

SIA NDC Updates

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Release of Altea NDC Version 21.3 for Singapore Airlines

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Updates to SIA NDC Functionality

The following improvements are now available through the SIA NDC connection for usage by partners:

1. Removing Free and Unpaid Services Post Booking
2. Add, Remove or Update Order Elements (21.3 Only)
 - a. Regulatory Information
 - b. Contact Information
 - c. Frequent Flyer Information

Release of Altea NDC Version 21.3 for Singapore Airlines

Introduction

IATA plans for releases to add, remove or update airline industry messaging standards 4 times a year. This includes the Enhanced and Simplified Distribution standards which covers the NDC messages.

As part of the industry's ongoing efforts to modernize the distribution ecosystem, airlines (including Singapore Airlines) have been working with IATA and other stakeholders to release incremental improvements to the NDC messages.

Much of these improvements have been concentrated in the 3rd release of 2021 (21.3) with the goal of providing the industry a robust version which could be commonly adopted by airlines, sellers and their associated IT providers.

Whilst there are still on-going patches which may be released by IATA, Singapore Airlines is pleased to share that partners may now choose to integrate with the new version 21.3 API instead of our existing version 18.1 API.

Iso-functional Deployment of version 21.3

A key principal of the version 21.3 release is that it should be iso-functional to our existing version 18.1. This principal ensures that for both new and existing partners, there should be little to no degradation/regression of NDC capability when choosing to use version 21.3 instead of version 18.1.

This iso-functional release covers the list of transactional flows which Singapore Airlines uses to certify our NDC partners – including but not limited to (i) shopping, pricing and booking (ii) exchanges and refunds (iii) ancillaries, across a variety of origin/destination, trip types and passenger types.

As a result, existing partners already certified on 18.1 should find the certification process for 21.3 to be relatively familiar, whilst new partners integrating directly on 21.3 will have a foundational set of capabilities which are critical for the immediate deployment and usage of NDC.

New Functionality on 21.3 in 2024

The upgrade to version 21.3 was designed to allow airlines and sellers to implement and develop additional capabilities to ensure the continued growth and evolution of the NDC channel. Whilst our current implementation is designed to be iso-functional with version 18.1, we will be releasing over the course of 2024 new functionality available only on version 21.3 in order to ensure that Singapore Airlines NDC continually improves to meet the needs of our distribution partners.

Our partners can look forward to the following non-exhaustive list of capabilities in version 21.3:

1. Shopping for itineraries with stopover
2. Add/Update Order Elements
 - a. Contact information
 - b. APIS/DOCS/DOCA
3. Add/Update shopping parameters
4. Waitlist

With more functionalities to come

Migration Considerations

We acknowledge that our NDC partners may have different approaches for how they believe the migration from version 18.1 to version 21.3 may be best managed. Singapore Airlines does not mandate fixed approach to how the migration is executed technically, so long as business continuity is preserved, and sellers and passengers continue to be able to perform their regular actions.

As such, we do have some recommendations/considerations for our NDC partners:

1. Minimize mixing of versions
2. When mixing versions, do so with a logical separation of transactions
 - a. For example: Performing prime booking in 18.1 and post-sale actions in 21.3
3. Remember to consider the impact on new transactions and existing Orders
 - a. Even if a big bang version upgrade is planned, there will be existing Orders already created using version 18.1 which may need to be managed

Migration Process

Regardless of the migration plan which each partner develops, it is likely to be a complex process requiring co-ordination and effort from both SQ and our partners. As such, if you are interested to embark on integrating and migrating to version 21.3, please reach out to your SQ leads to express your interest.

Like the integration process for version 18.1, SQ will provide interested partners with a sample SoapUI package which provide examples of the transaction flows on version 21.3. Partners will be able to use their existing Altea PDT credentials to test both version 18.1 and version 21.3 immediately.

Concurrently, partners should provide an overview of their plans to upgrade from version 21.3. This overview should ideally cover their proposed approach to deploy the version 21.3 API as well as the corresponding timeline/phases. Both SQ and the partner can then collaboratively review for any concerns/challenges and work to resolve them.

