IATA World Financial Symposium

NDC and Tax: Meet the Experts
Ancillary revenues expected to hit $92.9bn

Airline ancillary revenue has been projected to reach $92.9 billion worldwide for 2018. The CarTrawler Worldwide Estimate of Ancillary Revenue represents a 312% increase from the 2010 figure of $22.6 billion, which was the first annual ancillary revenue estimate.
The War Revenue Act
of 1917
including the
War Income Tax and the War Excess Profits Tax
and the
Federal Income Tax Law of 1916
As Amended 1917

Part I contains the text of the War Revenue Act as approved by the President on October 3, 1917, and an Index to the Act.

Part II contains the text of the Federal Income Tax Law of September 8, 1916, together with the amendments to the law as of October 5, 1917; the amendments are printed in the body of the law in italics; also an index.

and tax be therein stated; (c) a tax equivalent to eight per centum of the amount paid for the transportation of persons by rail or water, or by any form of mechanical motor power on a regular established line when in competition with carriers by rail or water, from one point in the United States to another or to any point in Canada or Mexico, where the ticket therefor is sold or issued in the United States, not including the amount paid for commutation or season tickets for trips less than thirty miles, or for transportation the fare for which does not exceed 35 cents, and a tax equivalent to ten per centum of the amount paid for seats, berths, and staterooms in parlor cars, sleeping cars, or on vessels. If a mileage book used for such
NDC is a great opportunity: It takes a team

- Marketing – The flexibility afforded by NDC may trigger taxability in subtle ways.
- Operations – Offerings may be designed in a way to make tax compliance easier.
- Accounting – System and reporting changes will influence data needed by Tax.
Meet the Experts

Participants:

• Facilitators
  • Mr. Damon Chronis, President, Ryan, LLC
  • Mr. Matt Reynolds, Director – Data Strategy, Innovation Lab, Ryan, LLC

• New Distribution Capability ("NDC")
  • Mr. Altug Meydanli, Senior Manager, Pay - Account Standards, IATA

• Tax Panel – Issues to Watch
  • Ms. Nathalie Rodier, Managing Director, Taxes, Air Canada
  • Ms. Rukhsana Pawane, Senior Manager Quality Assurance - Financial Shared Services, Emirates
  • Mr. Todd Behrend, Principal, International Income Tax, Ryan, LLC
  • Ms. Suzanne den Breems, Principal, Practice Leader VAT, Ryan, LLC
What’s the market problem?

**CUSTOMER EXPERIENCE**
Is not consistent depending on where they search for travel and not rich when shopping through travel agents

**TRAVEL AGENTS**
Can’t easily access many airline products that are available on the airline direct websites

**AIRLINES**
Don’t have the freedom to distribute their products across channels without being commoditized
What do airlines want?

Revenue Opportunities
• Differentiation (product description)
• Merchandizing (ancillaries, fare families)
• Personalization (based on loyalty, preferences)
• Dynamic Offers (based on personalization)

Cost Savings
• Innovation & Competition
The Solution is NDC

Why NDC?
- To modernize the way air products are retailed to travel agents, corporations and travelers

What is NDC?
- A travel industry-supported program for the development and market adoption of a new data transmission standard

Who can benefit from NDC?
- Full service and budget airlines
- Technology providers and travel agents
- Corporate buyers and travelers
Income Tax Considerations Arising from NDC

In general, airline profits have not been subject to income tax outside the airline’s home country. This was due primarily to:

1. Exemption under Article 8 of most double tax treaties; or
2. Exemption under a bilateral Air Services Agreement; and
3. Revenues not subject to an exemption are often earned by a legal entity other than the airline.

With NDC, travel agents will be able to sell on behalf of airlines a number of ancillary services / products and therefore earning income that might not be exempt.

What are the implications for the airline finance and tax departments going forward?

1. A potentially substantial increase in local country tax reporting and payment administration.
2. A need to provide local country branch trial balance and financial statements to support what is needed for the tax filings.
3. Potential increased audit scrutiny.
VAT/GST Perspective and Digital Services Tax

Key Considerations:

• If unbundled, does the ancillary charge still follow the VAT/GST treatment of the transportation?
• If not, is the charge "zero-rated," as is the case for transportation in most countries?
• If not, what is the "place of supply," i.e., where are the services taxable with VAT? What is the rate?
• What are the implications of the Digital Services Tax?
Open Discussion
Interline Considerations (for IATA WFS 2020)

• Timing and consistency of tax decisions.

• Tax decision drivers captured from sales channels.

• Impact of exchanges - what was traded for what?
Key things to keep in mind:

- Continued unbundling is inevitable
- NDC takes this dynamic to a whole new level of scale and interconnectedness
- Governments are bound to take notice, which carries both direct and indirect tax implications on a global basis
- Airline tax and finance departments should work closely with product development and marketing departments
New approaches to Route Profitability

Meet to Experts
Questions?

Sli.do

#WFSroute
Introduction

• Route profitability is important in both planning and performance management processes.
• Accurate route profitability information drives fleet, network, scheduling, revenue management, distribution and partnership strategy.
• Activity based costing is simple, but airlines have special challenges with data sources, and with network complexity.
• Industry transformation programs impact access to information, and provide new opportunities.
• Industry data sources allow benchmarking and a focus on competitiveness.
Speakers

Sanjyot Tawde
SVP, Strategy and Customer Solutioning
Accelya

Jean Ruiz
Head, Industry Data Management
IATA
New approaches to Route Profitability

Sanjyot Tawde – SVP, Strategy and Customer Solutioning

September 2019
Agenda

1. Traditional vs Modern Route Profitability
2. Mapping Stakeholders’ Need
3. Flight Profitability Schematic
4. Analytical Modelling
Traditional vs Modern Flight Profitability System (FPS)

Traditional FPS (Static, Accounting Based) vs Modern FPS (Flexible, Analytical)

### Data Version
- **Traditional FPS:** Based on Actuals
- **Modern FPS:** Actual / Forecasted / Simulated

### Accuracy
- **Traditional FPS:** DOC calculated based on Standard Cost; Fixed Cost on Block Hours
- **Modern FPS:** DOC calculated based on Contract Rates and Actual Operations; Fixed Cost on actual Operations

### Timeliness
- **Traditional FPS:** Month end / 2-3 weeks delayed
- **Modern FPS:** Daily / Weekly / Monthly / Forecasted

### Granularity
- **Traditional FPS:** Profitability at Route level only
- **Modern FPS:** Profitability at Leg level / Network Contribution, Customer Segments

### Analytical
- **Traditional FPS:** Standard “Fixed” Reports
- **Modern FPS:** Flash Reporting / Analytical models / Simulation
Stakeholder needs mapping

**Cargo**
- Passenger & Cargo yields
- Capacity analysis for additional cargo
- Decision on aircraft deployment for cargo

**Management Accounting**
- Accuracy
- Timeliness
- Ease of Use
- Automation
- Granularity

**Network Planning**
- Day of week,
  - Fleet allocation / reallocation
- Beyond contribution

**Alliances**
- JV Analysis
- Beyond contribution
- Effectiveness of SPA, codeshare agreements

**Loyalty**
- Track of earn & burn by flight legs, routes

**Marketing**
- Point of sales analysis
- Distribution channel analysis
- Ancillaries by flight

**Information Technology**
- Ease of integration

**Revenue Management**
- O&D Analysis
- Beyond contribution
  - (Granular)
- Yield analysis
- Product Mix
Analytical Dimensions

- **Time**
  - Comparison by week/month/quarter/financial or calendar year
  - Specific events – Thanksgiving, New Year, summer holidays

- **Route/Flight**
  - Route / Round trip Analysis
  - Short Haul / Long Haul

- **Leg**
  - Beyond Contribution analysis by leg/circular route
  - Displacement Revenue Calculation

- **Aircraft**
  - Profitability by fleet, sub fleet
  - Leased / Owned aircrafts
  - Aircraft Ageing Profitability Analysis

- **Currency**
  - Analysis by currency exposure
  - Analysis in multiple currencies

- **Class**
  - Premium / Economy analysis
  - Class re-configuration analysis
  - In flight sales by class

- **Operational**
  - JV / Non JV
  - Chartered operations

- **KPI**
  - KPI Analysis for cost categories
  - Statistical Analysis (seat factor, load factor)

- **Operational**
  - Budgeted vs Actuals
  - Forecasted vs Actuals
  - Budgeted vs Simulated

- **Network Profitability**
  - Network profitability
  - Business v/s economy
Flight Profitability Schematic

- **Revenue Forecasting**
  - In-built formats for easier interface

- **Revenue Accounting**
  - Flight Operations Data
  - Interface or Excel loading
  - Standard rates or contracts
  - Compute DOC's at flight level

- **Fixed Costs Budgeted Amounts**
  - Interface or Excel loading
  - Allocation rules by flight statistics
  - Fixed cost allocation to flight level

- **Multi-dimensional database**

- **Results Dashboards**
  - Profitability reports on-demand
Forecasting Model

Data Sets → Historical Trends → Forward Sales → Flight Schedule

Forecasting Parameters → Time window of departure → Day of the week → City Pair → Cabin Class

KPI forecasted → PAX Count → Revenue → Direct Operating Cost → Fixed Cost

Profitability reports on-demand → Results Dashboards
### Network Analysis Model

#### Flight 307

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#### Flight 416

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<td>380</td>
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</tr>
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</table>
Thank you
Questions?

