submit Passenger Data Manually
- Add another Passenger Data
- Quick Batch Upload

Quick Batch Upload allows the users to upload multiple travellers' API and/or PNR data more efficiently using the following supported file formats:

- Pre-defined templates in XLSX, XLS, CSV format
- Message file in PNRGOV EDIFACT v11.1, v12.1, v13.1, v15.1, PAXLST EDIFACT 02B, 05B, 12B formats

The format of the batch files is checked for errors and the result (success or failure) of the data submission is displayed. If any errors are detected details those errors found are also displayed.

Data Submission Errors *for* BatchFile_5thNov.xlsx ✕

ROW/COLUMN	ERROR DESCRIPTION	COLUMN NAME
R7 C3	must not be null	FamilyName*
R7 C2	must not be null	GivenName*

CLOSE

User Types

The OMS Portal is accessed only by authorized carriers. Carrier users are staff members working for airlines, general aviation companies involved in the checking-in or maintenance of manifests of passengers or the rostering and administration of crew members.

There are two classes of carrier users:

- Carrier Administrators
- Carrier Normal Users

Carrier Administrators can register Carrier Users for access to the OMS Portal for their own company only. Management of passwords for Carrier Users on the OMS Portal, in terms of expiry, active life, and re-use, is subject to the security requirements defined by us. Both Carrier Administrators and Carrier Normal Users are able to perform all the OMS Portal functions related to the submission of API, PNR & DCS data to the SITA API PNR Gateway System.

Multi-Factor Authentication (MFA): Our system employs robust multi-factor authentication to ensure that only authorized personnel can access and transmit sensitive data.

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;*	
SITA Response	**Compliant**

The API PNR Gateway includes graphical interfaces within a web portal, for efficient management of API PNR data. The interface provides functionalities such as sorting, searching and filtering data based on various parameters including data type, airline, route/flight, unique flight code, passenger data and passenger list viewing. The API PNR Gateway also provides viewing of passenger list, including personal data and data associated with passengers and crew data.

Additionally, it provides tools for assessing quality of recorded data, ensuring completeness, timelessness, accuracy and semantics.

API PNR Gateway Portal

The API PNR Gateway Web User Interface provides the following functionality.

- Customer Dashboard
- Message, Journey and Traveler Search and View
- Data Quality UI

Customer Dashboard

The Customer Dashboard is an interactive dashboard which provides at-a-glance an overview of various key metrics to a government user.

The dashboard is the landing page of the API PNR Gateway Portal.
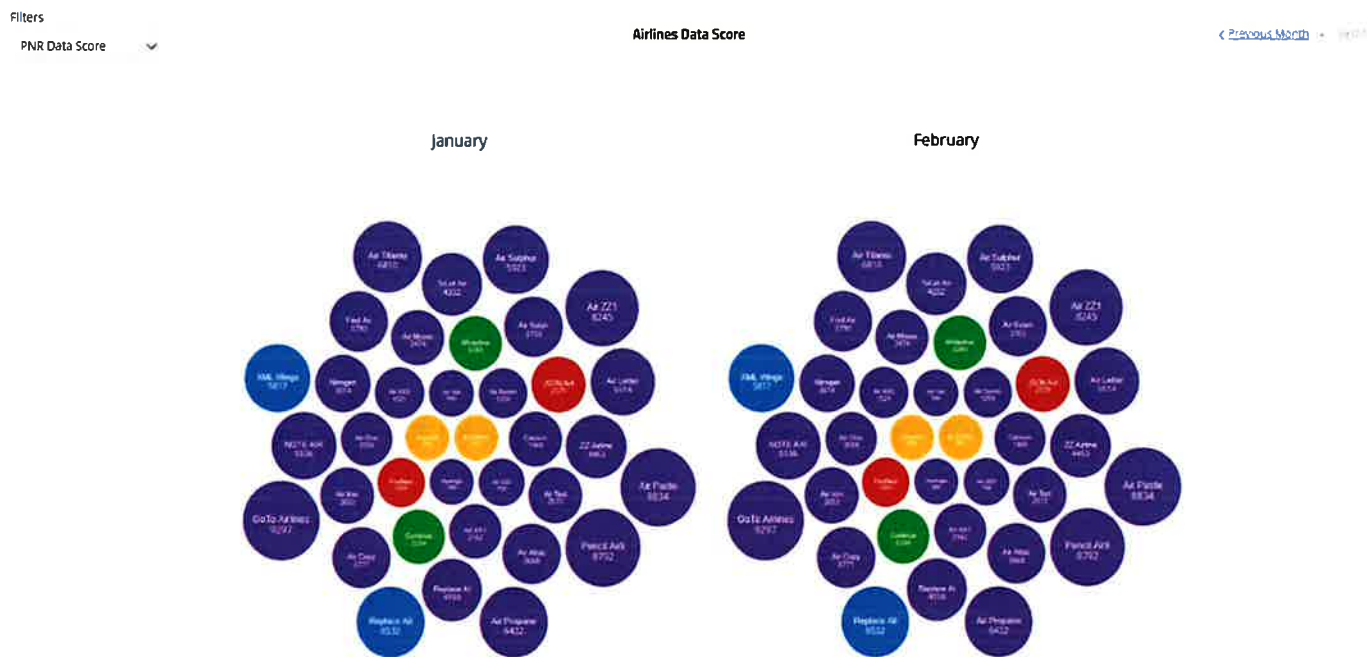
Message / Journey and Traveler view

The API PNR Gateway Portal provides the following ways of searching and viewing the data received from airlines via a web portal.

- Messages: Message View provides a single simplified view for users to search and view messages (PNR, DCS and API) sent by airlines from different sources.
- Journeys: Journey View allows users to search and view journey information. Users can search for Journeys using multiple criteria such as carrier code, flight number, route, date and time range.

- Travelers: Traveler View allows users to search and view traveler data sent to governments. search for Travelers using multiple criteria such as carrier code, flight number, route, date and time range.

Data Quality UI

Having access to any or all the above data types and message formats gives you the data you need. But you still need to protect yourself from inaccurate or low-quality data. Data quality is crucial because what you receive could be used to evaluate the risk of travelers entering, exiting or transiting your country. To ensure the data helps you generate reliable and relevant intelligence, it needs to be error-free.

Data quality has several different aspects. These include completeness, time and correctness. By addressing all dimensions, you can achieve the best quality data for your risk assessment.

Completeness – Refers to whether all the required data for all crew and passengers has been provided, this includes the following fields:

- Name/s or FIRST_NAME
- Last name(s) or LAST_NAME
- Gender or GENDER
- Date of birth or BIRTH_DATE
- Country of birth or COUNTRY_OF_BIRTH
- Nationality or NATIONALITY
- Document due date or PRIMARY_DOCUMENT_EXPIRATION
- Country of issue of the identification document or PRIMARY_DOCUMENT_COUNTRY

Timeliness – Is the data provided with enough time for you to use it for analysis and to identify potential risks posed by travelers?

Correctness – Focuses on the data being structured correctly. The data is in the correct fields and all mandatory fields are present.

Semantics - Ensures the data is meaningful eg a passport number of 12345 or a family name of "AAA" would be highlighted as not meaningful

SITA API PNR Gateway is built around these four principles. The tools and processes at the heart of the system ensure each message sent by carriers is checked for completeness and accuracy. This provides assurances that the intelligence pulled from it is of the highest quality.

Data Quality User Interface is a web-based portal to visualize the compliance data errors per category (Time, Completeness, Correctness, Semantic) per flight, per service and per journey.
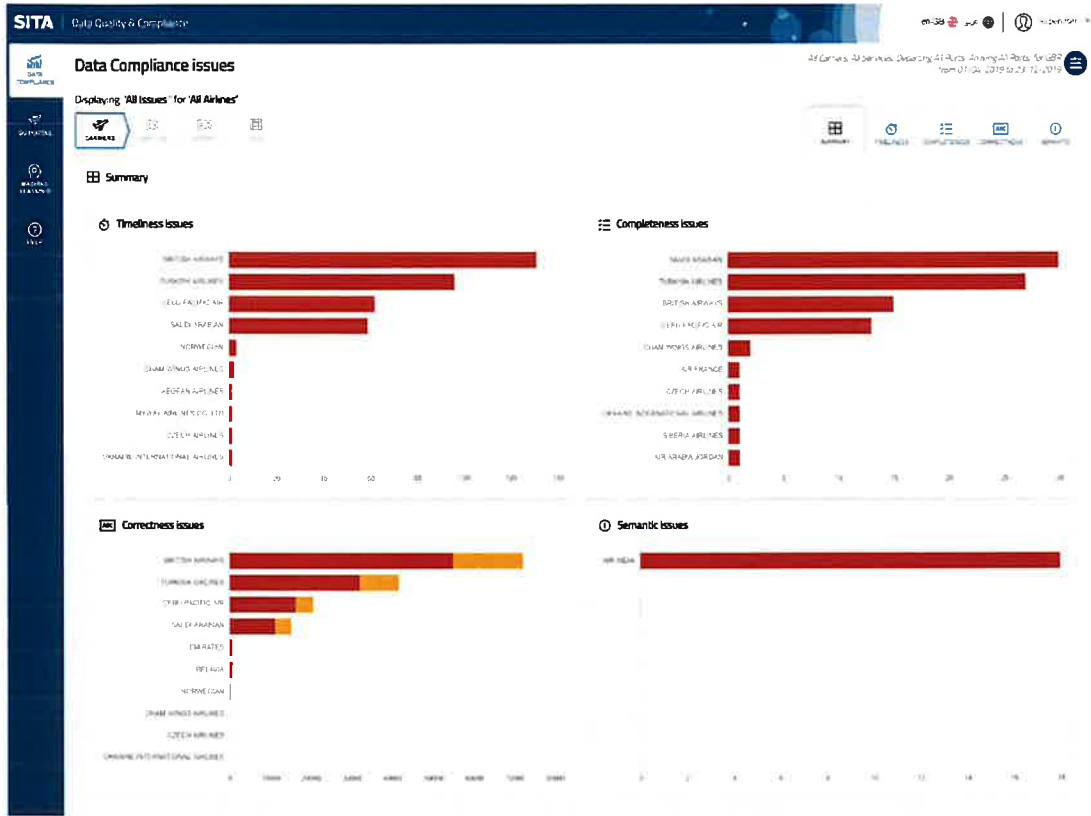
9.	SI "API-PNR" must offer the possibility (a separate module, separate page in the web portal) to view/create statistics reports, information panel with data, analysis of received data;
SITA Response	**Compliant**

Compliance Reporting

The API PNR Gateway provides a web portal dedicated to viewing and creating statistic reports. This module provides information panel with data and analysis of received data to help facilitate comprehensive reporting.

The following reports are available via the API PNR Gateway Portal

- **Message Statistics Report** provides statistical information for the messages received in the API PNR Gateway. Generated reports can be viewed on screen or downloaded in excel format.

    This report contains following information:

> ➢ First and Last message received date/time
> ➢ Message count for each data types with the breakdown of:
> ➢ In Range : Messages received on time for respective drop-times e.g. T-12, T-2, T-0 (this includes +/-10 min)
> ➢ Out of Range : Messages received outside for respective drop-times e.g. T-12, T-2, T-0 (this includes +/-10 min)

- **Error Details Report** provides details of errors associated with all messages received by the API PNR Gateway. Generated reports can be viewed on screen or downloaded in excel format.
- **Traveler Count** Report provides a list of all flights available in the API PNR Gateway together with the Traveler PNR count, DCS count and API count. Generated reports can be viewed on screen or downloaded in excel format.

All reports can be scheduled or can be run on-demand.

10. SI "API-PNR" must offer a functionality for managing user accounts, such as: creation, deactivation, role setting, auditing of user actions;	
SITA Response	**Compliant**

User Management

We provide a Government Administrator User for the Customer and other relevant stakeholders to manage users and permissions for their API PNR Gateway Government Portal users.

The User Management module allows government administrators to manage their respective users of the API PNR Gateway Government Portal. This functionality allows an administrator to add a new user, search for a user, view or edit an existing user (including changing their permissions)

The Government administrator perform the following management tasks via the Manage User screen:

- Add New User
- Search User
- View Existing User Details
- Edit an existing User.

A user can be assigned one or more of the following roles.

- Message Data Analyst – can access the message view search screens.

- Journey Data Analyst – can access the journey view search screens.

- Traveller Data Analyst – can access the traveller view search screens.

- Data Quality Analyst – allows users to view the data quality compliance of carriers.

- Machine Learning Admin – can manage the machine learning (semantic) data quality checks performed.

- Report Viewer – can generate and view standard reports.

- Traveller count

- Message Statistics

- Error Statistics

- SSR Infringement Report Viewer – allows users to find flights that infringe privacy SST flight codes.

- Audit Manager – can search and view user audited user events.

- User Account Manager – can add, edit, and enable/disable user accounts.

Add New User

Create a new user by entering their details, roles and access credentials below.

Organization Type	Organization Name	Organization Code
Government	India	IND

User Details

Departments	Given Name	Family Name	Phone Number
IND1 - IND.1			

Role

Select All

☐ **Message Data View Analyst** - The role allows a user to access Message View feature on Gateway Web UI. The user will be able to search, view and download raw input airline messages sent by airlines to SITA API PNR Gateway.

☐ **Journey Data View Analyst** - The role allows a user to access Journey View feature on Gateway Web UI. The user will be able to search, view and download Journey Data.

☐ **Traveler Data View Analyst** - The role allows a user to access Traveler View feature on Gateway Web UI. The user will be able to search, view and download Traveler Data.

☐ **Data Quality (DQ) Analyst** - The role allows a user to access Data Quality feature on Gateway Web UI. The user will be able to search, view and download reports for Timeliness, Correctness, Completeness & Semantic issues with the airline data.

☐ **DQ Machine Learning Admin** - The role allows a user to access DQ Machine Learning models. The user will be able to manage ML models for API and PNR data.

☐ **Report Viewer** - Allows a user to generate & download selected reports from portal.

    ☐ **Reporting Analyst [for Error Stats]** - The role allows a user to search, view & download Error Stats reports using Gateway Web UI.

    ☐ **Reporting Analyst [for Traveler Count]** - The role allows a user to search, view & download Traveler Count reports using Gateway Web UI.

    ☐ **Reporting Analyst [for Message Stats]** - The role allows a user to search, view & download Message Stats reports using Gateway Web UI.

☐ **SSR Infringement Report Viewer** - The role allows a user to find flight infringing privacy SSR flight codes.

☐ **User Account Admin** - The role allows a user to access Manage Users feature on Gateway Web UI. The user will be able to add new users, amend existing users and manage their access to various Web UI services availed by their organization.

☐ **Auditor** - The role allows a user to access User Audit feature on Gateway Web UI. The user will be able to search and view user events of all the users in their organization.

Enable Location Constraint For Data View Analyst

Location

Select location...

Add IATA codes one by one to restrict access to specific locations for this user.

Preferred Language

English   ⬍

Access details

Email ID   Password

                                 Password will be auto generated

[ADD USER]   [CANCEL]

In addition, a user can be assigned permission to only view data for a particular location or locations.

Auditing of User Actions

The API PNR Gateway captures event related data for features available in the API PNR Gateway Portal. An event represents any transaction performed by a user such as Add User, Add Flight, Search Messages etc. The User Audit feature allows authorized users of the API PNR Gateway Portal to view events that have been recorded.

If an event involves an update to data (this would only occur when updated data has been received from an airline), both the original data and the updated data are recorded with the event.

Users with auditor role can search and view audit data for all users in the organization.

The events recorded can be searched by the Audit Manager. The search can be filtered with the following parameters.

- User Id
- Data/Time Range
- Module – feature in which action has occurred.
- Action - represent transaction(s) which can be performed within the selected module.
- Action Parameter - fields that are associated with the chosen Action.
  - ➢ E.g., For the action Add user, the action parameters available for selection are First Name, Last Name, Phone number etc.
- Action parameter Value - The value associated with the action parameter.
  - ➢ E.g., Action parameter=Name Action parameter value=John can be entered to search for all events which contain the name John

Further details of the event can be viewed by double clicking on the particular event, an example of the information available is shown below.

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);

SITA Response	Compliant

System failure can be caused by various factors, such as network issues power outages, etc. These failures can lead to significate downtime, loss of data and disruption of service. Effective strategies are put in place for preventing, mitigating, and recovering from system failure to ensure a reliable, availability and continuity of operation.

The data centres have the following for the prevention of any failure.

- Redundant power supplies.
- Fully redundant network switches.
- Redundant server racks protecting the service from rack failure.
- Off-site backups of all virtual devices and data supporting fast RPO in the event of a full data centre loss

The architecture of the API PNR Gateway has been implemented with no single point of failure this includes.

- **Application** - All modules implemented with 2 or more nodes in an active-active mode.
- **Database** - 2 node cluster
- **Infrastructure** - Currently the API PNR Gateway has been implemented with a single active system architecture.

High Availability Architecture that has been designed to allow components to fail without impacting the service levels.

Multi-tier load balancing (within the production environment) is used to ensure failover when issues occur.

Extensive application monitoring is implemented to enable pro-active monitoring of the applications.

SITA is dedicated to promptly address any issues, having implemented a robust monitoring and maintenance procedures to minimize the impact of potential failures and operating a smooth service.

SITA will implement a Disaster Recovery site in an alternative data centre in Frankfurt, this will be in an Active/Passive configuration. This will include alternate infrastructure and a supporting Disaster Recovery plan to ensure business continuity and to enable the rapid transfer of the API-PNR service and data between data centres, minimising downtime and ensuring the continuity of the service.

To further strengthen the reliability of the service. the Disaster Recovery facility is scheduled to be implemented by 2025.

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);

SITA Response   **Compliant**

The API PNR Gateway can be integrated with a flight tracking service to provide live flight status information to and from the republic of Moldova. The statuses for flights departing over the next 24 hours can be viewed using the Journey Search screen shown below.

Journey Search Screen with Flight Status Information

The following flight statuses are reported.

- Unknown
- Planned
- Departed
- Cancelled
- Arrived

Reports can be generated on re-routed flights using arrival and departure airport search parameters shown below.

Please note that this functionality is not included in the current offer/proposal and comes with additional costs.

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).

SITA Response   **Compliant**

The API PNR Gateway provides the capability to store data for up to 6 months. This data retention period can be configured to store message data from 1 day up to 6 months.

Component	Data Retention
API PNR Gateway Government Portal	Message data – 5 days default (configurable - up to 6 months)

The retention period for other types of data is defined below and is not configurable.