As with version 18.1, our NDC partners are reminded that for all implementation changes (including the upgrade from 18.1 to 21.3), a robust testing and verification process should be carried out to ensure changes function as intended. When a proposed migration approach is provided by the partner SQ will then require the partner to execute the relevant test case scenarios and provide these supporting materials prior to certification.

Note: For clarifications and issues which are sent to Singapore Airlines, in addition to the usual details required, please also state the version(s) impacted.

Notable Implementation Changes

This section serves to highlight notable implementation changes for iso-functional capabilities which were already present in version 18.1 and are implemented differently in version 21.3.

For new capabilities available only on version 21.3, details will be communicated separately when the capabilities are available.

For further information about the version 21.3 APIs, please refer to the implementation guides and or reach out to your respective implementation leads.

Seller Identification

With the migration to version 21.3, the information used to identify a Seller in each request message has changed. Seller Identification is a critical aspect for the accurate processing of NDC transactions.

Before:

```
<Party>
  <Participant>
    <Aggregator>
      <AggregatorID>IBE</AggregatorID>
    </Aggregator>
  </Participant>
  <Recipient>
    <ORA>
      <AirlineDesigCode>SQ</AirlineDesigCode>
    </ORA>
  </Recipient>
  <Sender>
    <TravelAgency>
      <AgencyID>32393340</AgencyID>
      <IATA_Number>32393340</IATA_Number>
    </TravelAgency>
  </Sender>
</Party>
<PayloadAttributes>
  <VersionNumber>18.1</VersionNumber>
</PayloadAttributes>
<PointOfSale>
  <Country>
    <CountryCode>SG</CountryCode>
  </Country>
</PointOfSale>
```

After:

```
<DistributionChain>
  <DistributionChainLink>
    <Ordinal>1</Ordinal>
    <OrgRole>Seller</OrgRole>
    <ParticipatingOrg>
      <OrgID>32393340</OrgID>
    </ParticipatingOrg>
  </DistributionChainLink>
  <DistributionChainLink>
    <Ordinal>2</Ordinal>
    <OrgRole>Distributor</OrgRole>
    <ParticipatingOrg>
      <OrgID>IBE</OrgID>
    </ParticipatingOrg>
  </DistributionChainLink>
  <DistributionChainLink>
    <Ordinal>3</Ordinal>
    <OrgRole>Carrier</OrgRole>
    <ParticipatingOrg>
      <OrgID>SQ</OrgID>
    </ParticipatingOrg>
  </DistributionChainLink>
</DistributionChain>
<PayloadAttributes>
  <VersionNumber>21.3</VersionNumber>
</PayloadAttributes>
<POS>
  <Country>
```

```
<CountryCode>HK</CountryCode>
</Country>
</POS>
```

Product and Fare Description, Rules, and Information

With the migration to version 21.3, the format of the information returned regarding fare product as well as the associated descriptions, rules and disclaimers has been modified to meet the new IATA standard.

Partners are advised to pay specific attention to the following relevant sections:

1. <PriceClassList> in both versions 18.1 and 21.3
2. <PenaltyList> in version 18.1 and <CancelRestrictions> and <ChangeRestrictions> in version 21.3

IDs and References

General reminder

Partners are reminded that unless explicitly stated, they are not to make assumptions on the format of the various IDs used in the NDC messages such as <OfferID>, <OfferItemID> etc. This is a general principle in both version 18.1 and version 21.3

OrderID

The format of the OrderID returned by Altea NDC changes from version 18.1 to version 21.3 as a result of a new IATA resolution defining a general structure for OrderIDs.

Before:

```
<OrderID>SQ_RECLOC</OrderID>
```

After:

```
<OrderID>SQ618RECLOC00</OrderID>
```

However, our SQ NDC API will recognize any OrderID *in the format that it was created*.

For example: For a booking created using OrderCreate 18.1 API, our system may return an OrderID “SQ_A1B2C3”, this OrderID may then be used to retrieve an Order in both 18.1 and 21.3 versions without any modifications by partners to fit the new OrderID format. Similarly, or bookings created with OrderCreate 21.3 API, our system will return an OrderID such as “SQ618RECLOC00” and this may also be used without any modification in version 18.1.