Sli.do

#WFSroute
Cost recovery ability disappeared mid-2018

Unit cost and unit revenue growth

% change year-on-year

Source: IATA Economics using data from The Airline Analyst
IATA Travel Intelligence
Insights into Airline Revenue and Cost

- Airline Revenue analysis at Route level
- Based on actual 50% of global sales (e), complemented with estimates for 100% market view
- Benchmark your results against average industry revenues from other players

- Airline Operational Cost at Aircraft Level
- DOC: Flight Ops and Ground Expenses breakdown
- Benchmark your operational KPIs against the average ACMG airlines
Airline Cost Management Group (ACMG)

Provides an industry platform for effective cost and performance benchmarking

&

Promotes sharing best industry practices on airline cost management
ACMG Cost Drivers

Total Operating Costs

- Financial Operating Results
- Airline Staff Costs
- System Operating Costs

Direct Operating Costs per Aircraft Type

- Flight Operations
- Ground Operations

Operational and performance statistics
### Total Operating Costs

#### Financial Operating Results

- **AIRLINE OPERATING REVENUE** (core transportation activities)
  - PASSENGER REVENUES - TICKET SALES
  - PASSENGER REVENUES - ANCILLARY REVENUE
  - CARGO REVENUES

- **TOTAL AIRLINE OPERATING REVENUE** (core transport activities)
  - OTHER OPERATING REVENUES (incidental and miscellaneous)

- **NON-OPERATING REVENUE AND EXPENSES**
  - FUEL AND OIL "HEDGING" GAIN/LOSS
  - FOREIGN EXCHANGE GAIN/LOSS

- **TOTAL OPERATING EXPENSES**

- **AIRLINE OPERATING MARGIN** (core transport activities)

- **TOTAL OPERATING MARGIN** (including incidental revenue & expenses)

#### Airline Staff Costs

- FLIGHT DECK CREW
- MAINTENANCE AND OVERHAUL
- STATION AND GROUND CREW
- CABIN ATTENDANTS
- PASSENGER SERVICES
- RESERVATIONS, TICKETING, SALES AND PROMOTION
- IT AND COMMUNICATIONS
  - FINANCE
  - HUMAN RESOURCES
  - PROCUREMENT
  - OTHER

- **TOTAL GENERAL AND ADMINISTRATIVE**

#### System Operating Expenses

- **CABIN ATTENDANTS**
  - CATERING COST
  - LOAD INSURANCE (Passenger + Cargo)
  - PASSENGER INCONVENIENCE COST
    - LEGAL PENALTIES/REGULATORY COMPENSATION (FOR EXAMPLE: EU261)
    - EXPENSES FOR MEALS/HOTELS/TAXI FARES
  - OTHER PASSENGER SERVICES

- **PASSENGER SERVICE**

- **RESERVATION, TICKETING, SALES AND PROMOTION**

- **IT AND COMMUNICATIONS**
  - FINANCE
  - HUMAN RESOURCES
  - PROCUREMENT
  - OTHER

- **TOTAL GENERAL AND ADMINISTRATIVE**
### Direct Operating Costs per Aircraft Type

<table>
<thead>
<tr>
<th>Flight Operating Expenses</th>
<th>Ground Operating Expenses</th>
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<tbody>
<tr>
<td>- FLIGHT DECK CREW</td>
<td>- LINE MAINTENANCE</td>
</tr>
<tr>
<td>- FUEL AND OIL</td>
<td>- BASE MAINTENANCE (HANGAR)</td>
</tr>
<tr>
<td>- FLIGHT EQUIPMENT INSURANCE</td>
<td>- COMPONENT MAINTENANCE</td>
</tr>
<tr>
<td>- FLIGHT EQUIPMENT DEPRECIATION AND AMORTIZATION</td>
<td>- ENGINE MAINTENANCE</td>
</tr>
<tr>
<td>- AIRCRAFT RENTALS</td>
<td>- MAINTENANCE ADMINISTRATION (OVERHEAD)</td>
</tr>
<tr>
<td>- AIR NAVIGATION CHARGES</td>
<td>- MAINTENANCE AND OVERHAUL</td>
</tr>
<tr>
<td></td>
<td>- AIRCRAFT RELATED CHARGES</td>
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<tr>
<td></td>
<td>- AIRPORT RELATED PASSENGER CHARGES</td>
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<td></td>
<td>- TOTAL AIRPORT CHARGES</td>
</tr>
<tr>
<td></td>
<td>- PASSENGER RELATED CHARGES (INCLUDES EXPENSES ASSOCIATED WITH BAGGAGE HANDLING)</td>
</tr>
<tr>
<td></td>
<td>- CARGO HANDLING CHARGES</td>
</tr>
<tr>
<td></td>
<td>- TOTAL STATION AND GROUND</td>
</tr>
</tbody>
</table>

**ACMG Cost Drivers**

+ Operational and performance statistics
ACMG Airline Cost Structure

**FY2016**
- Fuel & Oil: 22.4%
- Station & Ground: 6.3%
- Air Navigation Charges: 4.5%
- Cabin Crew: 5.3%
- Aircraft Rentals: 8.0%
- Passenger Services: 6.3%
- IT & Communications: 1.2%
- General and Administrative: 7.6%
- Maintenance & Overhaul: 11.9%
- Flight Deck Crew: 7.0%
- Flight Equipment Insurance: 0.2%
- Flight Equipment Depreciation and Amortization: 6.3%

**FY2017**
- Fuel & Oil: 24.0%
- Station & Ground: 6.6%
- Air Navigation Charges: 4.3%
- Cabin Crew: 5.2%
- Aircraft Rentals: 7.0%
- Passenger Services: 5.3%
- Reservation, Ticketing, Sales & Promotion: 7.7%
- General and Administrative: 8.1%
- IT & Communications: 1.2%
- Maintenance & Overhaul: 11.4%
- Flight Deck Crew: 6.8%
- Flight Equipment Insurance: 0.1%
- Flight Equipment Depreciation and Amortization: 8.1%
ACMG Airline Cost Benchmarking BI Tool
https://acmg.iata.org

Main Features

- 78 cost and performance benchmarks
- Areas of analysis
  - Overview – ACMG Airlines Profile
  - Strategic KPIs
  - Operational KPIs
  - Aircraft Analysis
Dashboard with Operational KPIs

[Description of the dashboard with Operational Key Performance Indicators (KPIs)]

- **Aircraft**

All Aircraft
# Dashboards with AircraftAnalysis

## A340 – 2016 data

### Operational Data

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>ATR</th>
<th>A300</th>
<th>A310</th>
<th>A320</th>
<th>A320 (All Series)</th>
<th>A330</th>
<th>A340</th>
<th>A350</th>
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### Direct Operating Cost

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>A340</th>
<th>A340-300</th>
<th>A340-600</th>
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### Flight Operating Cost

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<thead>
<tr>
<th>Aircraft</th>
<th>Maintenance per AC</th>
<th>Maintenance per ASK</th>
<th>Maintenance per ATK</th>
<th>Maintenance per FC</th>
<th>Maintenance per FH</th>
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<td>A340</td>
<td>7,574,123.13</td>
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<td>4.57</td>
<td>13,690.16</td>
<td>1,666.53</td>
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<tr>
<td>A340-300</td>
<td>7,803,984.25</td>
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<td>16,766.37</td>
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<td>A340-600</td>
<td>11,124,887.72</td>
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<td>8.97</td>
<td>24,579.63</td>
<td>2,740.51</td>
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</table>
Aircraft Analysis A340 – 2016 data

