

IATA

WEBINAR

SIS WEBINAR #05 – 2021 WORKING WITH SIS FILES: IS-XML AND IS-IDEC



SIS



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- ! Unauthorized recording of the meeting is also prohibited.
- ! IATA will record the webinar and share the link afterwards to the members of this group and it will be posted on the SIS Website.

Welcome!

On The Agenda

- Working with IS-XML and IS-IDEC files
- Input File Formats and Record Structures
- Input File Submission and System Response (Outputs)
- Input File Processing and Monitoring
- How to Understand and Correct Validation Errors (Output Files)
- Things to Remember

Enter your Questions in the "Questions" box!



IATA Presenters

Xhonina Osmani

Analyst, Industry e-Invoicing

Samuel Diano-Brown

Analyst, Industry e-Invoicing

Iuliana Filiuta

Senior Manager, Industry e-Invoicing



Guest Presenter

Sérgio Pissarra

Revenue Accounting I.T. Analyst
I.T. Commercial Business Solutions
TAP AIR PORTUGAL



Automation with SIS

The SIS Participants have 3 options for submitting as well as receiving billing data in SIS:

- IS-WEB – An online interface to manually capture billing information into SIS
- **IS-IDEC – Enhanced version of the old IDEC file with many new record types**
- **IS-XML – An advanced file format for billing data having all the elements defined in the IS-IDEC file in addition to additional fields for Miscellaneous/Non-Transportation and UATP invoices.**

Using files to process your billing data to SIS **enables end to end automation** for sending as well as receiving invoices, allows for **automated processing and reconciliation, reduces manual work, reduces errors and increases efficiency.**

All types of invoices/transactions can be submitted via files, without any limits on the number of invoices per file or number of files per day or period.

The same level of automation can be achieved for all Billing Categories, transaction types (Prime Billings, Rejections, etc.) and file formats.



SIS File Formats and Record Structures

SIS File Formats and Record Structures

- IS-XML and IS-IDEC file formats
- Sandbox testing & Certification
 - File naming conventions
 - Files in SIS PROD vs. SIS Sandbox



SIS File Formats and Record Structures: IS-XML

- The IS-XML is an IATA EDI standard that allows the exchange of billing and reconciliation information.
- Industry Standard ([IS-XML](#)).
- Included in the [ISPG](#) package.
 - Current Version v4.2.0.0.

SERVICES

- Accreditation - Travel & Cargo
- Intelligence & Statistics
- Compliance Solutions
- Financial Services
- Airlines
- Simplified Invoicing and Settlement
 - SIS for Airlines**
 - SIS for Suppliers
 - SIS for Invoice Receivers
 - Supplier to Airline e-Invoicing (SAI)
- Airports & Air Navigation
- Travel Professionals

SIS for Airlines & Intermodal

Joining Simplified Invoicing and Settlement (SIS) instantly connects you with more than 420 airlines and intermodal entities exchanging interline billing data electronically. SIS eliminates the paper from the interline billing and settlement processes increasing efficiency and reducing costs; it enables processing automation which helps reduce billing duplication and simplifies reconciliation.

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Integrated Settlement Participation Guide (ISPG)

The ISPG contains all information and specification needed in order to fully implement Integrated Settlement (IS). This document is revised from time to time as needed.

- Complete ISPG package v4.2.0.0 (zip)**
- Complete ISPG package v4.2.0.0 (zip) with tracked changes

IS-IDEDEC Record Structure

- Passenger Record Structure v4.2.0.0

IS-XML Record Structure

- IS-XML Invoice Standard v4.2.0.0 (zip)

SIS File Formats and Record Structures: IS-XML

This standard has been based on the current Aviation Standard V1.0.0 and enhanced to meet the requirements of SIS.

IATA SIS

This standard has been based on the current Aviation Standard V1.0.0 and enhanced to meet the requirements of SIS.

How to read this document ←

Notation

1. Structure – the major sections of an invoice. Indentations represent subsets of the structure. Depending on the nature of the subset, the subset may be repeated to provide additional
2. Element – the element represents the invoice data element containing a value or information required by the supplier or customer to process and settle an Aviation Invoice. Some elements
3. Names prefixed with @ are attributes, the rest (i.e. the majority) are XML elements.
4. Indentation along with colour banding is used to represent parent / child structures.
5. Mandatory names (as and when the parent is present) are shown in bold. Optional names are typically those that depend on the context i.e. many are also mandatory but just in those

Naming conventions

~Amount implies a monetary amount. A decimal will be indicated with a dot example: 1234.789

~Date implies a date in the format ccyy-mm-dd e.g. 2019-03-31

~DateTime implies a date and time in the format ccyy-mm-ddThh:mm:ss e.g. 2019-03-31T15:45:00

If these ~Date and ~DateTime suffixes indicate whether time is typically to be provided or not, but if there is an exceptional need then time can in fact be provided for a ~Date or omitted for a

Changes V4.1.0.0 to V4.2.0.0 | **Notes** | IS XML Standard | M&U Charge Category-ChargeCode | M&U Mandatory-Recommended flds



SIS File Formats and Record Structures: IS-XML

“IS XML Standard” Tab includes the field value requirements for the multiple levels of each invoice type for all billing categories, such as:

- Occurrence | Type | Size | Billing Category | Dictionary Defined | Values
- Description | Notes | Recommendations | Validations | etc.

| Line | Field Name | Occurrence | Type | Size | Billing Category P/C/M/U/G | Dictionary Defined D/P/N | Attribute Dictionary Defined D/P/N | Values | Description |
|------|-------------------------|------------|------|------|-------------------------------|--------------------------------|---|--|--|
| 1 | InvoiceTransmission | 1 | | | G | | | | Defines an Invoice transmission file Required Node |
| 2 | TransmissionHeader | 1 | | | G | | | | Header Information of the Invoice Transmission File |
| 3 | TransmissionDateTime | 1 | DT | | G | N | | | Date and time of transmission of the Invoice file. This is the local date |
| 4 | Version | 1 | AN | 50 | G | N | | IATA:ISXMLInvoiceV4.2.0.0 | Current version number of the specification |
| 5 | TransmissionID | 0-1 | AN | 50 | G | N | | | Unique identifier for the TransmissionMessage. This will be referenced message if used. |
| 6 | IssuingOrganizationID | 0-1 | AN | 25 | G | N | | | Unique identifier for the entity issuing the transmission. Should be a valid IATA Carrier code. Is mandatory for input. |
| 7 | ReceivingOrganizationID | 0-1 | AN | 25 | G | N | | | Unique identifier for the entity receiving the transmission. Should be a valid IATA Carrier code. |
| 8 | BillingCategory | 0-1 | AN | 25 | G | D | | Dictionary defined: Passenger/Cargo/Miscellaneous/UATP | Describes the category of invoices |
| 9 | TransmissionData @Name | 0-20 | AN | 80 | M | N | N | Attribute 'Name' is Mandatory and open ended 30AN. When the attribute 'Name' equals 'ValReciNETAcID' | Extension fields. Allows modelling customer extension at the header level. |
| 10 | Invoice | 1-oo | | | G | | | | |
| 11 | InvoiceHeader | 1 | | | G | | | | |
| 12 | InvoiceNumber | 1 | AN | 30 | G | N | | | Invoice Number |
| 13 | InvoiceDate | 1 | DT | | G | N | | | Local date for the invoice |
| 14 | InvoiceType | 1 | AN | 25 | G | D | | Dictionary defined: Invoice | Type of invoice as defined in the dictionary. In case of 'Invoice' type (TotalAmount in Invoice) This field is only needed - if required for the invoice. |
| 15 | TaxInvoiceNumber | 0-1 | AN | 25 | M | N | | | Unique tax invoice number for Tax Jurisdiction. This field is only needed - if required for the invoice. |
| 16 | TaxPointDate | 0-1 | DT | | M | N | | | Date on which tax is due or calculated. This field is only needed if different from the invoice date. Invoice dates are assumed to be on the invoice date. |
| 17 | LocationCode | 0-1 | AN | 5 | M | D | | Dictionary defined: IATA AirportCode or | IATA airport/city code or UNLOCODE. A location code should be used. |



SIS File Formats and Record Structures: IS-XML

M&U (Misc & UATP) "Charge Category-Charge Code" Tab includes:

- Structure Elements | Element Occurrence | Type and Size | Charge Category and Codes

| Line# | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | (level) | Occurrence | Type | Size | Interest | Legal | Misc | Penalty | Taxes | Misc | Training | Baggage | Baggage Delivery | Cargo Handling | Catering | Cleaning | Commission | Crew Accommodation | Crew Transportation | Customs Service Charge | Deicing | Departure Stamps | FastTrack | Immigration Fines | Limousine | | | |
|-------|-----------------------------|---|---|---|---|---|---|---|---------|------------|------|------|----------|-------|------|---------|-------|------|----------|---------|------------------|----------------|----------|----------|------------|--------------------|---------------------|------------------------|---------|------------------|-----------|-------------------|-----------|---|---|--|
| 1 | Invoice Transmission | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | TransmissionHeader | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | TransmissionDateTime | | | | | | | | | 1 | DT | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Version | | | | | | | | | 1 | AN | 50 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | TransmissionID | | | | | | | | | 0-1 | AN | 50 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | IssuingOrganizationID | | | | | | | | | 0-1 | AN | 25 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | ReceivingOrganizationID | | | | | | | | | 0-1 | AN | 25 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | BillingCategory | | | | | | | | | 0-1 | AN | 25 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| 9 | TransmissionData @Name | | | | | | | | | 0-20 | AN | 80 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Invoice | | | | | | | | | 1-∞ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | InvoiceHeader | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | InvoiceNumber | | | | | | | | | 1 | AN | 30 | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | |
| 13 | InvoiceDate | | | | | | | | | 1 | DT | | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | |
| 14 | InvoiceType | | | | | | | | | 1 | AN | 25 | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | TaxInvoiceNumber | | | | | | | | | 0-1 | AN | 25 | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | TaxPointDate | | | | | | | | | 0-1 | DT | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | LocationCode | | | | | | | | | 0-1 | AN | 5 | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| 18 | LocationCode_ICAD | | | | | | | | | 0-1 | AN | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | LocationName | | | | | | | | | 0-1 | AN | 50 | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | ChargeCategory | | | | | | | | | 1 | AN | 25 | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | SellerOrganization | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | OrganizationID | | | | | | | | | 1 | AN | 25 | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | OrganizationDesignator | | | | | | | | | 0-1 | AN | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | LocationID | | | | | | | | | 0-1 | AN | 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | OrganizationName1 | | | | | | | | | 0-1 | AN | 50 | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | |
| 26 | OrganizationName2 | | | | | | | | | 0-1 | AN | 50 | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | TaxRegistrationID | | | | | | | | | 0-1 | AN | 25 | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | |
| 28 | AdditionalTaxRegistrationID | | | | | | | | | 0-1 | AN | 25 | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | CompanyRegistrationID | | | | | | | | | 0-1 | AN | 25 | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | |



SIS File Formats and Record Structures: IS-XML

M&U (Misc. & UATP) **"Mandatory and Recommended"** fields Tab includes:

- Charge Category
- Charge Code
- Field Name, Level, Type, Size
- Mandatory or Recommended
- The value and/or Format
- Description
- Validation

| A | B | C | H | I |
|-----------------|-------------|------------------------|----------------------------------|---|
| Charge Category | Charge Code | Field Name | Mandatory (M) Recommended (R) | Value/Format |
| Airport | | | | |
| Airport | Fees | LocationCode | M | IATA airport code or UN/LOCODE or city code if non-airport. |
| Airport | Fees | ChargeCodeType | M | Refer to charge code Type list |
| Airport | Fees | AircraftRegistrationNo | M | Registration number of the aircraft with no hyphen between the nationality prefix and remaining characters. Example: Aircraft Registration no is G-AAAA. This will be provided as GAAAA in the input. '0' (Numeric Zero) will also be allowed as substitution value |
| Airport | Fees | AircraftTypeCode_ICAO | M | Dictionary defined (ICAO aircraft type codes) '0' (Numeric Zero) will also be allowed as substitution value |
| Airport | Fees | EmissionClass | R | |
| Airport | Fees | EngineType | R | |
| Airport | Fees | FlightDateTime | M | YYYY-MM-DDThh:mm:ss Time is optional |

| A | B | C | H | I |
|-----------------|-------------|------------------|----------------------------------|--|
| Charge Category | Charge Code | Field Name | Mandatory (M) Recommended (R) | Value/Format |
| Ground Handling | | | | |
| Ground Handling | Baggage | | | |
| Ground Handling | Baggage | AircraftTypeCode | M | Dictionary defined (IATA aircraft type codes) '0' (Numeric Zero) will also be allowed as substitution value |
| Ground Handling | Baggage | ChargeCodeType | R | Refer to charge code Type list |
| Ground Handling | Baggage | FlightDateTime | M | YYYY-MM-DDThh:mm:ss Time is optional |

SIS File Formats and Record Structures: IS-XML

Charge Code Type List Tab

- Charge Category Name
- Charge Code Name
- Charge Code Type
- IATA Standards Reference

| A | B | C | D |
|----------------------|------------------|--|--------------------|
| CHARGE_CATEGORY_NAME | CHARGE_CODE_NAME | CHARGE_CODE_TYPE | IATA_STANDARDS_REF |
| Airport | Fees | Airport Service Charges | |
| Airport | Fees | Airport Departure Fees | |
| Airport | Fees | Concourse Fees | |
| Airport | Fees | Boarding Bridge Fee | |
| Airport | Fees | Airport Development Fee | |
| Airport | Fees | Cargo Fee | |
| Airport | Fees | Check-in Fee | |
| Airport | Fees | Ramp Charges | |
| Airport | Fees | Airport Infrastructure Development Fee | |
| Airport | Fees | Ground Handling Fee | |
| Airport | Fees | Equipment Rent Fee | |
| Airport | Fees | Permit Procedure Charges | |
| Airport | Fees | Navigation Aid Fee | |
| Airport | Fees | CurfewPAX | |
| Airport | Fees | Air | |
| Airport | Fees | Coordination | |
| Airport | Fees | Curfew | |

... IS XML Standard | M&U Charge Category-ChargeCode | M&U Mandatory-Recommended | **Charge Code Type List**

| A | B | C | D | E | F |
|----------------------|------------------|---------------------|--|---|---|
| CHARGE_CATEGORY_NAME | CHARGE_CODE_NAME | CHARGE_CODE_TYPE | IATA_STANDARDS_REF | | |
| 12 | Ground Handling | Mishandling Baggage | Lost Baggage Tracing | | |
| 13 | Ground Handling | Motor Fuel | Diesel Fuel | | |
| 14 | Ground Handling | Motor Fuel | Unleaded Fuel | | |
| 15 | Ground Handling | Passenger Handling | Ambu - Lift | | |
| 16 | Ground Handling | Passenger Handling | Boarding Pass | | |
| 17 | Ground Handling | Passenger Handling | Check in Counter Charges | | |
| 18 | Ground Handling | Passenger Handling | Custom clearance | | |
| 19 | Ground Handling | Passenger Handling | Customer Service - Agents OT | | |
| 20 | Ground Handling | Passenger Handling | Customer Service - Supervisor Normal Time | | |
| 21 | Ground Handling | Passenger Handling | Customer Service - Supervisor OT | | |
| 22 | Ground Handling | Passenger Handling | Customer Service Agents - Normal Time | | |
| 23 | Ground Handling | Passenger Handling | Customer Service Agents - Wheelchair Service | | |
| 24 | Ground Handling | Passenger Handling | Cute Charges - Fixed for charges | | |
| 25 | Ground Handling | Passenger Handling | Cute System Charges - Pax | | |
| 26 | Ground Handling | Passenger Handling | Cute System charges - Transfer Transit | | |
| 27 | Ground Handling | Passenger Handling | DCS Charge | | |
| 28 | Ground Handling | Passenger Handling | Escort Agent - Concierge Service | | |

... IS XML Standard | M&U Charge Category-ChargeCode | M&U Mandatory-Recommended flds | UOM Code List | **Charge Code Type List**



SIS File Formats and Record Structures: IS-IDEDEC

- The IS-IDEDEC is a text-based file standard that allows the exchange of billing and reconciliation information.
- Industry Standard ([IS-IDEDEC](#)).
- Included in the [ISPG](#) package.
 - Current Version v4.2.0.0.
- IS-IDEDEC file standard applies only to the Passenger and Cargo.

The screenshot shows the IATA website page for 'SIS for Airlines & Intermodal'. The page includes a navigation menu with options like 'ABOUT US', 'CAREERS', 'CONTACT & SUPPORT', 'PROGRAMS', 'POLICY', 'PUBLICATIONS', 'SERVICES', 'TRAINING', 'EVENTS', 'PRESSROOM', and 'You & IATA'. The main content area features the title 'SIS for Airlines & Intermodal' and a description of the Integrated Settlement Participation Guide (ISPG). Below the description, there are links to download the ISPG package and record structures. The record structures section lists 'IS-IDEDEC Record Structure' and 'IS-XML Record Structure', with arrows pointing to 'Passenger Record Structure v4.2.0.0 (zip)' and 'Cargo Record Structure v4.2.0.0 (zip)' respectively. The right sidebar contains a 'Need Help?' section, 'IATA Financial Systems Certification' (ISO 27000:2013 certified), and 'Related Links' including 'SIS is SOC2 Certified' and 'AICPA SOC'.



SIS File Formats and Record Structures: IS-IDEDEC

- **“List of SFI’s”** Tab includes the list of “Standard Field Identifiers” that must be used to define the IS-IDEDEC file record structure / layout.
- “SFI” numbers are used to assign the multiple “records” (a.k.a “levels”) that may be required for each particular invoice type.
- Advises whether records may be mandatory or conditional or optional.
- Additional “notes” related to each record.

| | A | B | C | D | E | F | G |
|----|-----|---|---|---|-------------|--|---|
| 1 | SFI | | | Record | Type | Notes | |
| 2 | 0 | | | File Header Record | Mandatory | Should always be the first record in the file | |
| 3 | 10 | | | Invoice Header Record | Mandatory | | |
| 4 | 11 | | | Reference Data - Billing Airline | Optional | Data for SFI 11 and 12 should be either | |
| 5 | 12 | | | Reference Data - Billed Airline | Optional | provided for both records or missing for both | |
| 6 | 20 | | | Coupon Record | Conditional | Should be provided for Non Sample and Sample Provisional Coupon and FIM billing | |
| 7 | 41 | | | Coupon Tax Breakdown | Conditional | Should be provided if the Billed Coupon Tax value of Coupon Record is not equal to zero | |
| 8 | 34 | | | Coupon VAT Breakdown | Conditional | Should be provided if Billed Coupon VAT value of Coupon Record is not equal to zero | |
| 9 | 51 | | | Sampling Form C Coupon Record | Conditional | Should be provided for Sampling Form C billings with a NIL Form C Indicator | |
| 10 | 52 | | | Sampling Form D Coupon Record | Conditional | Should be provided for Sampling Form D billings | |
| 11 | 43 | | | Sampling Form D Coupon Prorate Slip Breakdown | Optional | There can be max 10 occurrences of this Record per Sampling Form D Coupon Record | |
| 12 | 41 | | | Coupon Tax Breakdown | Conditional | Should be provided if Evaluated Coupon Tax value of Sampling Form D Coupon Record is not equal to zero | |
| 13 | 34 | | | Coupon VAT Breakdown | Conditional | Should be provided if Evaluated Coupon VAT value of Sampling Form D Coupon Record is not equal to zero | |
| 14 | 21 | | | Rejection Memo Record | Conditional | Should be provided for Non Sample and Sample Rejection Memos | |
| 15 | 31 | | | Rejection Memo Reason Record | Optional | There can be max 10 occurrences of this Record per Rejection | |
| 16 | 34 | | | Rejection Memo VAT Record | Conditional | Should be provided if no coupon breakdown exist and VAT rejected in the Rejection Memo Record | |
| 17 | 32 | | | Rejection Memo Coupon Breakdown Record | Conditional | Should be provided if coupon breakdown exist for the Rejected memo | |
| | 43 | | | Rejection Memo Coupon Prorate | Optional | There can be max 10 occurrences of this | |

