

Design Workshop GST InvoiceNow Requirement

Last update 17 May 2024

Part 1

1. Background
2. Business Obligations and Benefits
3. Actors and Terms

Part 2

1. Invoice Data Requirement
2. Systems Environment & Data Flow Type Definition

Part 3

1. Data Packaging

Break

Part 4

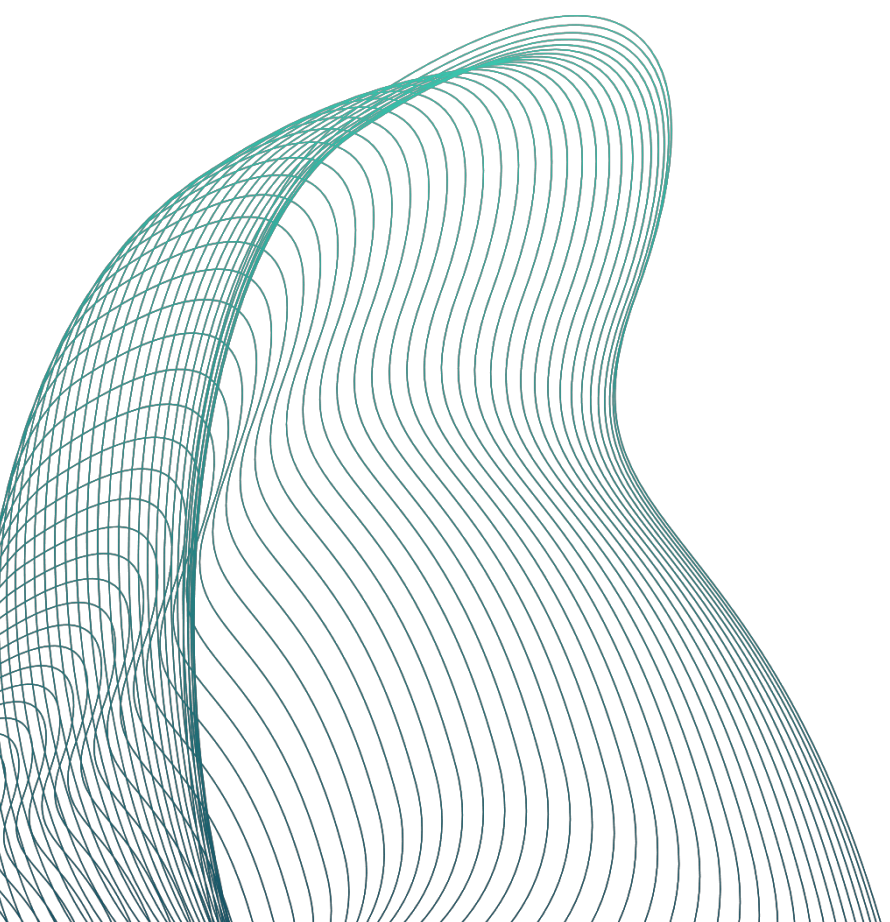
1. AP Connections
2. Invoice data submission activation & whitelist management
3. Validation Rules and Schematron
4. Front-end Service and Solution Uplift
5. Exception handling processes

Part 5

1. Accreditation Requirements (Timeline and process)

OUTLINE

BACKGROUND





Phased Adoption of GST InvoiceNow Requirement

2024 - Development

- System development from Jan 2024
- The system's sandbox environment from Q3 2024 to facilitate connectivity testing and onboarding of APs



2025 – Go Live and Soft Launch

- Early 2025 – System go-live
- May 2025 – Soft Launch!
- Nov 2025 - GST InvoiceNow Requirement for newly incorporated voluntary registrants



2026 – Greater Network Effect

- Apr 2026 - GST InvoiceNow Mandate for all new voluntary registrants



Joint IRAS-IMDA Pilot Journey

From Sep 2020 to Jun 2023 – integrate with IRAS' system for invoice data submission through InvoiceNow via API.

Our pilot showed encouragingly positive outcomes

- Validated the technical feasibility and viability of invoice data submission to IRAS
- Easy and seamless to onboard and send invoice data to IRAS
- To the business users... "did anything change?"



Large Enterprise

"Some ad-hoc audits can be reduced, we don't need to pull everything again, download every invoice again since IRAS has the data already"



SME 1

"We can receive quicker refunds since IRAS already have the data."



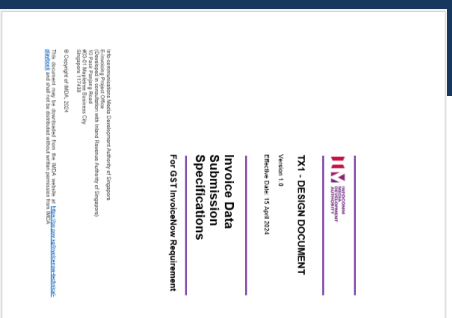
SME 2

"If all our suppliers and customers are on InvoiceNow, we will be able to achieve 50% time-savings when it comes to processing suppliers' invoices."

Invoice Data Submission for GST InvoiceNow Requirement Version 1.0 Released

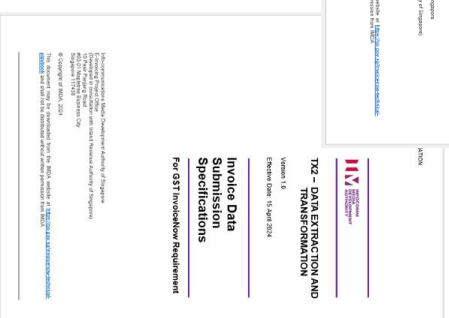
The technical specification comprises of:

Documents are available at
<https://go.gov.sg/invoicenow-technical-playbook>



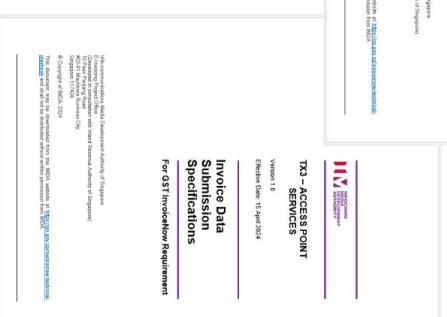
TX1 – Design Document

- Overall system design



TX2 – Data Extraction and Transformation

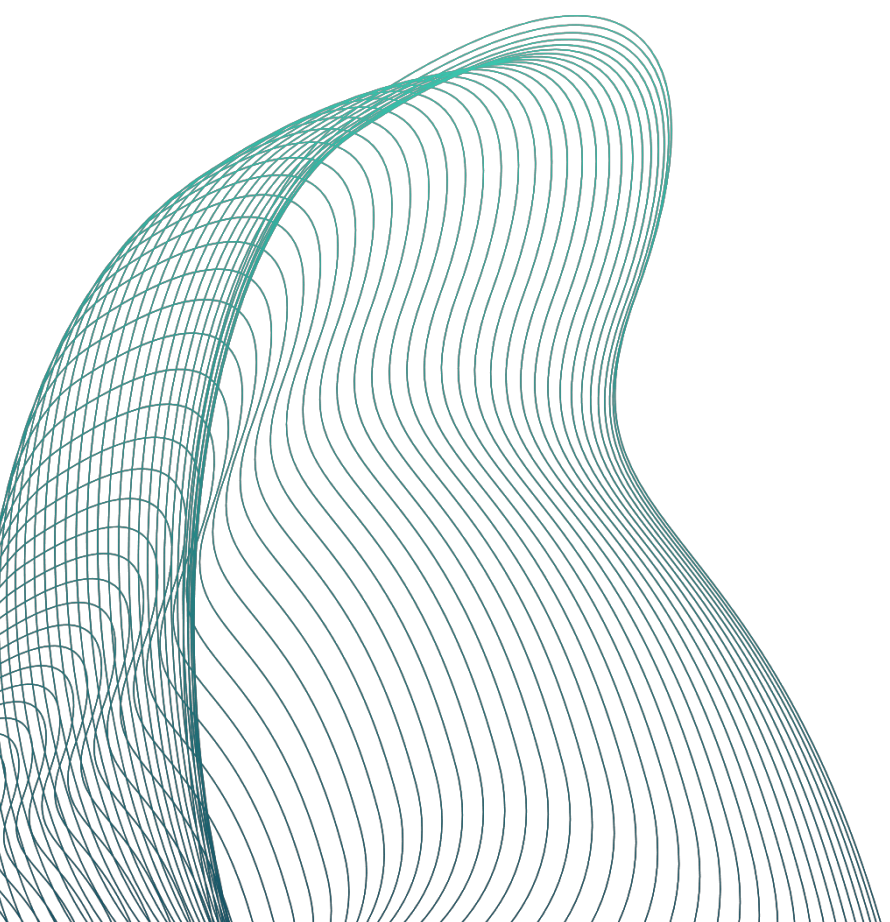
- Enhancements required for systems for both market solutions and GST-registered businesses



TX3 – Access Point Services

- Enhancements required for Access Points

BUSINESS OBLIGATIONS AND BENEFITS



Business Obligations and Benefits

Regulatory Compliance

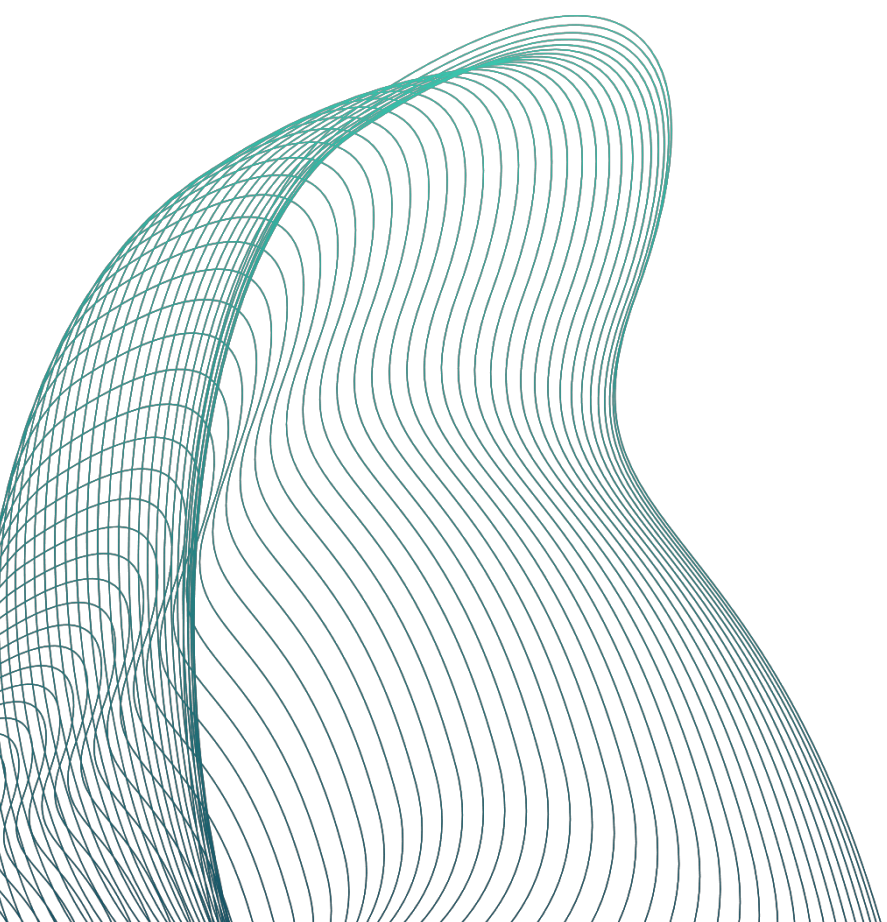
InvoiceNow GST Requirement helps digitize GST compliance obligations

Business Benefits

1. Reduced manual compliance efforts via automated data submission
2. Faster GST refunds
3. Shorter and faster audits
4. Capability of new value-added-services such as GSTN check to avoid incorrect charges

NB: Businesses submitting invoice data to IRAS shall continue to be required under Goods and Services Tax Act to comply with the obligations of a GST registered person to submit GST returns.

ACTORS AND TERMS



ACTORS AND RESPONSIBILITIES

Accredited Access Points ("APs")

- Only party allowed to submit invoice data to IRAS using IRAS' C5 API
- Provide front-end services to IRSPPs and GST-Registered Businesses
- Facilitate activation of invoice data submission feature (to C5) and maintenance of whitelist to facilitate continual submission
- Provide logging and transaction reporting between AP and business' solutions/ C5
- Provide support to their prospective or existing clients (IRSPPs and Businesses) on C5 matters

InvoiceNow-Ready Solution Providers ("IRSPPs")

- Establishing and maintaining connection to an Accredited Access Point.
- Extraction and packaging of invoice data submission according to data specifications
- Provide C5 On-boarding function for invoice data submission
- Provide support to their prospective or existing clients on C5 matters

GST-Registered Businesses

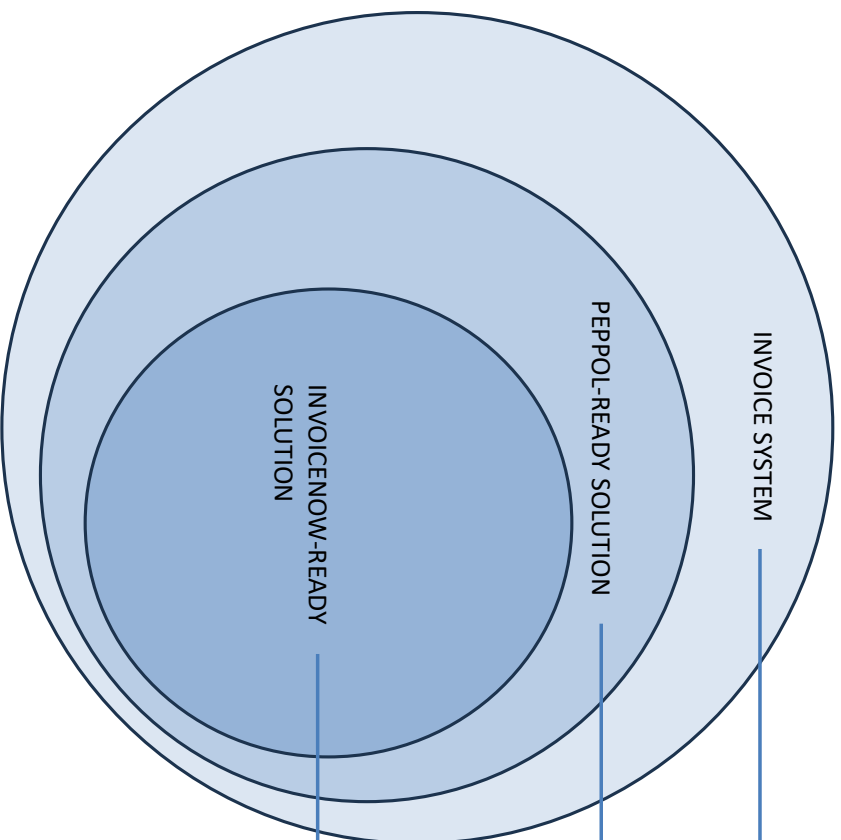
- Activate C5 Submission by completing the C5 On-boarding process if on IRSPP
- For Businesses with Own Solution
 - Establishing and maintaining connection to an Accredited Access Point.
 - Work with Access Point to execute the C5 On-boarding
 - Extraction and packaging of invoice data submission according to data specifications

ACTORS AND ROLES

- The role “Submitter” is for GST Registered Business who are obligated to comply to IRAS requirement for invoice data submission. The business may be using a IRSP to submit the Invoice Data to IRAS or submitting on their own from their solution.
- 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.

