

Cost Control Webinar



2 October 2024



Speaker introduction

Anna Zieleniucha

Senior Specialist of Airport Cost Controlling at Lufthansa Group Business Services



David Vaughan

Finance Manager Revenue Accounting & Taxes at Qantas

SIS Steering Group Chairman



Plan

Introduction

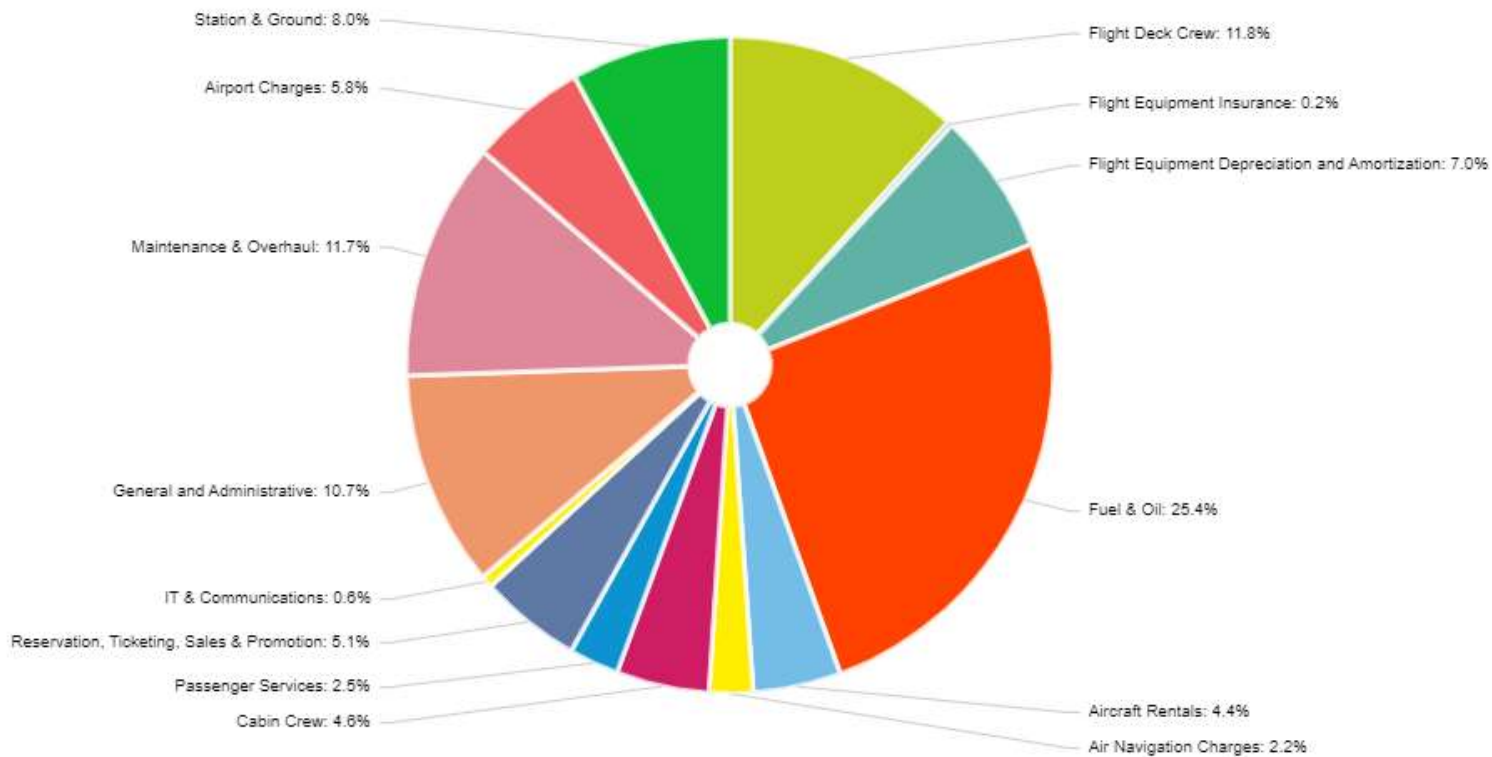
Anna shares her experience with ATC cost control

David will share views and consideration on cost control

Conclusion

Q&A

LUFTHANSA GROUP
BUSINESS SERVICES



Airlines need to validate invoices from direct operating cost supplier as they represent most of their cost Source : IATA - Airline Cost Management Group (ACMG)