Aircraft Type: Flight Operating & Maintenance Expenses per Flight Hours

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<td>U2T</td>
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<td>770</td>
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<td>XH2</td>
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<td>FA7</td>
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<tr>
<td>RCB</td>
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</table>

Airlines

Legend

- Loss making airline
- Profit making airline
- My Company

IATA
Aircraft Analysis A340 – 2016 data
# Report: Industry results per aircraft

## Pax Operations

### Airbus

<table>
<thead>
<tr>
<th>YEARS</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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<tbody>
<tr>
<td>ASK</td>
<td>8,517,202.27</td>
<td>13,002,149.4</td>
<td>17,704,287.12</td>
</tr>
<tr>
<td>ATK</td>
<td>9,013,514.48</td>
<td>11,604,652.97</td>
<td>8,119,379.43</td>
</tr>
<tr>
<td>Active Aircraft</td>
<td>20,161</td>
<td>193,881</td>
<td>140,541</td>
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</table>

## Pax + Cargo Operations

### Airbus

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<th>YEARS</th>
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### Boeing

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### Others

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Areas of growth 2020-2022

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<th>Cost Drivers</th>
<th>Total</th>
<th>Per AC type</th>
<th>Per Route *</th>
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<tr>
<td>Financial Ops results &amp; Airline Staff Costs</td>
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<tr>
<td>Flight Operating Costs</td>
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<td>Ground operating costs</td>
<td>✔</td>
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<td>✔</td>
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<tr>
<td>System Operating Costs &amp; Performance</td>
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<tr>
<td>Distribution Costs*</td>
<td>✔</td>
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<tr>
<td>Payment Costs* (*) Projected, subject to IATA legal review</td>
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ACMG Data Governance

- Trusted data source: Airlines *keep control* of their data
- ACMG *participating airlines eligible* to detailed data
- Keep *confidentiality* of the individual airline cost data
- **Global** Airline Participation goals
- Airline working group (Steering Committee)
- Meet *Quality KPIs: Completeness & Timeliness*
ACMG Program
Join us today!

Jean RUIZ

ACMG Demo Site
https://demoacmg.iata.org

Contact us:
acmg@iata.org
# ACMG Key Performance Indicators

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<thead>
<tr>
<th>ACMG Airlines Strategic KPIs</th>
<th>FY2017</th>
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<tbody>
<tr>
<td>Total Operating Expenses/FH (USD)</td>
<td>$9.782</td>
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<tr>
<td>Total Operating Expenses/ASK (US Cents)</td>
<td>6,89</td>
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<tr>
<td>Total Operating Expenses/ATK (US Cents)</td>
<td>47,00</td>
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<tr>
<td>Fuel Share of Total Ops. Expenses</td>
<td>24,5%</td>
</tr>
<tr>
<td>Total Ops Expenses without Fuel/ASK (US Cents)</td>
<td>5,20</td>
</tr>
<tr>
<td>Overall Yield (Op. Revenue/RTK in US Cents)</td>
<td>70,30</td>
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<tr>
<td>Airline Operating Margin (core transport activities)</td>
<td>3,50%</td>
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<tr>
<td>Passenger Load Factor (PLF)</td>
<td>79,7%</td>
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<tr>
<td>Weight Load Factor (WLF)</td>
<td>69,4%</td>
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<td>Daily Utilization (Hours)</td>
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</tr>
<tr>
<td>Average Fleet Age (Years)</td>
<td>9,63</td>
</tr>
</tbody>
</table>
Questions?

Sli.do

#WFSroute
Financial impacts of passenger disruptions

Meet the Experts
Speakers

Kapil Jain  
Head of Customer Success  
NIIT Technologies Limited

Joelle Cuvelier  
Head of Solutions for Americas, Airlines  
Amadeus
Questions?

Sli.do

#WFSdisruption
Financial Impact of Passenger Disruption

Kapil Jain
What's your opinion about this!!!
Disruption Facts

8% Revenue

$60b Worldwide

6.4 m Pax

The Number of People worldwide eligible for compensation under European air passenger regulation EC261, Since 2015
# Top Risks

<table>
<thead>
<tr>
<th></th>
<th>Significance</th>
<th>Magnitude</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative risks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel price movements</td>
<td>critical</td>
<td>extreme</td>
<td>→</td>
</tr>
<tr>
<td>Cyber and IT risks</td>
<td>critical</td>
<td>extreme</td>
<td>→</td>
</tr>
<tr>
<td>Breaches of compliance requirements</td>
<td>critical</td>
<td>high</td>
<td>↑</td>
</tr>
<tr>
<td>Exchange rate losses on pension fund investments</td>
<td>critical</td>
<td>negligible</td>
<td>→</td>
</tr>
<tr>
<td>Exchange rate movements</td>
<td>substantial</td>
<td>extreme</td>
<td>↓</td>
</tr>
<tr>
<td>Earnings risks</td>
<td>substantial</td>
<td>extreme</td>
<td>↑</td>
</tr>
<tr>
<td>Crises, wars, political unrest or natural disasters</td>
<td>substantial</td>
<td>high</td>
<td>→</td>
</tr>
<tr>
<td>Risks from irregularities in flight operations</td>
<td>substantial</td>
<td>medium</td>
<td>→</td>
</tr>
<tr>
<td>Counterparty risks</td>
<td>substantial</td>
<td>low</td>
<td>→</td>
</tr>
<tr>
<td>Loss of the investment grade rating</td>
<td>substantial</td>
<td>negligible</td>
<td>↓</td>
</tr>
<tr>
<td><strong>Qualitative risks</strong></td>
<td></td>
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<td></td>
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<tr>
<td>Flight operations risks</td>
<td>critical</td>
<td>negligible</td>
<td>→</td>
</tr>
<tr>
<td>Pandemic diseases</td>
<td>substantial</td>
<td>high</td>
<td>→</td>
</tr>
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<td>Human resources</td>
<td>substantial</td>
<td>high</td>
<td>→</td>
</tr>
<tr>
<td>Increased noise legislation</td>
<td>substantial</td>
<td>high</td>
<td>→</td>
</tr>
<tr>
<td>Market entry Original Equipment Manufacturer</td>
<td>critical</td>
<td>high</td>
<td>→</td>
</tr>
<tr>
<td>Contaminated foods</td>
<td>critical</td>
<td>low</td>
<td>→</td>
</tr>
</tbody>
</table>
Regulations for compensation to Passengers

- **Flight delay**: Entitled when arrival delay is over 3 hours
- **Flight cancellation**: Entitled to rerouting or refund ticket
- **Denied boarding**: First volunteers, then forced denied boarding

**Short haul**
- Up to 1.500 km
- €250
  - e.g. London - Amsterdam

**Mid haul**
- Up to 3.500 km
- €400
  - e.g. London - Malaga

**Long haul**
- More than 3.500 km
- €600
  - e.g. London - New York
EC261/2004, ADR, APRA

- Flight from UK: ~2 M
- Pax: 210 M
- Flights: 70

https://publicapps.caa.co.uk/docs/33/CAP%201227%20Cancellations%20and%20Delays.pdf
Impact of Passenger Disruption

- Pax: 200
- Flights / Day: 70
- Days: 365
- 5,110,000 Pax per Year
- €400 Payments
- €2,044,000,000
Looking @ annual reports

- **Airline 1**
  - 65 million charges in base related to the operational disruption
  - June, July and Aug 2018 delay got increased by 115% with average length on disruption increased by 190%

- **Airline 2**
  - 335 million euro in 2018 was factored for impact from current operations.

- **Airline 3**
  - Significant disruption to operational stability due to flight time tables, cancellations, delay etc…

- … Many more if we analyze the books of the airlines where we are pumping out money due to internal or external disruption.
Financial Impact of Passenger Disruption

Mass cancellation of the flights.

Share price has dropped by £175mm alone.
In total it is estimated Airline’s “IT failure” affected 758 worldwide flights with 112,631 passengers due to fly on them.

Based on EU compensation rules, Airline is potentially liable to pay €49,670,411.92 in passenger compensation for the two days of delays and cancellations for 2 days. Or €17,246 a minute (49.5mm / 2880min)!