SIS File Formats and Record Structures: IS-IDEDEC

| | A | B | C | D | E | F |
|----|-----|---|---|---|-------------|---|
| 1 | SFI | | | Record | Type | Notes |
| 2 | 0 | | | File Header Record | Mandatory | Should always be the first record in the file |
| 3 | 10 | | | Invoice Header Record | Mandatory | |
| 4 | 11 | | | Reference Data - Billing Airline | Optional | Data for SFI 11 and 12 should be either provided for both records or missing for both |
| 5 | 12 | | | Reference Data - Billed Airline | Optional | |
| 6 | 20 | | | Coupon Record | Conditional | Should be provided for Non Sample and Sample Provisional Coupon and FIM billing |
| 7 | 41 | | | Coupon Tax Breakdown | Conditional | Should be provided if the Billed Coupon Tax value of Coupon Record is not equal to zero |
| 8 | 34 | | | Coupon VAT Breakdown | Conditional | Should be provided if Billed Coupon VAT value of Coupon Record is not equal to zero |
| 9 | 51 | | | Sampling Form C Coupon Record | Conditional | Should be provided for Sampling Form C billings with a NL Form C Indicator |
| 10 | 52 | | | Sampling Form D Coupon Record | Conditional | Should be provided for Sampling Form D billings |
| 11 | 43 | | | Sampling Form D Coupon Prorate Slip Breakdown | Optional | There can be max 10 occurrences of this Record per Sampling Form D Coupon Record |

➤ **"Records"** are referenced by the **"SFI"** number.

SIS File Formats and Record Structures: IS-IDEC

➤ Example when the Record is **"Pax Coupon Data Record"** the SFI is 20.

| Element No | Name of Element | M/O/C | Glossary Ref. | Element Attribute | Positions | Example | Format | Comments | Validation | Case Sensitivity Match Done? | Case Sensitive / Insensitive Match | Case sensitivity Comments |
|------------|--|-------|---------------|-------------------|-----------|-------------|----------------|---|---|------------------------------|------------------------------------|---------------------------|
| 1 | Standard Message Identifier (SMI) | M | S90 | 3A | 1-3 | PBD | 'PBD' | | 1. Should be always equal to 'PBD' | | | |
| 2 | Record Sequence Number | M | S30 | 8N | 4-11 | 00000004 | RJ ZF | | 1. Should be greater by value of 1 as compared to previous record. | | | |
| 3 | Standard Field Identifier (SFI) | M | S80 | 2N | 12-13 | 20 | '20' | | 1. Should be always equal to "20" | | | |
| 4 | Billing Airline | M | A10 | 4N | 14-17 | 0075 | RJ ZF | | 1. Should be same as in Invoice Header Record | | | |
| 5 | Billed Airline | M | A10 | 4N | 18-21 | 0680 | RJ ZF | | 1. Should be same as in Invoice Header Record | | | |
| 6 | Billing Code | M | B10 | 1N | 22 | 0 | 0,3 | | 1. Should be same as in Invoice Header Record | | | |
| 7a | Invoice Number | M | I30 | 10A/N | 23-32 | ABX1234567 | LJ BF | | 1. Should be same as in Invoice Header Record | Yes | Insensitive | |
| 7b | Filler | O | P50 | 4A/N | 33-36 | bbbb | LJ BF | | | | | |
| 8 | Batch Sequence Number | M | S30 | 5N | 37-41 | 00100 | RJ ZF | | 1. Should be unique within the Invoice 2. Cannot be 00000 | | | |
| 9 | Record Sequence within Batch | M | S30 | 5N | 42-46 | 00001 | RJ ZF | Record Sequence number should be incremented by 1 for each Coupon Record. | 1. Should be incremented by 1 for each Coupon Record and should be unique within a Batch. 2. Cannot be 00000 | | | |
| 10 | Ticket/FIM Issuing Airline | M | A10 | 4N | 47-50 | 0098 | RJ ZF | | 1. Should be a valid airline numeric code | | | |
| 11 | Ticket/FIM Coupon Number | M | C40 | 2N | 51-52 | 02 | 01,02,03,04,09 | | 1. Should be a valid coupon no 2. In case of billings FIMs without a coupon no, the value "09" is allowed. | | | |
| 12 | Ticket/Document/FIM Number | M | T10 | 11N | 53-63 | 0440121328 | RJ ZF | 0 is not a valid ticket number | 1. 00000000000 will fail validation 2. The Ticket/FIM/Document numbers size cannot exceed 10 digits | | | |
| 13 | Check Digit* | M | C10 | 1N | 64 | 3 | 0-6,9 | | 1. Should be either 0-6 or 9 | | | |
| 14 | Coupon Gross Value/Applicable Local Fare | O | A50 | 11N | 65-75 | 00000080200 | RJ ZF | Gross Amount in Currency of Listing with 2 decimal places | | | | |
| 15 | Interline Service Charge (%) | O | P20 | 5N | 76-80 | 09000 | RJ ZF | Interline Service Charge percent with 3 decimal places | | | | |
| 16 | Coupon Tax Amount | O | A50 | 11N | 81-91 | 00000001000 | RJ ZF | Tax Amount in Currency of Listing with 2 decimal places | 1. If Tax Amount > 0, then Tax Breakdown record should be provided 2. Should be equal to the sum of "Tax Billed Amount" in the Coupon Tax Breakdown record 3. No Tax can be billed when Source Code (Element 19) is 14. | | | |
| 17 | Currency Adjustment Indicator* | C | C50 | 3A | 92-94 | USD | LJ BF | | 1. Should be a valid ISO Alpha Currency Code. | Yes | Sensitive | |

➤ Each "Record" will contain different requirements for the different "Fields"



SIS File Formats and Record Structures XML vs. IDEC

| Processes | Input & Output Formats | | | Input |
|---|------------------------|---------|----------------|-------|
| | IS-IDEC | IS- XML | IS-WEB | R50 |
| Passenger | | | | |
| Prime Coupon Billing | X | X | X | |
| Usage File ¹ | | | | X |
| Rejection Memos | X | X | X | |
| Correspondence (including Sampling and non-Sampling) | | | X | |
| Billing & Credit Memos | X | X | X | |
| Sampling | | | | |
| • Provisional Invoice (Form A and B) | X | X | X ² | |
| • Provisional Invoice – Consolidated monthly file | X | X | | |
| • Universe Adjustment (Form C) | X | X | X | |
| • Sample Finalization (Form D and E) | X | X | X | |
| • Rejection Memos (Form F and XF) | X | X | X | |
| Audit Trail Rejection & Correspondence History | | | X | |
| Cargo | | | | |
| Original Billing | X | X | X | |
| Rejection Memos | X | X | X | |
| Correspondence | | | X | |
| Billing & Credit Memos | X | X | X | |
| Audit Trail Rejection & Correspondence History | | | X | |
| Miscellaneous and UATP | | | | |
| Miscellaneous | | X | X | |
| Miscellaneous Rejections | | X | X | |
| Miscellaneous Correspondence | | | X | |
| Audit Trail Rejection & Correspondence History | | | X | |

➤ The difference between the IS-XML and IS-IDEC as the two Input and Output formats for submitting and receiving Invoice data in SIS is indicated in **Chapter 2.2** of the [ISPG](#).

SIS Sandbox Testing and Certification



SIS Sandbox Testing and Certification

- Chapters 4, 5 and 6 of the [Sign-up & Certification Guide](#)
- **Files can only be uploaded via iiNET**
- **Certification** is required before go live in SIS PROD

SERVICES

- Accreditation - Travel & Cargo >
- Intelligence & Statistics >
- Compliance Solutions
- Financial Services
- Airlines
- Simplified Invoicing and Settlement
- SIS for Airlines**
- SIS for Suppliers**
- SIS for Invoice Receivers
- Supplier to Airline e-Invoicing (SAI)
- Airports & Air Navigation
- Travel Professionals
- Industry Partners
- Air Pulse >

SIS for Airlines & Intermodal

Joining Simplified Invoicing and Settlement (SIS) instantly connects you with more than 420 airlines and intermodal entities exchanging interline billing data electronically. SIS eliminates the paper from the interline billing and settlement processes increasing efficiency and reducing costs; it enables processing automation which helps reduce billing duplication and simplifies reconciliation.

[JOIN SIS](#) **SUPPORT** [DOCUMENTS](#) [GLOSSARY](#) [FAQS](#) [WEBINARS](#) [REJECTIONS](#) [MEDIA](#)

Sign-up & Certification Guide

The [Sign-up and Certification Guide](#) (zip) provides details on the steps required for joining SIS. It defines various processes such as Member Profile Set-Up, Connectivity Testing, Sandbox/Certification Testing, and an overview of the IS Participation Agreement.

The Sign-Up and Certification Guide also contains the Super User form (Annex 1) and Bilateral Bank Details Form (Annex 2). As part of the requirements to join SIS, the Super User form must be completed. Bilateral Bank Details form is optional and applicable only for bilateral settlement invoices.

User Guide

The [User Guide](#) (zip) is an extensive manual to help SIS users navigate through the various screens on the SIS platform. This document describes in detail all screens and fields available on IS-Web and how to use them appropriately.