Introduction

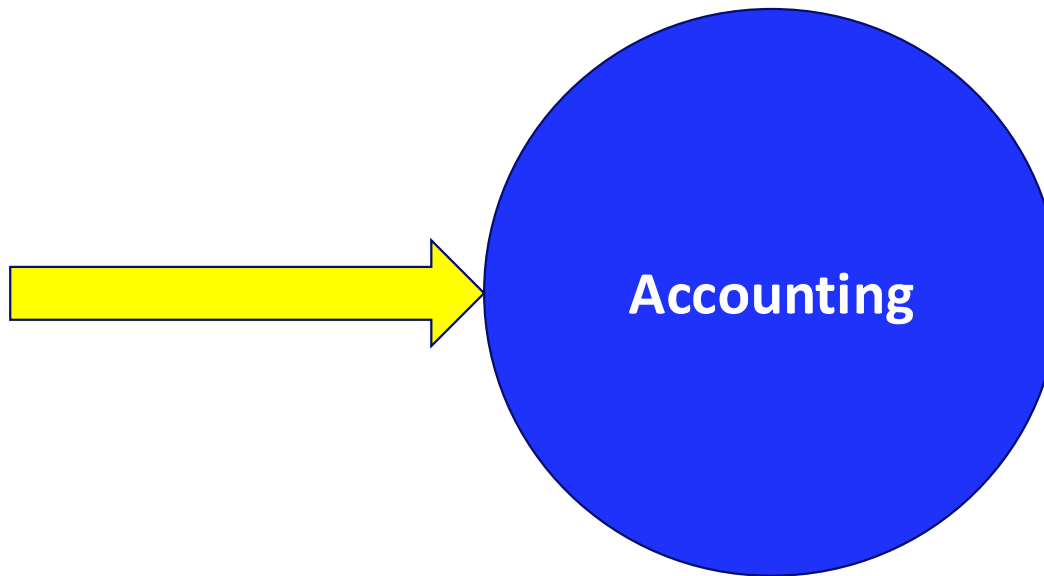
Cost control is based on extremely detailed expected cost accrual.

This process leverages the digitalization of operational data combined with contract cost elements and rules.

Cost control works better with detailed digital invoice information.

Still, you can match high level expected cost of a supplier coming from PDF invoice but challenge starts when needing to understand variation source.

Airline financial organization



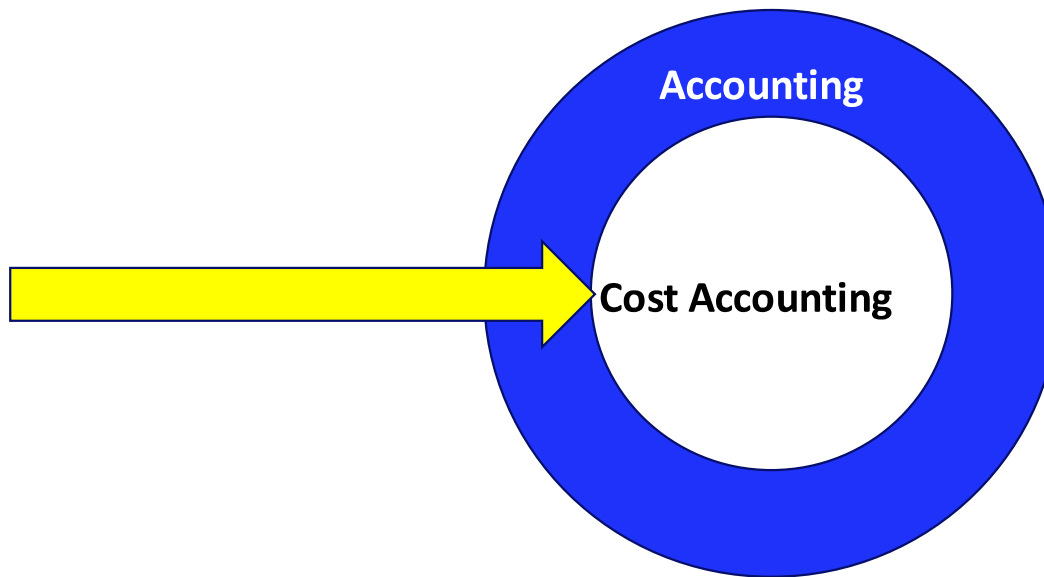
Step 1 Accounting

Invoice arrives to airlines:

- Native PDF per email
- Electronic paper PDF
- Paper (Scan copy)
- EDI or XML format