<table>
<thead>
<tr>
<th>Date</th>
<th>Total Affected Flights</th>
<th>Total Seats</th>
<th>Total Pax</th>
<th>Total Compensation (Euro)</th>
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<tbody>
<tr>
<td>Sat 27/5</td>
<td>515</td>
<td>95607</td>
<td>77537</td>
<td>€ 34,193,78</td>
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<tr>
<td>Sun 28/5</td>
<td>243</td>
<td>43273</td>
<td>35094</td>
<td>€ 15,476,631</td>
</tr>
<tr>
<td>Total</td>
<td>658</td>
<td>138880</td>
<td>112631</td>
<td>€ 49,670,411</td>
</tr>
</tbody>
</table>
Thank You
Questions?

Sli.do

#WFSdisruption
Questions?
Disruption Handling and On-Time Performance

IATA World Financial Symposium
Miami FL
September 2019
Airlines are facing capacity constraints combined with tighter consumer protection policies, leading to a greater focus for On Time Performance.

- **$65**: Average cost per minute of delay
- **EU261**: Consumer protection policy
- **x 2**: Number of passenger by 2036 (7.2 Bio)

As air traffic continue to grow, the likelihood of delays will increase and amplify the issues across the network.

**Key questions asked recently...**

- How do I build my schedule to improve OTP and resilience to face disruption?
- What is the right spare aircraft strategy to minimize the impact of disruptions on operations?
- How can we improve and automate our claims process?
- How can we bring all key stakeholders in the business to find a holistic solution to disruption management?
A thorough understanding of the strategic and tactical costs associated to on-time performance is critical to achieve the most cost effective operations.

Each airline has a balancing act.

Understanding strategic and tactical costs and the link in between them is key to find its own sweet spot and improve performance.

Balancing the strategic investments (“insurance”) and the tactical costs (“repair”).

Too much strategic investment

Too much tactical cost

“sweet spot” / perfect balance

High OTP

Low OTP

Total Costs

Tactical Costs

Strategic Investment

Total Costs

Tactical Costs

Strategic Investment
There are two ways of addressing disruption and OTP

Handling disruptions once they have happened and ensuring the best recovery

Focus on passenger facing activities

- Rebooking
- Compensation
- Communication
- Choice
- Reporting
- Analysis

Ensuring that the operations are set up to deliver the best quality at the lowest cost

Look at the whole flow from schedule planning to the day of operation

Balancing the strategic investment vs tactical costs

Reducing the avoidable delays to a minimum

The two areas are overlapping and complimentary
Building a business case for change

Cost Reduction
- Reduced mishandled bags = 1.32
- Lower costs for rebooking to partners = 1.12
- Reduced compensation = 2.3
- Lowered fuel costs = 0.73

Productivity Gain
- Faster re-accommodation = 0.85
- Pax handling time = 0.12
- Flight preparation = 0.2
- Increased Self Service = 1.7

Revenue Protection
- Fewer Refunds
- Keep Loyal Pax
- Xbag Collection

Holistic approach added value summary (in M$)
- ILLUSTRATIVE -

10.62

2.87

2.28
Amadeus Passenger Recovery – additional value drivers

- Drives higher customer NPS and better delay handling satisfaction results
- Helps you make better use of available inventory in mass disruptions - especially on the first wave of flights
- Through consistent application of established disruption policies, a reduction in disruption related costs (especially OAL rebooking costs)
- More time for your frontline airport teams to focus on customer interactions and servicing during delays and cancellations.
- Less calls to GCC and online requests via social media for assistance or rebooking as customers will receive their protection significantly quicker than today
Questions?

Sli.do

#WFSdisruption
IATA WORLD FINANCIAL SYMPOSIUM

23-26 September 2019
Miami, USA
Meet the Experts
SwO – Settlement with Orders
26 September 2019

Thibaut Ruy
IATA – Head of SwO Program

Gianna Monsch
IATA – Consultant to SwO
Introduction to SwO

Understand the potential future changes in finance – due to NDC and ONE Order
NDC & ONE Order → Finance

NDC
- OMS – same information
- Shop – Offer - Order
- Payment Commitments
- eTickets and EMDs issued

Order
- No more eTickets and EMDs

Challenges
NDC
- Settlement via current standards possible?
- SwO settlement

Order
- Current standards might need changes
  or
- SwO settlement

Settlement with Orders
SwO standard
(BSP, ICH, bilateral)

Agnostic, Simple
Cash flow management
Reconciliation

Order World Today

Opportunity

OMS = Order Management System
SwO process at a glance

Example: “Net” in favour of Airline (Retailer)

Airline (Retailer, ORA)
Finance System

Clearance ID: 111111
Agreement ID (OMS Order ID): 2356
Commitment ID (OMS Payment Info)
Payee: Airline ABC
Payer: Agent X
Currency: EUR
Net Value: 1’000
Settlement Date: DD MM YYYY
Settlement

IATA SwO Settlement Manager

Seller (Agent)
Finance System

Clearance ID: 111111
Agreement ID (OMS Order ID): 2356
Commitment ID (OMS Payment Info)
Payee: Airline ABC
Payer: Agent X
Currency: EUR
Net Value: 1’000
Remittance Date: DD MM YYYY
Payment
SwO Adoption Group

Working together with various providers to allow adoption

IATA
WORLD FINANCIAL SYMPOSIUM

IATA Settlement with Orders

accelya
indra
mnsait
ISO
Software Systems
Trust in IT-engineers

Lufthansa Systems

MAUREVA
NIIT
 technologies
SAP

SUTHERLAND

WNS

IFG

Accounting Centre of China Aviation

TravelSky

...more to come
NDC & ONE Order → Finance

IATA WORLD FINANCIAL SYMPOSIUM

SwO Standard

Carrier - Seller
Proof of Concept Dec 2018

SwO Draft Standard

Carrier - Carrier
Proof of Concept Aug-Oct 2019

SwO Standard 19.2

Test Pilot Nov – Dec 2019

SwO Standard 20.1 / 20.2

Go-Live

SwO Standard 21.1 / 21.2

Industry Adoption

2018

2019

2020

2021
Click Here for Video
Video – Takeaways

- Finance has to be involved
- SwO complementing NDC and ONE Order
- Agnostic and simple messages and process – for all needs
- Simplifying Finance processes
- Cash Flow Management
- Automated Reconciliation
- First: Carrier – Seller (agents)
- Next logical step: Interline
- Engage with Finance providers → smooth adoption process
Panel Discussion

Mladenka Vukmirovic
Chief innovation Officer

Philip Fernandes
Senior VP, Revenue Accounting Services

Gianna Monsch
Consultant IATASwO

(moderator)
Q & A

Mladenka Vukmirovic
Chief innovation Officer

Philip Fernandes
Senior VP, Revenue Accounting Services

Thibaut Ruy
Head SwO Program

Gianna Monsch (moderator)
Consultant IATASwO
Q & A

Contact the SwO team
swo@iata.org

Thibaut RUY
Head Settlement with Orders Program

Gianna Monsch
Settlement with Orders Strategy & Mobilization
Card payment in shared industry infrastructures

Christophe Kato
Head, Payment Services

WFS 2019, Miami
26th September 2019
# Agenda

- **BSP card process** | 3
- **SCA regulation** | 14
- **Applying 3DS to BSP card** | 16
- **What about payment in NDC?** | 23
- **Accepting card payment at airports** | 29
- **The latest SCA concern: in-flight sales** | 30
Assigning the right to transact on behalf of the airline

RESOLUTION 890
CUSTOMER CARD SALES RULES

PAC(55)890(except USA)  Expiry: Indefinite
Type: B

WHEREAS Members/Airlines wish to grant authority to Agents to conduct Customer Card sales against their card acceptance merchant agreements, and

WHEREAS Members/Airlines and Agents seek to establish a defined series of procedures in order to ensure compliance with card industry rules and to eliminate or substantially reduce their exposure to fraud,

IT IS RESOLVED that the following conditions will apply, and the following provisions will be complied with for the sale of passenger air transportation and Ancillary Services for which payment is made by a Customer Card that is accepted by the Agent on behalf of a Member/Airline in the country concerned.
Journey of a BSP card transaction

Card authorization request directly into the Card Scheme
No information on the Acquiring bank is transmitted

- Travel Agent
  - manual PAN key entry
  - GDS
    - via:
      - iiNET
      - BSPLink
      - SFTP
  - RET file

- Data Processing Center (DPC)
- Acquiring banks and processors
- Remittance
- Clearing and settlement

- Airlines
- Processors
- iOT file
- Various file formats
- aggregate and present to

- BSPLink
- IATA or IATA contracted party
- External party
- eTSPs (electronic Ticketing Service Providers):
  - Main GDSs (Amadeus, Sabre, TravelPort) + 17 local providers

- DPCs covering several countries:
  - ACCA (IBSPs)
  - Accelya (Maestro, migrating to IBSPs)
  - IDPC (IATA; IBSPs)

- DPCs covering a single country:
  - Deutsche Bank, India (IBSPs)
  - Multicarta, Russia (IBSPs)

- Authorization request
- Remittance
- Reports
Journey of a BSP card transaction: not that simple!

