



# New Distribution Capability (NDC)

*Together Let's Build Airline Retailing*

## 2018 Implementation Forum – 3 Meeting Summary

13 – 15 November 2018

### Meeting Venue Information:

IATA Geneva Office,  
33, route de l'Aéroport,  
Geneva Switzerland



## The November 2018 Implementation Forum



- ▼ 58 delegates from 47 organizations
- ▼ 100% satisfaction from the 54% of participants who gave feedback.
- ▼ Participants valued knowing what is happening at the overall program level and experiences migrating from older schema versions.
- ▼ Payment topics, understanding agent implementations, involuntary scenarios and being able to network accounted for over 50% of why people valued the meeting.
- ▼ Anonymized feedback and expectations for future meetings are shared here.
- ▼ **Summary of themes and discussion topics throughout the meeting:**

**Discussion Topics / Future items ....**

- Agent**
  - ▼ Identification
  - ▼ Mid-Back Office experiences
- Schema upgrade**
  - ▼ Recommendations to Imp Guide
- Standard and Technical aspects**
  - ▼ Online Implementation Guide
  - ▼ Payment
  - ▼ Schedule change / Involuntary
  - ▼ Errors
  - ▼ Common Types vs lean schemas
  - ▼ Refining Order statuses

**Discussion Topics / Future items ....**

- POCs**
  - ▼ Payment
  - ▼ Disruption
- Performance**
- Regional Implementation insights**
  - ▼ More updates from new players
  - ▼ Insights from Chinese airlines and agencies
  - ▼ Cross-continent implementation experiences
  - ▼ Greater understanding of regional/local requirements
- ONE Order**
  - ▼ Progress on pilots

**Discussion Topics / Future items ....**

- Hearing more experiences about**
  - ▼ Rich Content
  - ▼ Personalization
- Final NDC Certification**



## Some meeting highlights

- ▼ IATA presented **NDC and ONE Order Program Updates**, reminding participants of the expectations from Corporates to build the momentum and display tangible implementations. And as reflected in the [TMAG letter](#), IATA asked the audience to bear these 4 C's in mind while discussing the details of their implementation in this forum.

Corporate Buyer primary challenges today

- **Content** Improved, rich content, to match brand.com
- **Cost** Greater visibility of fare types & ancillary costs
- **Control** Encourage the traveller back into the chosen channels
- **Customer Experience**
  - Improve overall experience
  - Segment traveller types & personalize their trip

In 2018, the ONE Order program focused on delivery of the ONE Order standard and validating the concept through pilots. Now that the ONE Order schema has been delivered (published in the 18.2 release), certification program is launched to monitor the industry capability – to be in effect from January 2019.

### ONE Order - Program roadmap

- ▼ **Supported by the IATA Board of Governors**
  - ▼ Phase 1 : Standard development (messaging)
  - ▼ Phase 2 : Industry capability & adoption



- ▼ **The Implementation Guide** is moving from the PDF to an online version later this year. This next version will be based on the 18.2 standard and will cover both NDC and ONE Order domains. Delegates look forward to this, while asking for more complex use cases to be demonstrated in the guide.

- ▼ A full end to end explanation and live demo gave insights into the successes and challenges insights from **an IT-centric TMC Implementation** by Travel Planet.



This dynamic presentation highlighted scenarios from shopping, with ancillaries, creating the order, performing a refund and back-office functionality. One important goal for this TMC is to have a customer flow that is consistent across various suppliers.



Specific implementation topics raised include:

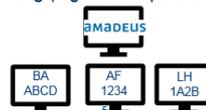
- 1) performing two AirShoppingRQs (in part, to address performance aspects),
- 2) wishing airlines would send a notification when time limits in an order change,
- 3) receiving unclear and un-coded error messages from airlines and
- 4) the need for structured offer and order rules.

TravelPlanet also highlighted the benefit of the standard - new airline integrations now take two to three weeks instead of a few months.

- ▼ IATA updated delegates on the work being done to address **agent identification challenges** in NDC.