This may differ by supplier segment

Airline financial organization

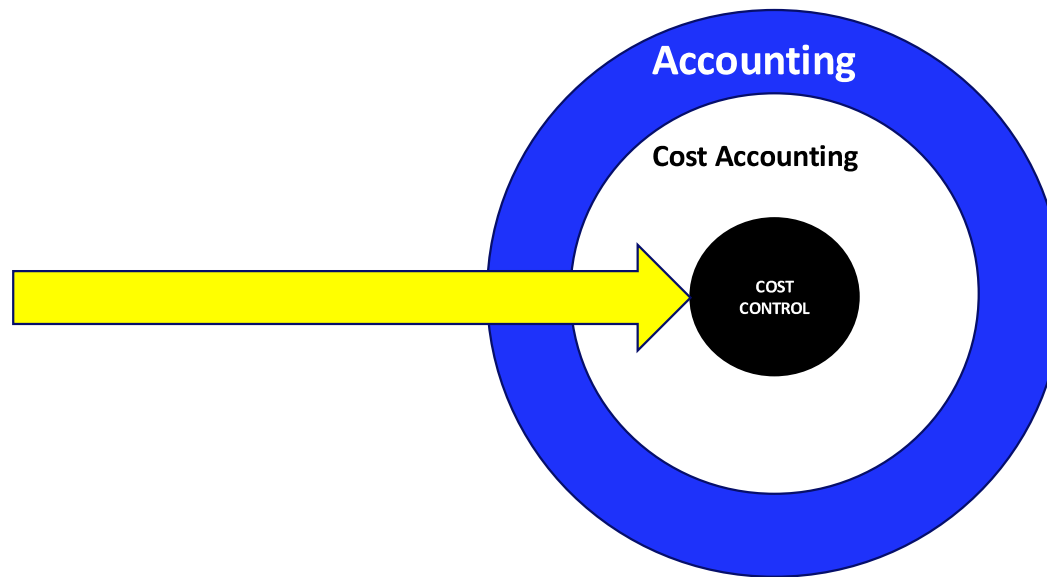


Step 2 is cost allocation

- Need to code invoice cost element and taxes
- Allow routing to cost owner

Data enrichment and mapping of supplier is required

Airline financial organization



Step 3 is cost control

- Details analysis of the cost element compared to accrual or budget
- Could be done high level on invoice total value and % tolerance
- Could be done in detail manner when receiving detailed information in electronic format

But could become step one when using standardized electronic format
And could replace step 2 in cost coding

Data enrichment is required

Tolerance in cost controls when using details cost is 5 time lower than when using invoice total value

Impact from fiscal e-Invoicing

Legislation is changing around the globe and will be generalized by 2030.



To know more about compliance check SIS web site and register to compliance bulletin

Impact from fiscal e-Invoicing

This will translate in more invoices received in different electronic formats

Using different layout and standards

But only helping airline with header of fiscal information

More invoice would be compared at total level automatically but with higher tolerance and a more complex process to identify discrepancies



Tax Invoice

فاتورة ضريبية

Issue Date	2023-09-12	تاريخ الاصدار
Invoice Reference Number (IRN)	SVLEGAL1	الرقم المرجعي للفاتورة (IRN)
Supply Start Date	2023-09-01	تاريخ بدء التوريد
Supply End Date	2023-09-30	تاريخ انتهاء التوريد

Seller		تاجر
Name	Swissport Saudi Arabia Ltd Co	الإسم
Other Seller ID	CRN 452313541255	معرف البائع الآخر

Buyer		مشتري
Name	KUWAIT AIRWAYS	الإسم
Other Buyer ID	TIN 31111111110013	معرف المشتري

Considerations

There are different achievements depending on process used and depending on data entry format.

Lufthansa is using in house system where Qantas is using a market solution

In both scenario you will understand that cost control is a HQ lead project

That contract data base and operational data feed are key to this process

That data quality and invoice quality remains problems

And that working with digital data flow requires tools that transform the way people work but achieve greater outcome

Cost management is the primary goal of this process, but it helps for other aspect like budgeting, forecast, procurement data mining...

Centralized Invoice Control @ LGBS



~50 FTE 
well-qualified and
educated employees

1 common
user interface 

4 supporting
BU-related tools



Service provided for:

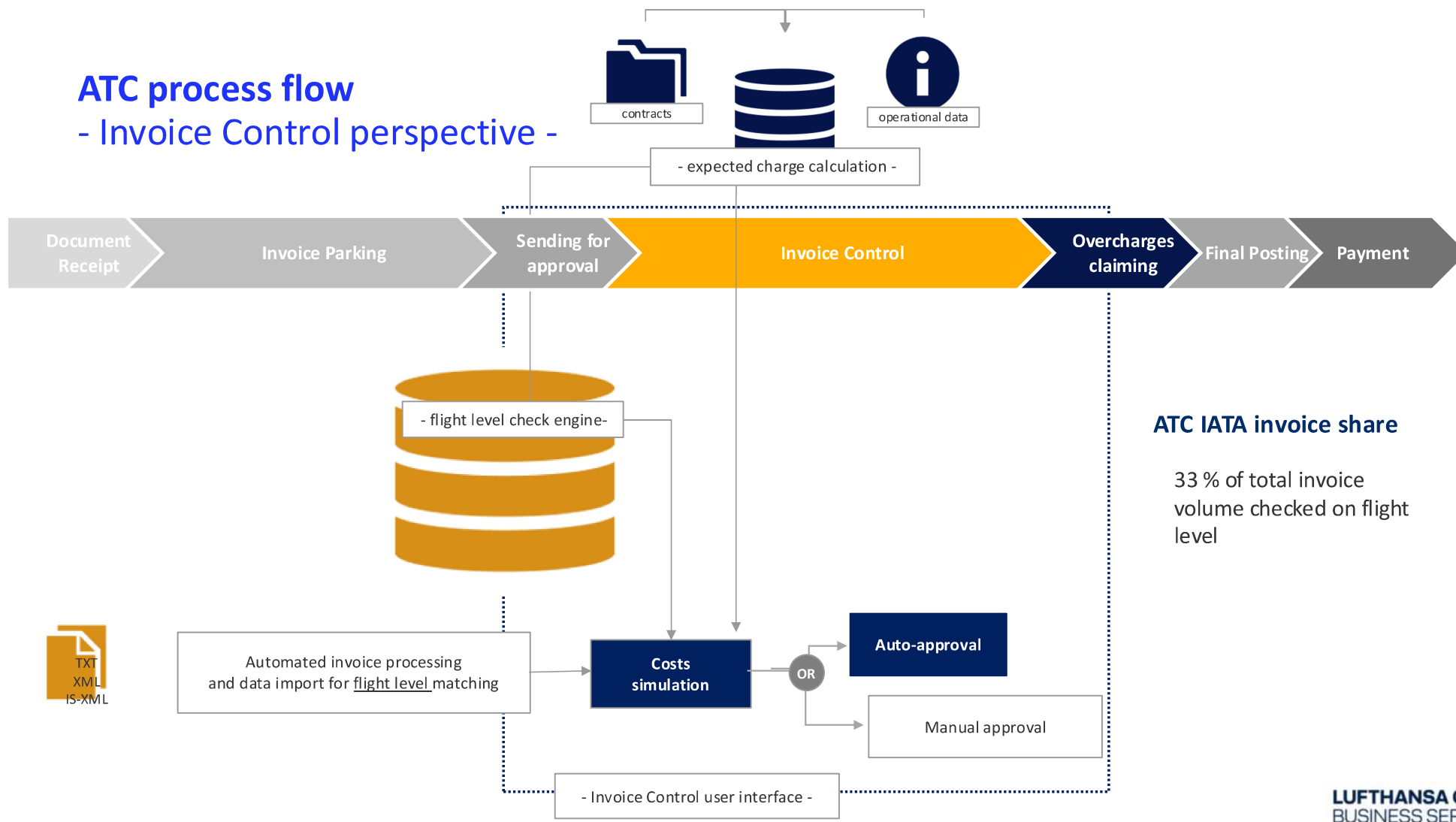
- ✦ Fuel
- ✦ **Air traffic control***
- ✦ **Airport & Handling costs***
- ✦ Crew costs
- ✦ Catering
- ✦ Flight irregularities
- ✦ Warehouse handling