Card authorization request directly into the Card Scheme
No information on the Acquiring bank is transmitted

Clearing and settlement
Remittance

Travel Agent
Airline staff
Airline Website
GDS
BSPLink
WEBLink

Authorization request
Remittance
Reports

IATA or IATA contracted party
External party

eTSPs (electronic Ticketing Service Providers):
Main GDSs (Amadeus, Sabre, TravelPort) + 17 local providers

DPCs covering several countries:
- ACCA
- Accelya
- IDPC

DPCs covering a single country:
- Deutsche Bank, India
- Multicarta, Russia

Manual imprints, sent by mail (some BSPs only)
Direct to airline acquirer (some BSPs only)
Data integrity and quality

After completing DISH 23 rollout
A single and global airline reporting format
• For direct airline sales too if desired
‘It it aint’ in DISH, it does not exist’

The impossible match between authorization and clearing
Transaction ID/Trace ID
Card scheme edit on POS terminal input capability indicator
• DISH amendment discussed next month at BDISG
PCI DSS: no airline is an island

Travel Agents

GDS

DPC

IATA own communication channels
The BSP world…

Customer’s card: pass-through

Customer payment

$$$ Monies held in trust

BSP Card

BSP “Cash”
The BSP world is changing
A Travel Agent card used as a remittance tool

Static plastic card number
Or one-time use card \textit{automatically generated}

\textit{integrated} in the passenger booking

Any payment instrument

\textit{Monies held in trust}

Agent card

GDS
Transparency In Payment (TIP) framework

1. Transparency
   - Providers enlist
   - Product enrollment

2. Individual Airline consent
   - Individual airline consent

3. Transaction validation and monitoring
   - 2 steps of validation:
     - Upfront validation
     - Post-ticketing monitoring

4. Infringement and consequences

- Airlines to follow-up with Agents
  - On bilateral basis, or
  - Via the Travel Agency Commissioner
The BSP world...

A1: Customer Payment
- Pass-through of customer’s card

A2: Customer Payment
- Customer’s card or other payment methods
- Monies held in trust

B1: Agent remittance to the Airlines ($$$)
- BSP “Cash”

Yesterday
The BSP world is changing

Yesterday

- Customer Payment
  - Pass-through of customer’s card
  - Customer’s card or other payment methods

Today

- Customer Payment
  - Pass-through of customer’s card
  - Agent remittance to the Airlines ($$$
  - Money held in trust

- Alternative Transfer Methods
  - BSP “Cash”
  - IATA EasyPay
  - New
  - Corporate
  - New

- Alternative Transfer Methods
  - New
  - Corporate
  - New
SCA: PSD2 Title IV Chapter 5 Article 97

Article 97
Authentication

1. Member States shall ensure that a payment service provider applies strong customer authentication where the payer:

(a) accesses its payment account online;

(b) initiates an electronic payment transaction;

(c) carries out any action through a remote channel which may imply a risk of payment fraud or other abuses.

Electronic payment transaction = all types of transactions
Internetsales: SCA = 3DS
‘face to face’, ‘card present, cardholder present’: SCA = chip and PIN

Effective since 14/09/2019
An 18 month postponement of enforcement agreed by most national payment regulators
Not a delayed date of entry in force
Demand of migration plans and milestones
What geographical scope?

EU-issued card and acquirer, transacting in local currency at a Japanese Agent or US kiosk

3. Title III, except for point (b) of Article 45(1), point (2)(e) of Article 52 and point (a) of Article 56, and Title IV, except for Articles 81 to 86, apply to payment transactions in a currency that is not the currency of a Member State where both the payer’s payment service provider and the payee’s payment service provider are, or the sole payment service provider in the payment transaction is, located within the Union, in respect to those parts of the payments transaction which are carried out in the Union.

EU-issued card, transacting in EU currency at a Japanese Agent or US kiosk: not likely, and even then:

4. Title III, except for point (b) of Article 45(1), point (2)(e) of Article 52, point (5)(g) of Article 52 and point (a) of Article 56, and Title IV, except for Article 62(2) and (4), Articles 76, 77, 81, 83(1), 89 and 92, apply to payment transactions in all currencies where only one of the payment service providers is located within the Union, in respect to those parts of the payments transaction which are carried out in the Union.

PSD2 states that it applies to the parts of the payment transaction carried out in the Union.

The location of the transaction matters too, aside the nationality of the issuer and acquirer
Applying 3DS to BSP card

Card schemes recognized that the Agent initiate the authentication request on behalf of the airline merchant

DISH reporting format supports the passing of supplemental 3DS information

DISH23 roll out is going as per plan

BSP UK and Greece rolled out 01/08, rest of European BSPs 02/10/2019

Mandatory global roll out: everybody connected to BSP will have the capability to support the data
Applying 3DS to BSP card – cont.

GDS
Are rolling out DISH 23 and preparing to receive 3DS data from Agent, populate the authorization request accordingly, and report into BSP

Travel Agents
Uneven level of awareness - IATA communication campaign this summer
Face to face: Agent must not perform a BSP card sales anymore - accept card on own electronic payment terminal
• A significant change in business practice?
• But on a minimal volume of business
Internet sales: the challenge of adding an extra step to the transaction making process
3DS for BSP card – for the ‘techies’

Which 3DS version?

Authentication: depends on the Agent MPI capability (neither GDS nor BSP nor airline merchant participate into the authentication process)

3DS version 2.0 and higher promise a better customer experience, a higher success rate and a better support for the demands of SCA in Europe

When the banking and retailer industry are not yet ready for those higher versions of 3DS, version 1.0 meets the basic requirement

Reporting the transaction (into BSP)

DISH 23 supports 3DS supplementary data

One card scheme has demanded 3 new data elements in clearing for 3DS 2.0 and higher

• DISH amendment to be discussed next month
The ‘secure corporate payment’ exemption

2018: 83% of BSP card sales in Europe were on corporate BIN ranges
Agent own card: when it’s a one time use number, it is exempt. But who knows?
Lodged card: is exempt

Exemption application:
Option 1: systematic authentication request, after which issuer conveys 3DS is not required
  Seems less optimal (develop 3DS messaging in order to be told it is not needed?)
• Option 2: authorization request flagged with new indicator
  Seems more applicable, but no mechanism today for TMC to inform the GDS it is a lodged card situation
  Issuer keeps right to refuse the authorization request…. but there will be no alternative: purchase will fail
Other SCA exemption cases

Merchant Initiated transaction, or Card On File
We understand this to apply to consumer cards only, not corporate (lodged cards)
This requires that:
• The cardholder be authenticated at enrolment time
• A mandate is in place between cardholder and merchant
Possible application to BSP card sales: not clear yet

White listing the airline merchant
Details are still coming out from the card schemes
How to apply this to Agency card sales?

TRA (low fraud rate)
As observed by the acquirer across its merchant portfolio
Airline acquirer is not involved in the authorization making process for BSP card sales

Low value amount
Another perspective on SCA: card fraud in BSP

SCA regulation (on Internet sale): target fraud rate

<table>
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<th>ETV</th>
<th>Remote electronic card-based payment</th>
<th>Remote electronic credit transfers</th>
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</thead>
<tbody>
<tr>
<td>EUR 500</td>
<td>0.01</td>
<td>0.005</td>
</tr>
<tr>
<td>EUR 250</td>
<td>0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>EUR 100</td>
<td>0.13</td>
<td>0.015</td>
</tr>
</tbody>
</table>

BSP card fraud rate in Europe in 2018
Average ticket: 422 euros
Card chargeback ADM ratio: 0.014%
The BSP card process is not yet fully transparent and SCA-compliant
But it does not hide a huge amount of trouble
BSP card sales: a change is needed

The current legacy way of calling all BSP card sales ‘MOTO’ must evolve
The GDS does not know how the client is ‘talking’ to the Agent
But this does not fit the European mandate for SCA

A change is needed - card schemes are explicit about this
The context of interaction between cardholder and Agent has to be reported so that the transaction is labelled in a more complete way:

• card on file: this expression covers both consumer and corporate cards
• phone order
• mail order
• internet order
• face to face, card and cardholder present
• ...
What about payment in NDC?