	Role	Party
1.	Access Point	IMDA Accredited Access Points
2.	Submitter	GST Registered Business
3.	Transmitter	GST Registered Business (“Transmitting Enterprises”)
4.	Transmitter	InvoiceNow Ready Solution Provider

SOLUTION DEFINITIONS



GST Registered Business will use solutions to generate tax compliant invoices that conforms to IRAS' requirement. For the purpose of this document, these solutions are generally named "Invoice System". The Invoice System is either a single system or combination of systems that contain invoice details. This could include but not limited to:

- i) ERP system
 - ii) Billing system
 - iii) Procurement system
 - iv) Supply Chain system
 - v) Accounts Payable/Receivable system
 - vi) Accounting System
 - vii) Other system that contains invoice data
- In addition to the above, there may be middleware solutions that tie the various elements into a whole for invoice data submission.

Invoice System that meet IMDA's requirement for Peppol connectivity.

Invoice System that includes features to meet the GST InvoiceNow Requirements and Peppol-ready.

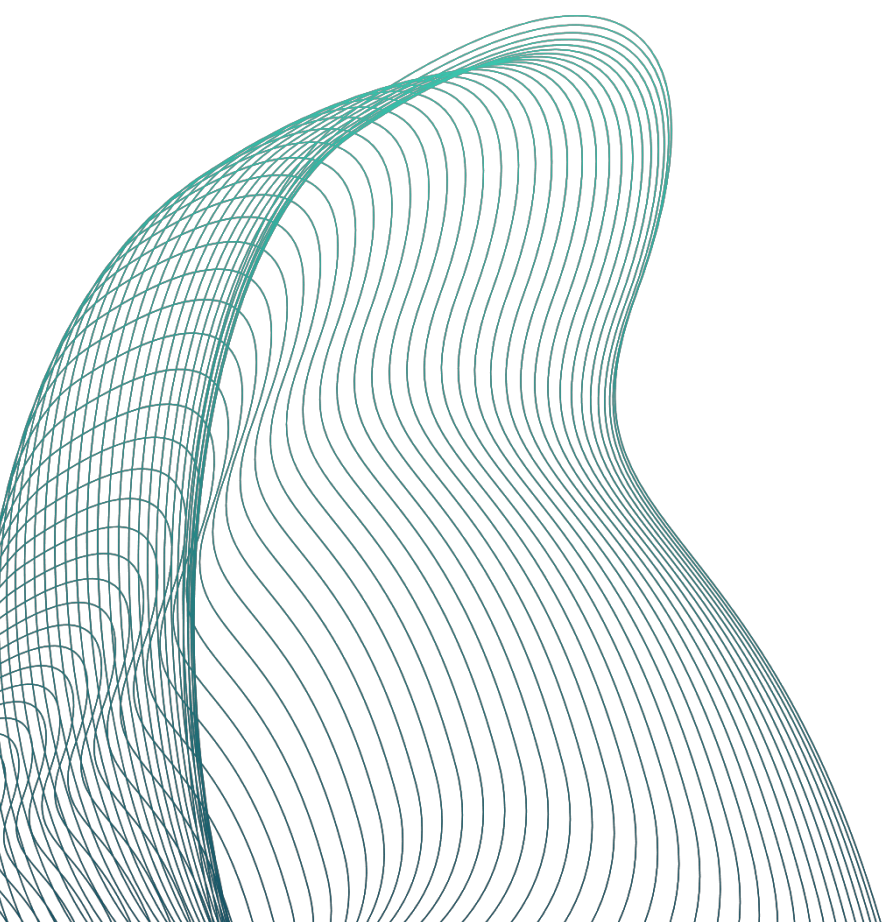
SOLUTION PROVIDER ACCREDITATION



<p>Peppol Ready Solution Providers “PRSP”</p>	<p>These are providers with productized solution that are pre-integrated to the InvoiceNow network via an IMDA Accredited Access Point. PRSPs are principal providers who have direct control over product source codes and intellectual property.</p>
<p>InvoiceNow Ready Solution Providers “IRSP”</p>	<p>These are PRSPs with solutions with features supporting IMDA’s mandatory document support and Peppol connectivity as well as meet the GST InvoiceNow Requirements.</p>

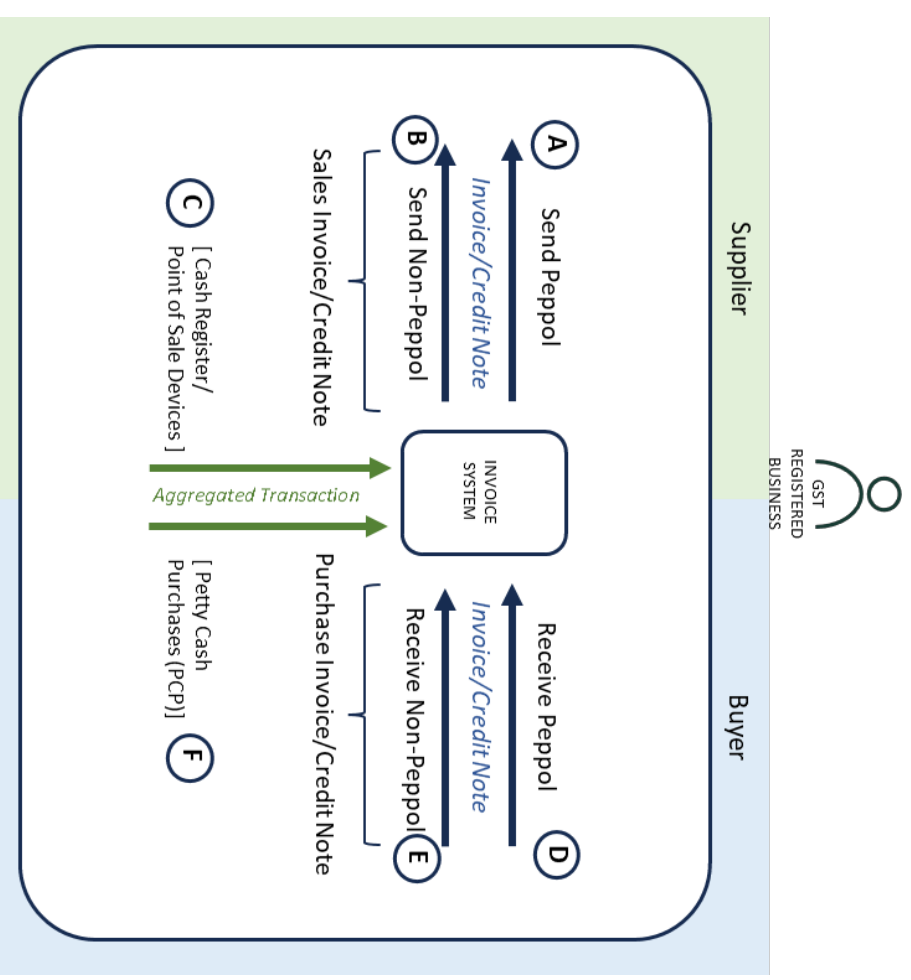


INVOICE DATA REQUIREMENT



Business Data Where Invoice Data Are Required

1. Sales invoices that are sent over InvoiceNow network
2. Sales invoices that are sent using PDF/email or other channels
3. Purchase invoices that are received over InvoiceNow network
4. Purchase invoices that are received using PDF/email or other channels
5. Aggregated B2C Cash Sales and petty cash transactions



Mandatory Data Elements (“MDE”)

- In line with the existing GST content requirements of a tax invoice, simplified tax invoice and other invoices allowed by the Comptroller under regulations 11 and 13 of the GST (General) Regulations, the invoice data transmitted to IRAS must contain the following mandatory data elements (“MDE”):

Seller Details		Buyer Details	
• Supplier Endpoint ID	• Supplier Name	• Customer Endpoint ID	• Customer Address – Address Line 1
• Supplier Scheme ID	• Supplier Address – Address Line 1	• Customer Scheme ID	• Customer Address – Postal Code
• Supplier UEN	• Supplier Address – Postal Code	• Customer UEN	• Customer Address – Country Code
• Supplier GSTN	• Supplier Address – Country Code	• Customer Name	

Note: Subject to industry consultation.

Mandatory Data Elements (“MDE”)

Invoice Details

<ul style="list-style-type: none"> • Customization ID 	<ul style="list-style-type: none"> • Invoice Currency Code 	<ul style="list-style-type: none"> • Quantity 	<ul style="list-style-type: none"> • Subtotal GST category taxable amount
<ul style="list-style-type: none"> • Profile ID 	<ul style="list-style-type: none"> • GST Category Code (i.e., GST tax code) 	<ul style="list-style-type: none"> • Item Net Price, excluding GST 	<ul style="list-style-type: none"> • Subtotal GST Category Code
<ul style="list-style-type: none"> • Doc UUID (Unique invoice identifier) 	<ul style="list-style-type: none"> • GST Category Rate (i.e., GST rate for the tax code) 	<ul style="list-style-type: none"> • Item GST Category Code 	<ul style="list-style-type: none"> • Subtotal GST Category Rate
<ul style="list-style-type: none"> • Invoice Number 	<ul style="list-style-type: none"> • Invoice Line Identifier 	<ul style="list-style-type: none"> • Item GST Category Rate 	<ul style="list-style-type: none"> • Total GST Amount
<ul style="list-style-type: none"> • Invoice Date 	<ul style="list-style-type: none"> • Item Name 	<ul style="list-style-type: none"> • Invoice Line Net Amount 	<ul style="list-style-type: none"> • Total Invoice Amount without GST
<ul style="list-style-type: none"> • Invoice Type Code (i.e., invoice or credit note) 	<ul style="list-style-type: none"> • Unit 	<ul style="list-style-type: none"> • Sum of Invoice Line Net Amount 	<ul style="list-style-type: none"> • Total Invoice Amount with GST
		<ul style="list-style-type: none"> • Subtotal GST Category Amount 	<ul style="list-style-type: none"> • Amount due for Payment

For non-SGD invoice, sgdtotal-excl-gst and sgdtotal-incl-gst are also required

Mandatory Data Elements (“MDE”)

Credit Note Details

<ul style="list-style-type: none"> Customization ID 	<ul style="list-style-type: none"> Credit Note Currency Code 	<ul style="list-style-type: none"> Quantity 	<ul style="list-style-type: none"> Total GST Amount
<ul style="list-style-type: none"> Profile ID 	<ul style="list-style-type: none"> GST Category Code (i.e., GST tax code) 	<ul style="list-style-type: none"> Item Net Price, excluding GST 	<ul style="list-style-type: none"> Total Credit Note Amount without GST
<ul style="list-style-type: none"> Doc UUID (Unique invoice identifier) 	<ul style="list-style-type: none"> GST Category Rate (i.e., GST rate for the tax code) 	<ul style="list-style-type: none"> Item GST Category Code 	<ul style="list-style-type: none"> Total Credit Note Amount with GST
<ul style="list-style-type: none"> Credit Note Number 	<ul style="list-style-type: none"> Credit Note Line Identifier 	<ul style="list-style-type: none"> Item GST Category Rate 	<ul style="list-style-type: none"> Amount due for Payment
<ul style="list-style-type: none"> Credit Note Date 	<ul style="list-style-type: none"> Item Name 	<ul style="list-style-type: none"> Credit Note Line Net Amount 	<ul style="list-style-type: none"> Preceding Invoice number
<ul style="list-style-type: none"> Invoice Type Code (i.e., invoice or credit note) 	<ul style="list-style-type: none"> Unit 	<ul style="list-style-type: none"> Sum of Credit Note Line Net Amount 	<ul style="list-style-type: none"> Preceding Invoice issue date
			<ul style="list-style-type: none"> Invoice Note

Note: Subject to industry consultation.

