TX3 – ACCESS POINT SERVICES

Version 1.3

Effective Date: 04 Dec 2024

Invoice Data Submission Specifications

For GST InvoiceNow Requirement

CHANGE LOG

Version	Effective Date	Summary of Changes
1.0	15 April 2024	First Release
1.1	15 May 2024	Added a new InvoiceNow Ready Solution Providers (IRSP) definition and replace PRSP with IRSP.
1.2	08 Aug 2024	Removed Unique Identifier assignment to AP or IRSP
1.3	04 Dec 2024	Added reference to IRAS API spec; added reference to C5 activation flow on SMP

TABLE OF CONTENTS

ANNEX – IRAS API SPECIFICATIONS [To be made available in later releases]

ANNEX A – ONBOARDING AND REGISTRATION OF INVOICE DATA SUBMISSION API

ANNEX B – INVOICE DATA SUBMISSION API

ANNEX C – CHECK GST REGISTER API

1.   INTRODUCTION

1.1   This document serves primarily as a guide to Access Point providers on services they are expected to perform to support GST InvoiceNow Requirement. It may also contain useful information for InvoiceNow Ready Solution Providers (IRSP) to design their own product/services. It is recommended to study TX1-Design Document and TX2-Data Extraction and Transformation before continuing with the rest of this document.

1.2   Only IMDA accredited Access Points can be the channel for enterprises and solution providers to submit invoice data documents to IRAS. IRAS provides APIs for Access Points to use for the checking of GST registered status and submission of invoice data.

1.3   Access Points are required to enhance its existing Peppol delivery functionalities by developing new features. There are 6 new functionalities that are defined as shown in the diagram below, each elaborated in the subsequent sections.
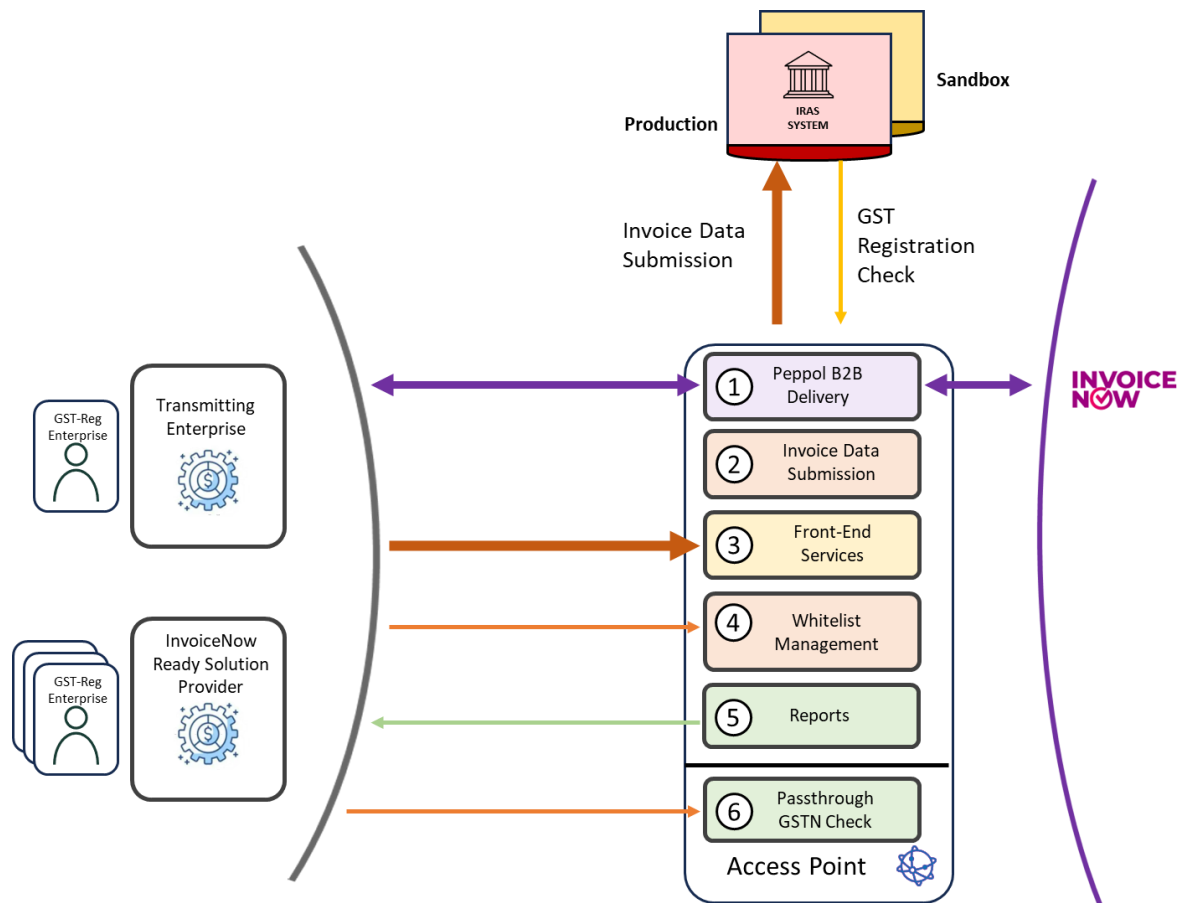
2. PEPPOL B2B DELIVERY SERVICES