BSP and ARC ‘cash’ is supported
Card payment is supported
Basic, non secure card payment
3DS 1.0: the seller is guided by the airline in what steps it has to take
3DS 2.0 and higher:
• It is no longer a simple customer redirection, but an authentication request
• The seller has to have the capability to conduct it
• Airline provides the necessary information (MID, acquirer BIN)
• Seller passes back to the airline the result of the authentication request
Context of interaction between cardholder and seller: needs improvement
Next: support other forms of payment from client to airline
With NDC, everything changes for card!

The **seller** is not necessarily an IATA accredited Agent

The seller **forwards** the card details (and other data) to the airline (ORA: Offer Responsible Airline)

The airline creates the card transaction out of the information received from the seller

It **creates the authorization request**

It can run the transaction past its fraud detection system (and decides not to conclude it despite receiving an approval code)

It can ask the seller for missing information (CVV2? cardholder street address, to compute AVS?)

It can ask the seller to assist in conducting an extra transaction step: authentication (3DS)

The airline conducts the transaction based on the data **forwarded** by the seller
NDC Payment Flow – Card payment
Looking back at Resolution 890

RESOLUTION 890
CUSTOMER CARD SALES RULES

WHEREAS Members/Airlines wish to grant authority to Agents to conduct Customer Card sales against their card acceptance merchant agreements, and

WHEREAS Members/Airlines and Agents seek to establish a defined series of procedures in order to ensure compliance with card industry rules and to eliminate or substantially reduce their exposure to fraud,

IT IS RESOLVED that the following conditions will apply, and the following provisions will be complied with for the sale of passenger air transportation and Ancillary Services for which payment is made by a Customer Card that is accepted by the Agent on behalf of a Member/Airline in the country concerned.
Payment scenarios in NDC

The seller decides

He reports a BSP/ARC ‘cash’ transaction (if he is an Accredited Agent)
He forwards the card and other details to the airline

A new scenario in the 19.2 release: payment redirect, or payment link

There is no preferred payment scenario
It is up to the 2 business partners, the seller and the ORA, to agree

Example 1: a seller who is not an accredited Agent and who does not want to touch sensitive payment data may look at payment redirect

Example 2: a TMC booking on behalf of a long time corporate client using his lodged card, with no fraud concern, may be perfectly satisfied in forwarding a card number … and nothing else

Example 3: the ORA may request the seller to initiate an authentication on a transaction presenting a risk of fraud, rather than refusing it outrightly (in line with what is done on the airline web site)
NDC card-paid: the airline depends on the seller

The airline has taken back control for making the card transaction

The airline continues to depend on data forwarded by the seller

Will the seller always provide all the data necessary for the airline to:
1 Conduct the authorization request with all the information demanded by the card schemes?
2 Feed the fraud detection system of the airline?

ORA and seller need to discuss the responsibilities of each party
Accepting card payment at airports

CUSS kiosk
The challenge of a retrofit

CUPPS check-in counters
Airlines have deployed wireless POS terminals
Some airports demand the deactivation of the legacy magstripe reader

Self Service Bag Drop
Do not take card payment yet
Solutions will be similar to check-in kiosk
The latest SCA concern: in-flight sales

Flight attendant with a shopping cart: a chip and PIN device

Back seat screen

Passenger device

A limited issue? But worth attending
To summarize
Thank you

Christophe Kato
katoc@iata.org
www.iata.org
6th World Financial Symposium
23-24 September 2019
JW Marriott Miami Turnberry
Cost Savings by Managing Efficiently Direct Operating Costs

Manfred Blondeel
Director Airline Partners Payment Solutions (APPS)

Bruno Rousssel
Senior Manager APPS Community
Environmental Sustainability

It is estimated it takes 12 million trees to create the 30 billion invoices that are sent in Europe each year. Removing these paper invoices, suggests the EU, will remove three million tons of CO2 from the environment.

Sustainability is one of the EU’s key reasons for promoting e-Invoicing.
Questions:

How do you do cost control?

- Manually
- Semi automated
- Fully automated
Do you do?

- Cost control on average
- Compare to last month
- Compare to budget
- On average variance
- Exact match
Industry trends

Everyone has an ERP capable to dialogue with external systems
Industry trends

There is a move from human based processes to standardized SOP processes.

Based on people skills is very subjective, 1% variation can be easily accepted.

Accounting, cost accounting and invoice reconciliation can be fully automated.
Industry trends

Digitalization: Electronic information is available more and more

Each airline has lots of data about its own operation

More countries recommend or mandate usage of e-invoicing
Industry trends

More and more airlines tend to centralize financial functions and systems

With latest new distribution standards, differentiation of product is increasing with new ancillary services

Cost will shift from flight level to passenger level in some instances
Reality today

Many invoices received in paper or PDF per email

Requires manual handling, subject to errors and time consuming

All details of the invoice aren’t captured so this reduces the opportunity to do precise cost control

This reduces also the opportunity to do business intelligence on details of the invoice that are usually not captured
Performant cost control 1/2
Overcharge identification
Undercharge identification
Understanding delay impact cost at flight level
Budgeting exercise simplified
Better use of EDI or e-invoice
Performant cost control 2/2

Lean process, people move from basic controls to add value to financial processes

Management reporting is very detailed, and faster because automated. Visibility on route profitability, consumption details for better negotiation and contract management

Understanding of cost at flight level or even lower level

Scalable

GST and VAT compliance when done manually is most likely not fully compliant
Conclusion

Effective cost control is automated and systematic

It works best with pure electronic data like EDI

Appropriate tools are necessary to grasp the benefit

Savings are possible with cost avoidance and process improvement

Digitalization is a reality so let us all be ready for it
Questions?

Thank You!
ASSESSMENT OF FINANCIAL REPORTING UNDER IFRS 16 AND ASC 842

MICHAEL DUFF
THE AIRLINE ANALYST
Outline

- Why IFRS 16?
- Industry financials
- Implementation status
- Analysts’ perspective
- Impact on airline KPIs
- Implications for commercial behaviour
- Disclosure
- Conclusions
- Q&A
Growth in Aircraft Leasing

1970: 2,206 Aircraft*  
1980: 4,049 Aircraft*  
1990: 7,156 Aircraft*  
2000: 12,972 Aircraft*  
2010: 20,230 Aircraft*  
2018: 28,726 Aircraft*  

*Western-built aircraft over 19 seats  

Source: Airfinance Journal Fleet Tracker
The current lease accounting requirements in IAS 17 Leases, have been criticised for failing to meet the needs of users of the financial statements, particularly because IAS 17 does not require lessees to recognise assets and liabilities arising from operating leases. IFRS 16 addresses those criticisms by requiring lessees to recognise most leases on their balance sheets and providing enhanced disclosures. The IASB believes this will result in a more faithful representation of lessees’ assets and liabilities and greater transparency of lessees’ financial obligations and leasing activities.