*IATA related services

ATC process flow

- Invoice Control perspective -



ATC IATA invoice share

33 % of total invoice volume checked on flight level



Automated invoice processing and data import for flight level matching

Costs simulation

Auto-approval

Manual approval

- Invoice Control user interface -

P2P process flow

- crucial information for ATC costs -

- ✦ Flight date
- ✦ Flight number
- ✦ Registration

- ✦ Waypoint code
- ✦ Distance
- ✦ MTOW

Billing Entity: <small>DEUTSCHE LUFTHANSA AG</small>		Invoice #: <small>1000000000</small>		Charge Category: ATC		Billed Entity: LH-220 Deutsche Lufthansa Aktiengesellschaft								
		Billing Period: Jul 2024, 02		Charge Code: Over-flight										
		Currency of Billing: USD												
Line #	Flight Date Time	Flt. #	Acft. Reg.	Acft. Type Code	Location Code @ Type	Flt. Info Rgn.	Max. Take Off Weight @UOM	Route Date Time @ Type	Weight Factor	WP Code	Distance @ UOM	Quantity	Unit Price	Charge Amount
10	2024-06-01 00:00	DLH5 72	DABYM	B748	EDDF @ Origin FAOR @ Destination	0	442.2500 @ TON	2024-06-01 00:00 @ Entry 2024-06-01 00:00 @ Exit		DURNA EPNUL	661.000 @ KM 661.000 @ KM	1.0000		
10	2024-06-02 00:00	DLH5 77	DAIGW	A343	FACT @ Origin EDDF @ Destination	0	271.0000 @ TON	2024-06-02 00:00 @ Entry 2024-06-02 00:00 @ Exit		UNLOK ITNEL	1,285.000 @ KM 1,285.000 @ KM	1.0000		
10	2024-06-02 00:00	DLH5 76	DAIGW	A343	EDDF @ Origin FACT @ Destination	0	271.0000 @ TON	2024-06-02 00:00 @ Entry 2024-06-02 00:00 @ Exit		ITNEL UNLOK	1,285.000 @ KM 1,285.000 @ KM	1.0000		
10	2024-06-02 00:00	DLH5 72	DABYM	B748	FAOR @ Destination EDDF @ Origin	0	442.2500 @ TON	2024-06-02 00:00 @ Exit 2024-06-02 00:00 @ Entry		EPNUL DURNA	661.000 @ KM 661.000 @ KM	1.0000		

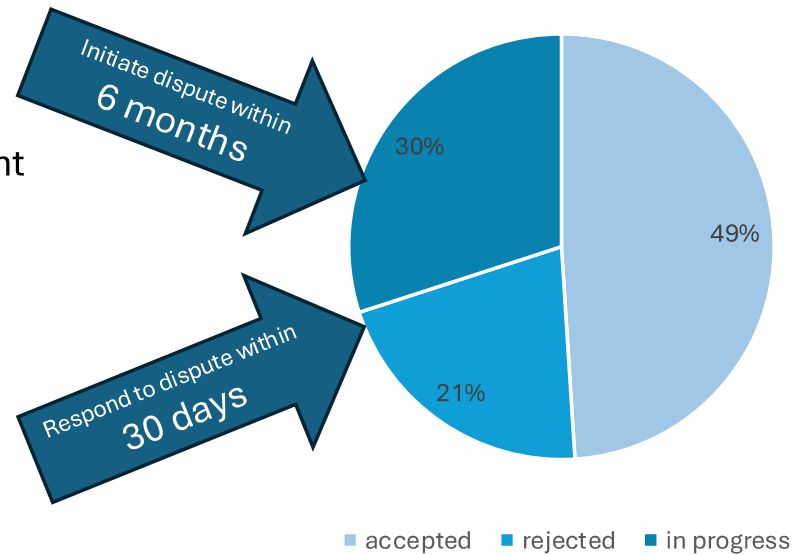
Dispute reasons and volumes for ATC

18 % of IATA invoices are disputed

Claim reasons:

- ✦ Cancelled flights
- ✦ Flights belonging to other airlines
- ✦ Unknown flights (missing registration or wrong flight number)
- ✦ Distance difference
- ✦ Flight didn't enter specific airspace
- ✦ Duplicated flights
- ✦ Wrong MTOW

% of dispute response from billing members



Dispute process - SIS portal

SIS Simplified Invoicing and Settlement

Dispute Header

From Member: LH-220	To Member: [REDACTED]	Dispute Date: 27-Aug-24	Dispute Reference Number: 14907
Original Invoice Number: [REDACTED]	Original Invoice Charge Category: ATC	Original Invoice Date: 16-Aug-24	Dispute Stage: 1
Dispute Owner: [REDACTED]	To Email ID(s): [REDACTED]	Currency of Original Invoice: [REDACTED]	Total Amount of Original Invoice: [REDACTED]
Additional Email ID(s) pertaining to Initiator: [REDACTED]	Currency of Dispute: [REDACTED]	Additional Email ID(s) pertaining to Non-Initiator: [REDACTED]	Total Disputed Amount: 0.000

[Save Dispute Header](#)

Line Item/Line Item Detail Search Criteria

Dynamic Field: Please Select	Dynamic Field Value: [REDACTED]	Line Item Number: [REDACTED]	Line Item Detail Number: [REDACTED]	Charge Code: Please Select	UOM Code: Please Select
Service Start Date: [REDACTED]	Service End Date: [REDACTED]				

[View Invoice Header Info](#)
[Add Invoice Level Dispute](#)
[Search Line Items](#)
[Search Line Item Details](#)
[Clear](#)