SIS Sandbox Testing – File naming convention

- Passenger and Cargo IS-IDEDEC input files for testing

Compressed (39 characters):

ST-AIDEDEC**-BBBCCCCCCCC**TTTTTTTTTTTTTTTTTTT.ZIP

- In case of Passenger, Cargo, Miscellaneous and UATP IS-XML input files

Compressed (39 characters):

ST-AXMLF**-BBBCCCCCCCC**TTTTTTTTTTTTTTTTTTT.ZIP

The screenshot shows a web interface for the 'Simplified Invoicing and Settlement (SIS project) - Sandbox'. At the top, there is a navigation bar with buttons: 'Submit a File' (highlighted in orange), 'Retrieve a File', 'Push On Demand', 'File Tracking', 'Billing History', and 'Account'. Below the navigation bar, the page title is 'Simplified Invoicing and Settlement (SIS project) - Sandbox'. A blue header bar contains the instruction 'Select a recipient from ONE of the following lists'. There are two main sections for recipient selection: 'Bookmarked Recipients' and 'All iiNET Recipients'. The 'Bookmarked Recipients' section has a dropdown menu with 'Simplified Invoicing and Settlement (SIS project) - Sandbox [ISSB]' selected and a 'Delete Bookmarked' button. The 'All iiNET Recipients' section has a dropdown menu with 'THE RECIPIENT IS NOT SELECTED YET' and an 'Add to Bookmarked' button. At the bottom left, there is a 'CONTINUE' button.

SIS Sandbox Certification – File naming convention

- In case of Passenger and Cargo IS-IDEC input files
Compressed (39 characters)

CT-AIDECF BBBCCCCCCCCTTTTTTTTTTTTTTT.ZIP

- In case of Passenger, Cargo, Miscellaneous and UATP IS-XML input files
Compressed (38 characters)

CT-AXMLF-BBBCCCCCCCCTTTTTTTTTTTTTTT.ZIP

File submission in SIS PROD

➤ SIS Production Files will not have any prefix:

➤ **M**XMLF | **P**XMLF | **C**XMLF | **U**XMLF

➤ **P**IDECF | **C**IDECF

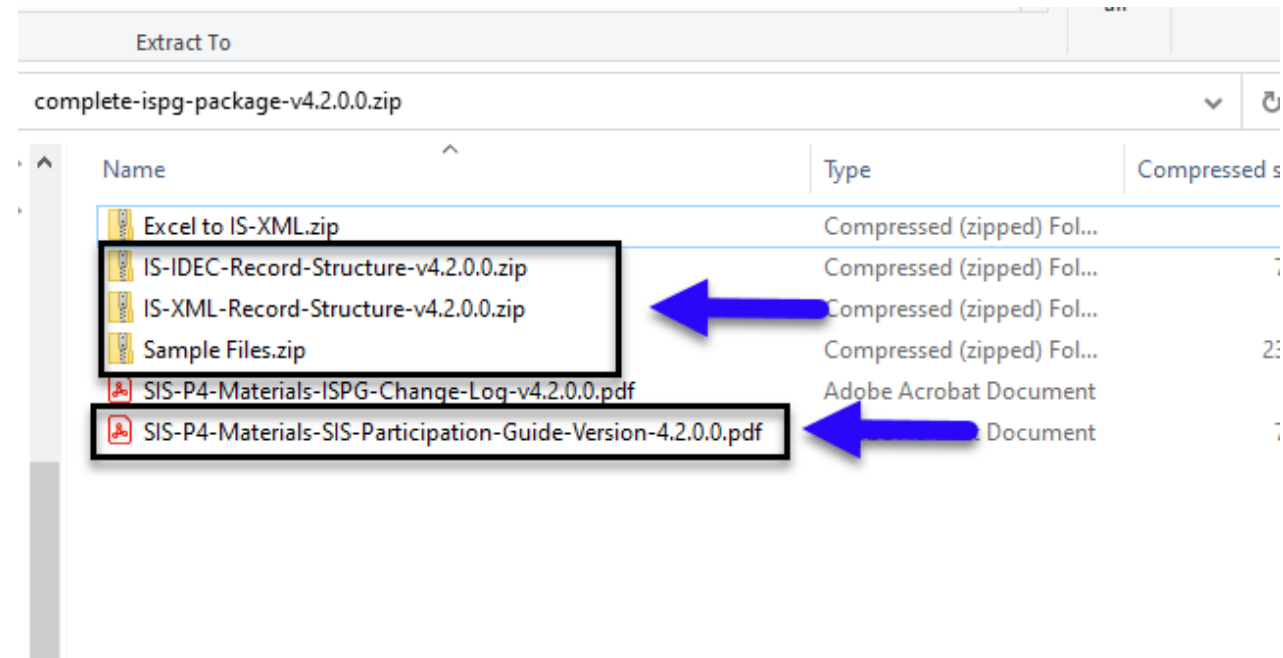
```
MXMLF-0082021010420210208162717.XML
1 <?xml version="1.0"?>
2 <InvoiceTransmission xsi:schemaLocation="http://www.IATA.com/IATAAviat
3 <TransmissionHeader>
4 <TransmissionDateTime>2021-06-22T16:23:12</TransmissionDateTime>
5 <Version>IATA:ISXMLInvoiceV3.2</Version>
6 <IssuingOrganizationID>008</IssuingOrganizationID>
7 <BillingCategory>Miscellaneous</BillingCategory>
8 </TransmissionHeader>
9 <Invoice>
10 <InvoiceHeader>
11 <InvoiceNumber>183450122</InvoiceNumber>
12 <InvoiceDate>2021-02-01</InvoiceDate>
13 <InvoiceType>Invoice</InvoiceType>
14 <LocationCode>Main</LocationCode>
15 <ChargeCategory>Ground Handling</ChargeCategory>
16 <SellerOrganization>
17 <OrganizationID>008</OrganizationID>
18 <OrganizationDesignator>XB</OrganizationDesignator>
19 </SellerOrganization>
20 <BuyerOrganization>
21 <OrganizationID>777</OrganizationID>
22 <OrganizationDesignator>XB</OrganizationDesignator>
23 </BuyerOrganization>
24 <PaymentTerms>
25 <CurrencyCode>USD</CurrencyCode>
26 <SettlementMethod>I</SettlementMethod>
27 </PaymentTerms>
```

```
CIDECF-7772021060220210616182218.DAT
1 CBD000000010007770320
2 CBD0000000210077700080353857 0000000000210600840840 02
ID2106100000000000100000000000
IV
3 CBD0000000320077700080353857 000010000104650204522177240100000003712000000000000
P 0000000000 00000 00000000000 00000 00000000000 00000000000 00000003712P P
0000000000000000
4 PBD0000000430077700080353857 9999999999 000000000003712000000000000000000000
25P P 0000000000000000 0000000000000000 0000000000000000
000000020000000000000000
5 CBD0000000540077700080353857 999999999900000 0000000000037120000000000000000000
000000000 P PP 0000000000000000 0000000000000000 0000000000000000 000000
0000000000000000 00000 0000000000000000 00000 0000000000 00000 0000000000000000 00000 000000
000000000003712P
6 CBD0000000642077700080353857 ]Charged via IATA Clearing
House
7 CBD000000075007779999999999999999 999999999999999 0000000000037120000000000000000000
000000000 0000000000000000 0000000000000000 0000000000000000
00000007
8
```



Things To Remember

- SIS Members have 2 options of file formats in SIS
 - **IS-XML**
 - **IS-IDEC**
- Each **IS-IDEC** or **IS-XML** needs to be a compressed file and the ZIP archive should contain only **one file**.
- The complete [ISPG](#) package contains the IS-IDEC and IS-XML structures and sample files.
- Members should test their files in Sandbox prior to uploading to SIS Production as a best practice to avoid validation errors in SIS Production.



Poll #1

Complete the following statement:

“I understand IS-XML / IS-IDEC file formats and Record Structures...”

- A. Very well
- B. Well
- C. Fairly
- D. Not so well
- E. Not at all



Input File Submission and System Response

Input File Submission and System Response

- File Loading via SIS and/or iiNET
- Processing times
- Calendar Input Files vs Output Files



Input File Submission and System Response

- SIS Members can upload their files via **SIS** or **iiNET**
 - Via SIS the process is manual (max 50 files at a time, should not exceed 25MB in cumulative size for all files submitted for upload)
 - Via iiNET members have the option of manual upload or automated push/pull mechanism (no limit on the number or size of file).
- File naming conventions in **Chapter 12** of the [ISPG](#) "Record Structure and Interfacing Details".
- Each file submitted to SIS should follow the **IS-IDEC** or **IS-XML** structure and the corresponding naming convention.

Input File Submission and System Response

- Files are processed, on **average**, within of 1m30s of reception in SIS
- The processing time may be impacted by the following factors:
 - The size of the file
 - The number of transactions within the file
 - The system load at the time of submission
 - The file source (i.e. loading via SIS directly or via iiNET)
 - The frequency defined when files are pushed or pulled via SFTP

- The SIS Service Levels are described in the [Attachment E](#) of the Sample of the "**Standard Agreement for SIS Participation**".

Calendar Input Files vs. Output Files

- The Calendar can be downloaded from SIS.