Component	Data Retention
API PNR Gateway Data Processor	3 days after schedule flight departure, required to process data
API PNR Gateway Government Portal	• Compliance issue details (anonymised) – 45 days • Compliance reports (anonymised) – 6 months • Message counts (anonymised) – 6 months • Data quality monitoring (anonymised) – 12 months • User audit logs – 12 months • System logs – 60 days

The SITA API PNR Gateway Portal stores message data for 5 days by default. Depending on the data volume there is an option to store message data for up to 6 months at an additional cost.

2. Response to:
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:

SITA Response	Compliant

Note: SITA classes customer references and recommendations as Business Secret and this information should not be disclosed to third parties.

Country	Name of the Customer	Approximate PAX per year (million)
Australia	Department of Home Affairs, Government of Australia	250
Azerbaijan	IDRAK Technology Transfer LLC (on behalf of the Government of Azerbaijan)	6
Brazil	Departamento de Policia Federale	374
Brunei	Jabatan Keselamatan Dalam Negeri, Government of Brunei	1
Egypt	EgyptAir (on behalf of the Egypt Civil Aviation Authority)	50
Honduras	Instituto Nacional de Migracion	1.5
Iceland	Iceland Revenue and Customs	12
Israel	Israel Tax Authority	16
Jamaica	Passport Immigration and Citizenship Agency	8
Jordan	General Intelligence Department	14
Mexico	Agencia Nacional de Aduanas de Mexico	264
New Zealand	Ministry of Business Immigration and Employment	72
Norway	Politiets Sikkerhetstjeneste	64
Oman	Royal Oman Police	16
Qatar	Qatar Civil Aviation Authority	104
Peru	American Embassy Lima (on behalf of National Superintendence of Migrations, Peru)	8
Saudi Arabia	Ministry of the Interior National Information Centre	102
Singapore	Immigration and Checkpoint Authority	52
United Arab Emirates	Manafth (The General Authority for the Security of Ports, Borders, and Free Zones)	156
Uruguay	Puerto del Sur S.A.	2

Recommendations

Several of our customers have been kind enough to provide signed Letters of Reference, and we have included copies of these in Appendix A.

Each letter contains the name and contact details of the customer who has signed it.

In addition, our customer from the Norway Borders Police, Politiets Sikkerhetstjeneste, advises that local rules restrain him from signing letters of reference for any supplier. However, he is happy to have his name put forward and would be pleased to talk to you if you wish to contact him.

Fredrik Johansen Bergdølmo

Police Superintendent, Head of Operations

Mobile: (+47) 95 00 22 22

E-mail: fredrik.johansen.bergdolmo@politiet.no

NCIS Norway, Passenger Information Unit (PIU)

Our customer in the Hashemite Kingdom of Jordan, the General Intelligence Department, advises us that unfortunately they don't have direct communication channels with the Government of Moldova. Therefore, writing an official recommendation letter isn't permitted for them. However, they have offered to host a visit for representatives from the Moldova Border Police to the GID. This visit would allow them to showcase the SITA system and demonstrate how it aids in safeguarding the country's borders and managing security risks associated with air travelers. If the Moldova Border Police is interested in visiting the GID, you should send a letter to GID through SITA which we will ensure reaches the correct department.

SITA has implemented Border Management systems for Jamaica including API PNR Gateway, and we have included a Letter of Reference which describes these wider services as well as a letter specific to API PNR services, to assist Moldova to understand the scope of the work. For the Jamaica SITA integrated Gateway implementation, country legislation delays (a challenge not derived from SITA) has prevented full adoption of PNR data sets. Our solution is deployed, remains available, and can process additional data when regulations permit. Our Jamaica customer, the Passport Immigration and Citizenship Agency, advises that they intend to make PNR fully live later in 2024.

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;*

SITA Response	Compliant

Team Members – Business Secret

Note: SITA classes submitted CVs as Business Secret and this should not be disclosed to third parties.

a) Project Manager

Name: Gary Mclean

CV attached here.

Name	Gary Mclean
Education	Post Graduate Diploma in Operational Management. Institute of Management Post Graduate Diploma in Management
Certifications	Project Management Institute – Credential ID 1037550 to 2027
Relevant experience in relation to the solution	Gary Mclean has over 15 years of experience delivering software and product build, including API/PNR projects to Governments, their entities and the aviation industry worldwide. He has experience in high-availability, complex border management projects, including Intelligence & Targeting with Risk Assessment, Automated Border Control Gates and Kiosks in numerous countries. In addition, Gary has been driving the delivery of data centre builds and migration of applications to the Cloud (AWS, Oracle and Azure).
Relevant experience in relation to management and collaboration	Our customers have described Gary as a project manager with a hands-on style, strong leadership and a customer service attitude. He is influencing senior stakeholders, has a strategic vision with high organisational ability, and has excellent communication skills. Gary believes in transparency, ownership and accountability which are crucial for successful project delivery. He has led high-profile IT projects with teams of over 200 personnel with multiple 3rd parties for major airline and border management installations with onsite teams of 30-50 resources. Worked at CxO level on projects for the airline industry, governments, and entities. Managed projects with various levels of Governance and collaboration for complete customer satisfaction. As an example, Gary was requested to act on behalf of the airline SunExpress and he led the negotiation and project delivery with the UK Border team for Passenger Data for iAPI, API and PNR data.

Role in the execution of the contract	Gary is the Senior Project Manager in the delivery and implementation of the API PNR Gateway and iAPI Gateway for the Moldova Border Police.
	The Project Manager acts as the primary point of contact for the project stakeholders. He provides regular updates on project progress, communicates milestones, addresses concerns, and manages expectations. He is responsible for overseeing and managing successfully the delivery of this solution.
	Gary takes care of the Governance of this project, leading the SITA team members, and working closely with the Moldova Border Police. He is the SITA representative for all project-related issues.
	He leads and orchestrates SITA development, implementation and rollout resources across work streams to ensure successful implementation to the defined scope.
	Gary guarantees a strong focus on quality to ensure the Moldova Border Police's maximum satisfaction and hopes to exceed your expectations.
Primary tasks	Project management in close collaboration with the Moldova Border Police's (and other relevant stakeholders) team during planning, implementation and post-implementation.
	▪ Project oversight - ensuring that project objectives, timelines and quality are monitored, as well as fulfilment of project purpose; monitoring the resources, and dependencies required for successful project execution.
	▪ Project planning - ensuring that project milestones are delivered on time, within scope and to the highest quality.
	▪ Project resource management and scheduling of these resources, ensuring the project team has the necessary tools and support to complete their tasks effectively.
	▪ Project Change Management - anticipate and manage changes to project scope, requirements, and timelines. The Project Manager assesses of the impact of changes, communicates them to stakeholders, and implements appropriate change control processes to minimize disruption.
	▪ Efficient project reporting and communication.
	▪ Project documentation - ensure that project documentation, including project plans, status reports, meeting minutes, and other relevant records, are accurate, up to date, and readily accessible to the project team and stakeholders.
	▪ Compliance with SITA and Customer project governance, issue and risk management.
	▪ Post Cutover Support.
	▪ Risk Management – monitor identified, and identify potential new risks, and develop mitigation strategies to minimize their impact on project success.
	▪ Team Leadership – lead the project team, provide guidance, motivation, support, team spirit and one team principle amongst all stakeholders.
Involvement and use of described skills and experiences	Gary's involvement in the Project has already begun as part of developing the draft Work Plan for the delivery of the solution and collaboration. Early engagement and being part of the very initial meetings and discussions ensure maximum mutual understanding and a smooth but accelerated kick-off of the project and collaboration.
	We have described above Gary's role in the project and his key tasks - starting with the Project bid and Kick-off Meeting, establishing a team ethos and relationship, to the transition to the Operations/Support teams, including the post-cutover support period.
	Gary has successfully led government and airline systems projects and rollouts. He understands government requirements, the non-disruptive nature of airline rollouts and

the complexity involved. He has led integration projects for API PNR, and has experience in multiple interfaces similar to GoTravel.

He also has knowledge of the business processes involved in border operations, airline operations and airport passenger processes. Bringing these worlds together can often decide the success or failure of such projects.

We are convinced that Gary's skills and experience ensure successful project execution. Only some of the projects he has been involved in are listed in the table below.

	Project Country	Project Scope	Year of Go Live	Candidate's role in the project
1	UAE	Intelligence and Targeting Implementation	2023	Senior Project Manager
2	France	PNR and API implementation with Emirates Airline	2020	Senior Programme Manager
3	Spain	PNR and API implementation with Emirates Airline	2020	Senior Programme Manager
4	United States of America	PNR and API implementation with Emirates Airline Including	2020	Senior Programme Manager
5	Canada	PNR and API implementation with Emirates Airline	2020	Senior Programme Manager
6	Italy	PNR and API implementation with Emirates Airline	2020	Senior Programme Manager
7	Australia	PNR and API implementation with Emirates Airline	2020	Senior Programme Manager
8	Oman	PNR and API implementation with Emirates Airline	2020	Senior Programme Manager
9	Iraq	PNR and API implementation with Emirates Airline	2020	Senior Programme Manager
10	Qatar	PNR and API implementation with Emirates Airline	2020	Senior Programme Manager
11	Turkey	Rollout of IBS' Reservations and DCS – full iAPI, PNR for SunExpress	2018	Senior Programme Manager
12	Germany	Rollout of IBS' Reservations and DCS – full iAPI, PNR for SunExpress	2018	Programme Manager
13	UK	Rollout of IBS' Reservations and DCS – full iAPI, PNR for SunExpress	2018	Programme Manager
14	India	Air India rollout of Reservations and DCS – full iAPI, PNR	2011	Programme Manager
15	Malaysia	Malaysia Airlines rollout of Reservations and DCS – full API, PNR	2009	Programme Manager

	Project Country	Project Scope	Year of Go Live	Candidate's role in the project
16	Singapore	Malaysia Airlines rollout of Reservations and DCS – full API, PNR	2009	Programme Manager
17	Indonesia	Malaysia Airlines rollout of Reservations and DCS – full API, PNR	2009	Programme Manager
18	Philippines	Malaysia Airlines rollout of Reservations and DCS – full API, PNR	2009	Programme Manager
19	Angola	TAAG rollout of Reservations and DCS – full iAPI, PNR	2008	Programme Manager
20	Jordan	Royal Jordanian Reservations and DCS implementation	2008	Programme Manager
21	Cabo Verde	TACV Reservations and DCS implementation – full APIS and PNR	2007	Programme Manager
22	Moldova	Reservations and DCS – full iAPI, PNR	2007	Programme Manager
23	Romania	Rollout of IBS' Reservations and DCS – full iAPI, PNR	2007	Programme Manager

b) Airline Engagement Manager, Technical Coordinator supporting the Project Manager

Name: Ahmed AL Lawati

CV attached here.

Name	Ahmed AL Lawati
Education	Bachelor of Science BSc – Management Information Systems, Sultan Qaboos University, Oman. 2006. Ahmed is also PMP certified, ITIL V.3 certified, CCNA certified and Network + certified.
Relevant experience in relation to the solution	Ahmed has 18 years experience in IT in the Airports and Airlines industry, specialising in Advanced Passenger Information. He has strong experience of working in project management and Airline engagement for government customers. As an example, recently Ahmed led the successful SITA delivery work for API PNR for the Norway Border Police, including integration with goTravel.
Relevant experience in relation to management and collaboration	Ahmed has been responsible for certifying the airlines connecting to the SITA API PNR Gateway for 12 years. He has been driving the airline certification for API data in multiple projects globally, working closely with airlines and governments. He has strong communication skills which is of utmost importance in airline engagement and management. He has the experience of collaborating with cross-functional teams inside SITA and externally with airlines and governments, accelerating the certification of the airlines and facilitating the Data Quality discussions.

Role in the execution of the contract	Ahmed is the SPOC for the Airline Engagement Management. Ahmed's primary focus in this project is on API/PNR data certification from the airline engagement to post-cutover in production. He is managing the successful integration, on-going engagement with airlines, and their compliance with API and PNR requirements. He is ensuring accelerated and smooth operations and monitors the data quality.
Primary tasks	▪ SPOC for Airline engagement and management. ▪ Airline certification for API, PNR and iAPI. ▪ Supporting the airlines in the process as per the scope ▪ Monitoring Data Quality up to post-cutover support period ▪ Project planning and ensuring that project milestones are delivered on time, within scope and to the highest quality. ▪ Project Change Management. ▪ Project reporting, communication and documentation. ▪ Post Cutover Support
Involvement time	From project preparation and kick-off, to transition to operations, including post-cutover support period.
Involvement and use of described skills and experiences	Ahmed has participated in high-availability national security-related government projects. He understands the government's requirements, airline's challenges and the processes involved in deploying API PNR Gateway solutions. This is essential to complete projects that involve numerous stakeholders while meeting deadline and customer expectation. Ahmed will bring extensive experience and knowledge of API and PNR certification, airline management and airline operations to the project. His experience allows us to accelerate the certification process, engage the right and responsible airline stakeholders at the earliest stage, make use of the know-how of specific airlines' specialities and peculiarities, offer the necessary support to airlines in the certification process.

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;*

SITA Response   **Compliant**

SITA is receiving, processing and transmitting API and PNR data from most of the airlines which fly regularly to Moldova. These airlines are providing SITA API and PNR data which is then being transmitted to Government authorities of one or more countries.

							PNR	APIS
No	Airline Name	IATA Code	ICAO Code	Base Country	Carrier Type	Require Bilateral Agreement to receive PNR/EU	Already providing PNR to SITA	Already providing APIS to SITA
1	Lufthansa	LH	DLH	Germany	Commercial	Yes	Yes	yes
2	Wizz Air	W6	WZZ	Hungary	Commercial	Yes	Yes	yes
3	LOT Polish	LO	LOT	Poland	Commercial	Yes	Yes	yes
4	Austrian	OS	AUA	Austria	Commercial	Yes	Yes	yes
5	FlyOne	5F	FIA	Moldova	Commercial	No	Yes	yes
6	Tarom	RO	ROT	Romania	Commercial	Yes	Yes	yes
7	Turkish	TK	THY	Turkey	Commercial	No	Yes	yes
8	Freebird	FH	FHY	Turkey	Commercial	No	Yes	yes
9	HiSky	H7	HYM	Moldova	Commercial	No	Yes	yes
10	Air Montenegro	YM	MGX	Montenegro	Commercial	No	No	No
11	Azerbaijan Airlines	J2	AHY	Azerbaijan	Commercial	No	Yes	yes
12	PEGASUS	PC	PGT	Turkey	Commercial	No	Yes	yes
13	TAILWIND	TI	TWI	Turkey	Commercial	No	Yes	yes
14	FlyOne Armenia	3F	FIE	Armenia	Commercial	No	Yes	yes
15	AEGEAN Airlines	A3	AEE	Greece	Commercial	Yes	Yes	yes
16	Arkia Airlines	IZ	AIZ	Israel	Commercial	No	Yes	yes
17	IsrAir Airlines	6H	ISR	Israel	Commercial	No	Yes	yes
18	SUN D'OR	2U	ERO	Israel	Charter	No	No	No
19	Georgian Wings	D4	GEL	Georgia	Commercial	No	No	No
20	Eurowings	EW	EWG	Germany	Commercial	Yes	Yes	yes
21	Air Baltic	BT	BTI	Latvia	Commercial	Yes	Yes	yes

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;*

SITA Response	Compliant

Yes. Provided that the assumptions and dependencies set out below, and elsewhere in this response, are complied with, SITA acknowledges the above requirement. The assumptions and dependencies are as follows:

A. The mandate must be issued to the airlines before the start of the contract, setting out *inter alia* clear timelines for the airlines to send each data type. This will ensure positive and prompt responses from those airlines, which is essential to ensure the delivery schedule can be met. In addition, the providers of the host systems must complete their system setup, as per the timelines provided in the mandate.

B. The Customer must ensure that non-cooperative airlines are promptly contacted for the necessary information, otherwise the delivery schedule could slip. It is also assumed that the Customer will provide, in a timely manner, all the documents, mandates and prerequisites necessary to execute the activities of the project.

C. The EU bilateral agreements must be established between the Customer and respective airline Governments for the provision of the necessary data. This is required no later than one month after the signing of the contract, to avoid any delays.

D. To avoid any delays, Customer's environments that will host the MQ Client must be ready before the start of the project, to enable SITA to install the required software and to perform any checks and tests.

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.;*

SITA Response	Compliant

Carrier Engagement

Airline Engagement Process

Airline stakeholder engagement is an important component of overall project implementation planning because airlines' participation is critical to the success of the project. The Airline Engagement workstream will focus on ensuring that airlines know what they are required to do to comply with Moldova authorities' requirements.

Our experience from previous system implementations tells us that carriers have been very co-operative and responded positively whenever they were required to comply with a government mandate that clearly indicated timeframes for implementation and implications for non-compliance (fines or other penalties). We believe that adequate legislation and a strong stance on penalties from Governments is a pre-requisite to guarantee full carrier cooperation.

The rollout for Moldova data requirements will impact carriers at different levels, determined by whether the carrier and/or its DCS and Reservation Hosts are already technically capable of and experienced in providing API and PNR data. A carrier that is already technically capable and experienced is likely to undergo a low level of change because of Moldova implementation. The converse is also true.

As it will not be technically or operationally possible to implement all the carriers at once, the rollout of carriers will be conducted based on priority considering the level of API and PNR readiness. In grouping and prioritising airlines, we can also consider passenger volumes or government priorities, such as airlines or routes of interest.

The following subsections describe the carrier engagement process. At the outset of the project, we will prepare an integrated carrier engagement plan in conjunction with the customer to confirm the below and detail the scope, deliverables and tools that are to be used.

AEM for Carrier Engagement

We have Airline Engagement Managers (AEMs) around the world for carrier engagement. Major airlines with many international routes to multiple API and/or PNR countries prefer to interface with only one AEM for any API and/or PNR matters. With dedicated AEMs building on their relationships with airlines from previous projects, the certification and implementation process for airlines will be executed in an efficient manner.

An AEM will be allocated for the Moldova project to ensure targets are met.

Implementation Scope

The implementation scope covers the following areas:

- All international air services to, from and through airports in Moldova for API, PNR data
- Commercial, air charters/general Aviation and cargo flights
- All passengers and crew, regardless of nationality
- International inbound and outbound passengers and crew (positioning and operating) for API data
- International inbound and outbound passengers for PNR data
- International passengers and crew transferring to another carrier or flight ("transfer") and passengers and crew continuing the same flight ("transit")

Carrier Engagement Process

Carriers will be engaged in four stages as shown below.