Line Item/Line Item Detail Search Results

Actions	Line Detail #	Service Start Date	Service End Date	Description	Quantity	UOM Code	Unit Price	Scaling Factor	Line Detail Total	Tax	VAT	Add/Deduct Charge	Line Detail Net Total	Dynamic Fields Summary
<input type="checkbox"/>	1		30-Jun-24	Overflight Charge	1	EA	[REDACTED]	1	[REDACTED]	0	0	0	[REDACTED]	[REDACTED]
<input type="checkbox"/>	1		30-Jun-24	Terminal Charge	1	EA	[REDACTED]	1	[REDACTED]	0	0	0	[REDACTED]	[REDACTED]
<input type="checkbox"/>	2		30-Jun-24	Overflight Charge	1	EA	[REDACTED]	1	[REDACTED]	0	0	0	[REDACTED]	[REDACTED]
<input type="checkbox"/>	2		30-Jun-24	Terminal Charge	1	EA	[REDACTED]	1	[REDACTED]	0	0	0	[REDACTED]	[REDACTED]
<input type="checkbox"/>	3		30-Jun-24	Overflight Charge	1	EA	[REDACTED]	1	[REDACTED]	0	0	0	[REDACTED]	[REDACTED]

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[Add to Dispute](#)

Dispute process - SIS portal

Home >> Miscellaneous >> Edit Dispute



Edit Dispute

Dispute Header

From Member: LH-220 To Member: Dispute Date: 27-Aug-24 **Dispute Reference Number: 14907** Dispute Stage: 1
 Original Invoice Number: Original Invoice Charge Category: ATC Original Invoice Date: 16-Aug-24 Currency of Original Invoice: Total Amount of Original Invoice:
 Dispute Owner: To Email ID(s): Additional Email ID(s) pertaining to Non-Initiator: Total Disputed Amount:
 Additional Email ID(s) pertaining to Initiator: Currency of Dispute:

[Save Dispute Header](#)

Line Item/Line Item Detail Search Criteria

Dynamic Field: Dynamic Field Value: Line Item Number: Line Item Detail Number: Charge Code: UOM Code:
 Please Select DD-MMM-YY DD-MMM-YY Please Select Please Select

[View Invoice Header Info](#) [Add Invoice Level Dispute](#) [Search Line Items](#) [Search Line Item Details](#) [Clear](#)

Line Item/Line Item Detail Search Results

Actions	Line Detail #	Service Start Date	Service End Date	Description	Quantity	UOM Code	Unit Price	Scaling Factor	Line Detail Total	Tax	VAT	Add/Deduct Charge	Line Detail Net Total	Dynamic Fields Summary
<input type="checkbox"/>	1		30-Jun-24	Terminal Charge	1	EA	0.000000	1	0.000000	0	0	0	0.000000	
<input type="checkbox"/>	1		30-Jun-24	Overflight Charge	1	EA	0.000000	1	0.000000	0	0	0	0.000000	
<input checked="" type="checkbox"/>	2		30-Jun-24	Terminal Charge	1	EA	0.000000	1	0.000000	0	0	0	0.000000	
<input type="checkbox"/>	2		30-Jun-24	Overflight Charge	1	EA	0.000000	1	0.000000	0	0	0	0.000000	
<input checked="" type="checkbox"/>	3		30-Jun-24	Overflight Charge	1	EA	0.000000	1	0.000000	0	0	0	0.000000	

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[Add to Dispute](#)

Disputed Items

Action	Disputed Item	Status	LI Description	LID Description	Line Item #	Line Item Detail #	Original Reference Number	Charge Billing Currency	Original Amount	Charge Unit Rate	Amount Available to Dispute	Reason Code Description	Disputed Amount	Dispute Remarks	Internal Comments	Flight
<input type="checkbox"/>	Line Item Detail	Disputed	Overflight Charge	Overflight Charge	10	3						Flight(s) not operated		View Disputed Item Remarks		DLH729
<input type="checkbox"/>	Line Item Detail	Disputed	Terminal Charge	Terminal Charge	20	2						Flight(s) not operated		View Disputed Item Remarks		DLH728

Benefits to join IATA SIS E-invoicing portal

- ✦ Compliance with legal and tax requirements
- ✦ Standardization and harmonization
- ✦ Easier implementation of own process improvements (e.g. posting and invoice control)
- ✦ Efficiency of Control & Approval process (reduce operating costs)
- ✦ Collaboration and partnership
- ✦ Dispute Management



Compliance with legal and tax requirements

- IATA ensures that SIS continues to comply with key legal and tax requirements applicable to the Industry including Digital Signatures and Legal Archiving.
- The e-invoicing scene is changing fast around the world, with additional jurisdictions mandating new requirements each year.
 - SIS is receiving frequent enhancements to add support for e-invoicing and tax requirements
 - Reporting to regulators is being brought upfront rather than during a post-event audit.
 - Includes all known predominant Global e-invoicing models planned to-date including transmission/receipt of data to/from relevant tax authorities as required in relevant countries.
 - There is an Active Roadmap for introduction of new countries updated quarterly
 - Since introduction of e-invoicing last year, 6 countries have gone live and more are expected / are on the watchlist.