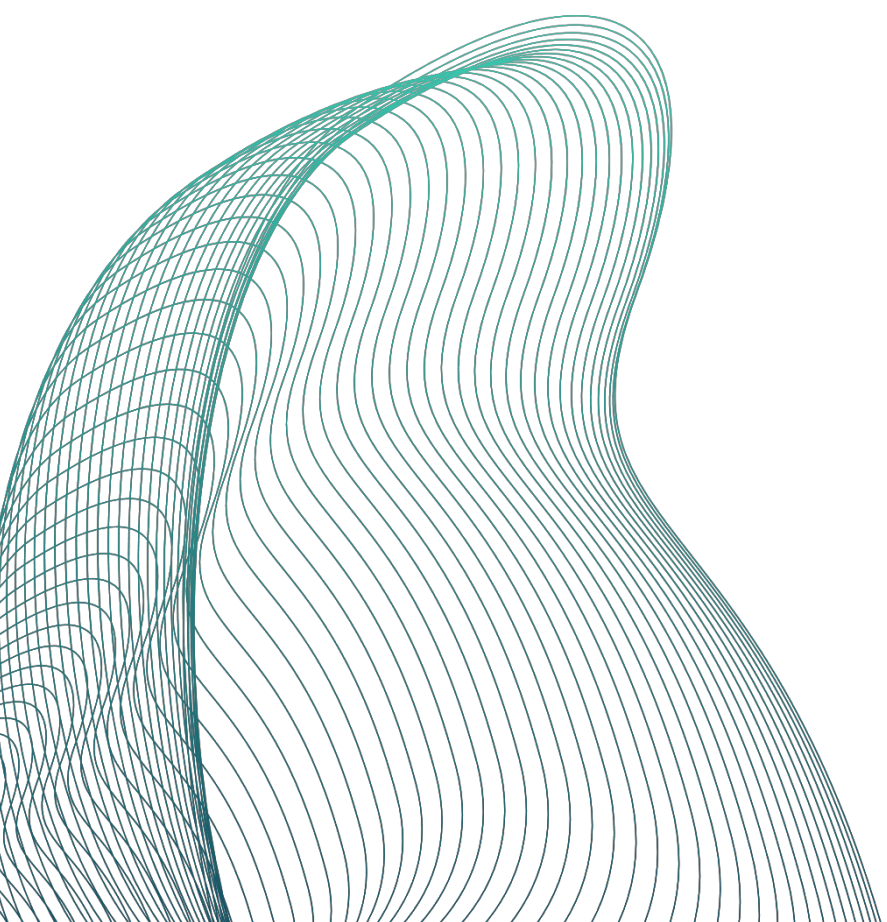
ANNEX A – DATA ELEMENTS

Note: Version 1.0 table has been simplified.

DATA EXTRACTION AND TRANSFORMATION

S/N	Card	Relevant Business Terms	Name	GST Invoice/How Requirement ^a	Remarks
57.	0..1	IBT-035	ubl:Invoice / cac:AccountingSupplierParty / cac:Party / cac:PostalAddress / cbc:StreetName	M	Added the street name as mandatory tax field
58.	0..1	IBT-036	ubl:Invoice / cac:AccountingSupplierParty / cac:Party / cac:PostalAddress / cbc:AdditionalStreetName		
59.	0..1	IBT-037	ubl:Invoice / cac:AccountingSupplierParty / cac:Party / cac:PostalAddress / cbc:CityName		
60.	0..1	IBT-038	ubl:Invoice / cac:AccountingSupplierParty / cac:Party / cac:PostalAddress / cbc:PostalZone	M	Added the postal code as mandatory tax field
61.	0..1	IBT-039	ubl:Invoice / cac:AccountingSupplierParty / cac:Party / cac:PostalAddress / cbc:CountrySubentity		

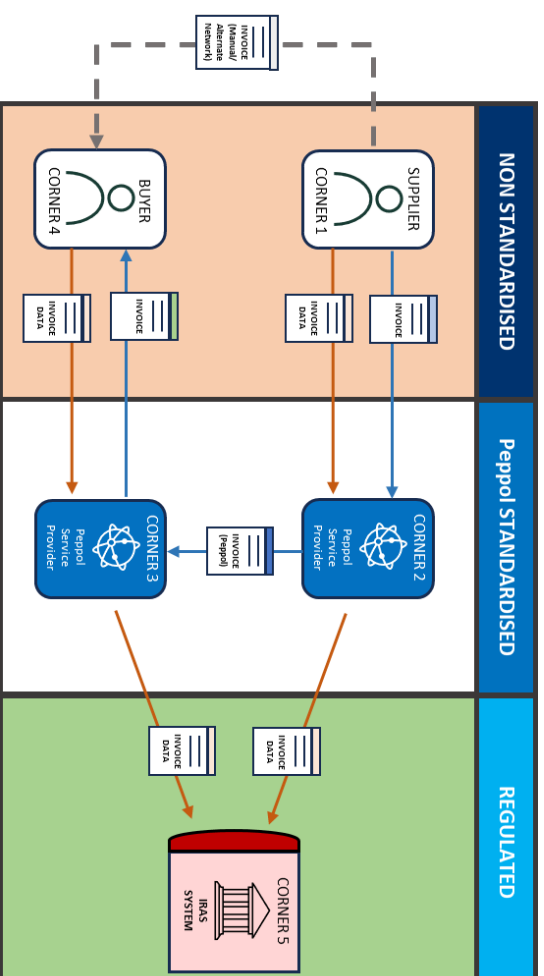
SYSTEM ENVIRONMENT and DATA FLOW TYPE DEFINITION



A 5th Corner will collect Invoice Data via Access Points using API calls

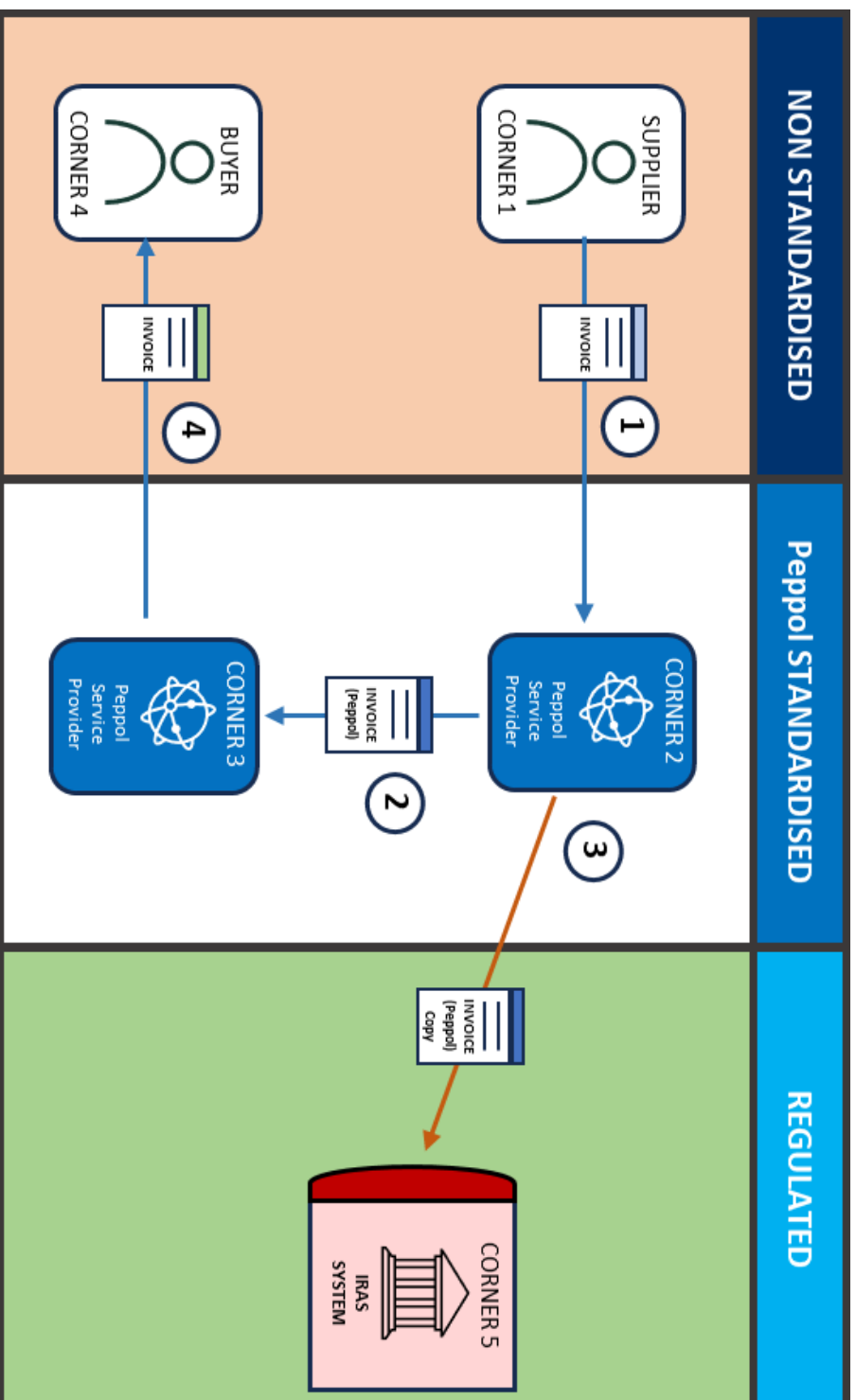
The adoption of InvoiceNow for invoice data submission to IRAS extends the traditional four-corner e-delivery model to a 5th corner. The overall system design includes funneling copies of live invoices over InvoiceNow and invoice data extracted from invoicing systems to IRAS system.

Data, both Peppol outbound traffic and all other invoice data required by IRAS to be extracted from solutions, will be based on PINT underlying structure.



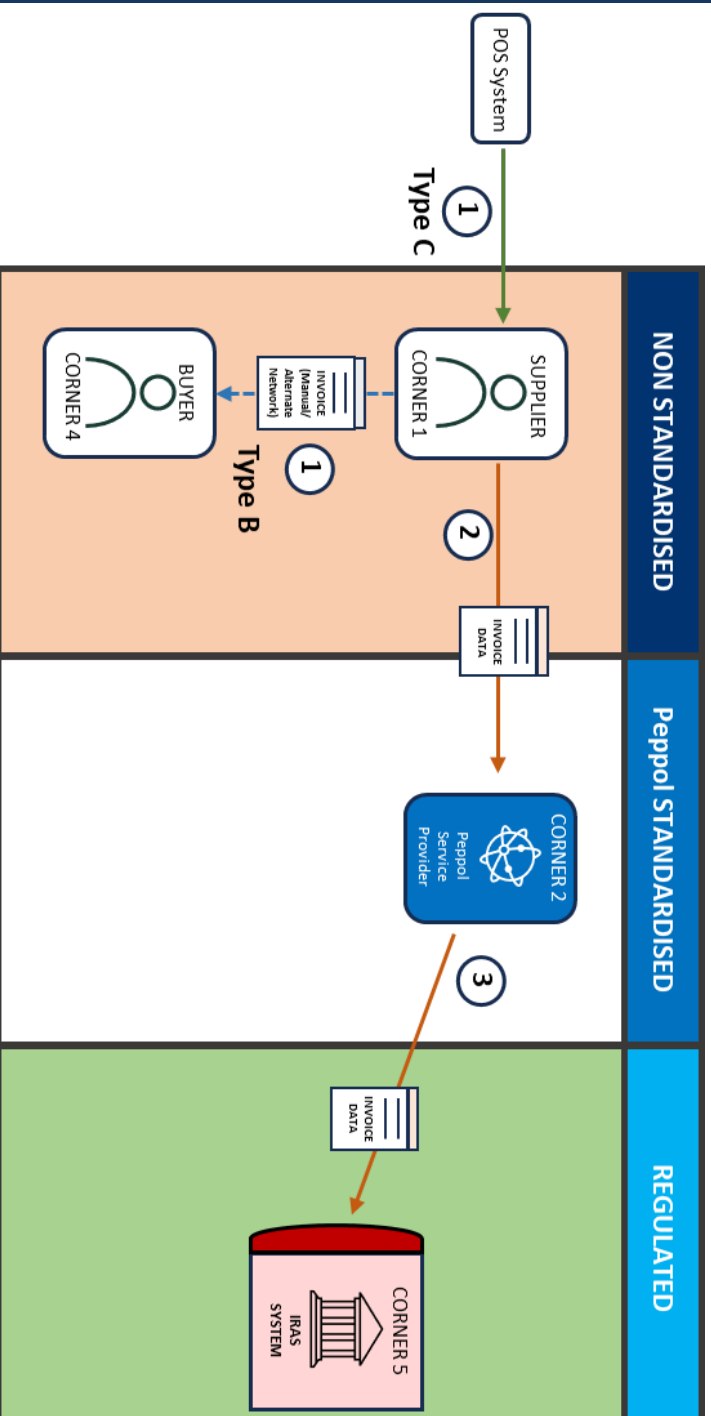
- ✓ Under the proposed IRAS' System, IRAS will leverage InvoiceNow to receive invoice data whenever businesses transact. The rest of the data will be extracted from systems for submission to IRAS.
- ✓ Data submitted via Access Points (ONLY), which will be connected to IRAS' System.