EY November 2018
IFRS 16 in one slide

- All aircraft and other leased assets go on balance sheet (other than leases with term < 12 months or for assets of nominal value)
- Minimum lease payments discounted at the implicit rate in the lease or the lessee’s incremental borrowing rate
- “Right-of-use” assets initially recorded at present value of minimum rentals
- Asset depreciated straight line to the expected end of life of the asset or the end of the minimum lease term, whichever is earlier
- Interest on lease liability included in finance expense
- Rental no longer appears as a single line item in the income statement
<table>
<thead>
<tr>
<th><strong>IFRS 16</strong></th>
<th><strong>ASC 842</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>No distinction between finance and operating leases</td>
<td>Similar balance sheet treatment to IFRS 16</td>
</tr>
<tr>
<td>Front-loading of interest component for operating leases due to effective interest method</td>
<td>Continue to treat operating leases and finance leases differently</td>
</tr>
<tr>
<td>Principal component of lease payment treated as financing cash flow</td>
<td>Continue to show aircraft operating lease rents as a separate line item under operating expense</td>
</tr>
<tr>
<td></td>
<td>Lease expense recognised on a straight-line basis</td>
</tr>
<tr>
<td></td>
<td>No change to cash flow presentation</td>
</tr>
</tbody>
</table>
### Industry profitability*

*Latest data as of 16 September 2019 for 2018/19

<table>
<thead>
<tr>
<th>Category</th>
<th>$ billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>703.8</td>
</tr>
<tr>
<td>EBITDAR</td>
<td>130.3</td>
</tr>
<tr>
<td>EBITDAR margin</td>
<td>18.5%</td>
</tr>
<tr>
<td>Aircraft rental expense</td>
<td></td>
</tr>
<tr>
<td>EBITDA</td>
<td>95.1</td>
</tr>
<tr>
<td>EBITDA margin</td>
<td>13.5%</td>
</tr>
<tr>
<td>Depreciation</td>
<td>-50.5</td>
</tr>
<tr>
<td>EBIT</td>
<td>44.5</td>
</tr>
<tr>
<td>Interest</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>-4.6</td>
</tr>
<tr>
<td>Net Income</td>
<td>27.0</td>
</tr>
</tbody>
</table>

*Latest data as of 16 September 2019 for 2018/19

Source: The Airline Analyst
## Impact of IFRS 16 on income statement

*Latest data as of 16 September 2019 for 2018/19*

<table>
<thead>
<tr>
<th>Item</th>
<th>$ billion</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td><strong>Net Income</strong></td>
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</tr>
</tbody>
</table>

Source: The Airline Analyst
Industry leverage*

* Latest data as of 16 September 2019 for 2018/19 for a sample of 163 airlines

Source: The Airline Analyst
Industry adjusted net debt*

* Latest data as of 16 September 2019 for 2018/19 for a sample of 163 airlines

Source: The Airline Analyst
## Impact on airline KPIs

<table>
<thead>
<tr>
<th>KPI</th>
<th>Impact Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDAR margin</td>
<td>• No impact, except maintenance cost to depreciation</td>
</tr>
<tr>
<td>EBITDA margin</td>
<td>• Major impact</td>
</tr>
<tr>
<td>EBIT margin</td>
<td>• Impact</td>
</tr>
<tr>
<td>Fixed charge cover</td>
<td>• Requires ROU depreciation and interest expense</td>
</tr>
<tr>
<td>Liquidity</td>
<td>• No impact</td>
</tr>
<tr>
<td>Leverage</td>
<td>• Major impact</td>
</tr>
<tr>
<td>ROIC</td>
<td>• Major impact</td>
</tr>
</tbody>
</table>
Impact of IFRS 16

Lufthansa

- New accounting standard IFRS 16 is applicable from 2019 onwards
- Lease liabilities must be recognized in the financial accounts at the present value of the contractually agreed lease payments for leases with a term of more than twelve months

**Effect on Profit & Loss:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA</td>
<td>+103</td>
</tr>
<tr>
<td>./. Depreciation</td>
<td>-95</td>
</tr>
<tr>
<td>EBIT</td>
<td>+8</td>
</tr>
<tr>
<td>./. Interests costs and FX valuation</td>
<td></td>
</tr>
<tr>
<td>EBT</td>
<td>-10</td>
</tr>
</tbody>
</table>

Adjusted EBIT Margin: + 0.1pts

**Effect on Balance Sheet:**

- EBITDA increase by +2,343
- EBIT increase by +2,356
- Financial Liabilities decrease by -113

Equity Ratio: -1.3pts / Leverage: +0.5x

**Impact on Group Adjusted EBIT expected to amount to ca. +25m EUR in full year 2019**
Implementation status

Accounting standards

- IFRS 47
- US GAAP 10

Transition approach

- Modified retrospective 44
- Full retrospective 13

Full year vs interim

- Full year 6
- Interim 51

6
44
Implementation status

**Date of adoption**
- Jan/19: 45
- Jan/18: 5
- Apr/19: 6
- Okt/18: 1

**Disclosed depreciation & interest for ROU assets?**
- Yes: 29
- No: 18
- US GAAP: 10

**Combined OLs and FLs?**
- Yes: 16
- Can't tell: 12
- No: 29
Analysts’ perspective

- Users of financial statements were very comfortable with previous regime:
  - Clear distinction between operating leased and “owned” aircraft
  - Anything that blurs the distinction viewed negatively
- Impacts established KPIs and financial models
- Unimpressed by the material differences between IFRS 16 and ASC 842
- ASC 842 much the preferred approach
- Comparability seriously impacted
- “Could do better” on disclosure
Issues with IFRS 16

- New standards create problems:
  - PV of ROU assets affected by lease duration and discount rate
  - Rent no longer disclosed
  - EBITDA and EBIT increase
  - Material impact on operating cash flow and free cash flow
  - Depreciation and interest on ROU assets often not disclosed
  - ROU assets include all leased assets, not just aircraft
  - Finance lease and operating leases combined under “lease liabilities”
  - Interest component front-loaded
  - Material impact on maintenance cost
  - Impact on airline KPIs
  - Comparability diminished
Airline mindset

IFRS 16 introduces new requirements regarding the accounting of Leases. It introduces significant changes in the accounting of the lessee by eliminating the distinction between an operating lease and financial lease, and requires the recognition of an asset by right of use and a lease liability at the start date of all leases.

IFRS 16 Leases eliminates the current dual accounting model for lessees, which distinguishes between on-balance sheet finance leases and off-balance sheet operating leases.

The new standard brings most leases on-balance sheet for lessees under a single model, eliminating the distinction between operating and finance leases.
The company has updated its definitions considering the adoption of IFRS 16. EBITDA is no longer presented as it is not comparable to previous periods......EBITDAR excludes both depreciation and aircraft lease expenses and [is] hence a more consistent measure for operational performance over time, excluding ownership costs and the most significant changes arising from adoption of IFRS 16.
Finance leases previously capitalised under IAS 17 Leases (‘IAS 17’)) have been reclassified to the right of use asset category under IFRS 16.

Aircraft held under finance lease arrangements previously presented within property, plant and equipment is now presented within the line item right-of-use-assets.
Airfinance Journal coverage

Analysis: IFRS 16- Analysts beware, all is not as it seems

Published 16 Mar 2018  Last Updated 15 Mar 2018 11:58
Tags  Risk  Europe

IFRS 16 implies that the assets are owned and the obligation is finite, but neither is true and the current standard market practice of grossing up annual lease costs, while not perfect, does take account of this. IFRS 16 also implies that as leases approach expiry, the airline’s obligations are declining. This is true in legal form but not in substance. In substance, the airline will have a choice in year eight: to hand back the aircraft, incur no future obligation and cease operations; to replace the five aircraft with new ones; or to extend the existing leases. The first option is clearly not practical, while the other choices show that to continue to operate, the airline will need to renew its obligations. As long as an airline uses operating lease finance and stays in business, it has a perpetual obligation in some form to pay the lease rates.
As of March 31, 2019, the Company leased aircraft, airport facilities, office space, and other property and equipment under non-cancelable operating leases which are generally on a long-term, triple net lease basis pursuant to which the Company pays taxes, maintenance, insurance and certain other operating expenses applicable to the leased property. The Company expects that, in the normal course of business, such operating leases that expire will be renewed or replaced by other leases, or the property may be purchased rather than leased. The following table summarizes future minimum rental payments primarily related to leased aircraft required under operating leases that had initial or remaining non-cancelable lease terms as of March 31, 2019 (in thousands):

Skywest, Inc.
Leverage is perpetual

% of lease commitments > 5 years

Short average lease duration

Long average lease duration

Source: The Airline Analyst and company reports
In addition to the aircraft that we own, we have leases for 332 additional aircraft. Of these leased aircraft, 34 are classified as finance leases, 12 are classified as operating leases and the remaining 286 are classified as short-term leases.

**Lease Costs**

The table below presents certain information related to the lease costs for finance and operating leases during 2018.