### Business Problem – Corporates

- ↓ Due to lacking industry standard, each Airline is forced to apply their individual tracking method for corporate reporting (e.g. OSI, Tourcode, Client Identifier)
- ↓ Corporate can not be recognized by airlines if booking is done via new-entrants (Non-IATA, MSE, OTAs)
- ↓ Implementation of dedicated PCCs per corporate/Non-IATA and/or OBT is cost and resource consuming and not state of the art, managed by the GDSs.
- ↓ Facilitation of Joint-Contracting (e.g. one corporate identifier per contract iso per airline)



For discussion purposes only

Using [TIDS](#), non-IATA agent stakeholders may be identified, using a format consistent with existing IATA numbers. Additional requirements are being drafted to identify parties at another level of granularity and tools to support onboarding. Delegates expressed the urgent need for an industry solution.

- ▼ Delegates got the opportunity to have an **overview of new functionality** introduced from 18.1 to 19.1, presented by IATA.

Over half of the audience had implemented pre-17.2 schema versions and considering their migration path. The group benefited from the experiences of a **15.2 schema migration journey** from Datalex who gave a message by message overview of the schema differences and considerations for each. The presentation included recommendations and other general observations for those planning their upgrade from earlier versions of the schema. Some felt this was important to make available to a wider audience.



- ▼ The zoom into **Involuntary Changes** included a walkthrough of the scenarios documented in the current Implementation Guide. Agent participants reiterated their role of taking care of their customers, informing them of changes that impact their orders, (may involve non-air). One contributor also cautioned the group not

to see the OrderChangeNotification message as a tool to synchronize orders. In the current schema, the OrderRetrieve and OrderHistory APIs provide a mechanism to allow the seller to get the latest version of the order.

Following discussions in previous Implementation Forums, a subgroup of the Orders group is taking a deeper look at involuntary scenarios. The initial priority of this group is schedule change scenarios, although there are potentially other



**Use Cases**

- CR-133 raised
- Where applicable the options accept, change and cancel will be reviewed
- Scenarios:
  - **Schedule Change** (Timing Change, Flight Number Change, Aircraft Change - customer not downgraded, Aircraft Change - customer downgraded, with ancillaries)
  - **Planned Cancellation** (Customers with and without proactive reaccommodation, Flight wet-leased, with ancillaries)
  - **Book away on BA**
  - **Operational changes – Flight Cancellation** (Customers with and without proactive reaccommodation)
  - **Delay**

reasons a seller may wish to be notified by the airline.

British Airways presented their **Disruption POC** with their partner Expedia, looking at delivery, content and process aspects to ensure the best customer experience. Feedback of this work will be input to the ongoing work in the Orders group.

- ▶ SAS, one of the 21 leaderboard airlines, shared their **NDC implementation approach** with their implementation partner, Datalex. With NDC, they look forward to providing an enhanced customer experience through enhanced retail capabilities, personalized content and offers. They will open their new distribution channel with booking and servicing capabilities in the 1<sup>st</sup> phase. Then build the capabilities to enhance offers in the 2<sup>nd</sup> phase. So far, SAS is working through challenges in the areas of payment and identification of agents and aggregators. SAS NDC implementation is based on the 18.1 schema.

- ▶ IATA gave a detailed outline of the changes to the **NDC Certification Program**. These changes will strengthen NDC certification by introducing elements that focus on servicing scenarios as well as the overall ability to support a large volume of NDC sales across the industry.



All updated and new certification applications are planned to be active as of March 1, 2019

**March 2019**

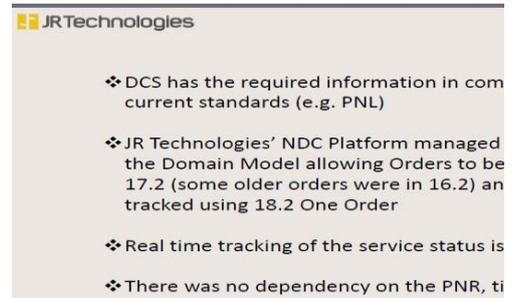
- Begin NDC@Scale certification
- Begin Level 4 certification
- No certification on level 1; renewals based on schema version validity
- No certification or renewal on schema versions 1.1.3 – 17.1 accepted
- Remove all XML-Capable entities from the NDC Registry

To strengthen servicing in NDC Certification, Level 4 will be added with four servicing messages: OrderChangeRQ, OrderChangeNotif and OrderReshopRQ OrderReshopRS. The certification period of a schema version will be 24 months from the release. The validity period of a schema version will be 36 months from the release. NDC Certification per entity will continue to be valid for 1 year. Details