DATA FLOWS (TYPE A)



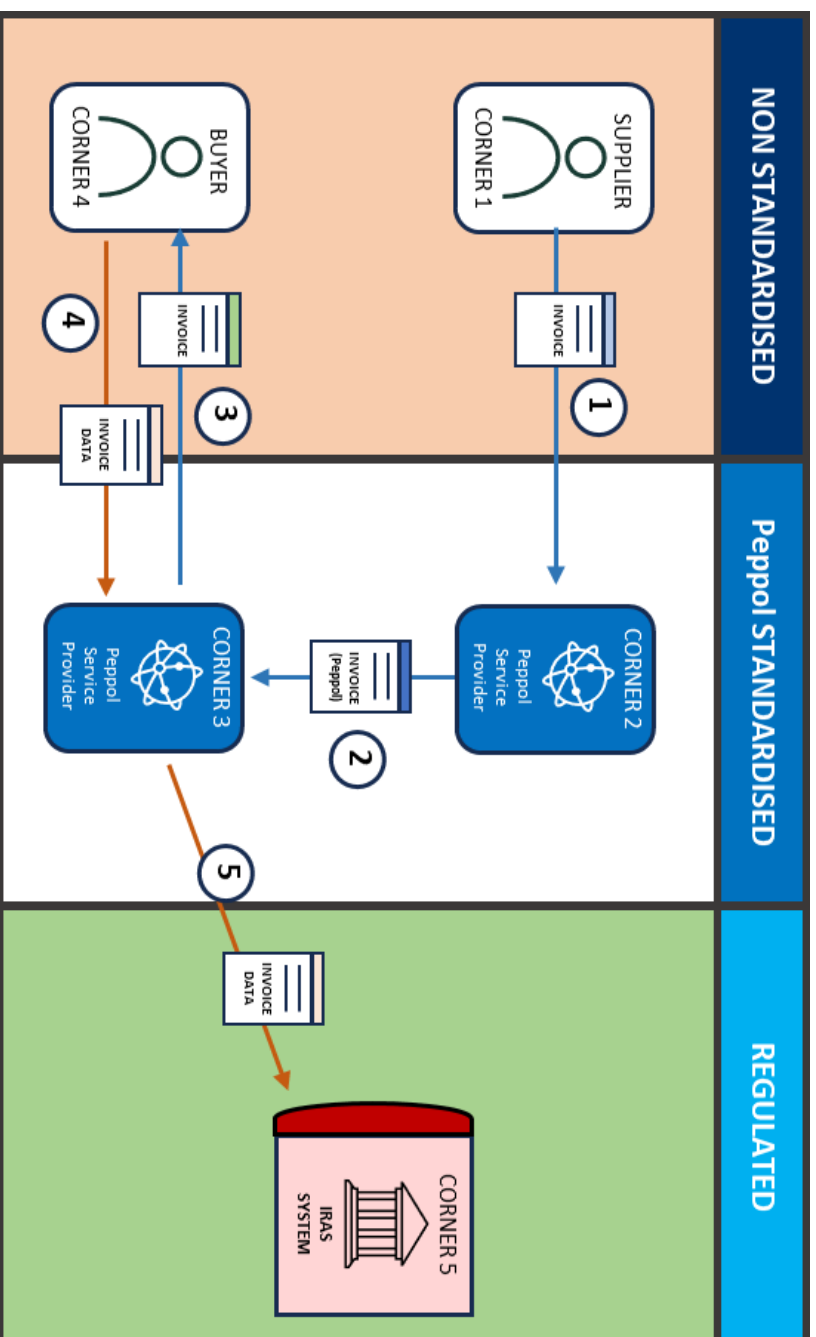
- This flow illustrates a Peppol transaction where an invoice from both supplier and buyer is transmitted over the Peppol network. The invoice data is sent to C5 once the supplier's invoice is successfully delivered to C3.
- This will be the dominant flow over time as usage of InvoiceNow increases and achieves network effect.
- Only submit to IRAS when instructed by C1.
- Submission to IRAS should happen immediately after completion of Peppol delivery to C3

DATA FLOWS (TYPE B AND C)



- Type B represents an **outbound invoice which is sent via non-Peppol route** (e.g. PDF or EDI). The invoice is entered by the supplier into the accounting system and sent to buyer before it is submitted to C5.
- Type C are **aggregated cash sales** data collected from cash registers/ POS devices in B2C transactions.
- The data is extracted directly from the solutions according to the data specifications and submitted as an invoice to C5 on a regular interval.

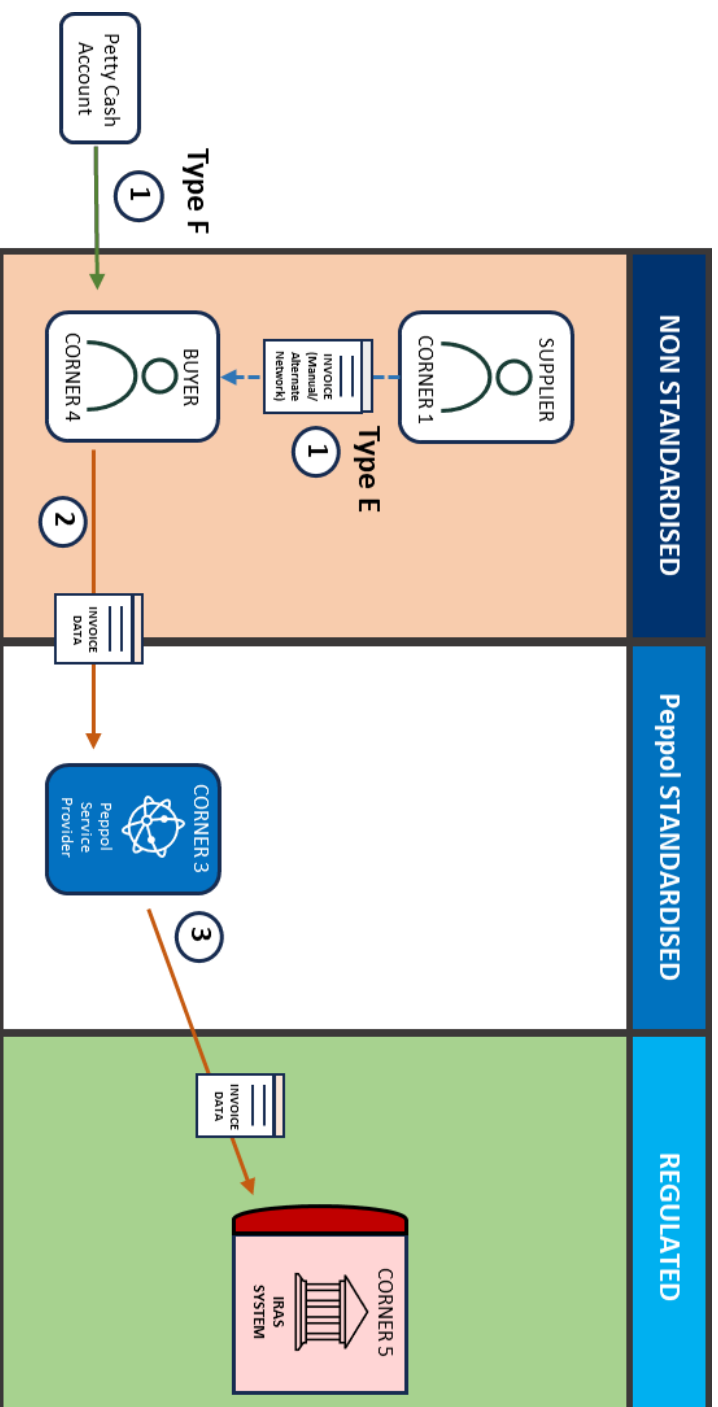
DATA FLOWS (TYPE D)



*Accepted Invoices are defined as purchase invoices where buyers (C4) have approved for payment.

- This flow involves an invoice transmitted via the Peppol network and ingested into the buyer's system.
- When a buyer receives the invoice from his supplier via Peppol network, the invoice will be ingested into the buyer's software/system and flipped into a purchase invoice. The invoice will be further processed with inputs required from the buyer (e.g. assigning correct purchase tax code, taxable purchase value etc).
- Once buyer has accepted the invoice* into the software/system, the accepted invoice is extracted directly from the solutions according to the data specifications and transmitted to C5.

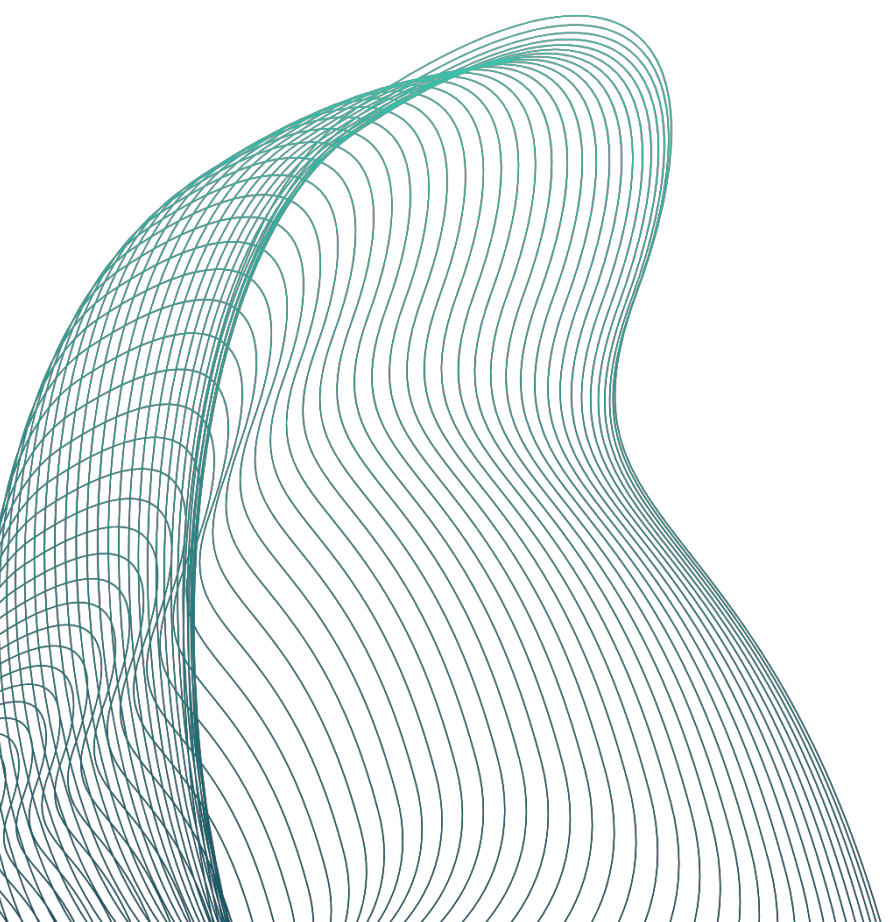
DATA FLOWS (TYPE E AND F)



* Accepted Invoices are defined as purchase invoices where buyers (C4) have approved for payment.

- Type E represents an inbound invoice received via non-Peppol route (e.g. PDF or EDI). The invoice is entered by the buyer into the accounting system. The invoice is further processed in the buyer's system with further inputs required from the buyer (e.g. assigning correct purchase tax code, taxable purchase value etc) and flipped into a purchase invoice. Once the buyer has accepted the invoice* into the software/system, the accepted invoice is extracted directly from the solutions according to the data specifications and transmitted to C5.
- Type F are aggregated data from petty cash transactions.

DATA PACKAGING



ANNEX B – SUMMARY OF CUSTOMISATION

Part 3 of 4

Peppol Fields*	Relevant Business Term	GST Invoice/Requirement-Mandatory	Peppol Network		Solution Extracted						
			Package	(Standard Peppol)	A	B	C	D	E	F	
ubl:Invoice / cac:AccountingCustomerParty / cac:Party / cac:PartyTaxScheme /cbc:CompanyID	IBT-048	No	Peppol Invoice (Sent)	Non Peppol Invoice (Sent)	Cash Register/POS (B2C)	Peppol Sales Invoice/Credit Note converted to Purchase Invoice/Credit Note (Received)	Non Peppol Sales Invoice/Credit Note converted to Purchase Invoice/Credit Note (Received)	Customer's GST Registration Number			
ubl:Invoice / cac:AccountingCustomerParty / cac:Party / cac:PartyLegalEntity /cbc:RegistrationName	IBT-044	Yes	Customer's Legal Name	Customer's UEN	B2C		Customer's Legal Name	Customer's UEN			
ubl:Invoice / cac:AccountingCustomerParty / cac:Party / cac:PartyLegalEntity /cbc:CompanyID	IBT-047	Yes	Customer's Legal Name	Customer's UEN	B2C		Customer's Legal Name	Customer's UEN			
ubl:Invoice / cac:InvoiceLine /cbc:InvoiceQuantity /@unitCode	IBT-129	Yes			1					1	
ubl:Invoice / cac:InvoiceLine /cbc:InvoiceQuantity /@unitCode	IBT-130	Yes			LOT					LOT	
ubl:Invoice / cac:InvoiceLine /cbc:InvoiceQuantity /@unitCode	IBT-131	Yes			Submit aggregated value recorded in the accounting solution. (The price of an item, excluding GST amount)					Submit aggregated value recorded in the accounting solution. (The price of an item, excluding GST amount)	