*for supported countries

<https://www.iata.org/en/services/finance/sis/e-invoicing-compliance/>



Electronic Invoices?

- What is meant by an e-invoice?
- In the case of SIS transmitted e-invoices, it includes relevant underlying key fields, component lines and detailed cost elements and underlying data transmitted electronically in a machine readable data interchange format with populated data fields that allow validations to be performed.
- Ideally for SIS, in an IS-XML file format



Electronic Invoices?



True e-invoices are not:

- Paper documents to be scanned by OCR in a service centre
- PDF style documents attached to an email to be processed by a service centre
- Invoices with accompanying Excel or other workbook to support the underlying calculation.

All of these can lead to data inconsistencies, additional burdens of reconciliation and require bespoke processes that often vary greatly across locations.

Electronic Invoices... SIS XML to power Cost Control Systems

Adoption of SIS XML based 'true' electronic invoices offer:

- Uniform consistency validated against a comprehensive database schema developed for SIS and specific to the airline industry.
- Ability to reuse queries and logic to check for variances
- Reproducibility of processing by airlines and customers
- Economies of scale once setup by suppliers and accepted by airlines
 - Leading CCS's support SIS XML formats.
- Extensible to include fields for mandatory e-invoicing regulatory requirements in selected countries
- A base upon which detailed checks can be performed against airlines own database of contractual data.

Standardization and harmonization leads to an increased Quality of Service

- Universally consistent and compliant invoice presentation and concise defined data formats including IS-XML formatted data.
 - Extensible Markup Language (XML). IS-XML is the implementation for IATA SIS, enriched with specific fields and for the Airline industry. Includes ATC, Airports and many other service specific fields.
 - Able to be extended with new fields over time whilst maintaining backward compatibility in most cases.
 - Currently a widely adopted and developed format for invoice data interchange.
- The IS-XML format continues to meet business needs by formatting data specific to the airline industry including adoption of IATA, ICAO and other leading data definitions and standards. All imaginable key fields can be adopted into the e-invoice data including mandatory minimum standards for each industry product or service.



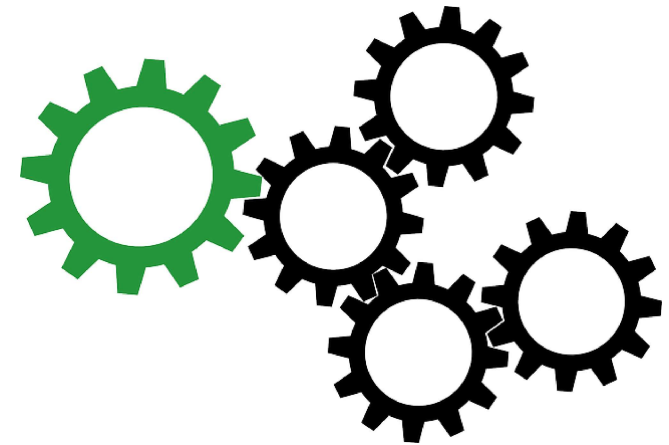
Supplemental Data Payloads

- Supplemental data (detailed underlying data) can augment summary invoice data to be validated against PO's and operational data.
- A rich set of additional data can be supported in IS-XML including:
 - ATC; Airports;
 - Ground Handling;
 - Fuel; Catering;
 - IT & Communications;
 - Accommodation;
 - Special events, AOG, RTB, Extended Ground time, others.



Standardization and harmonization leads to an increased Quality of Service

- Allows *consistent* delegation of responsibility to the appropriate teams as required.
- Finance may not need to 'touch' or interact with the majority of invoices.
 - Allows focus on the exception case invoices.
 - Increased productivity
 - Frees time for other work
 - Quality of the data is key to the success of matching.
- Improvements by suppliers using SIS invoices may well apply to entire industry (economies of scale)



Easier implementation of own process improvements (e.g. posting and invoice control)

- Paired with a Cost Control System, invoice initiation, approval, rejection, accounting processes can be automated and linked to each supplier/airlines own process ERP or General Ledger system
- CCS can be deployed in-house across teams, centralised, or through a managed service (or hybrid model)
- Rich data within IS-XML equipped invoices can be harvested to increase automation and level of matching for many cost categories.

Improved Quality of Invoices and Supporting Documents

Matching invoices with underlying operational data allows invoice quality to be controlled with appropriate feedback to suppliers.

Detection of:

- Inadequate Data
- Unclear Data
- Incorrect Data
- Substituted or Proxy data



Suppliers benefit by providing compliant invoices for efficient approval and payment.

Efficiency of Control & Approval processes (leads to reduction in operating costs)

Controls can be applied electronically via a Cost Control System (CCS), especially when matched with operational or other in-house data sources.