2.1 This is the standard InvoiceNow e-delivery services for all supported Peppol documents, such as invoices and credit notes, offered by the IMDA accredited Access Points. This service is not limited to serve only GST Registered Businesses. As this is a foundational service all accredited Access Points will have, the document will not cover requirement for this service.

2.2 The use of InvoiceNow network for delivery of invoices and credit notes will require businesses to be registered on the InvoiceNow network.

2.3 The InvoiceNow registration is a pre-requisite for invoice data submission to IRAS. The same registration process for InvoiceNow will be applicable.

3. INVOICE DATA SUBMISSION

3.1 IMDA accredited Access Points are the only entities authorized to utilize the C5 Invoice Data Submission API published by IRAS. Access Points will undergo the onboarding process with IRAS to obtain access to IRAS API. IRAS will provide these API to Access Points at no cost for both sandbox and production environments. Access Points can enhance their existing Peppol services to provide Transmitting Enterprises and InvoiceNow Ready Solution Providers (IRSPs) with the capability to submit data to IRAS.

3.2 IRAS' Invoice Data Submission APIis available to Access Points through APEX Cloud once IRAS grants them access to the API.

3.3 Access Points will be able to function as agents to submit invoice data to IRAS on behalf of GST registered businesses.

3.4 The API allow a single document and documents in bulk to be submitted per call.

3.5 The Access Points shall be able to process all the data packages as described in TX2. There are two types of packages: Peppol Delivered and Solution Extracted.

3.6 Package for Peppol Delivered and Solution Extracted are subjected to **run-time** validation before sending out into the Peppol network and IRAS.. A Schematron file will be published at a later stage so that IRSPs and Transmitting Enterprises can use it for validation, ensuring that the "Solution Extracted" invoice data submitted to IRAS conforms to the correct xml structure.

3.7 IRAS API submission has a limited capacity of supporting up to 10MB of package size. For Peppol Invoices that are greater than this limit, the submission to IRAS will fail and IRAS will provide a response and error code back to the APs. APs shall notify the respective IRSP or Transmitting Enterprise customers of the invoice data submission failure immediately. The IRSP or Transmitting Enterprise customer will be required to resubmit

the document without attachment so that the invoice document does not exceed the size limit.

4. FRONTEND SERVICES

4.1 Access Points will offer their own front-end data submission interfaces for their Transmitting Enterprises and IRSPs (i.e. Customers). These interface options include:

- **Invoice Data Submission API** – Access Points will provide a customer facing API similar to Transmitting Enterprise or IRSP will use the Access Point's Invoice Data Submission API for the submission of invoice data to IRAS via the Access Point.

- **SFTP and Others** – Access Points may provide alternative channel for submission of invoice data via SFTP or other document transfer options. Transmitting Enterprise or IRSP can submit single or bulk documents to the Access Points for submission to IRAS.

The interface should have the ability to allow users to specify where documents should be transmitted to. (e.g. either by different API endpoint, by use of a parameter or use of different FTP folders, etc.)
- Peppol delivery only
- IRAS submission only
- Peppol delivery and IRAS submission

Access Point are required to deliver documents based on the instructions provided by the end user and/or preconfigured rules in C1 system.

4.2 Access Points should implement security processes and protocols to restrict access to the AP infrastructure to authorised users only, and to detect and flag any unauthorized access.

4.3 Access Points will implement security measures that encompass, but not limited to, network connection security, API/SFTP credentials and API/SFTP availability management to ensure secure access by Transmitting Enterprises and IRSPs.

4.4 Access Points should have logging tools to capture date and time of user access, successful or unsuccessful access statuses, and other relevant information to manage the operations.