ANNEX B – SUMMARY OF CUSTOMISATION

Part 4 of 4

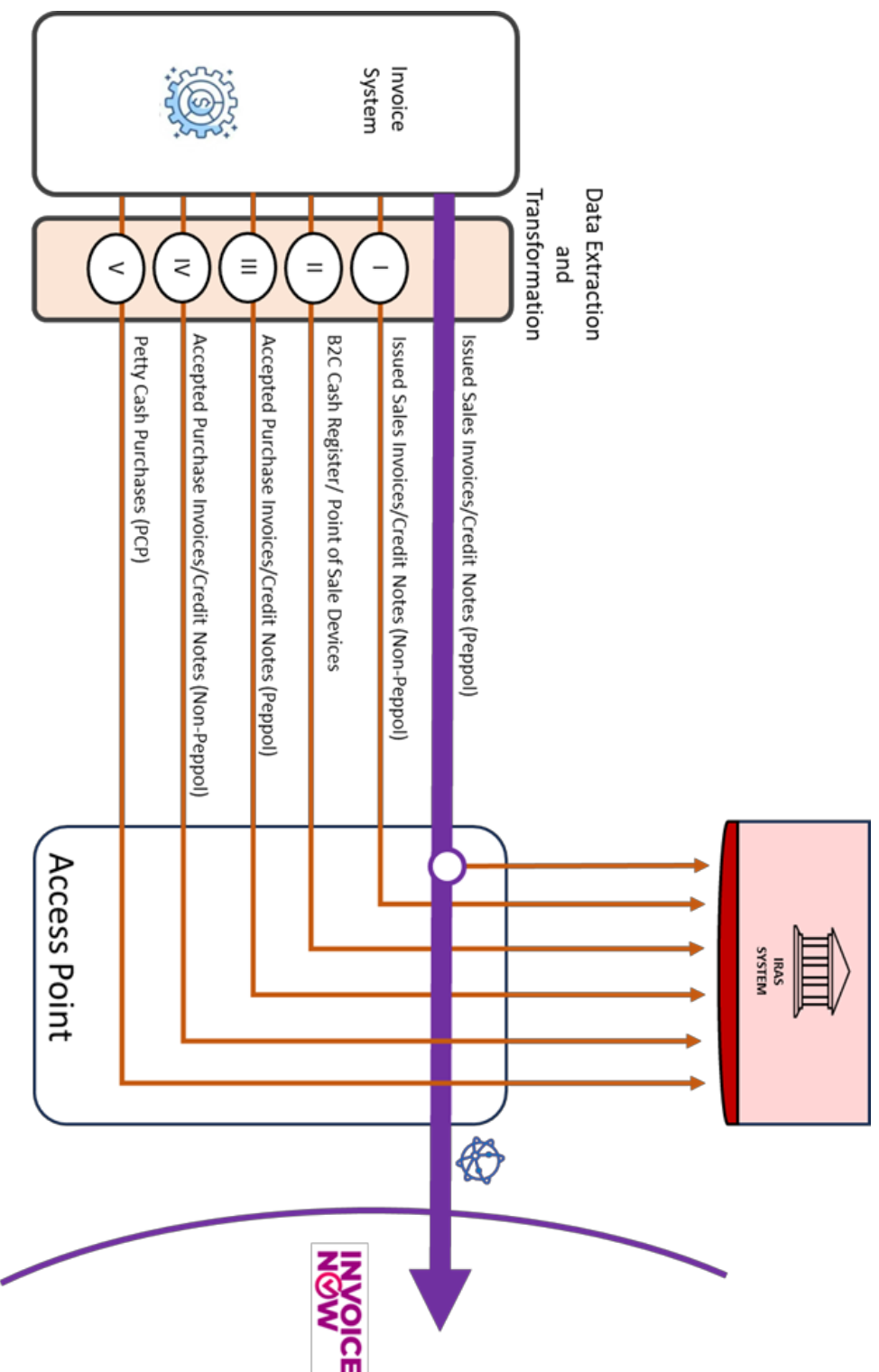
	Source		Solution Extracted					
	Data Flow	Package	Peppol Network	B	C	D	E	F
			A (Standard Peppol)	I	II	III	IV	V
Peppol Fields*	Relevant Business Term	GST Invoice/Flow Requirement-Mandatory	Peppol Invoice (Sent)	Non Peppol Invoice (Sent)	Cash Register/POS (B2C)	Peppol Sales Invoice/Credit Note converted to Purchase Invoice/Credit Note (Received)	Non Peppol Sales Invoice/Credit Note converted to Purchase Invoice/Credit Note (Received)	Petty Cash Purchases (PCP)
ubi:Invoice / cac:InvoiceLine / cac:Item / dbc:Name	IBT-153	Yes			B2C			PCP
ubi:Invoice / cac:InvoiceLine / cac:Price / dbc:PriceAmount	IBT-146	Yes			Submit aggregated value recorded in the accounting solution. (The price of an item, excluding GST amount)			Submit aggregated value recorded in the accounting solution. (The price of an item, excluding GST amount)

DATA PACKAGES



Data Flow	Peppol/ Non-Peppol	Item	Type of Transaction	Granularity of data to be sent	When invoice data is sent to C5	Data Package	Specifications
Type A	Peppol	Issued Invoices /Credit Note	Supply	Transaction level (Single)	When invoice is issued	Standard Peppol	Peppol Transaction (PINT-SG)
Type B	Non-Peppol	Issued Invoices /Credit Notes	Supply	Transaction level (Single)	The transactions should be submitted to C5 before or at the same time when the return is filed.	I	Solution-Extracted (Data specifications based on PINT-SG)
Type C	Non-Peppol	Aggregated Invoices from Cash Register/ Point of Sale Devices (B2C)	Supply	Aggregated level Such as daily cash register sales consolidated in a single invoice that is submitted to IRAS System on a regular interval		II	
Type D	Peppol	Accepted Invoices/Credit Notes	Purchase	Transaction level (Single/Bulk)		III	
Type E	Non-Peppol	Accepted Invoices/Credit Notes	Purchase	Transaction level (Single/Bulk)		IV	
Type F	Non-Peppol	Aggregated Petty Cash Purchases (PCP)	Purchase	Aggregated level Such as daily cash register sales consolidated in a single invoice that is submitted to IRAS System on a regular interval		V	

TRANSMISSION (SOLUTION VIEWPOINT)



USE OF UUID FOR TRACEABILITY

SBDH is required for all documents submitted to IRAS (both Peppol and Solution Extracted documents). To ensure that every document and every transmission of content on the network is being uniquely identified for tracking purposes we have two UUIDs:

- i. Document UUID* - which identifies the invoice/credit note document, and
- ii. Transmission UUID - which identifies the unique transmission of the document over the network.

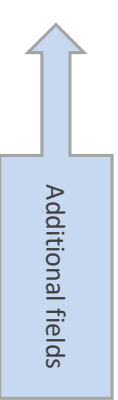
UUID should be represented in hexadecimal value, eg.

bfeacc3d0-82d8-4195-9d88-53b3547f83a3

* The field to store this UUID is [ubl:Invoice/cbc:UUID](#) or [ubl:CreditNote/cbc:UUID](#). Peppol PINT-SG schema will be updated at a later date to include this field.

EXAMPLE OF SBDH FOR SOLUTION EXTRACT

```
1 <?xml version="1.0" encoding="UTF-8" standalone="yes"?>
2 <StandardBusinessDocument
3   xmlns="http://www.unece.org/cefact/namespace/StandardBusinessDocumentHeader">
4   <StandardBusinessDocumentHeader>
5     <HeaderVersion>1.0</HeaderVersion>
6     <Sender>
7       <Identifier Authority="iso6523-actorid-upis">0195:SGUEN202012345A</Identifier>
8     </Sender>
9     <Receiver>
10      <Identifier>IRAS</Identifier>
11    </Receiver>
12    <DocumentIdentification>
13      <Standard>urn:oasis:names:specification:ubl:schema:xsd:Invoice-2</Standard>
14      <TypeVersions>2_1</TypeVersions>
15      <InstanceIdentifier>f4891878-0698-4b07-8eec-722c9055e709</InstanceIdentifier>
16      <Type>Invoice</Type>
17      <CreationDateAndTime>2024-02-02T13:45:23.744Z</CreationDateAndTime>
18    </DocumentIdentification>
19    <BusinessScope>
20      <Scope>
21        <Type>Document_UUID</Type>
22        <InstanceIdentifier>3a6dd66b-96a4-4136-b1f7-5d75ab3810da</InstanceIdentifier>
23      </Scope>
24      <Scope>
25        <Type>Source</Type>
26        <InstanceIdentifier>SGABCXY+ABCDE000</InstanceIdentifier>
27      </Scope>
28    </BusinessScope>
29  </StandardBusinessDocumentHeader>
30 </StandardBusinessDocumentHeader>
```



SBDH SENDER AND RECEIVER DATA

- SBDH is used to signify the data transfer of the package, capturing the sender and receiver. For sender, this will provide a means to differentiate between Solution Provider and Enterprise.
- Included in the SBDH is a UUID to be generated to uniquely identify the package. (See next slide.)
- For Type A, the SBDH is as per the Peppol document (without modification) as the intent is to have a blind cc of the data package to IRAS.

		Peppol Delivered	Solution Extract			
Package	Peppol Standard	I	II	III	IV	V
	Peppol Inv/CN	Non-Peppol Inv/CN	B2C/ Cash Register	Peppol Inv/CN	Non-Peppol Inv/CN	PettyCash
Sender		Supplier Peppol ID			Customer Peppol ID	
Receiver	Customer Peppol ID	"IRAS"				
Transmission UUID	Unique identifier of the SBDH/transmission, located at DocumentIdentification/InstanceIdentifier					
Document_UUID	NA	UUID of payload				
Source	NA	AP Identifier + Transmitter Identifier (Enterprise UEN/GSTN or IRSP Solution identifier)				

AP/IRSP Identifier ID

AP/IRSP Name	AP Identifier	IRSP Solution Identifier
Ademico Software	BEADMCS	-
B2B Router	OPB2BRT	-
Basware Oy	OPBASWR	-
Billbay Pte. Ltd.	SGBILLB	BILLB000
Datajust B.V. (Storecove)	NLDATAJ	STCOV000
DataPost Pte Ltd	SGDPOST	DPOST000
Deskera Singapore Pte Ltd	SGDESKR	DSKRA000
ecosio InterCom GmbH	DEECSIO	-
Edicom Capital Sociedad Limitada	OPEDCOM	-
Esker SA	OPESKER	ESKER000
IBM Corporation	OPIBMCO	-
ivi e-Invoicing Services (SEA) Pte Ltd	SGIVIES	-
LinkFor Pte. Ltd.	SGLNKFR	LNKFR000
Open Text Inc.	OPOPTXT	-
Oversea-Chinese Banking Corporation Limited	SGOCBCL	OCBCL000
Pagero AB	SEPGERO	PGERO000
PracBiz Pte Ltd	SGPRCBZ	PRCBZ000
RTC Teknologgi Anonim Sirketi	OPRCTK	-
SAP SE	DESAPSE	SAPBO000 SAPDR000
SESAMI (Singapore) Pte Ltd	SGSSAMI	SESWC000
Singapore E-Business Pte. Ltd.	SGSEBIZ	EZYAP000
Tickstar AB	SETKSTR	-
Tradeshift Belgium SA	BETSHFT	TDSHF000
Unifiedpost Pte Ltd (eInvoice.sg)	SGUPOST	UPOST000
Valta Technology Group Pty Ltd	AUVALTA	BNQUP000
Xaana Pty Ltd	AUXAANA	-
Zetta Solution Pte Ltd	SGZETTA	ZETTA000

FILTERING (SUPPLIER INVOICE DATA)

Issued invoices and credit notes (from supplier's perspective) that contain at least one line item that bears the prescribed tax categories below will need to send such invoice data and credit notes to IRAS' System.

Invoices not having any of the tax codes should not be included in the submissions.

No.	Tax category codes	Description
1	SR	Standard-rated supply of goods or services
2	SRCA-S	Customer Accounting supply made by supplier
3	SRCA-C	Customer Accounting supply accountable by the customer on supplier's behalf
4	SRLVG	Own supply of LVG
5	ZR	Zero-rated supplies
6	NA	Taxable supplies where GST need not be charged Such taxable supplies fall under specific GST schemes such as Gross Margin Scheme, Approved Marine Fuel Trader (AMFT) Scheme, Approved Third Party Logistics (3PL) Company Scheme

FILTERING (BUYER INVOICE DATA)

Filter conditions for received invoices and credit notes (from customer's perspective) are based on tax code and approval status:

For tax code filtering, include invoices that contains at least one invoice line matches any of the stipulated tax codes below:

TX	Standard-rated - Taxable purchases
TXCA	Standard-rated - Taxable purchases subject to customer accounting
TX-RE	Residual input tax - Purchases from GST-registered suppliers that are subject to GST at 9% and are either attributable to the making of both taxable and exempt supplies or incurred for the overall running of the business

For Approval Status: only received invoices that have been approved/accepted (i.e. marked) for payment should be filtered for submission to IRAS.

LOGGING AND REPORTING

- Access Points are expected to capture the following data points for each leg in a transaction i.e. from the solution 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 Points are expected to provide transaction reports to Businesses that are directly connected to them while their IRSPs will disseminate the transaction reports on behalf the Access Points to their customers.
- Access Points are required to submit monthly transaction reports to IMDA. The template of the transaction reports will be provided at a later stage.