Change in Rebooking Process

In the SQ NDC 21.3 APIs, in cases where rebooking of flights is done without payment, the rebooking will be managed via a two-step process:

1. Add new flights to the booking (without removing the old itinerary)
2. Remove unwanted flights from the booking

Each step is triggered by a separate OrderChange message. This two-step process allows travel sellers to be able to book the alternative for a passenger without cancelling the original itinerary for a short period.

When the passenger has confirmed they wish to proceed with the change, the old itinerary may be removed as a second step. However, if the passenger decides not to proceed with the change, the new flights may be removed without impacting the previously booked itinerary.

This new process will be automatically triggered when the version 21.3 API is used.

Removal of ActionContextCode in OrderChange

The version 21.3 schema supports the easier identification of the type of transaction being requested by the Seller via different nodes within <ChangeOrderChoice>, as such the usage of specific text keys within <ActionContextCode> which was required in version 18.1 is no longer required.

Before:

```
<ActionContextCode>UPDATE_PRICE</ActionContextCode>
```

After:

```
<ChangeOrderChoice>  
  <AcceptRepricedOrder>  
    <OfferRefID>SAMPLE_OFFER_ID</OfferRefID>  
  </AcceptRepricedOrder>  
</ChangeOrderChoice>
```

New OrderQuote message

In version 21.3, IATA has published a new NDC message OrderQuote which serves as a pricing step in the context of an Order, which is analogous to OfferPrice in the prime booking flow.

Whilst the message is new, the concept should already be familiar to most partners integrated in version 18.1 due to the OrderReshop (Shop) and OrderReshop (Price) steps which already exist currently. OrderQuote replaces the OrderReshop (Price) step which was previously executed via the OrderReshop message.

Updates to SIA NDC Functionality

1. Removing Free and Unpaid Services Post Booking

SQ NDC has released an enhancement to OrderChange to provide sellers with the flexibility to remove any free and/or unpaid ancillaries and services which they previously booked but no longer require, including seats, baggage, meals, MAAS and WCHR. The deletion of paid services will not be supported as part of this enhancement.

To utilize this functionality, partners should first perform OrderRetrieve before specifying in OrderChange the OrderItemRefID of the ancillary or service that they would like to remove.

Note:

For multi-passenger bookings, due to current system settings, seats that are booked together in one request will be bundled and created as one service. As the partial deletion of services is not supported, sellers will only be able to delete none or all the seats selected together for the flight segment.

For example:

- 1. Seller creates an unpaid order for SIN-SYD-SIN for 2 passengers*
- 2. Seller books 1 free seat and 1 chargeable seat for SIN-SYD -> 1st SSR created*
- 3. Seller books 2 free seats for SYD-SIN -> 2nd SSR created*

For both SSRs, the seller will have to delete both seats in the same SSR together – attempting to delete only 1 of the seats will return an error.

Alternatively, sellers may choose to book one seat each time in separate requests. This will lead to separate SSRs being created and allow for the deletion of individual seats subsequently.

Feature Availability:

Available in test and production systems

Action for Partners:

Partners who wish to permit Travel Sellers to make use of this functionality should review their implementation and make changes as required, particularly in their OrderChange flow to allow the seller to specify the ancillary or service to be removed.

2. Add, Remove or Update Order Elements (21.3 Only)

SQ NDC has released an enhancement to OrderChange to provide sellers with the flexibility to add, update or remove various informational Order elements. These include: Information required for regulatory purposes, contact information and frequent flyer information.

These changes may be made by calling directly OrderChange, specifying the passenger(s) whose details are to be updated, as well as the new details which will completely replace the old ones.

Feature Availability:

Available in test and production systems

Action for Partners:

Partners who wish to permit Travel Sellers to make use of this functionality should review their implementation and make changes as required, particularly in their OrderChange flow to allow the seller to specify the ancillary or service to be removed.