<table>
<thead>
<tr>
<th>(in millions)</th>
<th>Year Ended December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance lease cost</strong></td>
<td></td>
</tr>
<tr>
<td>Amortization of leased assets</td>
<td>$100</td>
</tr>
<tr>
<td>Interest of lease liabilities</td>
<td>$22</td>
</tr>
<tr>
<td>Operating lease cost (1)</td>
<td>$994</td>
</tr>
<tr>
<td>Short-term lease cost (1)</td>
<td>$458</td>
</tr>
<tr>
<td>Variable lease cost (1)</td>
<td>$1,427</td>
</tr>
<tr>
<td><strong>Total lease cost</strong></td>
<td>$3,001</td>
</tr>
</tbody>
</table>

(1) Expenses are classified within aircraft rent, landing fees and other rents and regional carriers expense, excluding fuel on the income statement. $150 million, $18 million and $48 million of the operating, short-term and variable lease costs, respectively, are attributable to our regional carriers.
## Non-aircraft leases

### Right of Uses and Lease Liabilities

<table>
<thead>
<tr>
<th></th>
<th>31 Mar 2019</th>
<th>1 Jan 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aircraft and reserve engines</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-of-use assets – aircraft and reserve engines</td>
<td>455</td>
<td>401</td>
</tr>
<tr>
<td>Right-of-use assets – from former finance leases according to IAS 17</td>
<td>550</td>
<td>579</td>
</tr>
<tr>
<td><strong>Property, plant and other equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-of-use assets – land and property</td>
<td>1.869</td>
<td>1.531</td>
</tr>
<tr>
<td>Right-of-use assets – technical equipment</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Right-of-use assets – other equipment, operating and office equipment</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Right-of-use assets – from former finance leases according to IAS 17</td>
<td>87</td>
<td>93</td>
</tr>
<tr>
<td><strong>Total right-of-use assets</strong></td>
<td><strong>2.980</strong></td>
<td><strong>2.623</strong></td>
</tr>
</tbody>
</table>
Comparability

- IFRS 16 vs ASC 842 vs non/later adopters vs prior periods
  - Rent expense
  - Interest/depreciation
  - EBIT/EBITDA
  - Leverage
  - Operating cash flow
- Impact of average lease duration
- Varying discount rates
- Different transition options (full retrospective vs. “catch-up”)
- Front-loading of operating lease interest expense under IFRS 16
- Shift from maintenance expense to depreciation
Due to the adoption of IFRS 16, the Group applied new judgments and estimates regarding the renewal options for the term of lease, early termination options and purchase options that are certain to exercise, as well as the determination of the appropriate discount rate.

- Reasonably certain
- Discount rate
- Depreciable life
Discount rates

Sources: Financial ratings from The Airline Analyst; discount rates from company reports
As from January 1, 2018, the Group put in place a cash flow hedge relationship for its revenues in US dollars via the lease debt in US dollars in order to limit the volatility of the foreign exchange variation resulting from the revaluation of its lease debt. The effective portion of the foreign exchange revaluation of the lease debt in US dollar at the closing rate is recorded in “other comprehensive income”. This amount is recycled in turnover when the hedged item is recognized.

The Group, starting from 1 April 2019, is mitigating these exposures by holding the majority of its cash balances in US Dollar (thus creating a US Dollar monetary asset to naturally offset most of the lease liability) and by entering into Euro/US Dollar FX forward contracts to cover the residual risk. The balance of the forward contracts will be actively managed in the future on a roll-forward basis to cover the estimated future net US Dollar liability.
Fixed charge cover

- Powerful leading indicator of imminent financial distress
- Answers the question: "can they afford to pay their rents and their debt interest?"
- "Near cash"
- Tells far more than EBITDA/interest, misses a class of creditor
- Sized to revenue generation
- Requires EBITDAR, rent (ROU depreciation + interest) + debt interest

\[ \text{Fixed charge cover} = \frac{\text{EBITDAR}}{\text{Net interest + aircraft rent}} \]
Under the accounting standards effective prior to the adoption of IFRS 16, cash flow from operating activities would be lower, mainly due to operational lease payments being included as a negative effect. Under IFRS 16, operational lease payments within the scope of IFRS 16 are reclassified to principal repayments of borrowings and payment of interest included as financing costs paid, both included in cash flows from financing activities. Net effect on change in cash and cash equivalents is zero.
Before adopting IFRS 16, expenses related to heavy maintenance and structural checks performed on aircraft under operating lease were recognized under Maintenance materials and repairs within the Consolidated Statement of Operations. Now such heavy maintenance and structural checks performed on aircraft previously classified as operating leases are capitalized and depreciation of such assets in line with accounting policies applicable to owned aircraft is recognized.

The adoption of IFRS 16 reclassifies maintenance provision charges out of the maintenance line into the depreciation expense.
8. **Supplementary rentals which were earlier classified in 'Aircraft and engine rentals (net)' and Aircraft repair and maintenance (net), Consumption of stores and spares and loose tools and Redelivery and overhaul cost which were earlier classified under 'Other expenses', have now been disclosed as a separate line item ‘Supplementary rentals and aircraft repair and maintenance (net)’ in the above financial results.**
The lease commitments for aircraft are as follows:

<table>
<thead>
<tr>
<th></th>
<th>March 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Unaudited) AED '000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within one year</td>
<td>-</td>
<td>15,178</td>
</tr>
<tr>
<td>Between 2 and 5 years</td>
<td>-</td>
<td>60,713</td>
</tr>
<tr>
<td>Above 5 years</td>
<td>-</td>
<td>2,994</td>
</tr>
<tr>
<td></td>
<td></td>
<td>78,885</td>
</tr>
</tbody>
</table>

The lease debt maturity breaks down as follows:

<table>
<thead>
<tr>
<th></th>
<th>As of December 31, 2018</th>
<th>As of December 31, 2017 restated(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In € millions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y+1</td>
<td>1.236</td>
<td>1.228</td>
</tr>
<tr>
<td>Y+2</td>
<td>1.090</td>
<td>1.157</td>
</tr>
<tr>
<td>Y+3</td>
<td>921</td>
<td>989</td>
</tr>
<tr>
<td>Y+4</td>
<td>744</td>
<td>847</td>
</tr>
<tr>
<td>Y+5</td>
<td>490</td>
<td>677</td>
</tr>
<tr>
<td>Over 5 years</td>
<td>1.124</td>
<td>1.276</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,605</strong></td>
<td><strong>6,174</strong></td>
</tr>
<tr>
<td>Including: Principal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Interest</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Disclosure in theory

- ROU assets separately from other assets
- Lease liabilities separately from other liabilities
- Interest expense on the lease liability shown separately within finance expense
- Depreciation charge for ROU assets by class of underlying asset
- Cash payments for the principal portion of the lease liability within cash flows from financing activities
- Cash payments for the interest portion of the lease liability should be classified applying the requirement in IAS 7
- Total cash outflow for leases
- Annual maturity analysis when acting as lessor; varying bands when lessee
- Exemptions
Disclosure issues

- Many airlines have reported their first IFRS 16 reports in condensed and unaudited quarterly or semi-annual statements
  - Some with few or no notes
  - No maturity analysis
- Operating and finance leases in combined “lease liabilities” category
- Rent no longer disclosed in most cases
- ROU assets include multiple asset classes not just aircraft
- Depreciation and interest not broken down
- Lease payments in cash flow not always disclosed
- Banding of lease commitment maturity profiles
Recommendations for disclosure

- Aircraft operating lease rent
- Weighted average remaining lease term
- Annual bandings of operating lease commitments from 1-5 years
- Discount rate used
- Breakdown of ROU assets and liabilities between finance leased and operating leased
- Breakdown of ROU assets between aircraft/engines, real-estate and other
- Disclose depreciation components related to ROU aircraft assets
- Interest component related to ROU aircraft assets within finance expense
- Disclose payments for operating lease liabilities in financing section of cash flow statement
- Provide notes/breakdowns with interim reports
Conclusions

- IFRS 16 is the biggest accounting change ever to affect the airline industry
- It has introduced comparability issues on three dimensions – with previous periods, with non and late adopters and with US GAAP reporters
- Most of the top airline KPIs are impacted
- A key decision for an analyst to make is whether to use the new asset/liability values which incorporate the effect of lease duration or to continue (or additionally) to use the “rent multiple” approach
- Disclosure to date ranges from excellent to very poor
- Airlines should make an extra effort to provide the investor and creditor community with the financial data they require
Q and A
ASSESSMENT OF FINANCIAL REPORTING UNDER IFRS 16 AND ASC 842

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THE AIRLINE ANALYST