Stage 1	CONTACT	Stage 2	DEVELOPMENT	Stage 3	CERTIFICATION	Stage 4	CUTOVER
	Inform airlines of API PNR and request a Single Point of Contact		Airlines develop their DCS and RES Systems		Airlines test system with SITA if required and receive certification		Airlines Go-Live and provide data
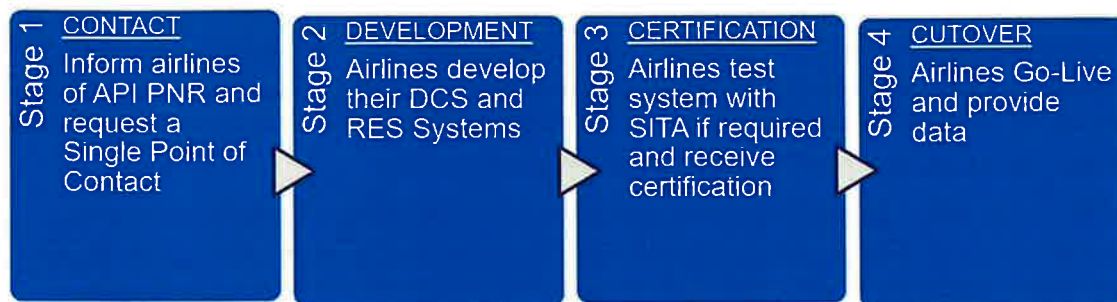
The same process applies to airlines providing API and PNR data, but there will be separate work streams for each data type because:

- API and PNR data will be sent from different airline systems and will likely involve different airline personnel
- There are different data elements required from the airlines for API and PNR
- Airlines will carry out different certification tests for API and PNR
- There are different pre-requisites for the airlines for API and PNR, such as network connectivity, systems infrastructure and Application development

This allows the flexibility to treat API and PNR data types independently from an Engagement and Certification perspective.

Stage 1: CONTACT

- Contact is established with the carriers and their contact and technical configuration details are collected via a Service Indication Form (SIF). Please see Appendix B for a template SIF Form.
- Upon receipt of the complete Service Indication Form, we engage with the carrier's contacts to agree on the method to be used for provision of the required data. Different methods may be used for different routes.
- Briefing sessions are held with the carriers to communicate the requirements to them.
- The Government of Moldova, through the appropriate authority, defines a multi-stage escalation process that can be used to ensure carrier conformance to the requirements to provide the required data.
- Technical information is provided to carriers so that they can complete their systems development necessary to support API and PNR.

Stage 2: DEVELOPMENT

- The carrier IT department or system services vendor implements any changes required for the carrier systems to comply with the agreed submission methods.
- We will work with the carrier / Host to establish and test any network configuration required to communicate the carrier's systems with the SITA network (both Test and Production) if needed.
- Once communication links have been established, the carrier sends connectivity test transactions, as defined in the certification plan, to the API/PNR certification environment.

Stage 3: CERTIFICATION

- Upon notification from the carrier that all required implementation and development work has been completed (readiness for certification), we allocate a time for certification testing.
- The carrier runs certification test cases that we have prepared, and we monitor the results. An airline may not need to complete some standard certification test cases if they have already been certified for a similar system in another country.
- Any errors found are corrected by the carrier and re-tested until all mandatory test cases are successful.
- If all applicable test cases are successful, we advise the carrier and the Government that they are certified to submit API or PNR data to Moldova.

Stage 4: CUTOVER

- An approval is received from the government to proceed with the carrier cutover.
- A service cutover date is scheduled with the carrier and a rollout plan for the different origin-destinations they service.
- Carriers train their staff and start implementation based on the agreed implementation plan.
- Carriers cut over according to agreed schedule.

Roles and Responsibilities

The table below outlines the key responsibilities regarding airline engagement:

Activity Number	Activity Description	Responsible
1	Mandate communicated to airlines	Government
2	Arrange PNR bilateral agreement with EU	Government
3	Service Indication Form returned to SITA	Airlines
4	Provide technical information to airlines	SITA
5	Carry out any development on Reservation/DCS	Airlines
6	System Test	Airlines / SITA
7	Certification Test	Airlines / SITA
8	Advise airline and government of certification result	SITA
9	Operational Preparation	Airlines
10	Cutover	Airlines / SITA

The roles that are expected to carry out the various airline engagement activities are as follows:

Organisation	Role	Key Responsibilities
Government	Government Authority Airline Liaison	Ensures that the mandate is correctly worded and is aligned with any existing regulations. An escalation point which has the power to enforce penalties on airlines for non-compliance.
Government	Project Manager Airline Liaison	A day-to-day role from the Government which responds to airline queries regarding the project objectives and timeframes A SPOC for the airlines who monitors progress and escalates where needed Approves engagement-related documentation Business-related decision-making
SITA	Airline Engagement Manager	Plans airline roll-out as per airline roll-out strategy Supports the Customer in communications to carriers Tracks and reports airline progress Attends meetings with airlines where required Manages airline certification process Ensure correctness and integrity of data provided by the airlines Co-ordinates preparation of airline documentation.

Table 2: Airline Engagement Roles

Note that having a visible and strong government team dealing with the airlines gives the project credibility, increases airline buy-in and allows the technical engagement process to run more smoothly.
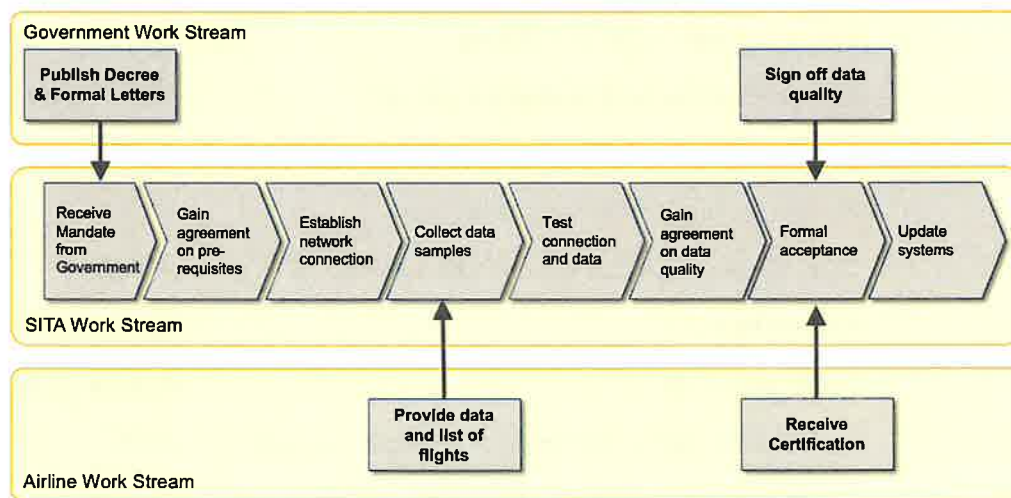
Implementation Considerations

Even though the process followed is the same for each data type, there are different technical and readiness considerations.

API Implementation

We will provide an "API Implementation Guide" to airlines outlining the data requirements and responsibilities relating to the provision of API data. This document will detail the message format, data elements, timing, and connectivity.

Application Development

As part of the Engagement and Certification process, airlines and their host system providers will need to carry out any development to ensure their API message conforms to the IATA standard and contains the required data elements for Moldova. Their systems will also need to be configured to push the data at the required timeframes.

Airlines have responsibility for developing their systems according to industry standards and API specifications. We will provide documentation and guidance to airlines relating to API.

Network Connectivity

Host system providers may need to implement connectivity to be able to send a Type B message. However, most Host providers already have this connectivity in place for sending API and other Type B messages via the SITA network, in which case the Host will just need to add the Moldova Type B address to their system.

Airlines may also use the Online Manual Submission Portal to submit API messages. The users will require an internet connection from the terminal they will use to login to the Online Manual Submission Portal.

Airline Readiness

The provision of API data is largely automated from an airline host perspective. This means the impact on the airline front-line staff (including Ground Handlers) is minimal and training is not required.

PNR Implementation

We will provide a "PNR Implementation Guide" to airlines outlining the data requirements and responsibilities relating to the provision of PNR data. This document will detail the message format, data elements, timing, and connectivity.

Application Development

As part of the Engagement and Certification process, airlines and their host system providers will need to carry out any development to ensure their PNRGOV EDIFACT message conforms to the IATA standard and contains the required data elements for Moldova. Their systems will also need to be configured to push the data at the required timeframes.

Airlines have responsibility for developing their systems according to industry standards and PNR specifications. We will provide documentation and guidance to airlines relating to PNR.

Network Connectivity

Host system providers will also need to implement connectivity to the appropriate SITA ServiceNet so that the data can be pushed via MQ. Host providers may already have this connectivity in place for other governments requiring the data, in which case there will just be some configuration required.

Airline Readiness

The provision of PNR data is largely automated from an airline host perspective. This means the impact on the airline front-line staff (including Ground Handlers) is minimal and training is not required.

Airlines from the European Union

In addition to the above readiness items, a PNR data provision agreement between the Moldova government and the European Union (EU) may be required. This agreement will define the data elements able to be provided to Moldova by airlines based in Europe.

European airlines are unlikely to provide PNR data to Moldova without such an agreement.

Carrier Rollout Plan

For a variety of reasons, not all airlines can certify and deploy at once. For instance, airlines may be at different stages of readiness. A structured approach to prioritisation is needed.

There is less technical and operational risk in a phased deployment and such an approach allows government users to get used to the system.

Escalation

Our experience has shown that countries that have legislation and penalties in place are much more successful with airline compliance. Ideally, the government mandate should be based on legislation and regulations which contain deadlines and penalties. The Government Authority empowered for management of airlines is generally the Department of Civil Aviation.

Further, the Government should be visibly promoting the project to the airline stakeholder groups and be seen to be prepared to act on airlines that are not complying with project timeframes.

If the carriers do not perform according to the Government plans the following are escalation triggers:

- No SIF provided
- Failing to provide a schedule for implementation
- Falling behind schedule for development / certification / cutover
- The following are the actions that the Government may take (to be agreed):
  - ➤ Site visit with warning letter
  - ➤ License suspension
  - ➤ Penalties

Carrier Engagement Communications Plan

Our experience shows that carriers are co-operative and respond positively whenever required to comply with a government mandate that indicates timeframes for implementation and implications for non-compliance (fines and penalties). Adequate legislation is a pre-requisite to guarantee full carrier co-operation. Below table illustrates the proposed communications plan for carriers.

Objective	Audience	Message	Target Result	When / Frequency	Type/ Method(s)	Owner
Communicate mandate to carriers	Carrier or service providers	Outline project objectives, scope and how it contributes to Moldova's objectives. Illustrate benefits/impacts to carriers. Should include Government mandate.	Obtain commitment or involvement from stakeholders. Signed SIF forms.	FIRST – as soon as possible from project start date	Letter and group briefing to carriers	Govt
Communicate with Industry organizations	IATA, ACI, etc.	Outline project objectives and how it contributes to Moldova's objectives. Illustrate benefits/impacts to carriers. Should include Government mandate.	Lobby industry organizations to facilitate commitment and involvement from carriers' stakeholders	FIRST – as soon as possible from project start date	Meetings	Govt
Provide technical and operational information to carriers	Carriers or service providers	Detail functional and non-functional requirements for API and PNR implementation	Satisfy stakeholder requirements for technical and operational information	At project milestone – once commitment obtained from carriers	Paper based documentation in electronic form	SITA
System/Certification Test	Carriers or service providers	Request data for system/certification test	Carrier is API and PNR certified	At project milestone	Electronic documentation	SITA, Carrier
Monitoring of carrier progress	Carriers or service providers	Determine status of activities with carriers	Clear understanding of where carriers are in the process	After mandate is communicated to carriers and ongoing during implementation. Fortnightly.	Email	SITA

SITA

Objective	Audience	Message	Target Result	When / Frequency	Type/ Method(s)	Owner
Briefings on project progress	Government, SITA, Carriers	Briefings with Carriers on project progress according to their agreed schedule.	Carrier is clear on how the project is progressing.	Quarterly	Workshops	Govt
Technical forums	Government, SITA, Carriers	Technical forum with carriers and systems providers	Carriers and system providers are clear about PNR technical requirements and PNR data transmission	As needed	Conference calls, webinars	SITA
Meetings on carrier progress	Government, SITA	Meetings to discuss carriers' progress, actions, and issues.	Government and SITA are well informed about progress of carrier engagement.	Weekly	Face to face meetings, conference calls	SITA
Migration and cutover	Carriers or service providers	Detail requirements for migration/cutover	Carrier is successfully migrated to API and/or PNR	At project milestone and once carrier is ready for API and/or PNR	Migration documentation	SITA, Airline

SITA

Engagement Documentation

The following table lists the documentation that will be prepared for this project.

Document	Description	Prepared by
Government Mandate	Written communication to the airlines servicing Moldova which advises the airlines that the Government is introducing the Moldova PIU system and that airlines must participate with their technology implementation partner, SITA. This communication references applicable legislation where available and indicates timeframes and consequences of non-compliance.	Draft prepared by SITA, finalized and distributed by the appropriate Government Authority.
PNR and API Implementation Guides	A guide for airlines regarding operational compliance with API and PNR data and technical requirements of the project.	Prepared and distributed by SITA.
SIF	The Service Indication Form is a template which airlines must complete, thereby providing contact and technical information to the Airline Engagement team.	Prepared and distributed by SITA. Completed and returned by airlines.
Certification test plan	Certification test plan sheet, test cases, test data and instructions for airlines to complete certification testing.	Prepared and distributed by SITA.

Carrier Website

We recommend that the Government prepares a website within an existing official website or a website that is hosted by the Government (with a government domain name). The website should serve as one mechanism to provide information to the carriers (apart from circulars, working groups etc.). This website should provide all the information about the project, the project timelines, compliance requirements, guidelines etc.

The website should be sized to handle Internet traffic of about 100 visits a week.

The website should have two types of content:

- **Website content** – in the format on articles displayed on the website
- **Documents content** – in downloadable document format accessible by authorized users only.

The website should have three different areas:

- **Public site** – this area is accessible to all the users with the domain name.
- **Members' section** – this area is accessible for members that have an account and have the privileges to access the private area of the website and download the documents. It will have the following pages:

    ➤ Home
    ➤ Project Background and Objectives
    ➤ Implementation
    ➤ Document Download Page (for authenticated users only)
    ➤ Current Status and Progress
    ➤ Frequently Asked Questions (FAQ)
    ➤ Contact Us

- **Administration area** – this area is accessible for the website administrators. From this area, all the website content and users can be controlled.

The website should be available to carriers in English language.

Production Data Assurance and Auditing

The primary activity undertaken prior to Production is airline Certification. Certification ensures that the airline sends data in the correct format and can therefore be processed by Moldova.

Once an airline is certified and is sending Production data, the system will carry out data validation to ensure message structure is correct and individual data fields meet certain constraints for database integrity.

Government Mandate

It is a requirement that the government of Moldova issue a mandate to all airlines traveling to and from Moldova to inform them of the requirement to send API, PNR and DCS data at the times listed below, to ensure continued co-operation of the airlines in the provision of data.

API data

Required when the carrier has a final manifest of those on board a flight. Usually provided at Wheels-up, when the flight has taken off and is unlikely to return to the gate or the airport. Often this will be within 30 minutes of actual departure time

PNR data

Required at regular intervals prior to scheduled departure to enable early capture of traveller information and late bookings close to departure time. Normal multiple delivery drop times are relative to scheduled departure time.

DCS data

Final data collected when the traveler checks-in recording their baggage information and is assigned their final seating position. Usually provided at the scheduled departure time at T-0. Some airlines are capable of providing this as part of their supplied PNR message at T-0

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;*

SITA Response	**Compliant**

SITA's Support Organisation

SITA's service to the Moldova Government will be supported by SITA Global Services (SGS)

SITA Global Services (SGS) is SITA's operational arm with around 1700 skilled engineers distributed globally. SGS provides SITA Customers with a truly flexible global support capability for all SITA products and services designed for the Air Transport Industry (ATI) and Governments.

SGS has invested in state-of-the-art Service Desks and Command Centres following ITIL best practices to provide expert technical support 24x7x365 seamlessly. Moreover, SITA strongly focuses on security with all SITA processes and infrastructures aligned to security standards such as ISO27001.

This investment together with SITA's unmatched expertise in serving Government and ATI customers for over 70 years and a comprehensive product portfolio and global network, best places SITA to deliver service excellence to AMP.

ITIL Practices

SITA provide Quality services through adherence to ITIL principles, SITA has 18 service processes written in line with ITIL 2011 best practices, audited by the external Registrar, used for ISO/IEC 20000 certification October 2017:

Since that time SITA have taken a different direction to ITIL and have not renewed our certification. SITA are in the process of completing assessments, of our ITIL Maturity and implementing an ITIL maturity program to target achieving a higher level of maturity over time. ITIL is Governed by Axelos, SITA are using an Axelos maturity model to gauge our ITIL maturity level, based on ITIL 4, the latest standard of ITIL.

SITA have performed an independent ITIL Maturity Assessment in Q4 2022. The ITIL Maturity assessment has been performed using the Axelos ITIL Maturity model: ITIL Maturity Model | Axelos. It has been conducted by an approved Axelos Consulting Partner: Beyond 20. As a result of this assessment, we have received a Practice Capability score for the evaluated Practices and a Maturity Road Map with recommendations. We are currently driving the 3-year ITIL Maturity roadmap with the ambition of increasing the maturity level of our practices by 2026. We plan to secure a second independent ITIL maturity assessment in 2025.

As detailed below SITA has an ITIL aligned Change Management process for the efficient handling of changes and to minimize the impact of change-related activities on service quality.

Support Model

The SITA 24x7x365 support model in place for SITA API PNR Gateway service is described below:

API PNR High level Support Model
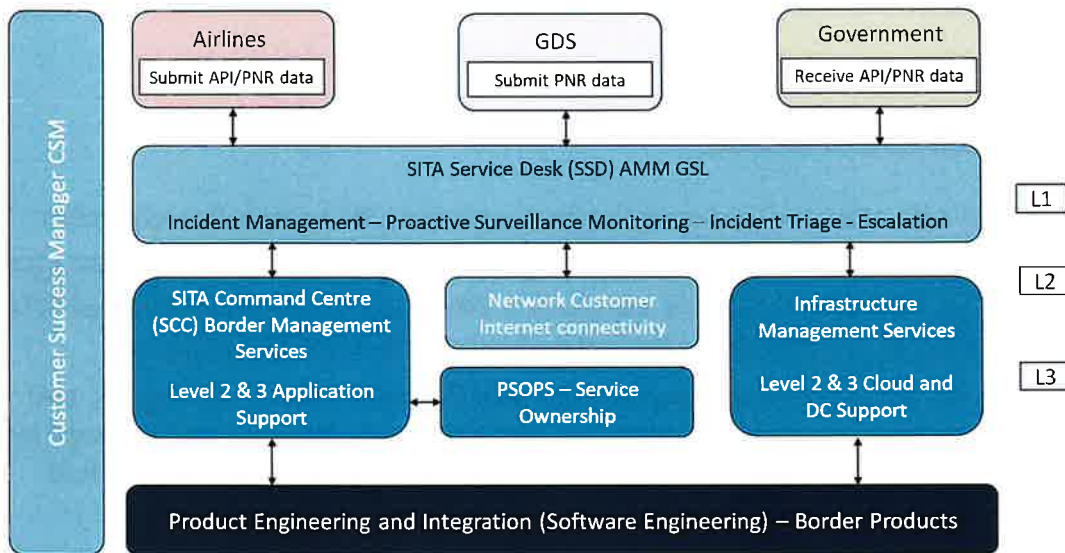
Level 1 Support SITA Service Desk (SSD)

First line support for Incidents and Service requests is provided by the SITA Service Desk, the single point of contact dedicated to Border Management (SSD-AMM-GSL). Incidents can be logged by Phone, Email and Portal, high priority incidents (P1&P2) should always be logged by phone.