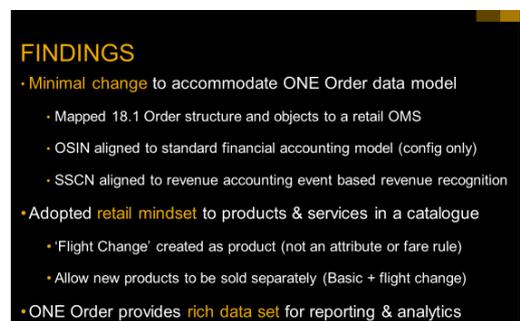
of the certification program are available online, along with a publication of the results of the industry survey used to create the criteria in the [NDC@Scale: Roadmap to Critical Mass](#).

- There were 2 **ONE Order Pilots** presentations - JRT and SAP. These pilots brought ONE Order to life, implementing end to end flows based on the Order concepts and flows (no ETKs or EMDs).

The JRT Pilot with InselAir demonstrated an NDC/OO end to end scenario with lessons primarily from tracking the service delivery.



The SAP pilot included several end to end scenarios as well from shopping to booking to delivery and accounting including use cases around voluntary/involuntary changes. These flows were presented to the audience via a live demo including the various systems used in this implementation (including SAP Commerce and SAP Customer Financial Management).

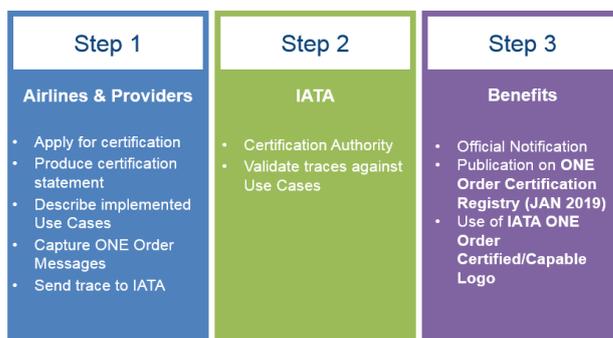


Various findings and feedback were shared by both pilots, nevertheless one common point was around the status of the Services as is defined today. There is a need for improvement and further clarity in the implementation guidelines

The feedback from the ONE Order pilots will contribute to the evolution of the standard.

- IATA also presented the **ONE Order Certification Program** for IT Providers and Airlines. This certification aims to identify and recognize the ability for players to manage Orders in Delivery and Accounting processes using the ONE Order

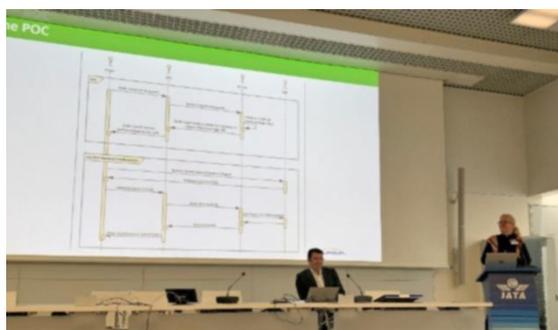
### ONE Order Certification - Process



schema and flows. A high level introduction to the program is available in the [ONE Order Certification Program Overview](#). The program will be open to receive applications as of 7 January 2019.



- Maureva presented the progress of their **payment redirection proof of concept (POC)**. This POC was first shared with implementers at the last meeting in Madrid and involves interaction with players outside the NDC standard scope. The players



are Air Austral, Ingenico (PSP) and Air Austral's Travel Agent Portal developed by Maureva. In the POC, the customer is redirected to Ingenico's hosted page to enter their payment details. The Airline's merchant ID is used for the transaction.

The POC was delivered using 17.2 and demonstrates a way for airlines to expand their accepted payment methods – i.e. any payment method accepted by the PSP may be made available in the NDC interaction. Scenarios such as 3DS are also handled by the PSP.

The requirement gaps and best practices are being shared with the Orders group. The next phase will include various alternate flows, e.g. changes in price based on the FOP selected, handling errors handling etc.