Through SIS, status and other updates can be transmitted back to the Supplier for immediate updates and information about payments.

All electronic approval (and rejection process) can be initiated in a CCS for efficient ops.

An efficient process links the airlines ERP \leftrightarrow **CCS** \leftrightarrow SIS \leftrightarrow ICH,...and vice-versa on the Supplier's side. An integrated eco-system to utilise. Further integration possible.

Lower footprint of management and integrated systems efficiencies.



Dispute Management

A CCS allows integration with underlying data repositories and SIS for improved dispute management timeframes

- Automated rejection processes;
- Improved analytics to support areas of issue;
- Traceability of underlying data shared with vendor / customer;
- Reproducible and consistent approach = trust;
- Faster turn times → faster resolution.



- ✓ Faster, more effective resolutions backed by data
- ✓ Less change of issues remaining buried for long periods
- ✓ Allows early addressing of disputes via automated means reducing size and urgency of late escalations.

Collaboration and Partnership

- Timely feedback and interaction between Suppliers and Customers as a result of insights and feedback from analysis and processing via CCS's lead to:
 - Improved data interchange and sharing of relevant data – a reduction in error rates over time;
 - Better understanding of how to co-operate and service each other's business;
 - Collaboration and development of improved processes;
 - Faster turnaround of invoices and queries ;
 - Improved relationships;
 - Improved cashflow and reduced disputes;
 - Fosters longer term and trusted business relationships
 - Allows to meet KPI's for better Payment Processing times etc – increasingly required to be reported in some jurisdictions



**A WIN-WIN
situation for
all parties.**

Models of Cost Control Systems (CCS's)

– 'In-House' Developed and Operated



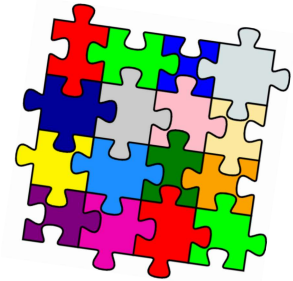
- Highest degree of tailoring to specific Airline or Supplier's requirements
- Development roadmap & priorities are fully under Airline's control
- Suited for large Airline Groups with high volumes of transactions (e.g. LH)
- Responsibility for system development, hosting and cyber security burden
- High R&D costs – may not share burden of development with other operators
- Possibility of licensing to third parties
- Different accounting and tax treatments of the development costs dependent upon the approach taken.

Models of Cost Control Systems (CCS's) Outsourced Provider / Market Solution

- Could include a managed service component maintained by contracted third parties
- Scalable solution from a small to large volume operators
- Hardware resources and common development shared with other users
- A 'lite' implementation footprint on-site – 'in the cloud'
- Benefits & limitations of a 'community based' model of development
- Customisation available (at a cost)
- Monitor contractual obligations by carefully chosen KPI's.
- Benefit from the expertise of a diverse community and managed service.



How can you contribute to increased benefits from SIS and Cost Control Systems?



Start the journey with your suppliers to adopt e-invoicing & underlying data

(Underlying data availability into XML format is key)

Once-off setup for Suppliers

Suppliers with multiple airline customers will benefit from once-off setup help from IATA so that they may service multiple customers using SIS e-invoicing

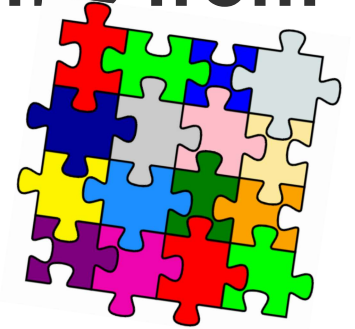
... can be used to exchange data with many customers

This in-turn assists airlines to use efficiently process invoices as the data is readily available and formatted for electronic review, validation, processing and reporting.

There is a Community of users capable and willing to service XML

How can you contribute to increased benefits from SIS and Cost Control Systems?

Time and commitment required to automate and streamline the processes involved.



- **Implementation of CCS itself**
- **Focus on efficiencies and making best use of technologies**
 - XML data, e-invoices, efficient service centres
 - Controls and checks for exceptions
 - Management of exception scenarios
 - Certain categories of charges well suited to CCS
- **Step by Step approach – Work with Suppliers/Customers as they are ready and committed to improving efficiencies.**

Conclusion and take aways

Electronic data flow enable faster turn around

More electronic data increase quicker ROI of cost control:

- Systematic check
- Less human intervention
- More discrepancies identified
- Lower tolerance

Rising of EDI and e-Invoicing in the world is an opportunity for airlines to consider cost control project

Assess the opportunity a cost control project. Cost savings and efficiency outpace largely the investment !



Q&A