- Initiates or receives incidents and support requests from customers or via SITA Monitoring tools.
- Retains ownership of the resolving process through the entire ticket lifecycle to full resolution.
- Through scripted troubleshooting they will attempt to resolve the incident with the users and try to provide First Call Resolution.
- Manages the routing of the ticket for technical resolution by higher level resolver groups.

Specific deliverables are:

- Log and categorize the reported Incidents.
- Track the Incident through to resolution.
- Attempt scripted First Call Resolution.
- Provide status updates to Moldova.
- Identify known errors and repetitive Incidents, providing a work-around where applicable.
- Escalate to appropriate Resolver Groups and levels of support.
- Initiate escalation procedures for critical incidents and involve Moldova if needed in the escalation path.

- Verify closure with Moldova and where applicable obtain Moldova concurrence for Incident closure.
- Close the Incident ticket and document the Incident resolution in the ticket record visible to Moldova in the SITA Service management platform.

SITA L1 can be engaged 24x7x365 with below communication channels:

- Phone using the SITA in-country number.
- Email (using a specific form provided by us for incident definition).
- SITA Service Portal

Proactive Surveillance Monitoring (PSM)

Proactive Surveillance Monitoring (PSM) is completed by the SITA Service Desk SSD. PSM is completed centrally using a single common platform, the SITA Next Generation Operational Support System (NGOSS) platform that delivers event management and proactive monitoring capabilities on network devices hosts, virtual infrastructure & applications. The aim of NGOSS is to provide SITA Operations team with an integrated monitoring solution across different technology domains (networks, cloud, servers, and data centre services). Monitoring is centred around real time information on problems in the infrastructure and alerts across the API PNR Infrastructure providing for faster identification of root cause issues – near real-time.

NGOSS receives monitoring inputs from the Nagios monitoring application that is used to monitor the API PNR Carrier Gateway Solution. The maximum time that it takes to poll and detect an Alert is a configurable parameter, SITA configure checks to run every 10 minutes, so the maximum time for detection will be 10 mins, the mean time will be 5 mins.

The main components of NGOSS are shown in the below diagram and described in the following table. All Nagios and vROPS events are aggregated into the single pane of glass ROSS.

Component	Function
VSA	VMware Service Assurance provides Network device, Host & infrastructure monitoring based on a number of network management protocols for data collection based on the VMware Smarts technology. Collating SNMP & Syslog traps and alerts. Performs SNMP polls to provide fault management events. Provides root cause and impact analysis.
IPRS	Provides near real-time and historical reporting and graphing based on data underlying collectors. Reports are visible on the IPRS web portal and can be scheduled to be generated and delivered via email regularly. Complex customer dashboards to provide a single view for networks, FLEX components, virtual infrastructure, applications, DDC's etc.
ROSS	Provides a coherent view of the event data from the underlying toolset which can be organized into logical assemblies by customer, location, etc. The ROSS portal is monitored for operational events with both manual and auto ticket creation. It is the entry point for provisioning, inventory, and event management tasks. Integrates with the ITSM tool set & CMDB/incident management.
ITSM	IT Service management system (ITSM) Globally, SITA use an integrated (ITSM), ServiceGateway (People, Processes, and the use of ServiceNow and Power BI) to manage, track and record incidents.
vROPS	Provides virtual Infrastructure, VM & physical server OS & application metrics collection utilising vROPS/Telegraf agents or direct collection techniques.

NGOSS provides dedicated views to SITA operations teams to allow:

- Monitoring of network devices, servers, clients, applications, and peripherals.
- Event management.
- Performance & customer reporting.
- Network configuration management.
- Capacity Management.
- Management of Configuration Items (CIs) and incidents through the integration with SITA ITSM tool, ServiceGateway:
    - Synchronization of business and technical information of the CIs.
    - Triggering of incident creation in ServiceGateway from NGOSS events.
    - Automatic incident creation in ServiceGateway for preconfigured events.

SITA can enable the Moldova to have access to the same information through a web portal, the SITA Integrated Performance Reporting Service (IPRS), enabling viewing of reports and performance graphs. IPRS is highly customisable and custom dashboards can be created to meet the needs of Moldova's teams. There is no additional cost for IPRS.

Level 2 Support SITA Command Centre SCC

Expert Support is provided by the SITA Command Centres (SCC), on a follow the sun basis, 24 hours a day, 7 days a week, 365 days a year. The SCC provides an advanced level of technical knowledge on the API-PNR service and troubleshoot and resolve complex incidents and requests.

- Proactive and reactive service, support of CORE equipment incidents.
- Determination and correction of incidents and problems encountered with the equipment, perform workarounds and permanent fixes identified by the Problem management process for Incident resolution, this may include emergency software patches and updates.
- To coordinate change activities with SITA CSMs and Customer staff to ensure any required change windows are agreed.
- To pass the incident to level 3 Support, if higher level support is required.

Level 3 Support, the SITA Product Engineering and Integration Team

Level Three (L3), the Product Engineering and Integration (PEI) team, SITA Advanced Application Support, provided during UK business hours (09:00-17:00) and on-call for high-priority issues.

Operationally they provide code fixes and workarounds, performs certification and testing of new software releases. They will:

- develops required code change and bug fixes.
- performs certification and testing of new releases;
- makes releases available to our operational teams for global release following beta certification.
- develops functional and technical documentation associated with new developments and user manuals.

Service management

We will assign a Customer Success Manager (CSM) trained on the API PNR Gateway solution.

This role will act as Moldova's voice within SITA for any operational issues. The CSM is responsible for ensuring service quality and Customer satisfaction and is available during normal business hours. They will provide support in English.

The CSM:

- Ensures that contracted service levels are met or exceeded.
- Owns issues and problems on Moldova's behalf and escalates internally when necessary.
- Ensures timely responses are given to all requests and that orders are delivered to meet expectations.
- Provides monthly service reports to report on the quality of the services delivered and to seek feedback.
- Proactively seeks improvements and innovations in the services provided by us, underpinned by a Continuous Service Improvement Plan.
- Coordinates the change management process.

- Manages administrative issues and payable invoice cycle.
- Serves as Customer escalation point for Incident Management and coordinate service restoration.
- Coordinates any customer satisfaction surveys requested by us and acts quickly and constructively on feedback.
- Supports on airlines Data Quality monitoring and improvement.

Service Review Meetings (Monthly), conducted by the SITA Customer Success Manager.

The CSM will present a monthly report with the objective to:

- Review service performance report for the month under analysis: incidents, problems, changes, capacity, service improvements.
- Review requests for complex changes, and particularly the possible implications for the contractual schedules.
- Provide updates on open issues, escalations, and improvements.
- Agree on operational priorities.

Escalation Process

During the delivery phase of the project, as a part of Service transition, Escalation contacts within Moldova will be established, the contact details will include name, email, and phone number. These contact details will be populated into SITA's ITSM system ServiceGateway (using ServiceNow) and the named contacts or support groups will be set up to be notified via email should an incident exceed an SLA. Notifications are sent to all support parties, to increasingly senior people in the support organization over time.

For example, for a P4 incident with an SLA of 8 hours the first SITA internal notification will be at 6 hours, 75% of the SLA, giving time to ensure that the SLA is achieved. At 8 hours, 100% of the SLA the 2nd level notification assigned personnel will be notified of the escalation. At 150% of the SLA time, at 12 hours, the escalation will increase to the next level of seniority and the 3rd Level assigned personnel will be notified. Finally when at 300% of the SLA, 24 hours, the 4th Level assigned personnel will be notified.

Notification	Percentage of SLA time.	Notified Escalation Contact
1st Notification	75% of the SLA	- Incident Owner - Team Lead of the Incident Owner - L2 AMS Support - Current Resolver Group
2nd Notification	100% of the SLA	- Same as above, + - L3 AMS SMEs - Customer Success Manager

Notification	Percentage of SLA time.	Notified Escalation Contact
3rd Notification	150% of the SLA	• Same as above, + • SITA Command Centre (SCC) Shift Manager • Subject Matter Experts (SME) Senior Manager • Regional Manager of the affected customers
4th notification	300% of the SLA	• Same as above, + • SCC Senior Manager • Operations Director • Product Manager

Escalations follow a hierarchical path and will be raised to higher levels within the support and account management teams as in accordance with the below diagram.
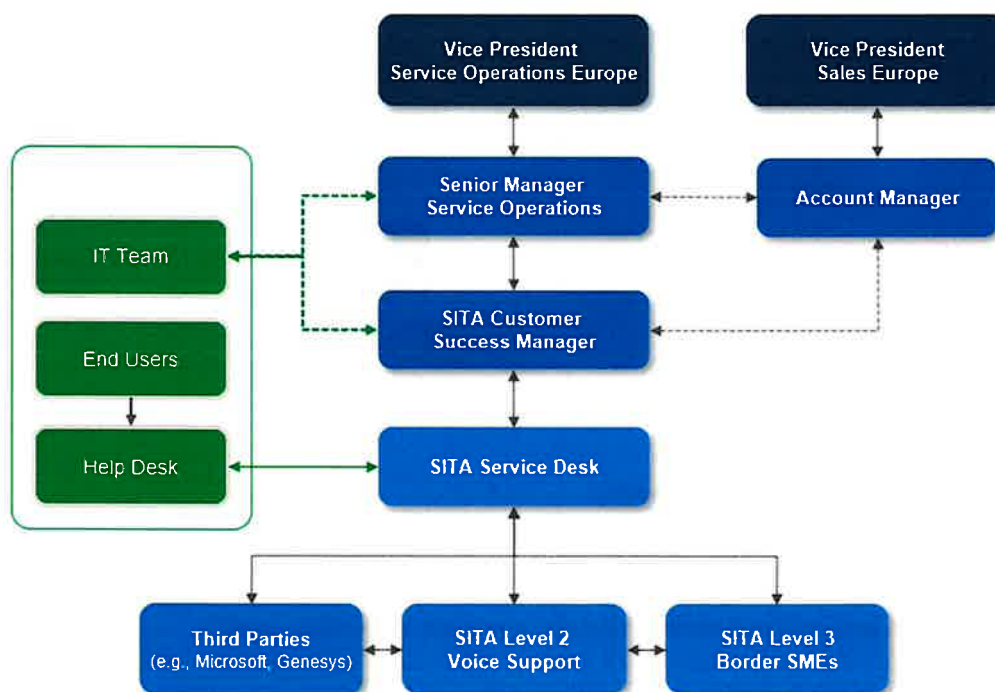
Major Incidents and Root Cause Analysis

The SITA Major Incident (MI) management process is triggered to address incidents with a critical impact and that exceed the SLA.

SITA Service Desk activates the MI process according to a set of pre-defined criteria. Major Incidents are immediately reported to the CSM by the SITA Major Incident management team which coordinates support teams for a swift resolution.

SITA forms two workstreams: a technical team for quick incident resolution and a communications flow to maintain clear communication among all parties, including Moldova, throughout the incident lifecycle. Escalation follows a hierarchical path, involving higher levels of SITA management over time.

After any Major Incident, SITA CSM provides a root cause analysis (RCA) report and establishes a service improvement plan based on recommendations.

Major incident flow
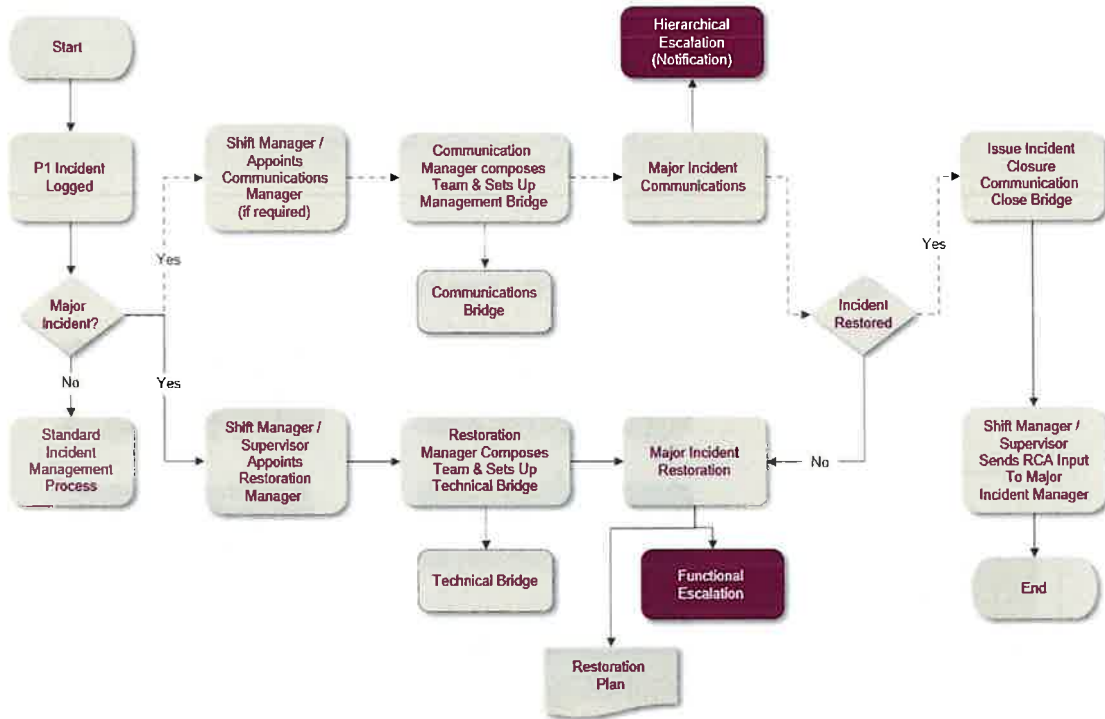
Service Levels and Service Credits

As part of our contract SITA will create a service level schedule, this will include:

- A list of the service to which the Service Levels are applicable against
- Definitions
  - System Availability
  - Scheduled Outages
  - Emergency maintenance notified to Customer.
  - Service Levels
  - Service Level Credits and their calculation
  - Exceptions

SITA will endeavour to meet the following Service Level target(s):

Service Credit Units, One Service Credit Unit (SCU) = 100 EUR

Measure Title	Description	Measurement period	Target	Service Credit
System Availability	Availability – API PNR	Month	99.5%	0 SCU
			Less than 99.5% but equal or greater than 98%	5 SCU
			Less than 98%	10 SCU
Business Continuity and Disaster recovery, Recovery Time objective (RTO) And Recovery Point Objective (RPO)	API PNR recovery of systems in an alternative Datacentre.	Hours	RTO less than 4 hours	0 SCU
			More than 4 hours but less than or equal to 10 hours	5 SCU
			More than 10 hours	10 SCU
Response and Resolution times	Government Gateway resolution of P3 incidents.	Month	**For each P3 incident more than 480 min (8 hours)	2 SCU's for each failed incident

Service credits covered by an aggregated cap of 5% TCV in any one year.

Availability Uptime of 99.5% for the SITA API PNR Gateway Solution

The SITA API PNR Gateway solution will provide an uptime of 99.5% based on 24x7x365 service provided over a 30-day month, this allows 215min downtime for unscheduled interruptions.

- Service Availability is measured on a monthly basis, unplanned outages are measures as 100% of the downtime against Critical incidents (Total outage) and 50% of the downtime against high severity incidents (Impaired operation).
- Service Availability is measured against the Expected Service Availability (i.e., excluding Scheduled Downtime). The table below contains a calculation (provided as an illustration only) of Expected Service Availability and Service Availability during one calendar month.

Service Levels for Service Availability are as set out in the following table:

Services	Hours	Availability
Moldova API-PNR	24 hr x 7 days a week x 365 days a year	99.5%

Service Availability Service Levels do not apply in the:

- Absence of an Incident Record issued by SITA.
- If the SLA is exceeded based on any delay that is an area under the customer responsibility

Example of Availability during one calendar month.

A month based on 30 calendar days = 43200 minutes (for a Service Cover Period of 24 hours x 7 days a week)

Scheduled Downtime = 60 minutes

Expected Service Availability = 43140 minutes

Unplanned Outages = 216 minutes

Service Availability = ((43140-216)/43140) * 100 = 99.5%

Scheduled Downtime

SITA complete Releases approximately every quarter, with patches and updates as necessary in between. SITA will work with IPIU to agree the maintenance schedule quarterly in advance. In the event of necessary maintenance by SITA that is likely to affect the Service SITA will provide seven (7) days' notice, where possible, to the Customer prior to any planned maintenance, with the reason, date, time, and estimated duration. Planned Downtime will be coordinated with IPIU by the SITA Customer Success Manager (CSM).

For Emergency changes, SITA will, whenever possible, give 24 to 48 hours' notice, the timescale will be driven by the nature and the implications behind the need for the change. SITA will follow the Emergency change process to ensure that the change is detailed, planned, and accepted.

The required activities will be coordinated with IPIU by the assigned Customer Success Manager (CSM).

Unscheduled Permitted Downtime means an **Emergency Change** that would require an emergency Service outages that is agreed and approved by the customer to perform emergency or urgent maintenance, which may include maintenance windows or maintenance update for third party issued patches and updates for the Service (and supporting infrastructure if applicable), which may be a critical security patch update if it addresses an issue that may affect the operating environment of the Service.

Emergency Changes

Emergency Changes are Changes that must be completed as soon as possible to repair a service outage or a service degradation, to resolve an ongoing Impact on business continuity, or to mitigate a risk factor that might cause an imminent Impact in the business or to the customer.

- Emergency Changes are normally completed in a short timeframe with approval of an Emergency Change advisory board (eCAB) consisting of key personnel from SITA and IPIU. Members of the eCAB may vary and will depend on the nature of the Emergency Change(s). Approval is given by the authorized Emergency Change Approvers named by the CAB or by the Change Manager
- Testing may be reduced or in extreme cases eliminated if necessary to deliver the Change urgently and if agreed by authorized members, Change Manager and/ or eCAB
- Updating of the Change entry in Service Management Tool and configuration data may be completed retrospectively until normal business hours resumed – though these activities remain mandatory as for Normal Changes.

