NDC InFocus



Highlights of <u>17.2</u> and what to <u>expect</u> until <u>19.1</u>

WHY IS 17.2 IMPORTANT?

NDC 17.2 has been cited by the industry as providing the stability required in order to move forward with industrialization and mass adoption of the standard. This *InFocus* will help you understand the key enhancements in this baseline and the journey to the next anticipated NDC baseline.

ZOOM INTO 17.2

The 17.2 release reflects the **structural enhancements that support robust retailing capabilities**.

It completes the changes that began in 17.1 to align the Offer and Order structures in the NDC schemas to support a consistent interpretation of the standard by software developers. On top of the changes made in 17.1, there are: enhancements to Shopping, Seats and Order Servicing capabilities, the first data structures derived from a new Airline Industry Data Model (AIDM), removal or renaming of messages and additional schema enhancements and technical cleanup items.

Taking each of these in turn below:

Enhancements to Shopping, Seats and Order Servicing Capabilities

The structures of Offers and Orders are now simplified and consistent across all the core messages. This helps the industry converge towards one interpretation of the standards.

Shopping

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▶ The OfferPriceRQ/RS message pair now provides an efficient way to compound Offers into a "shopping basket". The airline can easily reassess and reprice what has been selected by the passenger so far in the shopping flow, while maintaining the ability to keep up-selling. In the shopping flow, this is especially useful as a "final-check" step prior to moving to OrderCreateRQ.

The notion of an "A-La-Carte Offer" has been introduced primarily to reduce the size of shopping messages. This also facilitates the distribution of catalogue-style ancillary services, including those that are not necessarily delivered in-flight, e.g. lounge pass. A more efficient way to communicate the baggage allowance per passenger and segment.

Seat sale and selection

▹ There are big improvements to the way seat maps are returned and a redesign of the flow of seat selection by passengers. Seat maps have been restructured and are returned in the dedicated Seat Availability messages. This eliminates the message-size and performance issues that implementers would have experienced before. The seat messages also allow per-seat pricing and up-selling of seats. This means that multiple cabin types can be returned per flight and individual seat characteristics can be defined.

Order Servicing

• Order Servicing is redesigned with the Order-Reshop messages to allow a customer to make any changes to an Order (e.g. adding ancillaries post-booking, cancellations, refunds, etc.) and to get a simulation of the intended action on an Order. This simulation is returned by an airline in the form of Offers, which the traveler may subsequently accept using an OrderChange request. This simulate-and-confirm model allows the Seller to have full visibility of the consequences of any changes (including incurred additional costs) and to help its clients to make more informed decisions.

► Further, there are now simplified and explicit operations in servicing messages. This is much closer to today's API best practices, leveraging data manipulation concepts like Create/Delete/Update operations against the Order(s) intended to be serviced.

Additional change requests processed in this release. There is now the ability for travelers to specify the reason to change or cancel their Order. The airline has the opportunity to use this context when making new offers. This release also allows the seller to set a flag to indicate that a passenger intentionally refuses to provide their contact information.

The first changes introduced by the Airline Industry Data Model

The initial view of schema objects automatically generated from the Airline Industry Data Model (AIDM) was introduced in 17.1 and refined in 17.2. This is limited to the passenger domain and was in scope of the pilot phase of the wider project to align NDC to the AIDM.

Removal and renaming of messages

A total of 12 messages were decommissioned - 7 ticketing messages, 4 shopping messages and 1 Order message. The ticketing messages removed covered Exchange, Refund, Void and Cancel functionality and reflects that the decision for these actions in NDC is made by the airline. Ticket-level changes are now triggered by actions made against an NDC Order, placing more emphasis on NDC principles and Order Management Systems.

An additional 5 messages were removed since their functions were duplicated in other messages. These are ShopProductRQ/RS, ServicePriceRQ/RS and OrderHistoryNotif.

Four messages were renamed to better reflect the Offer and Order context - FlightPrice→OfferPrice; ItinReshop→OrderReshop

Other schema enhancements and technical cleanup items: including payment functionality such as preferences for refund forms of payment and consistency in core payment common types, new Offer and Order error codes, cleanup of un-used data elements, airline Profile schema changes to allow an airline to provide information about the technical coverage of their NDC implementation.

INDUSTRY STATE OF PLAY

The industry has quickly seized the opportunity to take advantage of the enhancements in NDC 17.2, with IATA already certifying 23 organizations 7 months after its September 2017 release. This is the most popular schema version for airlines, and IATA confirms this trend with the upcoming certifications in progress. **See below figure**

▶▶▶► ROADMAP TO 19.1

The NDC 18.1 contains many of the changes incurred from the alignment to the AIDM, and the full set of changes from this exercise will be completed by 18.2 forecasted for release in Q3 2018. This largely means different data element names and concepts to adhere to the AIDM guidelines rather than any fundamental redesign of the schemas and the way they function. Therefore, anyone designing their implementations on NDC 17.2 will not need to redesign processes and application logic. Instead the focus will be on re-mapping data elements.

InFocus: References

- ▶ <u>The NDC Schema Description</u>: Download the schemas, access the 17.2 release notes
- ▶ <u>Implementation Guide</u>: Support documentation to help you initiate your NDC project including sample instances to demonstrate some of the use cases in the guide.

► <u>Airline Industry Data Model (AIDM)</u>: An Overview of the AIDM Benefits, Status and links to other AIDM resources.