[Home](#) >> [Reports](#) >> IS and CH Calendar Report

IS and CH Calendar Report

Search Criteria

* Calendar Year: * Calendar Type: Time Zone:

[Generate Report](#)

IS and CH Calendar Report

Search Criteria: Calendar Year:2021, Calendar Type:IS and ICH, Time Zone:(UTC-05:00) Eastern Time (US and Canada)

| | | IS Processing Calendar | | | | | | | ICH Processing Calendar | | | | | | |
|---------------|---|------------------------|---|--------------------------------------|--------------------------------------|---------------------------|------------------------------------|--------------------------------|-------------------------|-------------|------------------|----------------|--------------|-------------------------------------|----------------|
| | | Submission Open | Submission Open (Future Dated Submission) | Submission Deadline For ICH Invoices | Submission Deadline For ACH Invoices | Billing Output Generation | Supporting Documents Link Deadline | Auto Bill Invoice Finalization | Closure Day | Advice Day | Protest Deadline | Early Call Day | Call Day | Settlement Day (Associated Members) | Suspension Day |
| January-2021 | 1 | 08-Jan 0:00 | 25-Dec 13:00 | 14-Jan 17:00 | 14-Jan 17:00 | 18-Jan 23:00 | 18-Jan 0:00 | 14-Jan 16:00 | 14-Jan 17:00 | 18-Jan 0:00 | 21-Jan 11:00 | 21-Jan 17:00 | 25-Jan 17:00 | 27-Jan 17:00 | 28-Jan 17:00 |
| | 2 | 15-Jan 0:00 | 25-Dec 13:00 | 21-Jan 17:00 | 21-Jan 17:00 | 25-Jan 23:00 | 25-Jan 0:00 | 21-Jan 16:00 | 21-Jan 17:00 | 25-Jan 0:00 | 28-Jan 11:00 | 28-Jan 17:00 | 01-Feb 17:00 | 03-Feb 17:00 | 04-Feb 17:00 |
| | 3 | 22-Jan 0:00 | 25-Dec 13:00 | 28-Jan 17:00 | 28-Jan 17:00 | 01-Feb 23:00 | 01-Feb 0:00 | 28-Jan 16:00 | 28-Jan 17:00 | 01-Feb 0:00 | 04-Feb 11:00 | 04-Feb 17:00 | 08-Feb 17:00 | 10-Feb 17:00 | 11-Feb 17:00 |
| | 4 | 29-Jan 0:00 | 25-Dec 13:00 | 08-Feb 17:00 | 08-Feb 17:00 | 10-Feb 23:00 | 10-Feb 0:00 | 08-Feb 16:00 | 08-Feb 17:00 | 10-Feb 0:00 | 15-Feb 11:00 | 16-Feb 17:00 | 17-Feb 17:00 | 19-Feb 17:00 | 22-Feb 17:00 |
| February-2021 | 1 | 09-Feb 0:00 | 25-Jan 13:00 | 16-Feb 17:00 | 16-Feb 17:00 | 18-Feb 23:00 | 18-Feb 0:00 | 16-Feb 16:00 | 16-Feb 17:00 | 18-Feb 0:00 | 23-Feb 11:00 | 23-Feb 17:00 | 25-Feb 17:00 | 01-Mar 17:00 | 02-Mar 17:00 |
| | 2 | 17-Feb 0:00 | 25-Jan 13:00 | 22-Feb 17:00 | 22-Feb 17:00 | 24-Feb 23:00 | 24-Feb 0:00 | 22-Feb 16:00 | 22-Feb 17:00 | 24-Feb 0:00 | 01-Mar 11:00 | 01-Mar 17:00 | 03-Mar 17:00 | 05-Mar 17:00 | 08-Mar 17:00 |
| | 3 | 23-Feb 0:00 | 25-Jan 13:00 | 01-Mar 17:00 | 01-Mar 17:00 | 03-Mar 23:00 | 03-Mar 0:00 | 01-Mar 16:00 | 01-Mar 17:00 | 03-Mar 0:00 | 08-Mar 11:00 | 08-Mar 17:00 | 10-Mar 17:00 | 12-Mar 17:00 | 15-Mar 17:00 |



Best Practices – TAP Air Portugal



- Uses IS-XML Files on Submission
- Automated File Submission via iiNET SFTP
- Manual File Submission via IS-WEB (Correction Files)
- Input Process Starts at 7 p.m. / Output Process Starts at 9 a.m.
- Calendar Provided by Revenue Accounting Team (1st week of Jan) and according to SIS Scheduling



Poll #2

What is the primary method used within your organization to upload SIS files?

- A. Manual upload via IS-WEB
- B. Manual upload via iiNET
- C. Automated upload via iiNET SFTP



Input File Processing and Monitoring

Input File Processing and Monitoring

- Member Profile Validation Settings
- File Loading & Status
- Processing Dashboard
- Validation Status
- Checking Validation Reports
- Deleting Failed Files



Validation Settings

Validations

Rejection on Validation Failure:

Allow Resubmission of Failed Invoices:

Future Billing Submissions Allowed:

Online Correction Allowed:

Additional File Types Accepted:

Validations

Rejection on Validation Failure:

invoices:


Future Billing Submissions Allowed:

Online Correction Allowed:

Additional File Types Accepted:

File Loading & File Status

[Home](#) >> [General](#) >> [File Management](#) >> [Upload File](#)

 File(s) uploaded successfully and is being processed.


Upload File

All files must be in compressed format with a .zip extension.


File Name: No file chosen

Search Criteria

* File Submission From Date:



* File Submission To Date:



Billing Period:



Billing Month:



Billing Year:



File Type:



File Name:

Search Results

| File Name | File Type | Received Date | Billing Period-Month-Year | Status | File Progress Status |
|-------------------------------------|-----------------|-----------------------|---------------------------|------------------------|----------------------|
| PXMLF-0082021060320210526133444.xml | ISXML - Inbound | 6/22/2021 10:18:28 AM | 03-06-2021 | Error In Validation | |
| MXMLF-0082021060320210526101228.xml | ISXML - Inbound | 6/22/2021 10:16:36 AM | 03-06-2021 | Successfully Validated | |
| CXMLF-0082021060320210526112222.xml | ISXML - Inbound | 6/22/2021 10:15:08 AM | 03-06-2021 | Successfully Validated | |



Using the Processing Dashboard

Working with Files: IS-XML and IS-IDEC

7-July-2021



File Loading & File Status

IS Processing Dashboard

150px X 50px

Invoice Status **Billing File Status** Document Package Status

Search Criteria

Quick Search Detail Search

Billing Period Current Previous

Search

Search Results

| <input type="checkbox"/> | File Generated Date | File Name | Billing Category | Billing Member | Billing Member Name | File Format | Received by IS | File Status | File Progress Status |
|--------------------------|---------------------|-------------------------------------|------------------|----------------|---------------------|-----------------|-----------------|-----------------------------|----------------------|
| <input type="checkbox"/> | 22-Jun-21 10:18 | PXMLF-0082021060320210526133444.xml | Passenger | XB-008 | Test Airline | ISXML - Inbound | 22-Jun-21 14:18 | Sanity Check Passed Phase I | |
| <input type="checkbox"/> | 22-Jun-21 10:16 | MXMLF-0082021060320210526101228.xml | Miscellaneous | XB-008 | Test Airline | ISXML - Inbound | 22-Jun-21 14:16 | Successfully Validated | |
| <input type="checkbox"/> | 22-Jun-21 10:15 | CXMLF-0082021060320210526112222.xml | Cargo | XB-008 | Test Airline | ISXML - Inbound | 22-Jun-21 14:15 | Successfully Validated | |

<< < Page 1 of 1 >> >> 5 View 1 - 3 of 3

Mark for Late Submission Increment Billing Period Download Delete

Processing Dashboard

IS Processing Dashboard

Invoice Status
 Billing File Status
 Document Package Status

Search Criteria
 Quick Search
 Detail Search

* Clearance Year:
 * Clearance Month:
 Period:
 Billing Member:
 Billed Member:

Clearance Type:
 Billing Category:
 Invoice No.:
 Invoice Status:
 Submission Method:

Daily Delivery Status:

Search Results

| <input type="checkbox"/> | Billing Period | SMI | Billing Member | Billing Member Name | Billed Member | Billed Member Name | Invoice Status | Invoice No. | Invoice Date | Billing Category | Invoice Curr. | Invoice Amount | Clearance Curr. | Clearance Amount |
|--------------------------|----------------|-----|----------------|---------------------|---------------|--------------------|----------------|----------------------------|--------------|------------------|---------------|----------------|-----------------|------------------|
| <input type="checkbox"/> | 2021-Jun-03 | B | XB-008 | Test Airline | XB-777 | Test Airline2 | Presented | Inv06785 | 03 Jun 2021 | Cargo | VUV | 134,290.000 | USD | 1,176,538 |
| <input type="checkbox"/> | 2021-Jun-03 | I | XB-008 | Test Airline | XB-777 | Test Airline2 | Presented | Test333 | 28 Jun 2021 | Miscellaneous | USD | 12,000 | USD | 12,000 |
| <input type="checkbox"/> | 2021-Jun-03 | I | XB-008 | Test Airline | XB-777 | Test Airline2 | Open | TEST333C | 28 Jun 2021 | Cargo | USD | 0,000 | USD | |
| <input type="checkbox"/> | 2021-Jun-02 | B | XB-008 | Test Airline | XB-777 | Test Airline2 | Presented | 820074 | 15 Jun 2021 | Miscellaneous | HUF | 1,050,122.000 | | |
| <input type="checkbox"/> | 2021-Jun-03 | I | XB-008 | Test Airline | XB-777 | Test Airline2 | Presented | Inv52255 | 30 Apr 2021 | Miscellaneous | USD | 50,710 | USD | 50,710 |
| <input type="checkbox"/> | 2021-Jun-02 | B | XB-008 | Test Airline | XB-777 | Test Airline2 | Presented | 8200743349 | 15 Jun 2021 | Miscellaneous | HUF | 1,050,122.000 | | |
| <input type="checkbox"/> | 2021-Jun-02 | B | XB-008 | Test Airline | XB-777 | Test Airline2 | Presented | 8200743213 | 15 Jun 2021 | Miscellaneous | HUF | 1,050,122.000 | | |