Unscheduled Downtime

It is the total time against incidents that the SITA platform is off-line and where the service is degraded so that it has an impact on the business and where there is no alternative available. The Start time would be the time at which P1 or P2 incident is created in the SITA ServiceGateway IT Service Management system, the end time would be the time at which the incident is resolved and when the service has been restored to operation, as in accordance with the times as logged and recorded by the SITA IT Service management system ServiceGateway (ServiceNow).

Communications Plan for Unscheduled Downtime

Should an incident be detected by SITA through remote Proactive Surveillance Monitoring then IPIU's nominated contact will be informed at the outset. For all unscheduled downtime incidents SITA will then communicate updates at regular periods throughout the incident life cycle.

Resilience and Redundancy

System failure can be caused by various factors, such as network issues power outages, etc. These failures can lead to significant downtime, loss of data and disruption of service. Effective strategies are put in place for preventing, mitigating, and recovering from system failure to ensure a reliable, availability and continuity of operation.

The data centres have the following for the prevention of any failure.

- Redundant power supplies.
- Fully redundant network switches.
- Redundant server racks protecting the service from rack failure.
- Off-site backups of all virtual devices and data supporting fast RPO in the event of a full data centre loss

The architecture of the API PNR Gateway has been implemented with no single point of failure this includes.

- **Application**

  All modules implemented with 2 or more nodes in an active-active mode.

- **Database**

  2 node cluster

- **Infrastructure**

  Currently the API PNR gateway has been implemented with a single active system architecture.

  High Availability Architecture that has been designed to allow components to fail without impacting the service levels.

Multi-tier load balancing (within the production environment) is used to ensure failover when issues occur.

Extensive application monitoring is implemented to enable pro-active monitoring of the applications.

SITA is dedicated to promptly address any issues, having implemented a robust monitoring and maintenance procedures to minimize the impact of potential failures and operating a smooth service.

Business continuity and Disaster Recovery (DR)

SITA are in the course of implementing a DR capability for the API PNR Gateway, SITA will be adding an alternate DR environment. The DR solution will be implemented in an Active/Passive configuration. This will include alternate infrastructure and a supporting Disaster recovery plan to ensure business continuity and to enable the rapid transfer of the API-PNR service and data between data centres, minimising downtime and ensuring the continuity of the service should a catastrophic event, such as fire, floods etc, render the primary data centre inoperable.

The DR location is a fully functional like-for-like service, the API PNR Gateway will run hot out of both sites. When not in use the API/PNR will run in a partial state in the secondary datacentre, monitored and ready to go. Both the primary and the secondary datacentres will have full resilience and both datacentres will have dual internet connectivity.

The DR capability will allow SITA to isolate the SITA service from risk of change, i.e. if there is a hardware upgrade at the primary we may choose to switch the service to secondary for the duration of the change to be safe.

Implementation of the DR plan

- The primary and the secondary site will be in Frankfurt with several Km separation between them, SITA already replicates backup of the data between these datacentres.
- The required high-speed connectivity between to the two datacentres is already in place.
- The secondary site will be a mirror image of the primary site, using same architecture, each site has the same capabilities as the other. For other products and services, SITA has already implemented DR capabilities between these datacentres. SITA regularly switch the service from Primary FRA2 to the secondary FRA7 and leverage that to isolate the SITA service from risk of change (i.e. if there is a hardware upgrade at FRA2 we may chose to switch the service to FRA7 to reduce risks. FRA7 is a fully functional like-for-like service. When acting as the standby location (ready to provide DR) the API PNR service will run in a partial state in FRA7, monitored and ready to go should it be needed.
- The API PNR Gateway portals (Government and OMS) will not be immediately available in the DR site. Any data processed by the DR site will be stored and be available to search and view in the Government Portal once the solution has been switched back to the Production site or the Portals have been implemented in the DR site.
- The process to switch (from Production to DR) will be automated but will be initiated manually once the decision has been to failover.
- In parallel, SITA will create a DR Plan supported by processes and procedures for the activation and implementation of the service, targeting to minimise downtime, ensuring data

integrity, and maintaining service levels. As a part of the plan SITA will create a communications plan so that IPIU will be informed via the agreed communication channels should SITA need to activate its DR plans.

- In creating the DR plan, a Risk assessment will be created, identifying any potential issues, such as loss of data, issues in transferring network connectivity and human error. Risks will be assessed and mitigated in severity order.

- Once the DR capabilities are developed and implemented SITA will conduct extensive testing of the functionality of the service and the integrity of the data to ensure that the infrastructure transfer and supporting plans work as intended, any failing areas will be reworked and tested again before final acceptance of the solution.

- Throughout the operational phase SITA will complete regular reviews of the DR plan, completing maintenance and monitoring of the DR facilities, periodic testing of the DR plan (Annual) and infrastructure to ensure that we have an effective DR capability available at all times, ready to be used should a disaster occur.

The data replication between production and DR environments will be pro-actively monitored to ensure the data in the DR data stores is in sync with production.

Once the decision to failover to the DR site has been made, the RTO and RPO for the switch to DR are as follows.

- RTO of 4 hours
- RPO of 4 hours
- RTO for Government and OMS Portal of 5 days

The DR architecture is shown below:
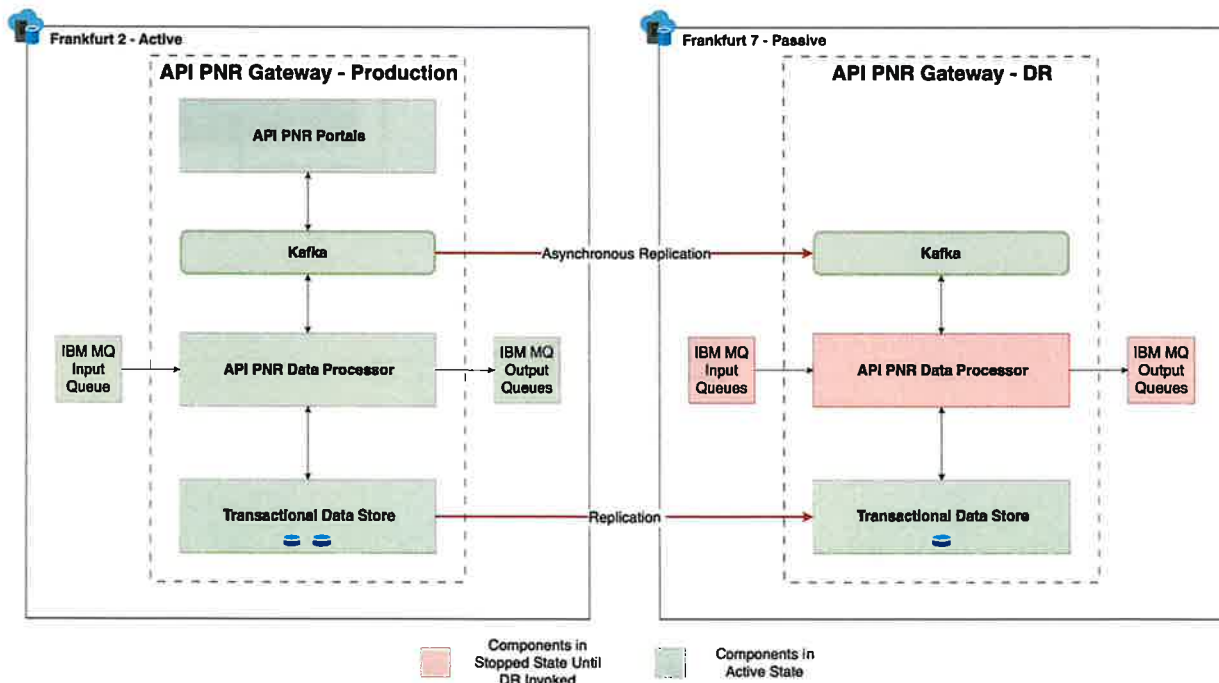
The Disaster Recovery facility is scheduled to be implemented in 2025.

Change Management Process

SITA has an ITIL aligned Change Management process for the efficient handling of changes and to minimize the impact of change-related activities on service quality.

SITA change management process is led by the assigned Customer Success Manager (CSM) and has the objective to:

- Ensure changes are logged, triaged, prioritized, assessed, and authorised by the SITA Change Approval Board (CAB), planned, implemented, and fully tested in a controlled manner.
- Ensure necessary corrective action(s) are taken during the change implementation, if necessary, to avoid any disruption.
- Ensure lessons are learnt from any failed changes as well as from successful changes where possible.
- Ensure quality controls are in place to monitor the evolution of changes implementation.

The Moldova will be informed of any changes, for example new software releases, that require end to end testing. Such changes are fully tested in a pre-production environment before they are applied in the production environment.

The change management process flow is shown in the below diagram.
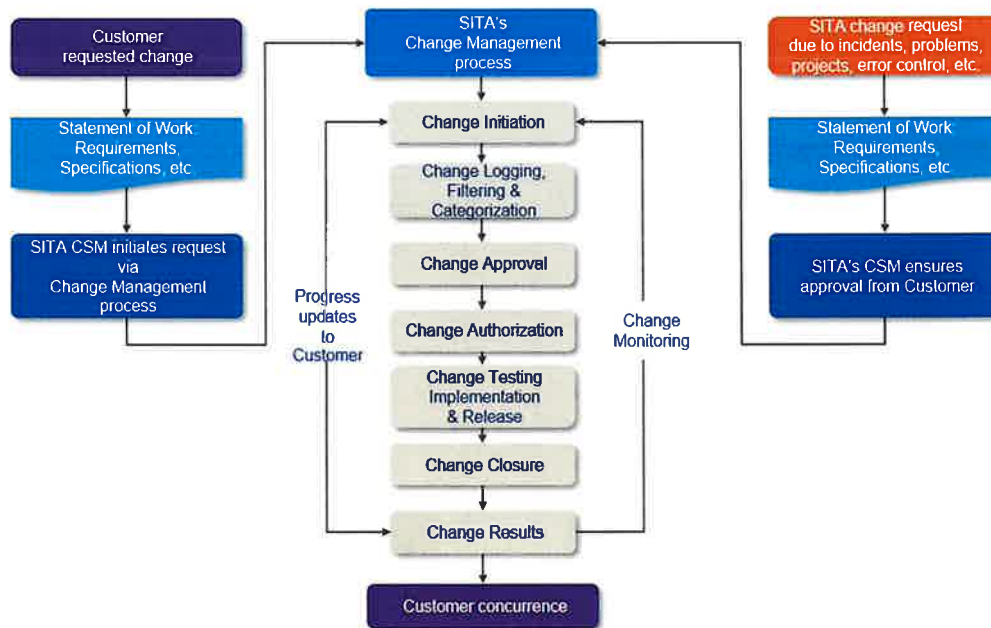
If either party would like to request a change to a Service, then either party will follow an agreed change process. SITA may enhance the Services for all SITA customers of the Services during the Term and may accordingly amend the Service Schedule to reflect such developments. All such amendments to the Service Schedule shall be effective after communication to Customer by SITA following the agreed change process.

The Charges do not cover changes to the Services as a result of system changes required by a recipient Government Agency, or any legislative change, for which SITA shall be entitled to charge its then-standard rate for such work.

The SITA API PNR Gateway is a multi-tenant service that provides API and PNR for multiple governments. When a request for customization is received, SITA assesses the complexity of the changes, and if they are needed for other customers as well as the originator of the request.

If any customizations are required for other countries, the cost of those changes may be absorbed by SITA (e.g. for a change in the EU directive) or spread across all customers. However, should any customer, including Moldova, request customizations that are not required by other countries (e.g. a bespoke XML format for data delivery), that customer may incur the full cost of those changes. These will be detailed and agreed before any work is undertaken.

Changes in the EU API and PNR directives.

SITA will update the API PNR Gateway to meet the changes in the EU API and PNR directives as required.

SITA monitors the data requirements and directives issued for all countries implemented on the API PNR Gateway. Additionally, we have contributed to Commission discussions on potential changes.

When a new requirement or an update to a directive is noted, the SITA API PNR Gateway product team analyses the changes to the requirements and assesses if a change to the API PNR Gateway is required.

Transition Management

SITA has a well-defined process for the transition of projects from Delivery into Operations. ITIL v4 Service Transition is concerned with the Processes, People and Tools that are required to support and maintain the system in Operations right with the Takeover Day until post-delivery. This includes Data Configuration and technical acceptance from Delivery to operations.

SITA will appoint a Transition Manager during the Initiation phase of the project who will be responsible in ensuring that the transition is well-planned and executed.

The transition manager will receive a Transition Initiation Request (TIR) document from the delivery Project Team which includes all information around:

- Customer details,
- Product and customer support model
- Site operations requirements
- Review technical requirements.
- Ensure technical requirements are understood.
- Define/Validate Telephony Solution

SITA will discuss this in a Transition Kick off meeting very early in the process and agree the Transition plan.

At this stage, after kick-off, the transition Project Manager will have all the information required to prepare the SITA internal documents, including description of the support model, roles and responsibilities (RACI) of the involved resolver groups and other stakeholders.

The documentation will define the people, process and tools required for:

- Incident, Problem, Change, and Asset & Service Management
- Tool usage
- Notification requirements
- Event and Knowledge Management

One of the next steps is the Data Collection and preparation of the Service Management System. SITA is using ServiceNow as their main Service Management System. The system will be populated with Location, Organisations, people (contact groups), Service and Asset-CI's (Configuration Item), Notification Triggers and underlying Customer SLA's.

Once all the information is collected the Service Management pre-production System is loaded and proper functionality is tested before the production system is loaded and ready for use.

The Transition project manager will be responsible to create a support guide and this will be stored in the knowledge management section of the Service Management System:

This support guide will focus on process flow for Event & Incident management Triage and escalation Guides, Problem and Change Management.

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;*	
SITA Response	**Compliant**

Detailed Work Plan

Upon selection and contract signature, the SITA team will be mobilised to coordinate the successful implementation of the API and PNR system to meet the business objectives of IGPF. Project activities will start as soon as the contract is signed. The project will be completed within 50 working days from contract signature as required by IGPF.

The conditions and pre-requisites required for achieving this timeline is indicated on the project schedule provided in this proposal.

The dates in the schedule assume contract signature and project start on 2 September 2024.

We are proposing to certify the airlines in 2 tranches:

- Tranche 1 will include 10 APIs and 1 PNR airlines. This tranche will include the highest priority airlines. The airlines to be included in this tranche will be discussed with IGPF in the project kick-off meeting.
- Tranche 2 will include the remaining APIs and PNRs airlines, i.e., 11 APIs and 20 PNRs.

We would like to propose that the system is transitioned into Operations after acceptance of Tranche 1, however we are open to discuss and consider alternative proposals.

Below table provides a high-level view of the key project deliverables. A detailed Work Plan is provided separately in Appendix C in the form of a Gantt Chart.

Workstreams	Elapsed Weeks from Contract Signature
Project Kick-off	1
Project Planning Completion	3
Gateway and Network Setup	3
API-PNR Portal Setup	4
In-Country Setup	5
Training	6
Tranche 1 API Certifications	6
Tranche 1 PNR Certifications	7
Acceptance and Go-Live – Tranche 1	7
Service Transition	7
Tranche 2 API Certifications	10
Tranche 2 PNR Certifications	10
Acceptance and Go-Live – Tranche 2	10
Project Closure	10

Delivery Approach

Upon contract signature, a SITA Project Manager will be assigned to the project who will act as the Single Point of Contact (SPOC) and will work closely with the designated point of contact(s) from IGPF.

The Project Manager is responsible for coordinating the various teams involved, management of project risks and issues, and reporting of progress. In addition, the assigned SITA Project Manager will manage the scope and the change control processes to ensure the project meets the agreed requirements.

SITA will dedicate experts in design and deployment in order to seamlessly deliver and transition the services to Operations.

SITA

The SITA API PNR Gateway has been designed such that it can be set up quickly, and SITA will endeavour to ensure the system is capable of transmitting data to the customer within the required timescale after contract award; dependent upon preconditions being met by IGPF and the airlines, and dependencies on airlines being compliant with project timelines and activities indicated in the Work Plan.

Airline data submission depends on the readiness of particular airlines and is managed during the progress of the project. If airlines do not respond, SITA will escalate to IGPF and this may impact the timelines.

SITA Project Management Methodology and PMI

Our project management team has adopted the structured, disciplined and standardised approach for project management embodied in the Project Management Institute's (PMI) Project Management Book of Knowledge (PMBOK), a highly developed and widely used methodology. Our approach will ensure a successful implementation, and cutover that can be monitored, controlled and measured throughout the lifecycle of the project.

SITA's Project Management Methodology segments the project lifecycle into four distinct phases:

- Initiation
- Planning
- Execution and Control
- Closedown
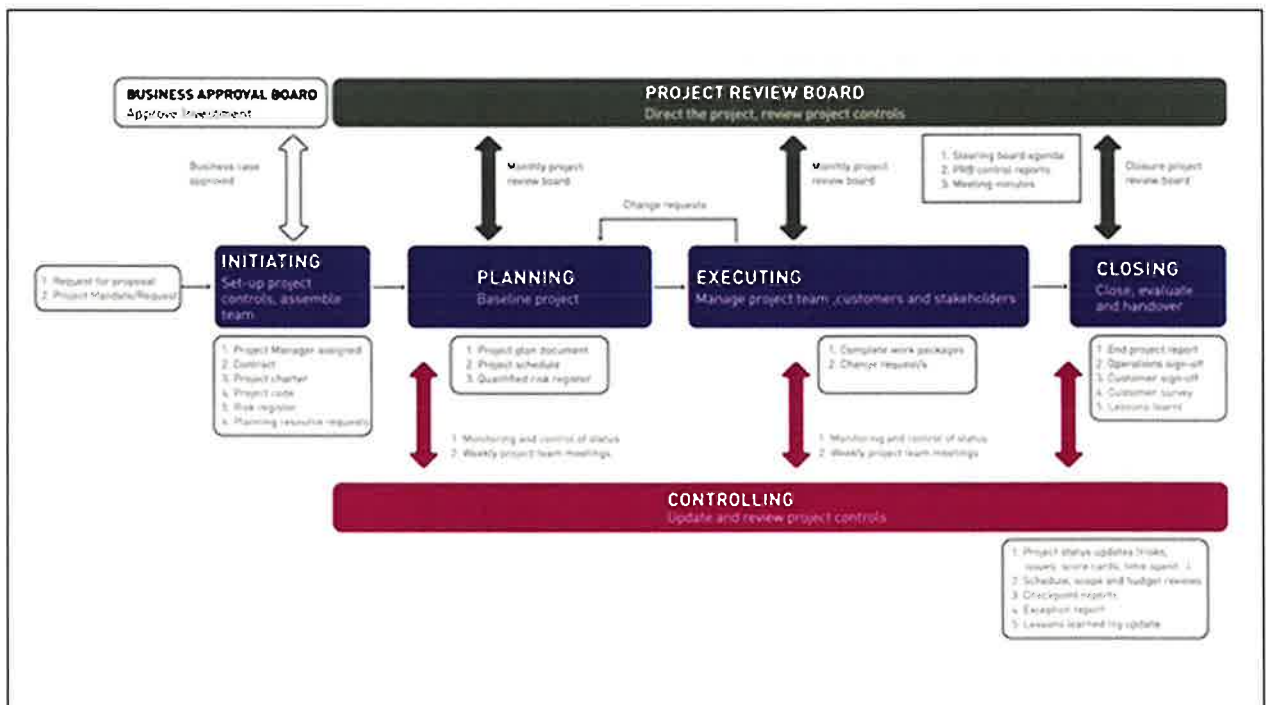
Each phase has well-defined activities with clear entrance and exit criteria to assure successful management of issues and risks, and application of relevant controls and corrective actions.