AP CONNECTIONS

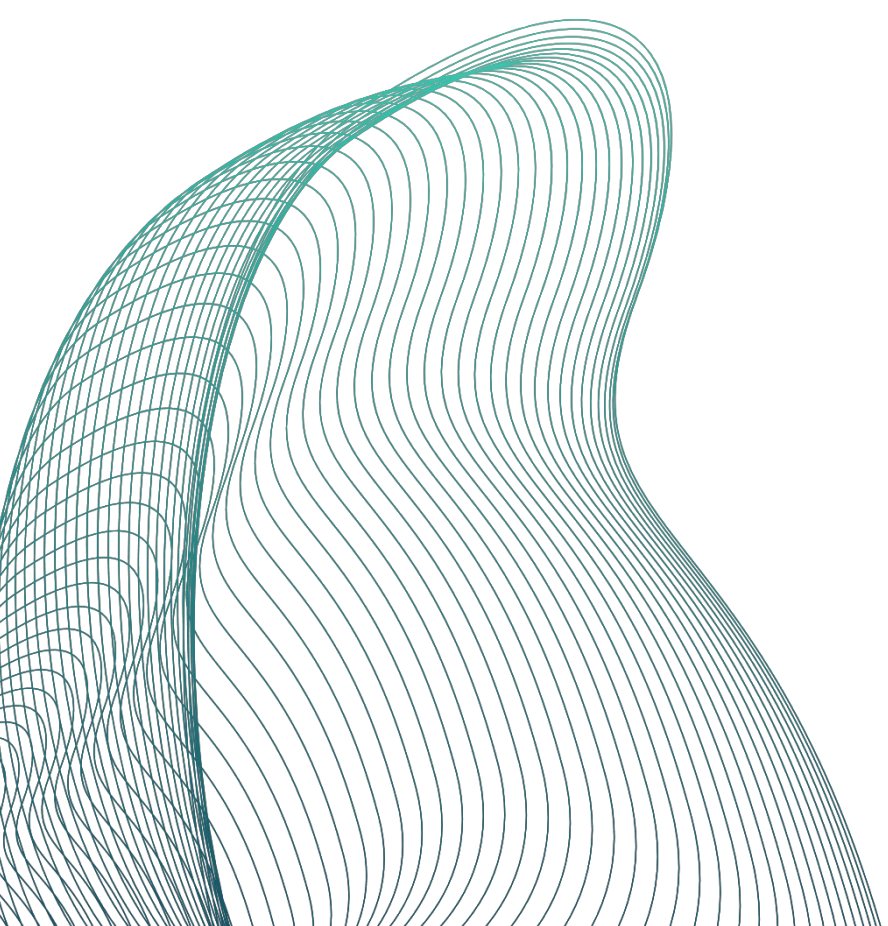
IRAS API MARKETPLACE

APEX

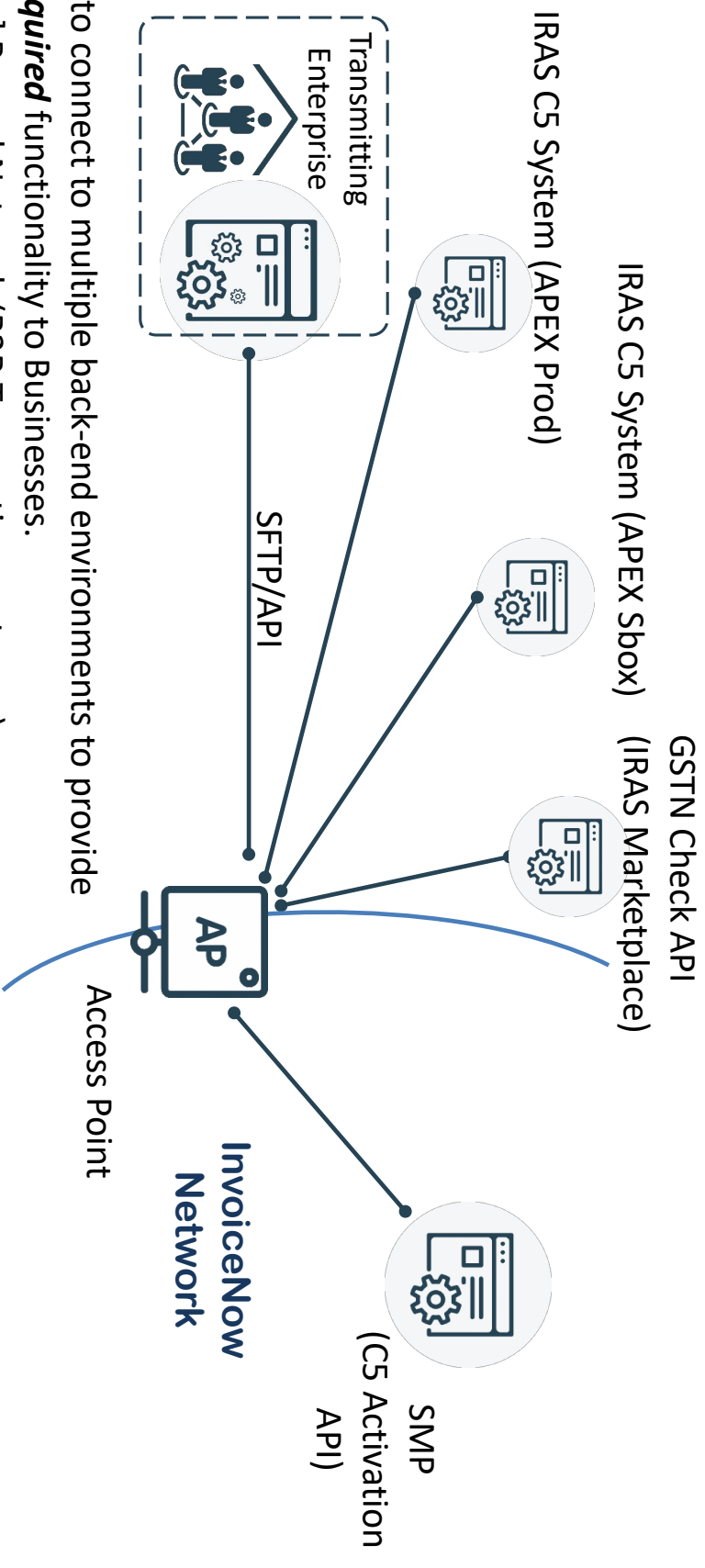
SANDBOX

PRODUCTIONS

SMP



AP CONNECTIONS



AP's will need to connect to multiple back-end environments to provide a full set of **Required** functionality to Businesses.

1. [Mandatory] Peppol Network (B2B Transactions gateway)
2. [Mandatory] IRAS C5 System – (Regulatory Compliance)
3. [Mandatory] SMP Activation API
4. [Optional] GSTN Check (IRAS Marketplace)

IRAS APEX API SERVICES

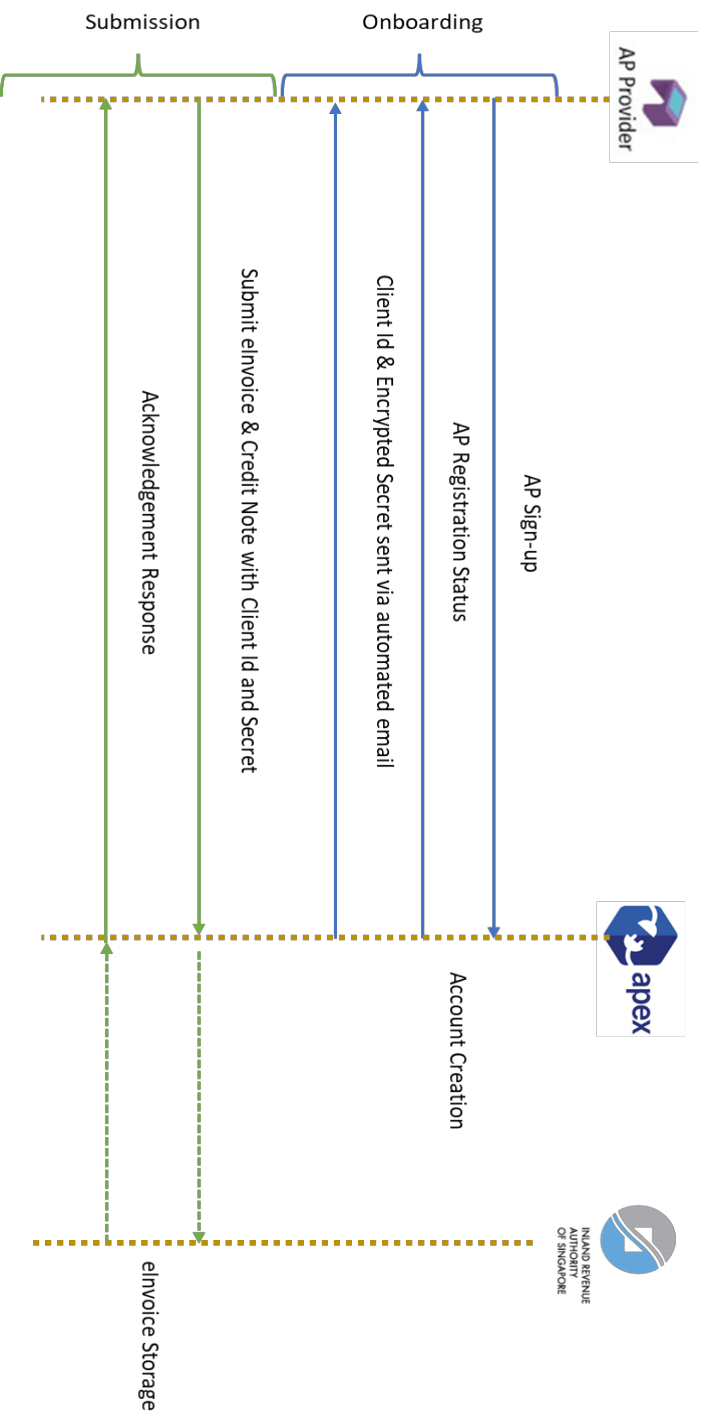
- **IRAS has two API's available for use**
 - Single document submission
 - Bulk document submission
- **IRAS APEX Specifications**

Each API submission is limited to no more than 10 MB in total data size.

 - To use UTF-8 as default encoding.
 - Unless otherwise specified, all API services are invoked using HTTP verb POST and GET
 - Unless stated as optional, all XML object properties (i.e. element & attribute) must be specified.
 - To follow W3C XML 1.0 standard specification e.g. valid characters, escape characters, etc

APEX ON-BOARDING AND DATA SUBMISSION

For Access Point
to note



AP must have their Corppass account and use it for the following activities on APEX.

1. Create Account (using Corppass)
2. Register Application (i.e. AP Gateway)
3. Generate Secret keys
4. Subscribe (to IRAS API)
5. Get approval
6. Test in Sandbox
7. Promote to production

IRAS API MARKETPLACE ONBOARDING

FOR GSTN Check API

AP must have their Corppass account and use it for the following activities on IRAS.

1. Create Account (using Corppass)
2. Register Application (i.e. AP Gateway)
3. Generate Secret keys
4. Subscribe (to IRAS API)
5. Get approval
6. Test in Sandbox
7. Promote to production

INVOICENOW DATA SUBMISSION FOR AP

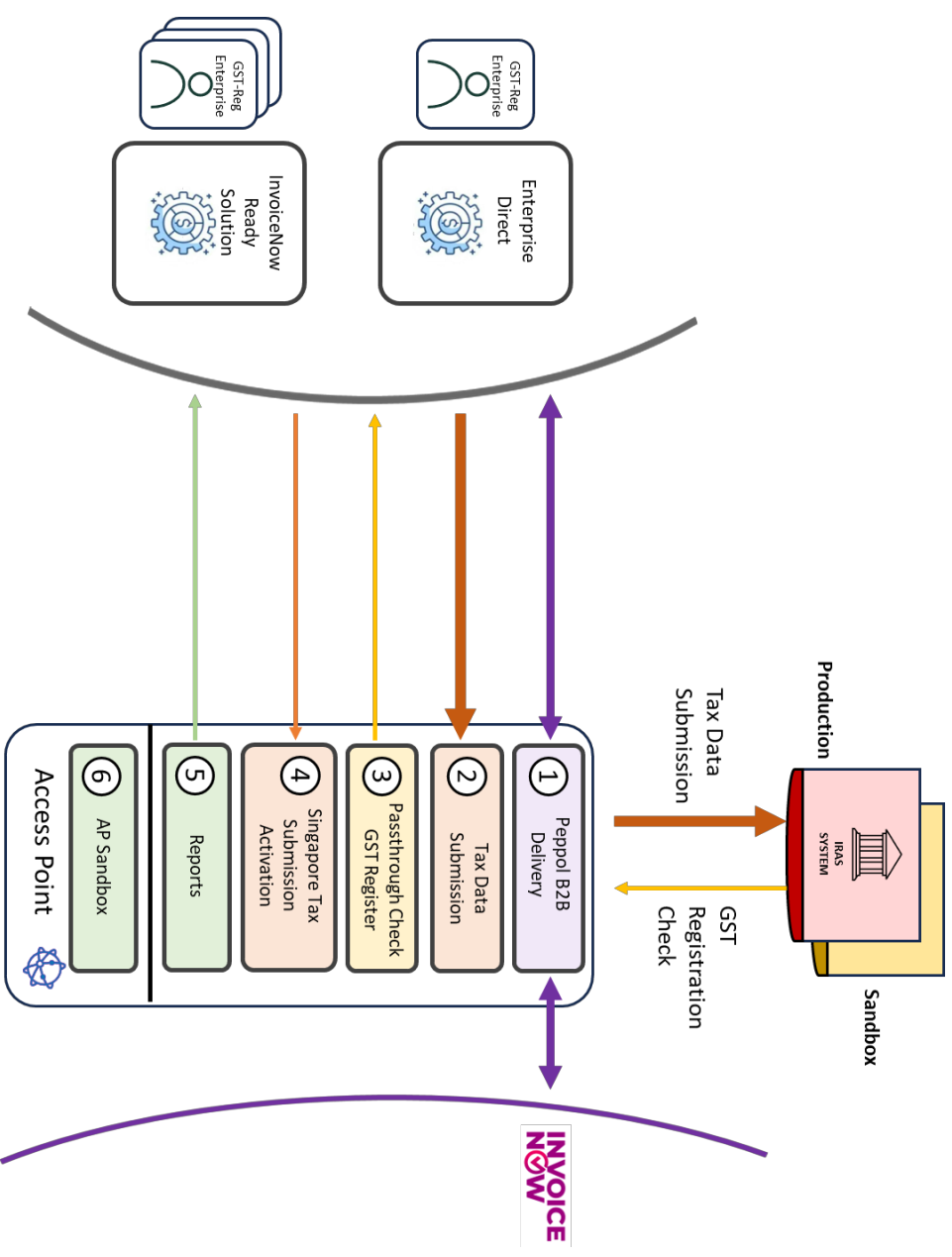
- a) Connect to IRAS System using the provided API interfaces.
- b) Follow the XML requirements for Peppol GST invoices and non-Peppol GST invoices
- c) Setup the Schematron to handle and validate Peppol GST invoices and non-Peppol GST invoices
- d) Validate the invoices sources as legitimate
- e) Validate the invoices [Design time and/or runtime] to be submitted
- f) Submit the Invoices and get/record the IRAS acknowledgement
- g) Put in place exception handling
 - i. IRAS API Rejection (for single invoice submission – synchronous)
 - ii. IRAS API Rejection (for bulk invoices submission - asynchronous)
 - iii. Network/connection errors (Retry mechanisms)
 - iv. Other errors (recovery handling mechanisms)
 - v. Failure handling processes
- h) Log the transaction (including specifically the document UUID / transaction id among other details as per the TX3 guide document)
- i) Report to sender(submitter) on success /failure with relevant details.
 - i. Upon successful submission AP should return the IRAS acknowledgement ID back to the sender
 - ii. For failure submissions, error messages from the transmission failure should be returned back to the sender
- j) AP should agree and implement on a re-submit mechanism for failed transactions (with sender).