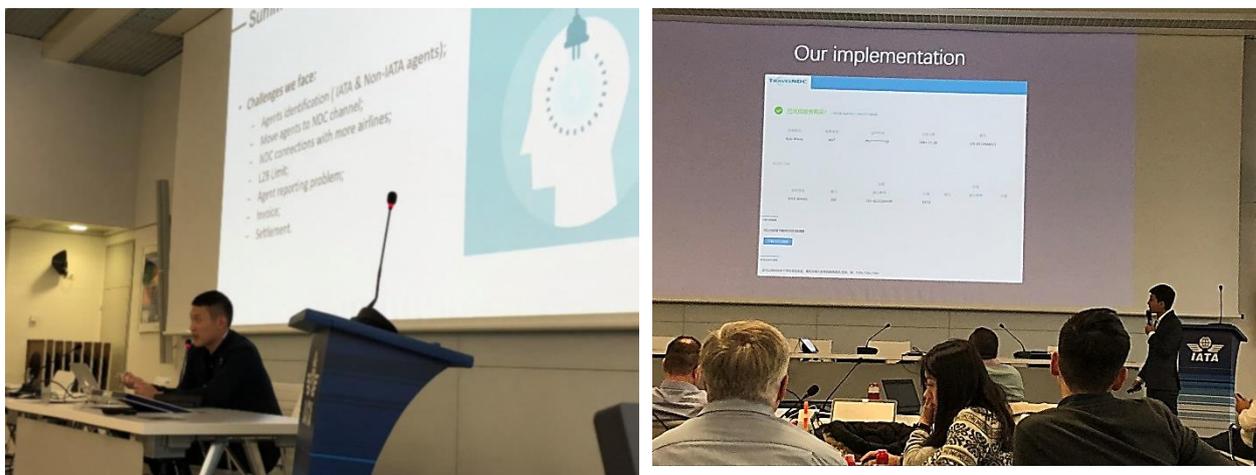
- For the first time in the Implementation Forums this year, there was a focus on a specific market. Delegates had an opportunity to hear about the **NDC landscape in China** and a bit of Asia Pacific. To start the session, IATA expanded on the NDC In-focus paper [NDC Distribution in China](#). Implementing NDC in China requires taking into account market considerations such as mobile payment and views on unbundling. Further there are not many low cost carriers as is common in other regions. These factors require a different approach for players implementing NDC in this market.

## Chinese NDC Airlines

NDC-certified Airlines (as of 2017)	Code	TOTAL PAX (M)	% tot pax carried	NDC Level
China Southern Airlines	CZ	126	3%	3
China Eastern Airlines	MU	111	2.7%	3
Air China	CA	102	2.5%	3
Hainan Airlines	HU	71.7	1.75%	3
Cathay Pacific (Dragon)	CX	34.8	0.8%	3
Xiamen Airlines	MF	32.7	0.79%	3
Shenzhen Airlines	ZH	32	0.78%	3
Sichuan Airlines	3U	25	0.6%	3
Shandong Airlines	SC	23.5	0.57%	3
Hong Kong Airlines	HX	6	0.15%	3



PKFare and TravelNDC are two startups that shared their experiences doing NDC aggregation in the Asia Pacific and China markets.



- PKFare plays an aggregator role, presenting NDC and non-NDC content to their agent clients. They can also play what they refer to as a "SuperAgent" role.

Their demo showed shopping with ancillaries to booking with Finnair. Agent identification and dealing with look to book restrictions imposed by airlines are among the challenges raised by PKFare.

PKFare has implemented with Finnair, American Airlines, Emirates and others.

- TravelNDC has implemented on the 17.2 standard, yet connects to airlines and agents based on the schema version of their partners. Their British Airways implementation is based on the 16.1 schema and TravelNDC takes care of the translation.

TravelNDC shared a demo of the workflow and provided additional insight on China. The payment method of choice by agents (including corporate agents) is mobile. There also shared about the China-specific requirements for VAT on invoices for corporates, though this is not unique to NDC.

- ▶ IATA commissioned a consultant to interview a number of airlines, agencies and distribution providers in China to conduct an extensive research tour in March 2018. This report is available in the [NDC Distribution in China](#) (pdf) NDC InFocus paper. Participants may also listen to a replay of the NDC InFocus webinar held on this topic.