The following definitions of what can be included in a project management mechanism will be agreed during the project kick-off meeting and be included in the Project Management Plan (PMP) in respect of what is appropriate for this project.

Initiation and Planning

During this phase, we will undertake all pre-requisite activities for the project and create a detailed project plan based on the Work Plan provided in this proposal. The tasks in this phase will include assignment of the project resources including the Project Sponsor, and the SITA Project Manager.

At the end of this phase, the Project Manager has the resources and governance structure to execute the project.

Deliverables of the Initiation and Planning phase are:

- Establishing the core project team
- Detailed project schedule
- Creation of a Project Management Plan (PMP), including team structure, roles and responsibilities,
- Risk and Issue Register
- Work Breakdown Structure (WBS) for the overall scope
- Change Control process
- Project governance and control processes

- Activities in this phase include:
  - ➢ Resource mobilisation
  - ➢ Reviewing baseline project plan and project timeline, roles and responsibilities of various stakeholders including other stakeholders such as the airlines
  - ➢ Reviewing assumptions, constraints, and dependencies
  - ➢ Project kick-off workshop, where high-level project plans, project team structure, roles and responsibilities, risk factors, and key success criteria are presented and agreed.

Execution and Control

The Execution and Control Phase involves conducting all the work that is defined and scheduled during the Initiation and Planning phase.

Key workstreams within this phase are:

Gateway and Network Setup

Thes activities concern setting up and configuring the API PNR Gateway for Moldova.

SITA will implement an IPsec VPN connection from the SITA network to the customer network for delivering the data streams.

It is expected that in most cases the airlines will already have a connection to the SITA network. If an airline does not have an existing connection from the airline to the SITA network, this will be implemented.

API-PNR Portal Setup

The Portal will enable manual entry of API and PNR data for airlines that cannot provide API and PNR automatically. This is a standard portal which has been deployed for a number of SITA customers.

In-Country Setup

This concerns setting up the environment in Moldova by IGPF to receive the data feeds. SITA will assist with setting up of the MQ Client on IGPF's environment. The dependency is the environment which is required to deploy the MQ Client.

Training

Training and documentation will be provided to IGPF for the operation of the system. This will include training documentation and user manuals.

A Training Plan will be developed at the outset of the project in collaboration with IGPF and any other stakeholders.

Tranche 1 - API and PNR Certifications

This tranche will include certification of 10 API and 1 PNR airlines. These airlines are to be selected by IGPF and are deemed to be the highest priority airlines.

The airline engagement and certification process is explained in detail under our response to Question 4. SITA has vast experience of engaging with airlines on previous Gateway projects, resulting in an efficient process led by experienced SITA Airline Engagement Managers (AEM) known to airlines and their host providers. An AEM will be assigned to the project at the outset of the project and will join the project kick-off meeting and weekly status calls.

SITA already has certification environments which only need configuration for airlines to test and certify against the Customer requirements. Many host providers and airlines already have connectivity to these Gateway certification environments for other SITA Gateway projects, which also allows early readiness for certification for the Customer.

The airline engagement process is detailed in our response to Question 5.

Acceptance and Go-Live – Tranche 1

Tranche 1 certifications will be followed by acceptance testing and go-live of the airline APIs and PNRs in tranche.

The API and PNR messages will be subject to acceptance by IGPF prior to going live. SITA will prepare a User Acceptance Test plan which will outline the tests to be carried out and the acceptance criteria.

Test cases will involve SITA injecting messages into the Gateways and providing the output via the network connection IGPF to examine. IGPF will confirm that the messages provided by SITA meet the agreed requirements.

Service Transition

This concerns service transition activities which will run throughout the project to enable starting a live service and handover of operations to SITA Global Services (SGS) from the point of acceptance of Tranche 1. APIs and PNRs certified as part of Tranche 2 will be added to the service at the end of Tranche 2 acceptance.

Tranche 2 - API and PNR Certifications

This tranche will include certification of a further 11 API and 20 PNR airlines. If some airlines are not ready, we will agree whether the ones which are ready can be cutover to production, with the remainder following when they are ready.

The certification process is detailed in our response to Question 5.

Acceptance and Go-Live – Tranche 2

Tranche 2 certifications will be followed by acceptance testing and go-live of the airline APIs and PNRs in this tranche.

Control

Project execution is constantly monitored so that potential problems can be identified in a timely manner and corrective action can be taken, as necessary, to control the execution of the project. The key benefit is that project performance is observed and measured regularly to identify variances from the project plan.

The project methodology provides controls that ensure all parties understand their roles and responsibilities throughout the lifecycle of the project.

We propose to have weekly progress meetings with IGPF in which the SITA Project Manager will present a progress status report which will include update on progress, risks and issues and their mitigations, and status of dependencies.

We also would like to propose to have a monthly Executive meeting between IGPF and SITA in which we can manage escalations and report on any unresolved issues which may require further actions and support from the Executive teams of IGPF and SITA.

Closedown

The Closedown includes closing the project, ensuring that transition activities are completed, documents are updated and starting Service Operations.

The Closedown phase ensures that delivery project has a distinct end point and there is a transition of the project's outputs and/or outcomes to Operations Services which will be managed by a SITA Customer Success Manager (CSM) for the ongoing management of the operation and services for the duration of the contract.

Deliverables of the Closedown phase are:

- Finalise all delivery documentation and controls
- Mitigate all open risks and close the risk register
- Transfer any open, unresolved issues to operations support
- Gain formal acceptance of the project outputs by the customer Project team and any stakeholders
- Evaluate the project and conduct a lessons-learned exercise
- Transfer ongoing responsibility of any remaining project outputs to the dedicated Operations Team.
- Following Closedown, the project is completed.

Roadmap for the current year and for the contractual period

SITA is committed to the gradual enhancement and evolution of the API PNR Gateway system to reflect changes in industry standards and trends, new customer requirements, provision of additional interfaces if/as necessary, improvements to system ease of use, reflect customer feedback and regional requirements, multi-modal operations and so on.

Apart from ongoing maintenance releases, the current API PNR Gateway Roadmap for the remainder of 2024 and first half of 2025 includes plans to deliver:

Second Half of 2024:

- User Management and User Audit reporting
- Management Trend Reports
- Portuguese language available
- Continent and Region displayed for Departure and Arrival locations
- Display of In-transit passengers
- New 'restricted user' role – limits user's access to personal data
- Enhancements to Online Submission portal for more complete data collection

First Half of 2025:

- Government self-management for Private Jet/GA operators
- Notifications and alerts for non-receipt of expected messages
- Service resiliency (DR implementation)

8. *The tenderer will present information on how to train IGPF employees regarding the use of the proposed solution;*	

SITA Response	Compliant

SITA firmly believes that the success of a project is assured through the combination of an excellent business solution and implementation supported by a comprehensive program of training.

The principal objective of our training programme is to provide end-users with a detailed knowledge of the functionality and administration of the API PNR Gateway system, such that they achieve real benefits in their jobs.

Planning

We will appoint a trainer responsible for formulating a **Training Plan** for the project and providing training to the Border Police.

For our training to be effective, you must assign a single point of contact within your organization to work with our trainer.

The training plan includes the following details:

- Definition of user roles
- Course description, target audience, format, duration, objectives and content
- Mapping of user roles to courses
- Schedule of training.

Since the Training Syllabus and user roles for this product are defined the focus of the training planning will be the schedule.

Webinar Training

Webinar training will be provided for up to 20 trainees. Trainees from different organisations and departments can attend the same course. The schedule will define which trainees need to attend which course based on their assigned user roles.

Training sessions will take place during working hours.

Courses will be led by a SITA Trainer.

Training courses will be presented in English and all training materials and documentation will also be in English.

Training Syllabus

Course	Description
Solution Overview	An overview of the API PNR Gateway, covering why traveler data is needed, the carriers that send the data, the operation of the gateway, and the benefits from using the gateway.
Getting Started	Attendees will learn how to log in, understand the dashboard, navigate around the gateway, and manage their own user account.
Managing Government Users	Attendees will learn how to create and manage government users in the API PNR Gateway.
Working with Data Views	Attendees will learn how to find, view, and export traveler, journey, and message data, from all the carriers sending data to the government.
Government Data Quality	Attendees will learn how to ensure the data is being received is in compliance with the government mandate.
Government Compliance Reports	Attendees will learn how to schedule and review compliance reports. Compliance reports will contain data for all airlines sending data to the government.
Auditing Government Users	Attendees will learn how to find and review audit events for all government users.

A course starts by covering the concepts that users need to understand about the functionality, before looking at each function from a business and end-user perspective. Trainees then will access the system to perform hands-on exercises related to their job role. Courses may also include role-plays, in which trainees act out a scenario, and instructor-led discussions to encourage participation from trainees.

Trainees

The customer is responsible for identifying end users who will attend the training.

Training Deliverables

The following training deliverables will be provided:

Training Material	Description
Training Plan	This document describes how the training program will be implemented.
Training Slides	PowerPoints for webinar.
User Guide	This document describes the steps used for each function.

Additional Training

Additional Training can be provided on a Time and Materials basis following delivery of the initial training.

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;_

SITA Response	**Compliant**

SITA holds certification for ISO 27001 and for ISO 9001. We have included these certificates in Appendix D to this document.

SITA recognizes that protecting information and information systems is a continuous activity. To this end, SITA has adopted an information security management system that is aligned with industry practices and ISO 27001/2 standards.

The following guiding principles support this approach and are applied while conducting Information Security activities within SITA:

- SITA manages risks to information assets by the proper selection and operation of security controls. The security controls must strike a balance between cost of implementing and operating the control and value of the information asset;

- SITA implements and operates security controls as elements of an Information Security management system which is planned and controlled through effective management processes; and

- SITA complies with applicable laws, regulations and other contractual obligations to ensure that SITA and SITA's customers remain protected against potential liability. Liabilities could arise because of data loss, inaccuracy, unlawful use or in absence of due care in protecting its, or its customers information assets.

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;_

SITA Response	**Compliant**

Noted. This document has been set up to respond to the terms of reference as required by the customer

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;

SITA Response	**Compliant**

Please refer to Annex 23 for our financial offer.

- All Prices are stated in EURO's.
- The payment term is 30 days from the date of invoice issuance.
- Payment will be to a SITA bank account in Europe or the US unless otherwise agreed.
- No Price adjustments are anticipated for 2024 from the price submitted. SITA applies CPI to pricing annually but this contract is reflective of 2024 only.
- The prices listed in this document are valid for work being delivered in 2024 only. SITA reserves the right to offer alternative pricing for 2025 and any subsequent year, subject to its internal approval process. Nothing in this document compels SITA to offer the 2024 pricing presented here for any other calendar year.
- SITA offers various payment models for such contracts and will be happy to discuss these in more detail during the contract negotiation.
    - ➢ Model 1 – One-Time payment on delivery of priority airline
    - ➢ Model 2 – Monthly payments over the course of the contract duration, all to be paid within the contractual year of 2024.

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

SITA Response	**Compliant**

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.

SITA Response	**Compliant**

Yes. SITA is able and willing to comply with this, and we look forward to signing a Framework Agreement for future years. As permitted by the RFP process, SITA has submitted with this document a short list of suggested changes to the draft contract.

3.　　Observations and comments on the Draft Contract

Thank you for the opportunity to present SITA's observations and comments on the proposed contract terms and conditions relating to the RFP noted above, which are set out in the Draft Contract (Annex 24).

We understand that, if selected, we will discuss the contract terms with you as part of the final negotiations on the awarded contract. We also expect that more minor issues can be addressed during the course of those discussions.

To be clear, our bid in response to the RFP is not conditional upon these observations and comments being accepted by you. These are suggested changes only and form the basis of future discussions.

If you have any questions about these observations and comments, please contact:

helen.boughton@sita.aero

Item	Reference	Observation / Comment
1	General	As currently drafted, the Draft Contract does not contain any 'framework' mechanisms that would allow the parties to 'call-off' future contracts on an annual basis. SITA assumes that this will be added to the final contract. Is that correct?
2	Clause 3 – Price and Terms of Payment	SITA assumes that all pricing and payment will be expressed in EUROS in the final contract. Does the Contracting Authority agree with that?
3	Clause 4 – Handover-receipt conditions	Some minor changes will be needed here to reflect the fact that the solution does not involve the supply of any goods / hardware in-country.
4	Clause 8.2(b)	This sub-clause states: *The Contract may be resolved unilaterally by… Buyer/Beneficiary in case of non-compliance by the Supplier/Service Provider with the established delivery/delivery terms;* With respect, SITA suggests that this unilateral termination right should not apply. Failure to achieve any agreed delivery date may happen for any number of reasons, including where caused by the Contracting Authority or by a third party that is not under the service provider's control – or where a force majeure occurs. Therefore, the termination right could be interpreted as being unfair. The service provider is incentivised to deliver a soon as possible under this contract, to ensure that the monthly charges can be invoiced as soon as possible. Please note that the general legal principles of termination for material breach will always apply here (hence the reason why we believe this sub-clause can be removed). If the service provider is late in delivering and that has a material effect on the project, then the Contracting Authority can always choose

Item	Reference	Observation / Comment
		to exercise its rights under applicable law and terminate for material breach.
5	Clause 10 - Penalties	SITA notes that there is currently no cap on general liability in the contract. The Contracting Authority will appreciate that SITA, as a large organisation and one of the world's leading providers of border management services, is required to carefully manage its liability exposure in every contract that it signs. This is dictated by internal policies, and by the requirements of our insurers. SITA therefore respectfully requests that the Contracting Authority adds to the contract a cap on the general liability of the parties, in addition to the cap on penalties (which are liquidated damages). SITA suggests a cap set at 100% of charges paid, applied on an annual basis. Can the Contracting Authority agree to that?
6	Clause 10 – Penalties	SITA also notes that the Draft Contract does not contain any exclusion of indirect and consequential losses. It is common practice to exclude such things, which include loss of profits, loss of revenue, loss of business opportunities etc. The final contract should include a clarification to say that neither party will be exposed to potential liability for indirect and consequential losses, as follows: *"Neither party shall be liable to the other for any indirect nor consequential losses."* Can the Contracting Authority agree to that?
7	Clause 10 – Penalties	Thank you for confirming, by way of the clarification questions, that penalties under this contract will be capped at 5%. SITA would welcome the opportunity to discuss this further with you, to find a common understanding on how that cap will apply. SITA suggests that the cap of 5% should be applied to all penalties that arise after 'go-live' of the service, as either: • a cap at 5% on an annual basis (meaning the penalties arising in any calendar year would be capped at 5% of the charges paid for that calendar year), or • a cap at 5% on a monthly basis (meaning the penalties arising in any month would be capped at 5% of the charges paid for that month). Which of those two approaches would the Contracting Authority prefer? To be clear, SITA suggests that late delivery penalties should not apply in relation to delivery of the system – and penalties should only apply for operational performance after 'go-live'.
8	Clause 10 – Penalties	SITA understands that the performance guarantee will apply to the period following 'go-live' but will not apply in relation to the

Item	Reference	Observation / Comment
		delivery phase of the project (meaning that the Contracting Authority cannot call upon such guarantee in the event that any agreed delivery deadlines are not met, for any reason). Please see above for reasons why a delivery deadline might be missed.
		SITA suggests that the contract should be amended to reflect this position.
		Can the Contracting Authority agree to that?
9	Clause 12.8 (Final Provisions)	Can the Contracting Authority agree that the laws of either: (a) England and Wales; or (b) the Netherlands; or (c) Switzerland, will govern this contract?
10	Clause 12.8 (Final Provisions)	Can the Contracting Authority agree that the courts of either: (a) England and Wales; or (b) the Netherlands; or (c) Switzerland, will have jurisdiction to hear any disputes under this contract?

Thank you.

SITA, Friday, 12th July 2024

Appendix A:
Customer Reference Letters

IDRAK Technology Transfer LLC

04 July 2024

Country of Implementation:	Azerbaijan.
	The end-customers are State Border Service of Azerbaijan, Ministry of Internal Affairs of Azerbaijan, State Security Service of Azerbaijan and other government agencies.
Name of the Contractor:	SITA Advanced Travel Solutions Ltd
Annual Passenger Volume:	More than 6,000,000 (six million) Passengers

Description and Scope of the Project:

Implementation of SITA API PNR Gateway, to enable carriers to submit their passenger and crew API and PNR data which is then delivered to the end-customer. The implementation included the engagement and certification to use the API PNR service, of all the international airlines who operate services to Azerbaijan.

The contract includes the full ongoing support of the service including preventive support and maintenance over the period of operations.

Service Status:	Active
Satisfaction level:	Excellent

Name, Title and Contact details of authorised signatory:

Mr. Javanshir Huseynov, Vice President.

Address: 46 Abbasgulu, Abbaszadeh str., Badamdar, AZ1004 Baku, Azerbaijan

Phone: +994 277 52 77

Email: Javanshir.huseynov@idrak.az

Customer signature of Mr Mr. Javanshir H.

DARINKA FRANCESCA RAMACIOTTI MIRES

Tradutora Pública e Intérprete - Traductor Público e Intérprete Comercial
Idioma/Lengua: Espanhol/Española Matrícula JUCESP N° 1882
Rua do Arouche, 23 , 4° andar - República - São Paulo - SP - CEP 01219-906
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Libro:	Pagina:	Traducción N°
Livro: 0152	Página: 1	Tradução N° E-31.524/23

Yo, Darinka Francesca Ramaciotti Mires, Traductora Pública Jurada e Intérprete Comercial, certifico que me fue presentado un documento en idioma portugués para ser traducido al español, lo que cumplí en razón de mi oficio, de la siguiente forma.