Invoice Status

Home >> Reports >> Processing Dashboard

IS Processing Dashboard

Search Criteria

Quick Search
 Detail Search

| | | | | |
|--------------------------|--------------------------|---------------|--|--------------------------|
| * Clearance Year 2020 | * Clearance Month Dec | Period All | Billing Member XB-A89-IATA MONTREAL | Billed Member |
| Clearance Type All | Billing Category All | Invoice No. | Invoice Status All | Submission Method All |
| | | | Daily Delivery Status All | |

| Validation | Value Confirmation / Tax Submission | Digital Signature | Settlement File Sent | Daily Delivery | Presented |
|------------|-------------------------------------|-------------------|----------------------|----------------|-----------|
| ● | - | - | ● | - | ● |
| ● | - | - | - | - | ● |
| ● | - | - | - | - | ● |
| ● | - | - | - | - | ● |
| ● | - | - | - | - | ● |
| ● | - | - | ● | - | ● |
| ● | - | - | ● | - | ● |
| ● | - | - | - | - | ● |

- Invoice Status → Indicates the status of the invoice
 - **Open** = invoice has been created but **not submitted**
 - **Ready for Submission** = invoice has been created and validated but **not submitted**
 - **Validation Error – Web Invoice** = invoice manually submitted via IS WEB that **failed validation**
 - **Error – Correctable** = Invoice submitted via file that **failed validation** for error correctable (can be corrected online)
 - **Error – Non Correctable** = invoice submitted via file that **failed validation** for error non correctable (has to be deleted, corrected and resubmitted)
 - **Ready for Billing** = invoice has been **submitted**
 - **Claimed** = invoice has been **submitted and accepted by the Clearing House**
 - **Presented** = invoice is **available for the billed member**

Validation Status

| Validation | Value Confirmation / Tax Submission | Digital Signature | Settlement File Sent | Daily Delivery | Presented |
|------------|-------------------------------------|-------------------|----------------------|----------------|-----------|
| ● | - | - | - | - | ● |
| ● | - | - | - | - | ● |
| ● | - | ● | - | - | ● |
| ● | - | ● | ● | - | ● |
| ● | - | ● | ● | - | ● |
| ● | - | ● | - | - | ● |
| ● | - | ● | ● | - | ● |
| ● | - | ● | ● | - | ● |
| ● | ● | ● | ● | - | ● |
| ● | - | ● | ● | - | ● |
| ● | - | ● | ● | - | ● |
| ● | ● | ● | ● | - | ● |

> **Validation** → Indicates the status of the validation

- ● = successful
- ● = pending
- ● = failed

> **Digital Signature** → indicates the status of the Digital Signature process

- -- = not required
- ● = successful
- ● = pending
- ● = failed

> **Daily Delivery** → indicates whether invoices are for daily delivery:

- -- = not required (invoice will be delivered after period closure)
- ● = successful (invoice is available)
- ● = pending (invoice will become available within 24h)
- ● = failed (invoice failed validation)

> **Presented** → indicates whether the invoice is available to the billed member to download

- ● = successful (invoice is available)
- ● = pending (invoice will be available after period closure)
- ● = failed (invoice failed validation)

Validation Reports

Search Criteria

| | | | | |
|----------------------------|---------------------------|--------------------------|-------------------------|-----------------------|
| Billing Month From: Jun | Billing Period From: 2 | Billing Month To: Jun | Billing Period To: 2 | Billing Year: 2021 |
| File Type: All | Location ID: Main | | | |
| Search | | | | |

Search Criteria for Daily MISC Bilateral Files to Billed Members/Document Package Files to Sending or Receiving Members:

| | | | |
|-----------------------------------|---------------------------------|------------------|------------------------|
| * Delivery Date From 17-Jun-21 | * Delivery Date To 17-Jun-21 | File Type All | * Location ID: Main |
| Search | | | |

Search Results

| File Generated On | Billing Month | Billing Period | File Name | File Type | Location ID | Action |
|----------------------|---------------|----------------|---|--|-------------|---|
| 6/18/2021 9:52:44 AM | 06-2021 | 2 | MXMLF-0082021060220210617153016_VAL.ZIP | Validation/sanity check reports for IS-IDEC/IS-XML | |  |
| 6/18/2021 9:38:05 AM | 06-2021 | 2 | PXMLF-0082021060220210618151156_VAL.ZIP | Validation/sanity check reports for IS-IDEC/IS-XML | |  |

Deleting Failed Files

Home >> Reports >> Processing Dashboard

No LOGO

150px X 50px

IS Processing Dashboard

Invoice Status

Billing File Status

Document Package Status

Search Criteria

Quick Search Detail Search

Billing Period Current Previous

Search

Search Results

| <input type="checkbox"/> | File Generated Date | File Name | Billing Category | Billing Member | Billing Member Name | File Format | Received by IS | File Status | File Progress Status |
|-------------------------------------|---------------------|-------------------------------------|------------------|----------------|---------------------|-----------------|-----------------|--|----------------------|
| <input type="checkbox"/> | 18-Jun-21 09:52 | MXMLF-0082021060220210617153016.zip | Miscellaneous | XB-008 | Test Airline | ISXML - Inbound | 18-Jun-21 13:52 | Sanity Check Error | |
| <input checked="" type="checkbox"/> | 18-Jun-21 09:38 | PXMLF-0082021060220210618151156.zip | Passenger | XB-008 | Test Airline | ISXML - Inbound | 18-Jun-21 13:38 | Sanity Check Error | |
| <input type="checkbox"/> | 16-Jun-21 16:07 | MXMLF-0082021060220210615143635.XML | Miscellaneous | XB-008 | Test Airline | ISXML - Inbound | 16-Jun-21 20:07 | Successfully Validated | |
| <input type="checkbox"/> | 16-Jun-21 16:04 | MXMLF-0082021060220210615143634.zip | Miscellaneous | XB-008 | Test Airline | ISXML - Inbound | 16-Jun-21 20:04 | Sanity Check Error | |
| <input type="checkbox"/> | 16-Jun-21 16:02 | MXMLF-0082021060220210615143602.XML | Miscellaneous | XB-008 | Test Airline | ISXML - Inbound | 16-Jun-21 20:02 | Successfully Validated | |

Page 1 of 2 5 View 1 - 5 of 6

Mark for Late Submission

Increment Billing Period

Download

Delete

Things To Remember

- Your IDEC/XML Files can be uploaded to SIS via iiNET or IS-WEB
- Whether you need to delete an invoice, or a file is dependent on the validation settings on your profile
 - Reject File in Error
 - Reject Invoice In error
- Make sure submitted file names MUST respect naming convention to be processed in SIS
- File Names must be unique...
 - Good practice is to delete failed files (dependent on validation settings) and resubmit with a new unique file name

Poll #3

Q: How often do you monitor your input file submissions?

A. Daily

B. Weekly

C. Before Period Closure

D. After Period Closure

E. After Each File Submission



File Validation Process in SIS

Validations performed by SIS

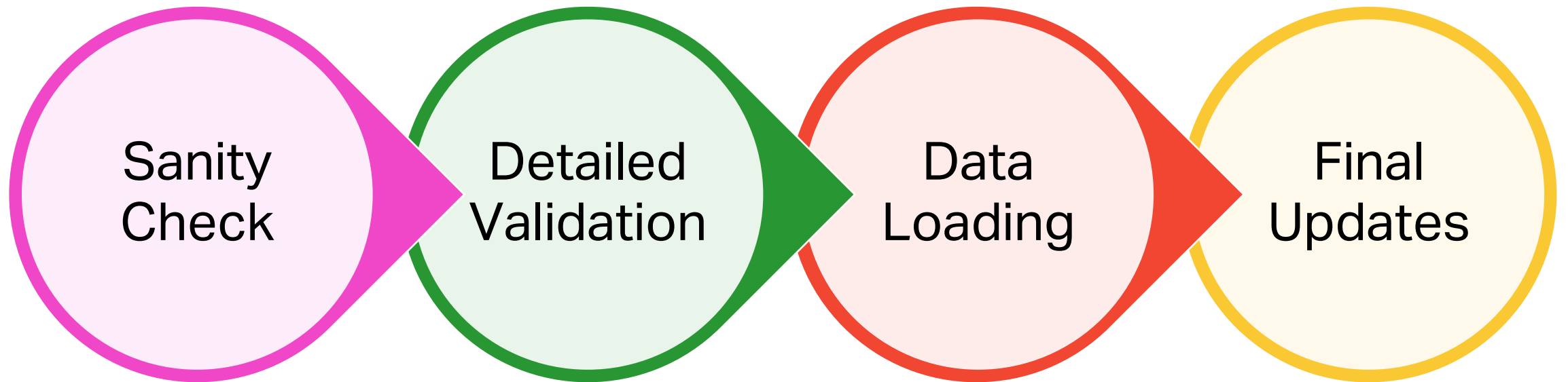
- **File Construction checks:** SIS will validate if the invoice files are created as per the defined file specifications, naming convention, duplicate files, compression logic, etc.
- **Field Format checks:** SIS will check if data values have been provided for mandatory data elements, conditionally mandatory data elements if the condition is met, etc. It will also ensure that the data is provided as per the field format (e.g. numeric, alphabetic, date, etc.) and as per the field length specifications (e.g. numeric field with a maximum of 5 digits)
- **Reference Master checks:** Invoice data fields having standard reference data values are valid (e.g. From City field if populated should have a valid IATA city/airport code, etc.)
- **Interline Billing Rules checks:** Some of the Interline billing rules defined in the RAM or ACH Manual of Procedure, such as possible duplicate billing check, outside time limit billings, minimum billing amount check for different type of transaction, etc.
- **Settlement Information checks:** SIS will validate the correctness of the Settlement details provided on the invoice if it needs to be cleared through a clearing house (e.g. Currency of Clearance information, Clearing House information, etc.).
- **Billing Audit Trail checks:** SIS will check if the various stages of billing are linked together and there are no out of turn billings (e.g. validation of 'Previous Invoice number', 'Previous Billing Month', 'Previous Rejection number', 'Rejection Stage number' in case of Rejections etc.)
- **Computation checks:** SIS will validate if billing amounts specified at various levels within the invoice add up together (e.g. the invoice total adds up to the sum of all Line Item totals, similarly Line Item total adds up to the sum of all Line Item details totals etc.). The total of the line items must not vary from the invoice value by more than a small tolerance.
- **Legal Requirement checks:** SIS will validate if certain legal requirements are satisfied by the Billing Entity in the invoice data (e.g. invoice Number is unique for a Billing Member within a calendar year, VAT breakdown information is provided in the case that VAT amounts are billed in the invoice, etc.)