The screenshot shows the NDC InFocus website interface. At the top, there is a navigation menu with 'ABOUT', 'INFO' (highlighted with a red circle), 'LEADERBOARD', 'STANDARD', 'PLAYERS', and 'CERTIFICATION'. Below the navigation is a header section with the text 'Broaden your knowledge' and a link to 'sign up for the NDC Hub e-newsletter'. A section titled 'NDC InFocus documents' lists several PDF documents, with 'NDC Distribution in China (pdf)' highlighted by a red circle. On the right side, there is an 'Advertisement' section showing '530K visitors/month' and '2.2M page views/month'. Below that is a 'NEW NDC White Paper' section for 'NDC@Scale: Roadmap to Critical Mass (pdf)'. Further down is a 'Related Links' section with a link 'Let's talk NDC Join NDC InFocus Webinars' highlighted by a red circle. At the bottom right, there is an 'Events' section for 'AIR Hackathon'.

## Participant Feedback

- What was valuable to participants and what are they interested in seeing in the Implementation Forums in 2019? **Click on the images below for more.**



- breakout session for those involved in the **coding of NDC** to discuss issues and ask questions of schema developers
- "More **ancillary implementation**
- More **ONE Order** implementation "
- Short, **in-depth technical** discussions. The various level of technical knowledge of the participants make it hard to have in-depth discussions on certain aspects of the standard.
- I'd like to hear updates from the topics discussed in previous Implementation Forums
- "Updates on the ongoing **POCs** and implementation projects.
- Maybe we could have presentations from **hackathon outcomes** as they are also implementers ?"
- Perhaps a presentation from someone who achieves Level 4 or 4+ certification.
- more agents/TMCs**
- "- **More live demos** and/or **ONE Order pilots**
- "Future pitches"" where innovations (triggered by NDC) can be presented (if existent)"
- More agent feedback**
- More time for **ONE Order pilots** and showing live demos. Bring it to life as the next major initiative
- Presentations (including mine ;) ) should be more dynamic. Questions should be asked continuously.
- "NDC in USA market (ARC)
- Airline solutions for the **agent identification**
- More **ONE Order** presentations of certified airlines
- NDLink** - how it works now and in the future"
- Not only NDC message transaction, but also what kind of system for each company internally .
- More Agency Implementation Demos.**
- More **POCs and Demos** (or a follow up on the ones presented).

## Wrapup and next steps

Discussion Topics / Future items ....	Discussion Topics / Future items ....	Discussion Topics / Future items ....
<b>Agent</b> <ul style="list-style-type: none"> <li>Identification</li> <li>Mid-Back Office experiences</li> </ul> <b>Schema upgrade</b> <ul style="list-style-type: none"> <li>Recommendations to Imp Guide</li> </ul> <b>Standard and Technical aspects</b> <ul style="list-style-type: none"> <li>Online Implementation Guide</li> <li>Payment</li> <li>Schedule change / Involuntary</li> <li>Errors</li> <li>Common Types vs lean schemas</li> <li>Refining Order statuses</li> </ul>	<b>POCs</b> <ul style="list-style-type: none"> <li>Payment</li> <li>Disruption</li> </ul> <b>Performance</b> <ul style="list-style-type: none"> <li>Regional Implementation insights                             <ul style="list-style-type: none"> <li>More updates from new players</li> <li>Insights from Chinese airlines and agencies</li> <li>Cross-continent implementation experiences</li> <li>Greater understanding of regional/local requirements</li> </ul> </li> </ul> <b>ONE Order</b> <ul style="list-style-type: none"> <li>Progress on pilots</li> </ul>	<b>Hearing more experiences about</b> <ul style="list-style-type: none"> <li>Rich Content</li> <li>Personalization</li> </ul> <b>Final NDC Certification</b>

### Some next steps

- Agent identification challenges:** Detailed requirements are being drafted, to be submitted to the Shop Order Board in January 2019.
- 15.2 Schema migration:** Submit recommendations for those looking to upgrade schema versions to the groups taking care of the Implementation guide.
- ONE Order pilot input:** Share feedback to refine the standards (including implementing Order statuses).



- **Maureva Payment POC findings:** Share feedback into the payment subgroup (19 November Amsterdam meeting) and ongoing.
- **Disruption POC findings:** Input into the group taking care of involuntary changes.
- **Receive updates from groups working on pain points**
  - Streamlining error handling
  - Feedback on common Types vs lean schemas
- **Performance:** Participants are asked to bring concrete data points to the table to progress on this. Email [ndc@iata.org](mailto:ndc@iata.org) to let us know.

~ end ~