4.5 Access Points should not modify or store the invoice data longer than necessary to fulfil their obligations of transmitting the data to IRAS (unless they have explicit permission and instructions by their customers).

5.   WHITELIST MANAGEMENT

5.1   To improve the traceability of data flow, the key actors in C5 are identified with unique IDs or names and where necessary and practical, a mapping table is maintained to connect these IDs so relationships between actors can be kept.

Actors include:

	Party	Role	Identifier
1.	IMDA Accredited Access Points	Access Point	AP Name
2.	GST Registered Business	Submitter	UEN (ACRA issued) Solution Account ID (IRSP issued)
3.	GST Registered Business ("Transmitting Enterprises")	Transmitter	UEN (Govt issued) Access Point Account ID (AP issued)
4.	InvoiceNow Ready Solution	Transmitter	IRSP Solution ID/Name Access Point Account ID (AP issued)

5.2   The role "Submitter" is for GST Registered Business who are obligated to comply to IRAS requirement for invoice data submission.

5.3   The role "Transmitter" refers to the party performing the function of transmitting the invoice data to IRAS System, which could be an GST-Registered Business using their own Invoice System or a IRSP sending on behalf of their customer.

5.4   Typically, solution features (whether for Access Points or IRSPs) are accessed using user accounts representing the actors, leading to the need to ensure user accounts and identifier mappings are maintained to enhance traceability. For example, in a Transmitting Enterprise scenario (1), the GST Registered Business uses an account provided by the Access Point to invoke an API to initiate data transmission. The Access Point will have to maintain awareness that the user account used represents which submitting entity (based on UEN). Likewise, for IRSP scenario (2), the GST Registered Business uses an account provided by the IRSP to submit data to IRAS. The IRSP will have to maintain awareness that the user account used represents which submitting entity (based on UEN).

GST Registered Business Identity binding with Peppol ID
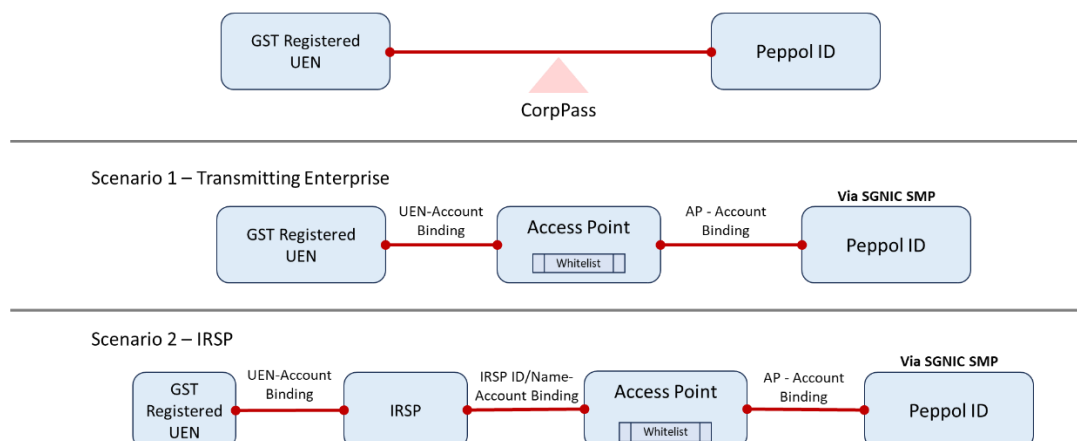
The above identifiers are used at various junctures with business rules applied to guide flow of the data packages being submitted to IRAS. The Access Points are expected to maintain a whitelist of all GST Registered Businesses who are participating in the IRAS invoice data submission for this purpose.

Example Whitelist Table for Access Points

Invoice Data Submission Registered	Date/Time Activated	Transmitter (Use UEN for Transmitting Enterprise or IRSP Name/ID)
UEN1	xxx	UEN1
UEN2	xxx	IRSP1
UEN3	xxx	IRSP2
UEN4	xxx	UEN4
UEN5	xxx	UEN1
UEN6	xxx	IRSP2
UEN6	xxx	UEN6

Example of treatment:
- UEN1 can submit for UEN1 and UEN5
- IRSP1 can submit for UEN2
- IRSP2 can submit for UEN3, UEN6
- UEN4 can submit for UEN4
- UEN6 can submit for UEN6

5.5   For invoice data submission to start, an **activation process** will be required. Invoice data submission activation API will be provided to Access Points at no cost for both sandbox and production environments. Access Points should enhance their existing Peppol services to provide invoice data submission activation flow (available through the SMP API or UI services) for Transmitting Enterprises and IRSPs

5.6   The invoice data submission activation process can be executed in one of the following ways:
- IRSPs must enhance their solution or processes to affect the activation by working with their Access Point to trigger the SMP activation.
- Transmitting Enterprises may approach the Access Point for assistance on the activation.