FORMATO PARA ACREDITAR LA EXPERIENCIA ESPECÍFICA DEL PROPONENTE			
Nombre del cliente	Departamento de Policía Federal - DPF		
Nombre del contratista (oferente o miembro del oferente)	SITA		
¿El contratista es oferente plural?	No	Porcentaje de Participación	100%
Fecha de inicio	01/01/2014	Fecha de Terminación	01/01/2024
Duración en meses	120 meses (10 años)		
Objeto del contrato	Servicios continuos de transmisión segura de datos API – Información Anticipada de Pasajeros y PNR – Registro de Nombres de Pasajeros, de aquellos vuelos cuya entrega de dichos datos sea requerida por regulación de la Secretaría de Aeronáutica Civil u otro organismo.		
Nivel de Satisfacción del Servicio	Excelente		
Datos de contacto para verificación	Dr. Caio Bortone Ramos Ribeiro		
Teléfono	+55 (61) 2024-8366	Celular	+55(61) 8112-5743
Dirección	SCN, Quadra 4, Bloco A Torre D Edificio Multibrasil Corporate – Asa Norte, Brasília – DF, 70714-903		
Correo electrónico	caio.cbrr@pf.gov.br		
Firma del cliente			

Documento firmado digitalmente
CAIO BORTONE RAMOS RIBEIRO
Fecha: 23/08/2023 12:12:50 – 0300
Verifique en https://validar.iti.gov.br

Dr. Caio Bortone Ramos Ribeiro
Cargo: Jefe de División de Migración

Nada más contenía el documento que traduje fielmente, conferí, hallé conforme y doy fe. Esta traducción no implica juzgamiento sobre la forma, la autenticidad y/o el contenido del documento.
São Paulo-SP, 23 de agosto de 2023.
Emolumentos según la Ley.

DARINKA F. RAMACIOTTI MIRES
Tradutora Pública e Intérprete Comercial
Traductora Pública e Intérprete Comercial

	CONSELHO NACIONAL DE JUSTIÇA		**BRASIL**
			APOSTILLE
			(Convention de La Haye du 5 octobre 1961)

1. País: (Country / Pays):	REPÚBLICA FEDERATIVA DO BRASIL

Este documento público
(This public document / Le présent acte public)

2. Foi assinado por: (Has been signed by / A été signé par)	DARINKA FRANCESCA RAMACIOTTI MIRES
3. Na qualidade de: (Acting in the capacity of / Agissant en qualité de)	TRADUTORA PUBLICA JURAMENTADA E INTERPRETE COMERCIAL
4. Tem o selo / carimbo de: (Bears the seal / stamp of / Est revêtu du sceau / timbre de)	JUCESP Nº 1882

Certificado
(Certified / Attesté)

5. Em: (At / À):	SÃO PAULO	6. No dia: (The / Le):	24/08/2023
7. Por: (By / Par):	ISAAC ALVES DE LIMA		
8. Nº: (Nº / Sous nº):	1729046-23		
9. Selo / Carimbo: (Seal / Stamp / Sceau / Timbre)	BRASIL APOSTILA APOSTILLE	10. Firma: (Signature)	Assinatura Eletrônica / Electronic Signature / Signature Électronique

Tipo de Documento:
(Type of document / Type d'acte)
Traduções - PUBLICA JURAMENTADA

Nome do titular: SITA
(Name of holder of document / Nom du titulaire)

Esta Apostila certifica apenas a assinatura, a capacidade do signatário e, quando apropriado, o selo ou carimbo constantes no documento público. Ela não certifica o conteúdo do documento para o qual foi emitida.

This Apostille certifies only the signature, the capacity of the person signing it and where appropriate, the seal or stamp which the public document bears. It does not certify the content of the document for which it was issued.

Cette Apostille ne certifie que la signature, la qualité en laquelle le signataire de l'acte a agi et, le cas échéant, les sceau ou le timbre dont cet acte public est revêtu. Elle ne certifie pas le contenu de l'acte pour lequel elle a été émise.

A autenticidade desta Apostila e de sua assinatura eletrônica bem como o documento público subjacente, podem ser verificadas em:

The authenticity of this Apostille and its eletronic signature, along with the underlying public document, may be verified at:

L'authenticité de cette Apostille, dela signature électronique, ainsi que de l'acte public sous-jacent peut être vérifiée sur:

https://apostil.org.br

A presente Apostila foi firmada com assinatura eletrônica, conforme a Lei nº 11.419/2006.

This Apostille was electronically signed in accordance with Law nº 11.419/2006.

Cette Apostille a été signée par une signature électronique, d'après la Loi nº 11.419/2006.

Dúvidas a respeito desta Apostila entrar em contato com a Ouvidoria do CNJ.

Any questions about this Apostille may be directed to the Ombudsman of he CNJ.

Vauillez contacter l'Ombudsman de la CNJ pour toute question relative à cette Apostille.

(61) 3772-7800

servicos@notariado.org.br

Por favor, utilize este QR Code para checar a autenticidade desta Apostile e de sua assinatura eletrônica. Uma cópia do documento público subjacente também está disponível na mesma página.

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Código (Code / Code)
1729046-23
CRC
D5579B80

Apostil

BR 112359 005689526

Reconheco por semelhanca a(s) 1 firma(s) de
DARINKA FRANCESCA RAMACIOTTI MIRES
XXXXXXXXXXXXXXXXXXXXXXXXXX -XXX XXXXXXXXXXX XXXXXXXXXXX
Sao Paulo, 24/08/2023   Sem valor economico
Em testemunho da Verdade
3823111808 LEONILSON DOS SANTOS VIEIRA-8935/94

TABELIÃO DE NOTAS DA CAPITAL
ALEXANDRE GONCALVES KASSAMA - Tabeliao
AV SAO LUIZ, 59 - REPUBLICA - SAO PAULO - SP - FONE (11) 3129 5000 - CEP 01046-001

EXPERIÊNCIA ESPECÍFICA API PNR

Nome do Cliente *Nombre del cliente*	Departamento de Polícia Federal - DPF
Nome da contratada *Nombre del contratista (oferente o miembro del oferente)*	SITA

O contratante é um licitante consorcio? *¿El contratista es oferente plural?*	Não *No*	Percentagem de Participação *Porcentaje de Participación*	100%
Data de início *Fecha de inicio*	01/01/2014	Data de Rescisão *Fecha de Terminación*	01/01/2024

Duração em meses *Duración en meses*	120 meses (10 anos) *120 meses (años)*
Objeto do contrato *Objeto del contrato*	Serviços continuados de transmissão segura de dados API – Advance Passenger Information e PNR – Passenger Name Record, de quaisquer voos cuja entrega desses dados seja requerida por normativo da Secretaria de Aviação Civil ou outro órgão responsável. *Servicios continuos de transmisión segura de datos API – Información Anticipada de Pasajeros y PNR – Registro de Nombres de Pasajeros, de aquellos vuelos cuya entrega de dichos datos sea requerida por regulación de la Secretaría de Aeronáutica Civil u otro organismo*
Nível de Satisfação de Serviço *Nivel de Satisfacción del Servicio*	Excelente *Excelente*
Detalhes de contato para verificação *Datos de contacto para verificación*	Dr. Caio Bortone Ramos Ribeiro

Telefone *Teléfono*	+55 (61) 2024-8366	Celular *Celular*	+55 (61) 8112-5743

Endereço *Dirección*	SCN, Quadra 4, Bloco A Torre D do Edifício Multibrasil Corporate - Asa Norte, Brasília - DF, 70714-903
E-mail *Correo electrónico*	caio.cbrr@pf.gov.br

Assinatura do cliente

gov.br
Documento assinado digitalmente
CAIO BORTONE RAMOS RIBEIRO
Data: 23/08/2023 12:12:50-0300
Verifique em https://validar.iti.gov.br

Dr. Caio Bortone Ramos Ribeiro
Cargo: Delegado Chefe de divisão
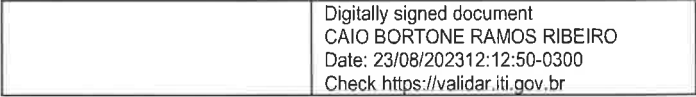*Cargo: Jefe de División de Migración*

DARINKA FRANCESCA RAMACIOTTI MIRES

Public Translator and Interpreter - Public Translator and Commercial
Interpreter

Idioma/Language: Espanhol/EspañolaMatricula JUCESP Nº 1882
Rua do Arouche. 23 . 4º andar - Rep(1blica - Sao Paulo - SP - CEP 01219-
906 Cel/WhatsApp: (11) 98485-4409 - E-mail:
darinka_ramaciotti@ hotmail.com

Book:	Page:		Translation No.	
Livro: 0152	Pagina: I		Translation No. E-31´524123	

I, Darinka Francesca Ramaciotti Mires, Sworn Translator and Commercial Interpreter, hereby certify that I have been presented with a document in Portuguese to be translated into Spanish, which I have done in accordance with my profession, in the following manner.

FORMAT FOR ACCREDITING THE SPECIFIC EXPERIENCE OF THE BIDDER			
Client's name	Federal Police Department - DPF		
Name of contractor (bidder or member of the bidder)	SITA		
Is the contractor a plural bidder?	No	Percentage of Participation	100%
Start date	01/01/2014	Termination Date	01/01/2024
Duration in months	120 months (10 years)		
Object of the contract	API - Advance Passenger Information and PNR - Passenger Name Record, for those flights for which the provision of such data is required by regulation of the Secretary of Civil Aeronautics or other agency.		
Service Satisfaction Level	Excellent		
Contact details for verification	Dr. Caio Bertone Ramos Ribeiro		
Telephone	+55 (61) 2024-8366	Cellular	+55(61) 8112-5743
Address	SCN, Quadra 4, Bloco A Torre D Edificio Multibrasil Corporate - Asa Norte, Brasilia - DF, 70714-903		
E-mail address	caio.cbrr@pf.gov.br		
Customer's signature			

Digitally signed document
CAIO BORTONE RAMOS RIBEIRO
Date: 23/08/202312:12:50-0300
Check https://validar.iti.gov.br

Dr. Caio Bertone Ramos
Ribeiro Position: Head of Migration
Division

Nothing else was contained in the document which I have faithfully translated, certified, found to be in conformity and attest. This translation does not imply any judgement on the form, authenticity and/or content of the document.
Sao Paulo-SP, 23 August 2023.
Emoluments according to the Law.

DARINKA F.RAMACIOTTI MIRES
Sworn Translator and Commercial Interpreter
Sworn Translator and Commercial Interpreter

(61) 3772-7800

servicos'a nolariad...

3R 112359 005689526

Código (Code Code)
1729046-23
1729046-23

CRC
D5579B80

rifAposti

Sem valor economico

SANTOS VIEIRA-8935/94

27° TABELIÃO DE NOTAS DA CAPITAL
ALEXANDRE GONÇALVES KASSAMA - Tabeliäo
AV SÃO LUIZ, 59 - REPUBLICA, SÃO PAULO - SP FONE (11) 3721 9000 - CEP 01046-101

SPECIFIC EXPERIENCE API PNR
FORMAT FOR ACCREDITING THE SPECIFIC EXPERIENCE OF THE BIDDER

Customer Name	Federal Police Department - DPF
Nome da contratada	SITA

O contratante e um licitante consortium?	Nao	Percentage of Participatio n	100%
Start date	01/01/2014	Data from Resci sao	01/01/2024

Lasts<:ao in months	120 months (10 years)
Object of the contract	Continuous services for the secure transmission of API - Advance Passenger Information and PNR - Passenger Name Record data, of any aircraft for which the provision of such data is required by regulations of the Secretary of Civil Aviation or other responsible body.
Service Satisfaction Level	Excellent
Details of cantata for verification	Dr. Caio Bartone Ramos Ribeiro

Telefone	+55 (61) 2024-8366	Mobile	+55 (61) 8112-5743
Endereco	SCN. Ouadra 4, Bloco A Torre D do Edificio Multibrasil Corporate - Asa Norte, Brasilia - OF, 70714-903		
E-mail	caio.cbrr@pf.gov.br		

Assinatura do cliente

Digitally signed document
CAIO BORTONE RAMOS RIBEIRO
Date: 23/08/202312:12:50-0300
Check https://validar.iti.gov.br

Dr. Caio Bartone Ramos Ribeiro
Cargo Delegado Chefe de
d i v i s a o

Oarinka F. Ramaciotti
M. JUCESP n 1882
Mobile 11 9 8465-4409

Junio 31 del 2023 - Tegucigalpa, Honduras

HONDURAS
GOBIERNO DE LA REPÚBLICA

A quien pueda interesar

Asunto: Certificación de provisión de datos API (Información Avanzada de Pasajeros)

Por medio de la presente, nos permitimos certificar a la empresa SITA, es la actual proveedora del servicio de conexión de aerolíneas y transmisión de datos de pasajeros API (Advance Passenger Information, por sus siglas en ingles) para el Instituto Nacional de Migración de la Republica de Honduras.

A continuación, más información sobre el servicio:

- Entidad de Gobierno: Instituto Nacional de Migración (INM), Honduras

- Nombre del contratista: SITA

- Fecha de inicio: Julio 12,2018

- Estado del Servicio: Vigente a la fecha

- Calificación de servicio: Alto

Persona de contacto para verificación:

Nombre: Lucy Videa

Correo electrónico: lucy.videa@inm.gob.hn

Teléfono / Celular: (504) 9493-0770

Dirección: Tegucigalpa, Honduras

Cordialmente,

Firma:

Cargo: Gerencia de Cooperación Externa

July 31, 2023 - Tegucigalpa, Honduras

To whom it may concern

Subject: API (Advance Passenger Information) data provision certification

We hereby certify SITA as the current provider of the Advance Passenger Information (API) airline connection and passenger data transmission service for the Instituto Nacional de Migracion de la Republica de Honduras.

Here is more information about the service:

- Government Entity: National Institute of Migration (INM), Honduras

- Contractor's name: SITA

- Start date: July 12,2018

- Service Status: Ongoing as of today

- Service rating: High

Contact person for verification: Name:

    Lucy Videa

Email: lucy.videa@inm.gob.hn

Phone / Cell: (504) 9493-0770

Address: Tegucigalpa, Honduras

        Cordially yours,

Signature:

Position: External Cooperation Manager

Passport Immigration and Citizenship Agency of Jamaica (PICA)

14 May 2024

Country of Implementation: Jamaica

Name of the Contractor: SITA

Annual Passenger Volume: More than 6,000,000 (six million) Passengers

Cumulative Invoicing during 2021, 2022, 2023 and 2024 to date is above five million Euros.

Description and Scope of the Project:

Implementation of 30 new TS6 ABC kiosks over the past 3 years, with built in travel document reader, touch-screen information display, facial biometric technologies meeting ISO and Frontex guidelines, and integration with the Border Management system for passenger enrolment and clearance including API/PNR. The kiosk delivery project was successfully executed within the time limits stipulated in the contract.

The service includes warranty, break/fix and preventive support and maintenance over the period of operations of the 45 TS6 kiosks and the integration with external PICA systems. The service also includes support and maintenance of 20 stations allowing CCTV monitoring via video stream, and a further 55 kiosks which were installed by PICA in earlier projects.

In addition, 9 new ABC e-gates have been purchased and 15 old-model kiosks are being replaced with new TS6 kiosks.

Service Status: Active

Satisfaction level: Excellent

Name, Title and Contact details of PICA authorised signatory:

Mr. Andrew Wynter, CEO of Passport Immigration and Citizenship Authority.

Address: 25c Constant Spring Road, Kingston, Jamaica.

Phone: +1 876 754 7422 ext 7120.   Mobile: +1 876 754 1265

Email: Andrew.wynter@pica.gov.jm

Customer signature of Mr Andrew Wynter, CEO

01/Nov/2023

Country of Implementation *Pais de Implementação*	JAMAICA
Name of the Client *Nome do cliente*	PASSPORT IMMIGRATION AND CITIZENSHIP AGENCY OF JAMAICA, PICA
Name of contractor *Nome do contratista*	SITA

Start date *Data de início*	FEB 17, 2020 *FEV 17. 2020*	Current Status *Status Atual*	Active *Ativo*

Contract Duration *Duração do contrato*	36 MONTHS + 12 MONTHS OF EXTENSION *36 MESES + 12 MESES DE PRORROGAÇÃO*
Project Description *Descrição do projeto*	Provisioning of API/PNR Passenger data processing solution *Provisionamento de solução de processamento de dados de passageiros API e PNR*
Annual passenger volume *Volume anual de passageiros*	6.000.000 million passengers *6.000.000 milhões de passageiros*
Is a web interface portal included? *Interface web de gerenciamento de dados*	Yes. The Project includes the provisioning of a Web User portal for Data Management, Dashboards and Reports currently in use. *Sim. O Projeto inclui o fornecimento de um portal de Usuário Web para Gestão de Dados. Dashboards e Relatórios atualmente em uso.*
Satisfaction level *Satisfaction Service Level*	Excellent *Excelente*
Full name of authorized signatory *Contato do cliente*	Mr. Andrew Wynter

Phone *Telefone*	+1 876 754 7422 ext 7120	Mobile *Celular*	+ 1 876 754 1265

Address *Endereço*	25c Constant Spring Road, Kingston, Jamaica
Email	andrew.wynter@pica.gov.jm

Customer signature
Assinatura do Cliente

Chief Executive Officer
PASSPORT, IMMIGRATION AND CITIZENSHIP
AGENCY

Name: Mr. Andrew Wynter   Title: CEO
Nome   *Cargo*

August 7, 2023

To whom it may concern:

Subject: Certification of API and PNR Data Provision

Through this letter, we hereby certify that SITA is the current provider of the airline connection service and transmission of API and PNR passenger data to the Peruvian State, as follows:

Contracting Entity: AMERICAN EMBASSY LIMA
Government End User:
· API and PNR Data: National Superintendence of Migrations, Peru
· API Data: National Superintendence of Customs and Tax Administration (SUNAT), Peru

Service Provision Start Year: 2016
Last Contract number 19PE5023C0002 Signed: May 31, 2023 for a period of performance through July 13, 2024

Current Service Status: Active as of the date of this certification.

Point of Contact for reference:

Janet Oliver Contracting Officer Representative (COR)
oliverj@state.gov
942-148031
Av. Lima Polo cdra 2 s/n, Monterrico, Surco, U.S. Embassy.

Sincerely,

Carlos Quimpo
Contracting Officer

[Brasão]

Embaixada dos Estados Unidos da América

Lima, Peru

7 de agosto de 2023

A quem possa interessar,

Assunto: Certificado de API (Informações Antecipadas de Passageiro) e Disposição de Dados PNR (Registro de Identificação de Passageiros)

Por meio desta carta, neste ato certifico que a empresa SITA é a atual fornecedora do serviço de conexão e transmissão de linha área de API e dados de passageiro PNR para o Estado Peruano, conforme segue:

Entidade Contratante: EMBAIXADA AMERICANA DE LIMA

Usuário Final do Governo

Dados de API e PNR: Superintendência Nacional de Migrações, Peru

Dados de API: Superintendência Nacional de Aduanas e Administração de Imposto (SUNAT), Peru

Ano de início da concessão de serviços: 2016

Número do último contrato 19PE5023C0002 Assinado: 31 de maio de 2023 por um período de desempenho até 13 de julho de 2024

Estado Atual de Serviço: Ativo a partir da data desta certificação.