BACK-END CONNECTION TO IRAS

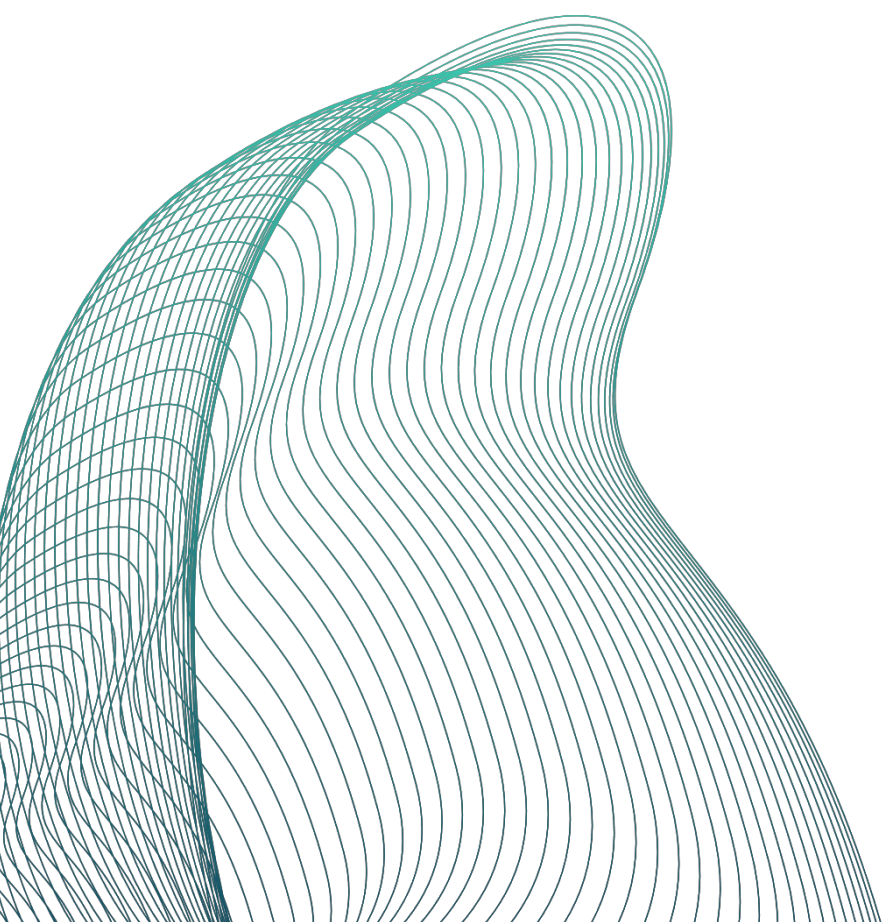
Security and Handling

- Support a **server-to-server connection**
- Transport Layer Security (TLS) and IP Whitelisting will be used to secure end-to-end communications
- Protocol Support Requirements: HTTP REST over **TLS 1.2 (HTTPS)**
- Server to Server Connection. HTTP Basic Authentication using the App Id and Client Secret

SUMMARY OF AP SERVICES



**INVOICE DATA
SUBMISSION
ACTIVATION
&
WHITELIST
MANAGEMENT**



USER ON-BOARDING FOR SUBMISSION

- Parties can onboard C5 invoice data submission in one of two ways:
 - InvoiceNow-Ready Solution Providers who has an interface that has been integrated with their Access Point provider to onboard GST-Registered Businesses.
 - GST-Registered Businesses with their own solution can approach their Access Point for assistance with their on-boarding.
- The on-boarding to C5 is verified using a CorpPass KYC process.

AP'S ACTIVATION FUNCTION

- a) Upon user triggering (either manually, via API or other front-end interface), access C5 Activation API (from SMP) and initiate user KYC process using Corppass.
- b) Verify that user has completed the KYC process before allowing data submission (periodic check against SMP or on-demand check against SMP when data flow happens).
- c) Allow data flow of user GST InvoiceNow Data to IRAS
 1. Whitelisting of source
 2. Validating of User / Solution identity

WHITELIST EXAMPLE

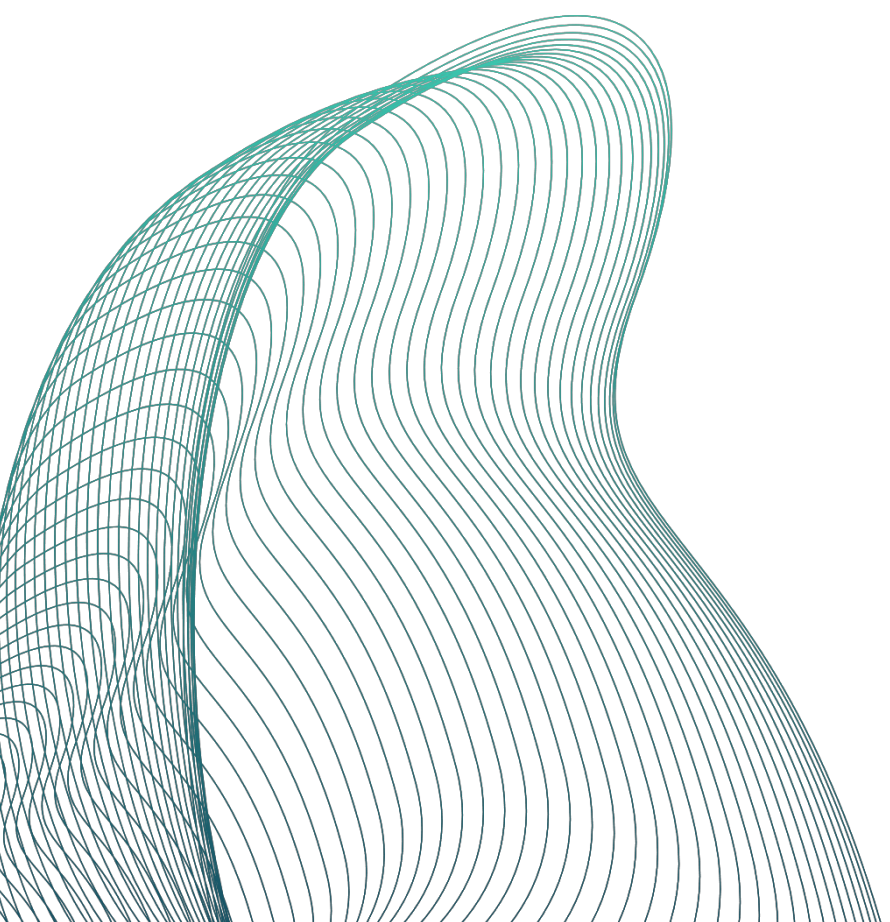
Invoice Data Submission Registered	Date/Time Activated	Transmitter (Use UEN for Transmitting Enterprise or IRSP Identifier)
UEN1	xxx	UEN1
UEN2	xxx	IRSP1
UEN3	xxx	IRSP2
UEN4	xxx	UEN4
UEN5	xxx	UEN1
UEN6	xxx	IRSP2
UEN6	xxx	UEN6

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

For invoice data submission to start, an **activation process** will be required.

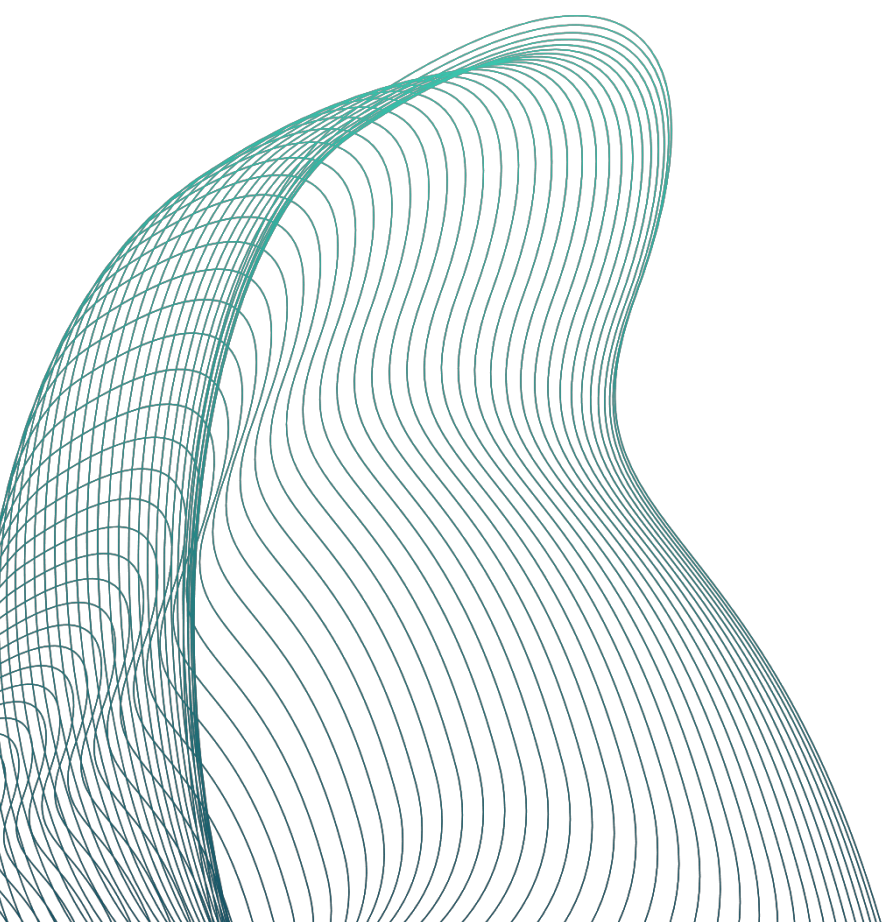
VALIDATION RULES AND SCHEMATRON



Content Validation

- a) Access Points must validate content routed to the InvoiceNow network using the normal Peppol validation (AKA Schematron)
- b) For IRAS traffic, Access Point will receive a dedicated Schematron that will allow them to validate the IRAS XML submission against any errors towards the IRAS requirements.
 - This can be done during design time or runtime
 - In any case IRAS will also do a validation hence it may be better to catch the errors at source and fix them rather than get rejected at the IRAS end.

FRONT END SERVICES AND SOLUTION UPLIFT



FRONT-END CONNECTIONS

Front-end connections towards Transmitting Enterprises or Invoice Ready Solution Providers

Security and Handling

Access Points should implement security processes and protocols to restrict access to the AP gateway to authorized users and systems only (this may include point to point VPN tunnel, source IP restrictions (whitelisting) or other measures to minimize risk of compromise.

AP's must also have measures to detect and flag any unauthorized access.

Support for scenario-based connections (Channels)

Access points should allow the client (enterprise or solution provider) to determine the transmission scenario and transfer the document to the Access Point for on-ward transmission appropriately as below.

- Peppol delivery only
- IRAS submission only
- Peppol delivery and IRAS submission

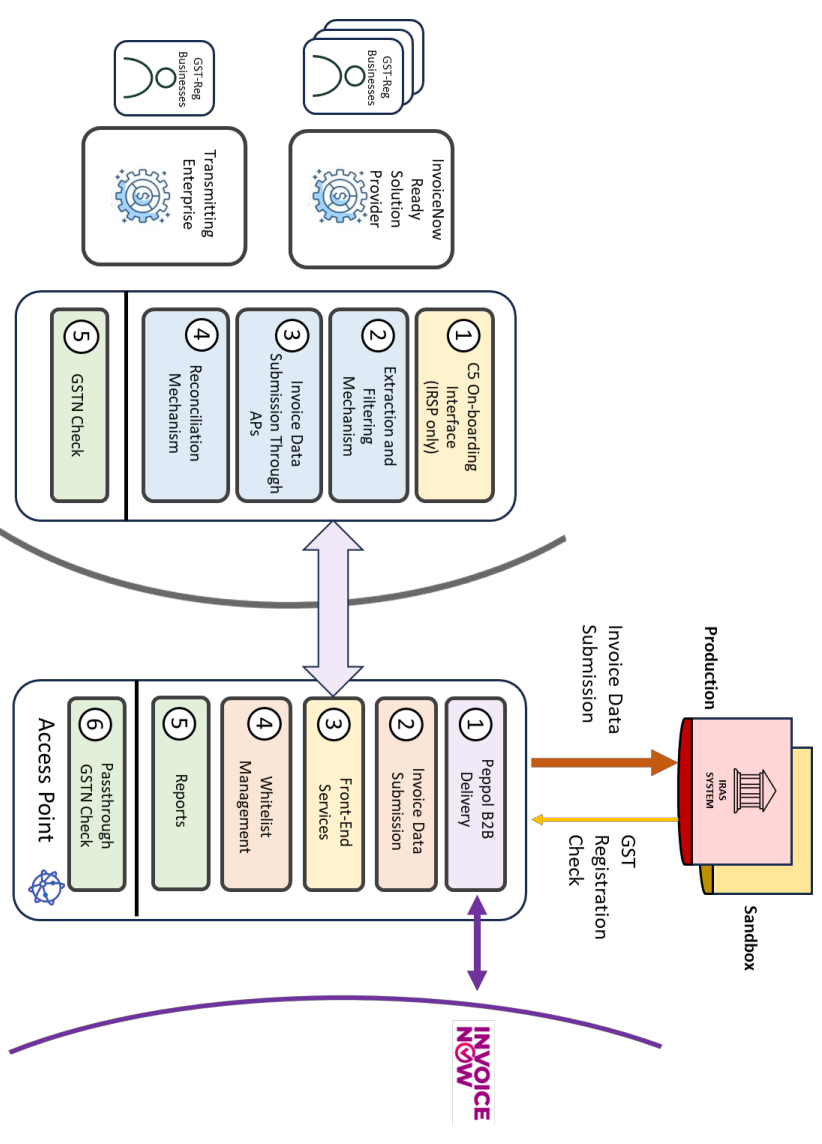
Solution Uplift Required To Support Invoice Data Submission