Upon completion of the activation process, the status of the businesses should be updated in the whitelist to be used subsequently to control data flow.

5.7   The pre-requisite for activation is that the GST registered businesses must be registered on InvoiceNow with a Peppol ID. As part of the activation process, GST registered businesses will be required to complete a verification process using CorpPass. Access Points must verify that the CorpPass authorization is completed before commencing the submission of invoice data to IRAS. Please refer to the latest SMP user guide and API specification (https://app.swaggerhub.com/apis/galaxygateway/SMP_REST_API/2.1.2) on details of such activation process.

5.8   The activation facility/processes should also include a de-activation feature also available through the SMP API or UI services. Upon deactivation Access Points will need to ensure that the whitelist is updated with invoice data submission activation status for subsequent data flow control.

5.9   For each data packaged destined to be submitted to the IRAS system, the APs are to use the SBDH to check against the whitelist (and possibly with their own account management module) to ensure the account used is properly tied to either a IRSP or a Transmitting Enterprise who has the right to transmit for the UEN shown in the SBDH.

6.   REPORTING

6.1   Access Points must capture the following data points for each leg in a transaction i.e. from the Invoice System to the Access Point and Access Point to IRAS System, and vice-versa.
- Transmission Event (source and destination)
- Date and time of invoice data submission
- Document UUID
- Transmission UUID
- Peppol ID of the entity submitting the invoice data
- Status and the acknowledgement ID of the submission of the invoice data to IRAS

ACCESS POINT SERVICES

6.2   Access Points are expected to provide transaction reports comprising of success (e.g. document UUID, acknowledgement, date and time) or failure (e.g. document UUID, failure reasons, date and time) records of invoice data submission to IRAS. These transaction reports are provided to Transmitting Enterprises or IRSPs who will disseminate the reports to their customers.

6.3   Access Points are required to submit monthly transaction reports to IMDA. The template of the transaction reports will be provided at a later stage.

6.4   Note that the Access Point will not store invoice/credit note data (unless with the enterprise's explicit consent). The Access Points shall keep records of all Document and Transmission UUIDs they have sent to IRAS for reporting and tracing purposes. The Access Point may avail such reports to the GST Registered Businesses, IRSPs, IRAS and IMDA upon request.

6.5   Periodically, Access Points, IRSPs, or GST Registered Businesses may be asked by IRAS to provide evidence of invoice data submission using a UUID as the unique reference.

6.6   The data to aid tracing of submissions shall be kept according to IRAS' requirement to keep proper records and accounts. Please refer to link for details - https://www.iras.gov.sg/taxes/goods-services-tax-(gst)/basics-of-gst/invoicing-price-display-and-record-keeping/keeping-records

7. PASSTHROUGH GSTN CHECK

7.1   To facilitate invoice data submission, accredited Access Points will be granted access to IRAS' API services to verify the GST registered status of a business entity by passing in the Supplier's GST number (GSTN) as indicated on the invoice via the API. IRAS API will return the supplier's status which can be passed to the Access Point's customer.

7.2   This GST check register API provides additional assurance to buyers transmitting their invoices to C5, ensuring that their non-GST-registered suppliers have not erroneously levied GST upon them and the buyer do not wrongly claim for GST refund. The GST check register API can alert buyers of the non-GST-registered status so the buyer can address instances where the suppliers have incorrection charged them GST.

7.3   APs have the option to offer a passthrough IRAS API to their IRSPs or Transmitting Enterprises connected to them, where the actual IRAS Check GST Register API is consumed through a single integration point.

7.4   IRSPs or Transmitting Enterprises can use this passthrough API, to validate if the invoice issuer (supplier) is GST registered at the point of creating invoices and or accepting the invoices for payment (by the buyer).

8.   [OPTIONAL] AP SANDBOX SERVICE

8.1   As an optional service APs may provide testing facilities for their customers (IRSPs and Transmitting Enterprises). During the onboarding of their customers, APs may support and provide consultation advise to their customers on how to get connected for the submission of invoice data to C5. The AP sandbox will be connected to IRAS Sandbox.

8.2   This AP Sandbox service shall not include use of live data and kept separated from AP's and IRAS' production environment.