Ponto de contato para referência:

Janet Oliver Encarregada de Contratações (COR)

oliverj@state.gov

942-148031

Av. Lima Polo cdra 2 s/n, Monterrico, Surco, Embaixada Norte-Americana

Atenciosamente,

[*Assinatura ilegível*]
Carlos Quimo
Diretor Contratante

aName of the Client *Nombre del cliente*	**Qatar Civil Aviation authority** *Autoridad de Aviación Civil de Qatar*		
Name of contractor (offer or member of the bidder) *Nombre del contratista (oferente o miembro del oferente)*	**SITA**		
The contractor is a plural bidder? *¿El contratista es oferente plural?*	**No** *No*	Percentage of Participation *Porcentaje de Participación*	**100%** *100%*
Start date *Fecha de inicio*	**Oct 2010** *Oct 2010*	Date of Completion *Fecha de Terminación*	**Sep 2027** *Sep 2027*
Duration in months *Duración en meses*	**120 months (10 Years) renewed in 2020 to 2030 for another 120 months** *120 meses (10 años) renovado en 2020 hasta el 2030 por otros 120 meses*		
Total contract amount (including additions) *Monto total de contratado (incluyendo adiciones)*	**Confidential – Above than 500 Thousand US Dollars per year** *Confidencial – Superior a 500 mil dolares americanos por año*		
Amount Executed of the contracted value (including additions) *Monto Ejecutado del contratado (incluyendo adiciones*	**Confidential – Above than 500 Thousand US Dollars** *Confidencial – Superior a 500 mil dolares americanos por año*		
Object of the contract *Objeto del contrato*	**Supply end-to-end border management solution including API, Interactive API, PNR and asscioated tools for faciliattion and security for more than 30 million passenger per year** *Provision de una solución completa de gestion de fronteras incluyendo API, API interactivo, PNR y herramientas asociadas para la facilitación y seguridad de más de 30 millones de pasajeros por año.*		
Contract number *Número del contrato*	**Confidential** *Confidencial*		
Specific activity of the Certification *Actividad específica de la certificación*	**Succesful project and Active contratctual relationship** *Proyecto exitoso y Relación contractual vigente*		
Contact details for verification *Datos de contacto para verificación*	**Mr. Fahad Al Qahtani**		
Phone *Teléfono*	**+974 44557475**	Mobile *Celular*	**+97455540144**
Address *Dirección*	**Old Salata, P.O.Box:3000,Doha,Qatar**		
Email *Correo electrónico*	**FAHAD.ALQAHTANI@caa.gov.qa**		
Customer signature *Firma de cliente* **Name**: Fahad Dabsan Alqahtani		**Title**: Director Of Security and Facilittion *Cargo*	

Montevideo, Julio 31 de 2023

FORMATO DE CERTIFICACION DE CONTRATOS			
Nombre del cliente	Puerta del Sur S.A. (Aeropuerto Internacional de Carrasco)		
Nombre del contratista (oferente o miembro del oferente)	SITA		
¿El contratista es oferente plural?	No	Porcentaje de Participación	100%
Fecha de inicio	Agosto 2017	Fecha de Terminación	Agosto 2033 (Vigente)
Duración en meses	192 meses (16 años)		
Monto contratado (incluyendo adiciones)	USD 14.000.000 valor aproximado Catorce millones de dólares americanos.		
Objeto del contrato	Proporcionar un sistema de gestión y análisis de riesgo (iBorders) totalmente integrado, que incluye los servicios de recopilación, normalización, y transmisión de información sobre los pasajeros (API, PNR y DCS) junto con un motor de análisis de riesgos de pasajeros para el Ministerio del Interior de Uruguay		
Número del contrato	200170136		
Actividad específica de la certificación	Certificación de la provisión de sistema iBorders para Uruguay.		
Calificación del servicio	Excelente		
Teléfono	+ 598 26040329	Celular	–
Dirección	Ruta 101 Km 19,950		
Correo electrónico	Martin.radesca@aeropuertosuruguay.com.uy		

Firma de cliente
Por Puerta del Sur S.A.

Nombre: Cr. Martín Radesca
Cargo: Gerente de Administración y Finanzas

Montevideo, July 31, 2023

CONTRACT CERTIFICATION FORM			
Client's name	Puerta del Sur S.A. (Carrasco International Airport)		
Name of contractor (bidder or member of bidder)	SITA		
Is the contractor a plurality bidder?	No	Percentage Share	100%
Start date	August 2017	Date of termination	August 2033 (In force)
Duration in months	192 months (16 years)		
Contracted amount (including additions)	USD 14.000.000.000 approximate value Fourteen million US dollars.		
Object of the contract	To provide a fully integrated risk management and analysis system (iBorders), including passenger information collection, standardisation, and transmission services (API, PNR and DCS) together with a passenger risk analysis engine for the Ministry of Interior of Uruguay.		
Contract number	200170136		
Specific activity of the certification	Certification of the provision of iBorders system for Uruguay.		
Service rating	Excellent		
Telephone	+ 598 26040329	Cellular	-
Address	Route 101 Km 19,950		
E-mail address	Martin.radesca@aeropuertosuruguay.com.uy		

**Customer
signature By Puerta
del Sur S.A.**

Name, Cr. Martin Radesca
Position: Administration and Finance Manager

Appendix B:
Service Indication Form

Service Indication Form

This is the Service Indication Form ("**SIF**") for the implementation of APIS, PNR, DCS data for <Government Entity>.

The information requested below is required for the purposes of information flows between an Airline and SITA on behalf of the <Government Entity>.

Please complete, sign and return this SIF to SITA within 5 working days.

Airline Details

Airline name: _____

IATA Code: _____

ICAO Code: _____

Airline Project Manager or Representative
This is the airline contact that is responsible for delivering the airline data.

Contact Name: _____

Contact Title: _____

Email Address: _____

Phone Number: _____

Airline Technical Contact or Representative
This is the technical contact that SITA will work with regarding APIS, PNR and DCS data.

Contact Name: _____

Contact Title: _____

Email Address: _____

Phone Number: _____

Airline Emergency/Operational Contact 24/7

This is the contact who can be contacted out of office hours in the event of an operational emergency.

Contact Name/Group Name/Service Desk: _____

Contact Title: _____

Email Address: _____

Phone Number _____

1 APIS data

1.1 API for Passenger data

Airline Departure Control System name (1): _____

Select from the following transmission methods:

Transmission Method	
☐	Type B
☐	SITA Online Manual Submission Portal (Web Portal)

If you have selected, Type B, Airline Type B
address: _____

Airline Departure Control System name (2 If applicable): _____

Select from the following transmission methods:

Transmission Method	
☐	Type B
☐	SITA Online Manual Submission Portal (Web Portal)

If you selected Type B address, Airline Type B
address: _____

1.2 API for Crew data

Airline Crew System name: _____

Select from the following transmission methods:

Transmission Method	
☐	Type B
☐	SITA Online Manual Submission Portal (Web Portal)

If you selected Type B address, Airline Type B
address: _____

SITA Type B address in Test: **\<TBD\>**
SITA Type B address in Production: **\<TBD\>**

Note: *SITA will send the Online Manual Submission Portal Registration form separately.*

2 PNR (RES) data

Airline	Transmission Method	SITA
RES Push	Airline/Host MQ Server to a SITA MQ Server address	Receives from airline as: Ex: PNRGOV EDIFACT v15.1, or PNRGOV XML v15.1

Airline Reservation System name: _____

Existing connection with SITA? (Yes/No):_____

Data format (Enter the type of data and versions which will be transmitted *eg.PNRGOV EDIFACT v15.1*):

_____

Note: *Airline must complete SITA MQ Configuration form which will be provided by SITA if connectivity does not exist*

3 DCS data

For <u>DCS data,</u> please indicate which of the following transmission methods will be used to submit DCS information from any departure point on your operational network:

Airline	Transmission Method
☐ DCS Push	Within PNRGOV Airline MQ Server to a SITA MQ Server
☐ DCS Push	PRL message through SITA Type B address

Airline Departure Control System (DCS) name: _____

Existing connection with SITA? (Yes/No):_____

Data format (Enter the type of data and versions to be transmitted *eg.PNRGOV v15.1 or PRL*):

_____

Note:

Airline must complete SITA MQ Configuration form which will be provided by SITA if connectivity does not exist.

<u>If Type B PRL is selected, the following generic all government Teletype addresses are to be used:</u>

SITA Type B address in Test: **\<TBD\>**
SITA Type B address in Prod: **\<TBD\>**

Any Other comments from Airline:

_____

_____

_____

Return this completed form to: SITA Airline Engagement Manager <mark>Name</mark>

Email: <mark>@sita.aero</mark>

"Airline must ensure that the provision of actual passenger data to SITA has the consent of such passengers."

SIF completion:

[Complete]

Signed and agreed to on [date] by

....

For and on behalf of

[Airline]

Appendix C:
Detailed Work Plan

Moldova API-PNR Project

ID	Task Name	Duration	Start	Finish
	Moldova API-PNR Project	50 days	Mon 02/09/2	Fri 08/11/24
1	Contract Signed	0 days	Mon 02/09/2	Mon 02/09/24
2	**Customer Dependencies**	26 days	Mon 02/09/2	Tue 08/10/24
3	Airline Mandate Issued	0 days	Mon 02/09/2	Mon 02/09/24
4	EU Bilateral Agreements Signed (8 EU Airlines)	0 days	Wed 02/10/2	Wed 02/10/24
5	Network IPSec Ready	0 days	Mon 02/09/2	Mon 02/09/24
6	Provision of Training Facility	0 days	Tue 08/10/2	Tue 08/10/24
7	Airline Provision of Service Indication Form (SIF)	0 days	Mon 16/09/2	Mon 16/09/24
8	**Initiation and Planning**	10 days	Wed 04/09/2	Tue 17/09/24
9	Project Kickoff	1 day	Wed 04/09/2	Wed 04/09/24
10	Airlines Meeting and Provision of SIF	1 day	Tue 10/09/2	Tue 10/09/24
11	Detailed Project Plan	3 days	Wed 11/09/2	Fri 13/09/24
12	Project Plan Signed-Off	2 days	Mon 16/09/2	Tue 17/09/24
13	**Execution and Control**	50 days	Mon 02/09/2	Fri 08/11/24
14	**Gateway Setup**	8 days	Thu 05/09/2	Mon 16/09/2
15	**QA Setup**	5 days	Thu 05/09/2	Wed 11/09/2
16	Configure Govt. on API-PNR Gateway - QA	5 days	Thu 05/09/2	Wed 11/09/2
17	API-PNR Gateway - QA Configured	0 days	Wed 11/09/2	Wed 11/09/2
18	**Prod Setup**	8 days	Thu 05/09/2	Mon 16/09/2
19	Configure Govt. API-PNR - Prod	8 days	Thu 05/09/2	Mon 16/09/2
20	API-PNR Gateway - Prod Configured	0 days	Mon 16/09/2	Mon 16/09/2
21	**Airline Certification**	44 days	Tue 10/09/2	Fri 08/11/24
22	Sign-up Airline SIF	5 days	Tue 10/09/2	Mon 16/09/2
23	**Tranche 1**	26 days	Tue 10/09/2	Tue 15/10/24
24	**API Airline Certifications (10 Airlines)**	16 days	Tue 17/09/2	Tue 08/10/24
25	Configure Airlines on API-PNR Gateway - 1 wk	Tue 17/09/2	Mon 23/09/2
26	Certify Airline API Messages (10 Airlines)	10 days	Fri 20/09/24	Thu 03/10/24
27	Configure Airlines on API-PNR Gateway - 1 wk	Tue 01/10/2	Mon 07/10/24
28	Cutover Airlines API/DCS to Prod	1 day	Tue 08/10/2	Tue 08/10/24
29	**PNR Airline Certifications (1 Airline)**	26 days	Tue 10/09/2	Tue 15/10/24
30	Configure Airlines on API-PNR Gateway - 1 wk	Tue 10/09/2	Mon 16/09/2
31	Certify Airline PNR Messages (1 Airline)	15 days	Tue 17/09/2	Mon 07/10/2
32	Configure Airlines on API-PNR Gateway - 1 wk	Tue 08/10/2	Mon 14/10/2
33	Cutover Airlines PNR to Prod	1 day	Tue 15/10/2	Tue 15/10/24
34	**Tranche 2**	42 days	Thu 12/09/2	Fri 08/11/24
35	Certify and Cutover 11 API Airlines	42 days	Thu 12/09/2	Fri 08/11/24
36	Certify and Cutover 20 PNR Airlines	42 days	Thu 12/09/2	Fri 08/11/24
37	**In-Country Setup**	22 days	Thu 05/09/2	Fri 04/10/24
38	Build VMs for MQ Servers	5 days	Thu 05/09/2	Wed 11/09/2
39	In-Country MQ Setup	15 days	Thu 12/09/2	Wed 02/10/2
40	Test Message Flow	2 days	Thu 03/10/2	Fri 04/10/24
41	**API-PNR Portal Setup**	5 days	Fri 20/09/24	Thu 26/09/24
42	Setup Government API-PNR Portal Access - Ac	5 days	Fri 20/09/24	Thu 26/09/24
43	**Training**	27 days	Thu 05/09/2	Fri 11/10/24
44	Prepare Training Plan	5 days	Thu 05/09/2	Wed 11/09/2
45	Train on Portal, Reporting, and Dashboards	4 days	Tue 08/10/2	Fri 11/10/24
46	Training Complete	0 days	Fri 11/10/24	Fri 11/10/24
47	**Service Transition**	50 days	Mon 02/09/2	Fri 08/11/24
48	Transition to Operation	31 days	Mon 02/09/2	Mon 14/10/2
49	Acceptance and Go-Live for Tranche 1	0 days	Tue 15/10/24	Tue 15/10/24
50	Airlines (based on 10 API & 1 PNR Airlines)			
51	Acceptance and Go-Live for Tranche 2 Airlines (11 API and 20 PNR Airlines)	0 days	Fri 08/11/24	Fri 08/11/24
52	**Governance**	48 days	Tue 03/09/2	Thu 07/11/24
53	Produce Project Management Plan	2 days	Wed 18/09/2	Thu 19/09/24
54	Weekly Project Status Reporting	46 days	Tue 03/09/2	Tue 05/11/24
65	Monthly Customer Exec Meetings	46 days	Thu 05/09/2	Thu 07/11/24
76	**Closedown**	2 days	Thu 07/11/2	Fri 08/11/24
77	Update Project Documentation	2 days	Thu 07/11/2	Fri 08/11/24
78	Distribute Final Test Reports and Acceptance Ce	2 days	Thu 07/11/2	Fri 08/11/24

Appendix D:
ISO Certification

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.:
C520823

Initial certification date:
20 January 2016
(by different Certification body)

Valid:
12 February 2022 – 29 October 2024

This is to certify that the management system of

SITA Information Networking Computing UK Limited

Royal Pavilion, Wellesley Road, Aldershot, Hampshire, GU11 1PZ, United Kingdom

and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard:
ISO 9001:2015

This certificate is valid for the following scope:
Design and development of IT solutions for Airports, Airlines and Borders.

Place and date:
London, 08 February 2024

For the issuing office:
DNV - Business Assurance
5th Floor, Vivo Building, 30 Stamford Street,
London, SE1 9LQ, United Kingdom

UKAS
MANAGEMENT
SYSTEMS
0013

MEMBER OF MULTILATERAL
IAF
RECOGNITION ARRANGEMENT

John K Pepper

John Pepper
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance UK Limited, 5th Floor, Vivo Building, 30 Stamford Street, London, SE1 9LQ, United Kingdom - TEL: +44(0) 203 816 4000.
www.dnv.co.uk

DNV

Appendix to Certificate

SITA Information Networking Computing UK Limited

Locations included in the certification are as follows:

Site Name	Site Address	Site Scope
SITA Information Networking Computing UK Limited	Royal Pavilion, Wellesley Road, Aldershot, Hampshire, GU11 1PZ, United Kingdom	Design and development of IT solutions for Airports, Airlines and Borders.
SITA Information Networking Computing USA Inc.	3100 Cumberland Boulevard, Suite 900, Atlanta, GA, 30339, USA	Design and development of IT solutions for Airports, Airlines and Borders.
SITA Information Networking Computing Ireland Limited	IDA Business & Technology Park, Carnamuggagh Lower, Letterkenny, Ireland	Design and development of IT solutions for Airports, Airlines and Borders.
SITA B.V.	Blaak 555, 3011 GB Rotterdam, Netherlands	Design and development of IT solutions for Airports, Airlines and Borders.

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance UK Limited, 5th Floor, Vivo Building, 30 Stamford Street, London, SE1 9LQ, United Kingdom - TEL: +44(0) 203 816 4000.
www.dnv.co.uk

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CERTIFICATE

This is to certify that

SITA Information Networking Computing USA Inc.

SITA Command Centre (SCC)

770 Sherbrooke Street West
Montreal, QC H3A 1G1
Canada

with the organizational units/sites as listed in the annex

has implemented and maintains an
Information Security Management System.

Scope:
The Information Security Management System encompasses the operations and supporting infrastructure of the SITA Command Centers located in Montreal & Singapore.

With reference to Statement of Applicability (SOA): Version 4, dated 2021-10-29

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO / IEC 27001 : 2013

Certificate registration no.	10015488 ISMS13
Date of original certification	2019-01-06
Date of revision	2022-01-03
Date of certification	2022-01-06
Valid until	2025-01-05

DQS Inc.

Brad McGuire
Managing Director

Annex to certificate
Registration No. 10015488 ISMS13

SITA Information Networking Computing USA Inc.
SITA Command Centre (SCC)

770 Sherbrooke Street West
Montreal, QC H3A 1G1
Canada

Location	Scope
10015487 **SITA Information Networking Computing USA Inc.** **11 Loyang Way, Singapore** **Singapore 508723** **Singapore**	SITA Command Center operations.
10015488 **SITA Information Networking Computing USA Inc.** **SITA Command Centre (SCC)** **770 Sherbrooke Street West** **Montreal, QC H3A 1G1** **Canada**	SITA Command Center core infrastructure, SITA Command Center operations and centralized ISMS Management.

This annex (edition: 2022-01-03) is only valid in connection with the above-mentioned certificate.

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SITA