Validations **NOT** performed by SIS

- That the Billing Entity is entitled to bill the other party
- Anything related to **WHAT** is billed and **HOW** the value is calculated
- Whether all required taxes are applied correctly
- Whether all required legal information is provided
- Correctness of Supporting Documents



Validation Process in SIS



Checking the file progress status

[Home](#) >> [General](#) >> [File Management](#) >> [Upload File](#)

Upload File

All files must be in compressed format with a .zip extension.

File Name: No file chosen

Search Criteria

* File Submission From Date:

* File Submission To Date:

Billing Period:


Billing Month:

Billing Year:

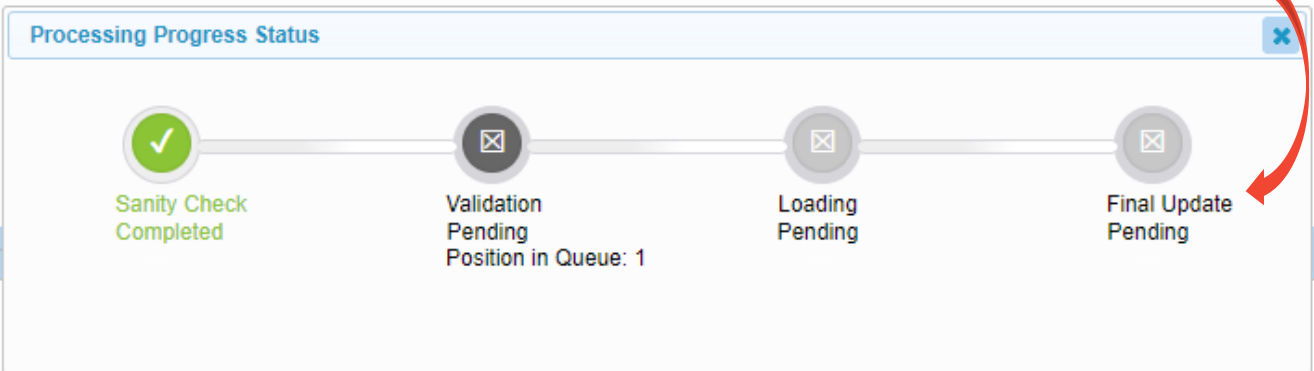
File Type:

File Name:

Search Results

| File Name | File Type | Received Date | Billing Period-Month-Year | Status | File Progress Status |
|-------------------------------------|-----------------|---------------------|---------------------------|-----------------------------|---|
| MXMLF-7772021060420210701200647.xml | ISXML - Inbound | 7/5/2021 8:09:15 PM | 04-06-2021 | Sanity Check Passed Phase I |  |

Processing Progress Status



Sanity Check Completed

Validation Pending
Position in Queue: 1

Loading Pending

Final Update Pending

Page 1 of 1 | 10 | View 1 -

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What happens during the Sanity Check?



General checks:

- File naming convention
- Duplicate files
- Successful decompression
- Acceptable characters

File specific checks:

- File structure
- Mandatory fields within records (IS-IDECA)
- Count of records/invoices within the file
- Total amounts within the file

What happens during the detailed validation?

- On successful completion of the Sanity Check process, the data within the billing file is loaded onto the Billing Record Database.
- The data is then checked for all the details and validations carried out as mentioned in the Validation rules section of the IS-IDEC Record Structure for IS-IDEC files. For IS-XML/Form C XML files, the rules detailed in the corresponding IS-XML/Form C XML excel file are applied.
- There is a summation tolerance of USD 0.50 and rounding tolerance of 0.05.

SIS Validation Report

Each file sent to SIS will generate a validation report, containing the outcome of the validation process

There are two reports generated as part of the validation process:

1. SIS Validation Summary Report (R1): This report provides a summary of the validation process for a Billing file. **This report is created irrespective of the Validation status.** So even if all Invoices in the file are successfully validated, this report will be created.
2. SIS Validation Detail Error Report (R2): **This report provides the details of only the errors encountered during the SIS Validation Process.** Hence if all invoices in a file are successfully validated, this report will not be created.

Outcome of the validation process

File statuses:

1. **Successfully Validated:** The validation process is controlled at the file level and no validation errors are encountered in the file
2. **Error in Validation:** the validation process is controlled at the file level and at least one error is encountered in the file
3. **Validation Completed:** The validation process is controlled at the invoice level, **check the validation report for specific outcome per invoice**

Invoice statuses:

1. **Ready for Billing/Claimed:** No validation error encountered
2. **Error – Correctable:** The Invoice contains errors that can be corrected online via IS-WEB.
3. **Error – Non Correctable:** The Invoice contains errors and at least one of them is non correctable
4. **On Hold:** No validation error encountered in the invoice, however **the Invoice is kept on hold as the validation process is controlled at the file level**

Validation Statuses in the Report

Z - Sanity Check Error

X - Error – Non Correctable

C - Error – Correctable

W – Warning

V – Validated Successfully (only in R1 file)



How to read the SIS validation reports

The SIS Validation Detail Error Report (R2 file) provides the details of all errors encountered during the validation process and depending on the error type will indicate the invoice number, the level at which the error was encountered, the field and the value causing the error.

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V |
|-----------|-------------|-----------|-----------|-------------|--------------|--------------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|------------|-------------|----------------------------|-------------|--|--------------|
| Serial No | Billing Ent | Clearance | Period Nu | Billing Cat | Billing File | Billing File | Submissio | Billed Enti | Invoice N | MISC Char | MISC Char | MISC Line | MISC Line | Main Doc | Linked Do | Error Code | Error Level | Field Name | Field Value | Error Description | Error Status |
| 1 | 8 | 202106 | 4 | M | MXMLF-00 | 20210706 | IS-XML | 157 | 27011476 | Finance | | 0 | 0 | | | BMISC_1 | Invoice | InvoiceHeader LocationCode | LXX | Invalid Location code for Iata Airport and City. | X |

Errors encountered during the sanity check process are less detailed, as these errors are at the file level, **before the system can read and upload any billing data.** Nevertheless, the error description provides an indication of the level where the problem was encountered.



How to Understand and Correct Validation Errors (Output Files)

How manages Validation Errors

Sanity Check Errors vs Invoice Level Errors
Correction Process
Lessons Learned



Sanity Check Errors vs Invoice Level Errors



Sanity Check Errors

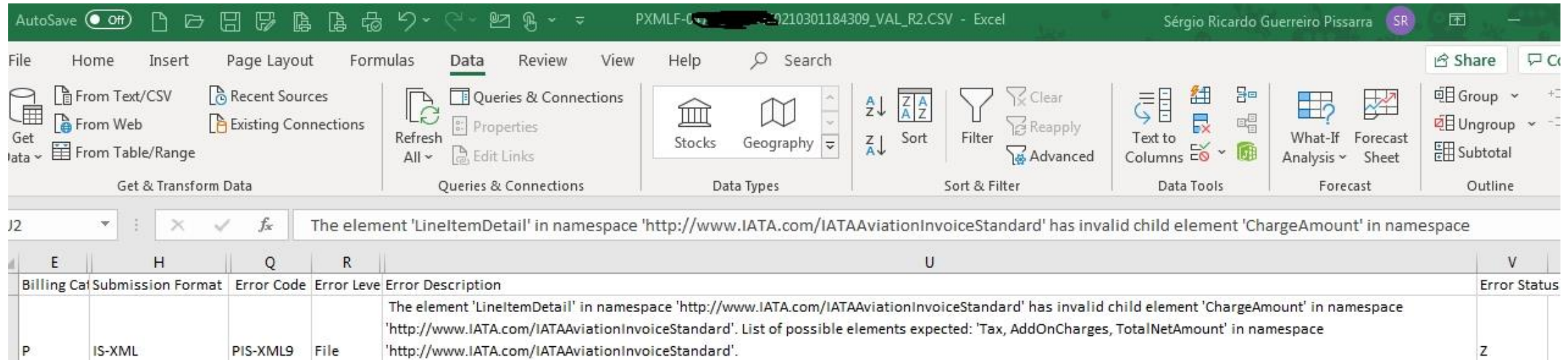
- Look up at Known-Errors List
- Analyze file and divide
- Correct and learn

Invoice Level Errors

- Correctable
 - Send e-mail with error to TAP Revenue Accounting Team for Online correction
- Non-Correctable
 - Verify Invoice Errors
 - Validate Information in TAP Revenue Accounting System
 - Contact TAP Revenue Accounting Team (if situation requires)
 - Correct and Learn