Enhancements on Access Points to include

- Ability to receive Invoice Data from solutions and transmit to IRAS via API
- Management features to ensure proper traffic control

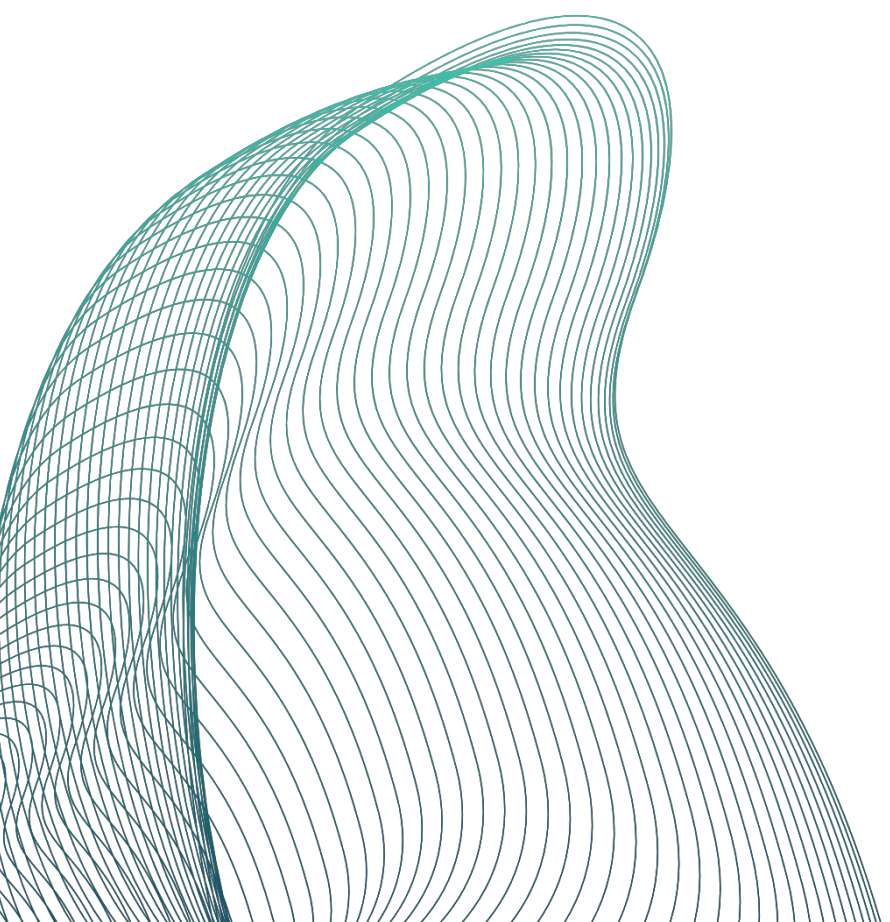
Enhancements on Invoice System to include

- Ability to deliver e-invoices over Peppol
- Ability to extract and package invoice data and channel appropriately through to IRAS through Access Points
- Ability to support reconciliation to ensure consistent and accurate submissions



Note: Invoice System can either be solutions offered by InvoiceNow Ready solution providers or GST-Registered Businesses' own system.

EXCEPTION HANDLING PROCESSES



FAILURE AND EXCEPTION HANDLING (1/2)

Business exception handling

During Implementation of InvoiceNow GST compliance Access Point must ensure that they and their customers have processes and procedures in place to manage compliance failures. Such failures could be in the form of

- Structural Compliance issues

For example, the formatting of the invoice may not comply to the IRAS tax specifications and field requirements, (particularly the GST InvoiceNow specifications) and may need to be enhanced at source to comply.

Alternatively, Customers who face difficulty in modifying the source may request for the access point to incorporate specific value-add inputs into the IRAS GST submissions. AP's **must** ensure that in such cases they have proper authorizations from the customer and clear agreement on the changes that they add to the GST submissions.

- Transmission issues

There may be failures or exceptions during the transmission of the invoice (whether from user to access point or from access point to IRAS system. Access points will need to put in place measures to capture exception handling (particularly on the front end (from customer to AP)

- Incomplete data (from customer)
- Transmission failure (from customer)
- Invoice rejection (from IRAS)
- Transmission failure (to IRAS)

- Business Issues

Occasionally businesses may have a need to cancel a particular invoice after such has been submitted to IRAS (invoice cancellation), in such circumstance the correct way is to create a credit note reversing the charges found within the Invoice so that the net effect is that that invoice is nullified.

FAILURE AND EXCEPTION HANDLING (2/2)

Service Issues (Service failure)

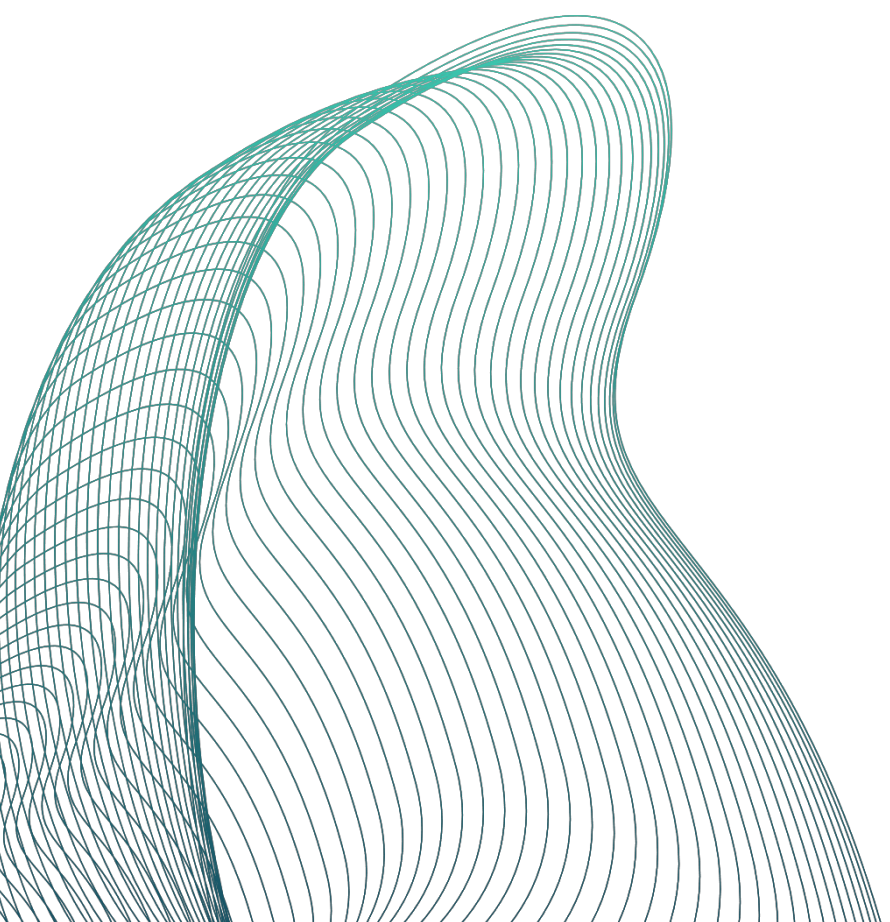
Access Point must maintain a 99.5% percent uptime (Same as Peppol delivery), any service failures must be able to be recovered to maintain the above uptime SLA.

Operations Issues

- Service Compromise
- Data Leakage
- Data Breach

Should the service be compromised (i.e software compromise, man-in-the-middle attack, denial of service, virus or other such malicious issues arise), AP will need to take appropriate action to recover the system and keep IMDA as well as their customers informed of the issue. The same SLA's as for Service issues will apply.

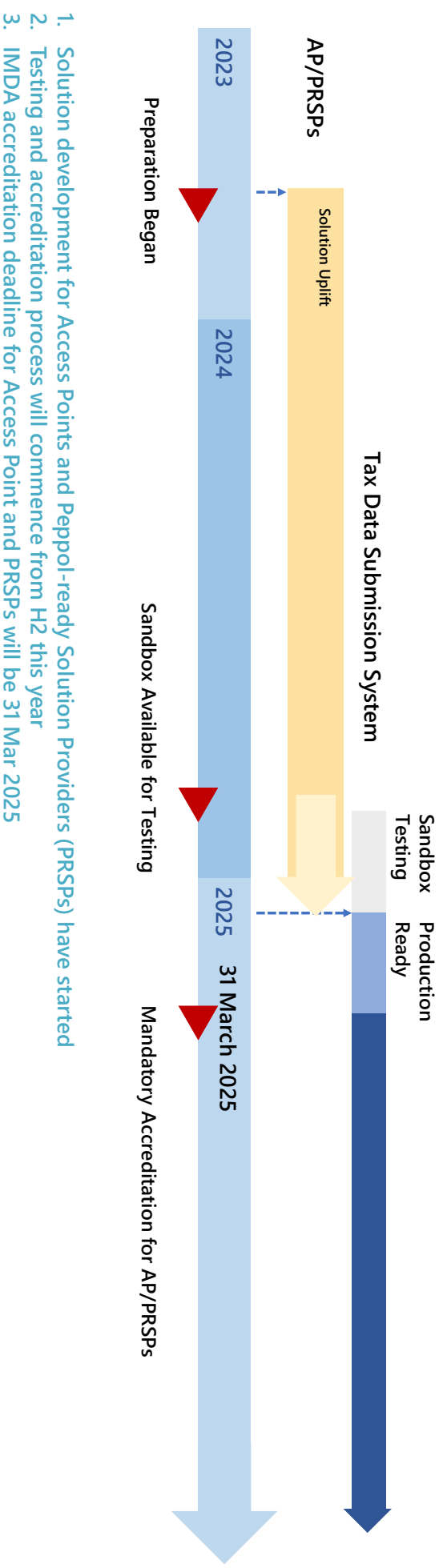
ACCREDITATION REQUIREMENTS



ACCESS POINT ACCREDITATION

- C5 Submission requirement will become a mandatory Access Point Accreditation Requirement, with deadline for compliance set for **31 Mar 2025**.
- Accreditation process will include:
 - Signing of a GST InvoiceNow service provisioning agreement with IMDA
 - Development and support of C5/C5-related features specified in the technical section
 - Passing of C5 testing requirements in sandbox and production environments
- The above will be included in a revised Peppol Accreditation process and include (minimally)
 - IRAS C5 APEX Account
 - IRAS C5 API submission compliance [All package types, bulk Submission API is currently optional]
 - C5 User Activation enablement (SGNIC SMP)
 - Transaction Logging
 - Transaction Reporting (Reconciliation)
 - IMDA Reporting (Format to be provided separately)
- Access Point providers are encouraged to secure accreditation early and be the first few providers to be listed as C5-ready in H2 2024.

Schedule for Service Provider Readiness

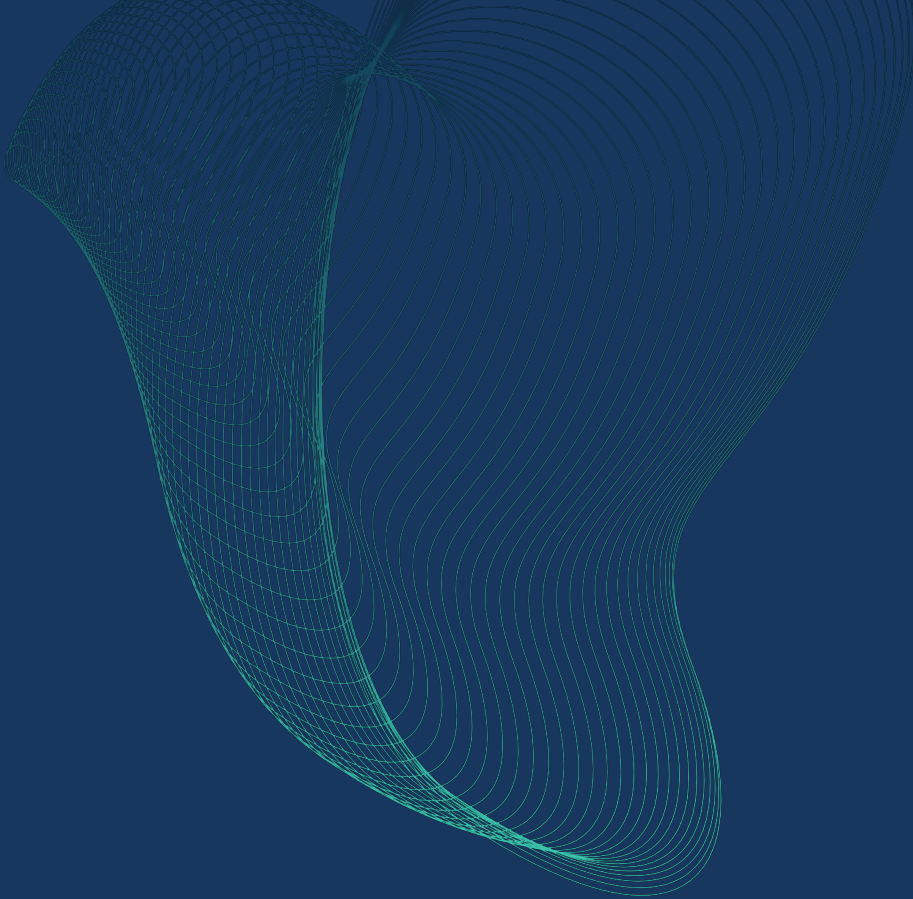


1. Solution development for Access Points and Peppol-ready Solution Providers (PRSPs) have started
2. Testing and accreditation process will commence from H2 this year
3. IMDA accreditation deadline for Access Point and PRSPs will be 31 Mar 2025

IMDA will conduct it's first design workshop for Access Points on 15 May 2024.

Invitations will be sent out for registration

Similar workshop for PRSPs will be arranged subsequently.



Thank You

Contact Our Team
invoice@imda.gov.sg