Sanity Check - Example



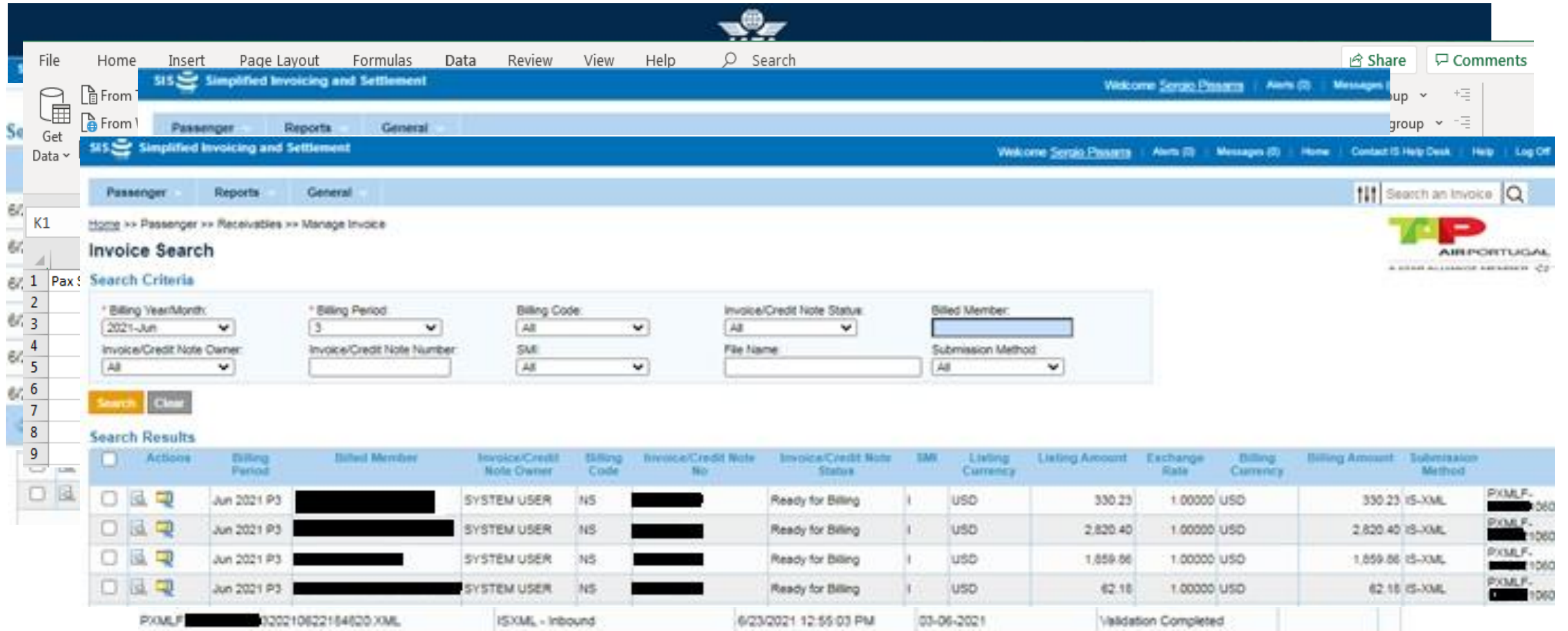
The screenshot shows the Microsoft Excel interface with the 'Data' tab selected. The status bar at the bottom displays an error message: "The element 'LinItemDetail' in namespace 'http://www.IATA.com/IATAAviationInvoiceStandard' has invalid child element 'ChargeAmount' in namespace 'http://www.IATA.com/IATAAviationInvoiceStandard'". Below the status bar, a table provides details about the error.

| Billing Category | Submission Format | Error Code | Error Level | Error Description | Error Status |
|------------------|-------------------|------------|-------------|---|--------------|
| P | IS-XML | PIS-XML9 | File | The element 'LinItemDetail' in namespace 'http://www.IATA.com/IATAAviationInvoiceStandard' has invalid child element 'ChargeAmount' in namespace 'http://www.IATA.com/IATAAviationInvoiceStandard'. List of possible elements expected: 'Tax, AddOnCharges, TotalNetAmount' in namespace 'http://www.IATA.com/IATAAviationInvoiceStandard'. | Z |

Error found:
Duplicate Tag in LinItemDetail

Solution:
Delete Tag <ChargeAmount>"Billed" in LinItemDetail

Correction Process



The screenshot shows the SAP SIS (Simplified Invoicing and Settlement) interface. The main window displays the 'Invoice Search' screen. The search criteria are as follows:

- Billing YearMonth: 2021-Jun
- Billing Period: 3
- Billing Code: All
- Invoice/Credit Note Status: All
- Billed Member: [Redacted]
- Invoice/Credit Note Owner: All
- Invoice/Credit Note Number: [Redacted]
- SME: All
- File Name: [Redacted]
- Submission Method: All

The search results table is as follows:

| Actions | Billing Period | Billed Member | Invoice/Credit Note Owner | Billing Code | Invoice/Credit Note No | Invoice/Credit Note Status | SME | Listing Currency | Listing Amount | Exchange Rate | Billing Currency | Billing Amount | Submission Method |
|--------------------------|----------------|---------------|---------------------------|--------------|------------------------|----------------------------|-----|------------------|----------------|---------------|------------------|----------------|-------------------|
| <input type="checkbox"/> | Jun 2021 P3 | [Redacted] | SYSTEM USER | NS | [Redacted] | Ready for Billing | I | USD | 330.23 | 1.00000 | USD | 330.23 | IS-XML |
| <input type="checkbox"/> | Jun 2021 P3 | [Redacted] | SYSTEM USER | NS | [Redacted] | Ready for Billing | I | USD | 2,820.40 | 1.00000 | USD | 2,820.40 | IS-XML |
| <input type="checkbox"/> | Jun 2021 P3 | [Redacted] | SYSTEM USER | NS | [Redacted] | Ready for Billing | I | USD | 1,859.86 | 1.00000 | USD | 1,859.86 | IS-XML |
| <input type="checkbox"/> | Jun 2021 P3 | [Redacted] | SYSTEM USER | NS | [Redacted] | Ready for Billing | I | USD | 62.18 | 1.00000 | USD | 62.18 | IS-XML |

Summary information at the bottom of the table:

- File Name: PXMLF [Redacted] 320210822184820.XML
- Submission Method: ISXML - Inbound
- Date/Time: 6/23/2021 12:55:03 PM
- Status: 03-06-2021
- Validation: Validation Completed

Validation Errors

You can find support documentation on the [SIS website](#).

You may refer to the '[List of Error Codes](#)' found in the [Support Tab](#) under Reference Documentation to get information regarding validation errors

Sign-up & Certification Guide

The [Sign-up and Certification Guide](#) (zip) provides details on the steps required for joining SIS. It defines various processes such as Member Profile Set-Up, Connectivity Testing, Sandbox/Certification Testing, and an overview of the IS Participation Agreement.

The Sign-Up and Certification Guide also contains the Super User form (Annex 1) and Bilateral Bank Details Form (Annex 2). As part of the requirements to join SIS, the Super User form must be completed. Bilateral Bank Details form is optional and applicable only for bilateral settlement invoices.

User Guide

The [User Guide](#) (zip) is an extensive manual to help SIS users navigate through the various screens on the SIS platform. This document describes in detail all screens and fields available on IS-Web and how to use them appropriately.

Computer-Based Training (CBT)

The [Computer-Based Training \(CBT\)](#) is a set of web tutorials aimed at providing users an overview of how to use the SIS platform. The tutorials present available functionalities that are accessible by an IS-Web user.

Reference Documentation

The following are various support documents related to implementing SIS.

- [Introduction to SIS](#) (pdf)
- [Member Profile Template](#) (xls)
- [User Permissions Template](#) (xls)
- [Master Data Table Sources](#) (pdf)
- [List of Error Codes](#) (xls)
- [Benefits of using IS-XML with SIS](#) (pdf)
- [SIS Password Requirements](#) (pdf)
- [Location ID set up](#) (pdf)
- [India GST SIS e-Invoicing guideline](#) (pdf)

Lessons Learned

- Build your own Errors List (Error and Solution)
- Keep Backup of Files sent and Validation Files received
- Review Programs or Processes in Submission Files creation
- Stay Up-to-date for Industry Changes

Things to Remember!

- Always check the validation outcome for your submissions! File submitted does not mean file successfully validated!
- Implement a regular monitoring and reconciliation process, to ensure errors are identified and corrected in time
- Manage your member profile to best suit your needs, by controlling the validation process at the file or at the invoice level
- Make use of the processing dashboard as your control panel for all receivables
- Check the detailed validation reports (R2) for detailed information on validation errors.

Poll #4

Q. On average, how much time do you spend to correct File Validation Errors?

A. 5 minutes or less.

B. Less than 1 Hour.

C. 1 to 4 Hours.

D. 4 hours or more.

E. I have No Errors.

SIS ISPG available on our Website!

1. www.iata.org/SIS
2. **'SIS For Airlines'** or **'SIS For Suppliers'**
3. **'Documents'** Tab

www.iata.org/cs to contact us!

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[Airports & Air Navigation](#)

[Travel Professionals](#)

[Industry Partners](#)

[Air Pulse](#) >

[Taxes Applied on Ancillary Sales](#)

SIS for Airlines & Intermodal

Joining Simplified Invoicing and Settlement (SIS) instantly connects you with more than 420 airlines and intermodal entities exchanging interline billing data electronically. SIS eliminates the paper from the interline billing and settlement processes increasing efficiency and reducing costs; it enables processing automation which helps reduce billing duplication and simplifies reconciliation.

[JOIN SIS](#) | [SUPPORT](#) | **[DOCUMENTS](#)** | [GLOSSARY](#) | [FAQS](#) | [WEBINARS](#) | [REJECTIONS](#) | [MEDIA](#)

Integrated Settlement Participation Guide (ISPG)

The ISPG contains all information and specification needed in order to fully implement Integrated Settlement (IS). This document is revised from time to time as needed.

- [Complete ISPG package v4.2.0.0 \(zip\)](#)
- [Complete ISPG package v4.2.0.0 \(zip\) with tracked changes](#)

IS-IDEC Record Structure

- [Passenger Record Structure v4.2.0.0 \(zip\)](#)
- [Cargo Record Structure v4.2.0.0 \(zip\)](#)

IS-XML Record Structure

- [IS-XML Invoice Standard v4.2.0.0 \(zip\)](#)

Thank you



Q&A

Post in Q&A box