



**OpenJaw**

A TravelSky Company

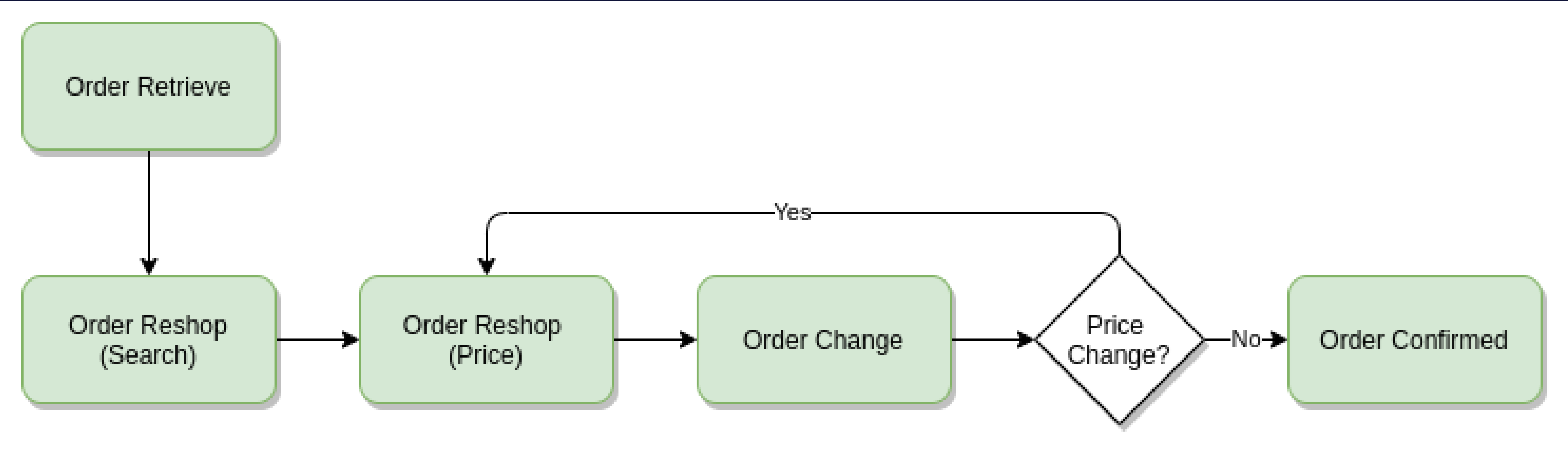
# NDC Implementers Forum – Jan 2020

## Voluntary Servicing Overview

# Scenarios Supported

- Partial Cancel
- Full Cancel
- Add/Remove/Modify Ancillaries/Seats
- Full Flight Date Change
- Partial Flight Date Change

# Flight Only Servicing Flow



# Example Partial Date Change

In this scenario we will show how a booking can have a date changed on a single bound for a subset of passengers in a booking.

We will utilise the retain service function in the Offer in order to identify which segments we want to keep vs the ones we want to replace.

## Initial Booking

2 Adult Passengers

Return Trip HKG <-> DUB

Outbound Date 01-June-2020

Inbound Date 07-June-2020

## Target State

2 Adult Passengers

Return Trip HKG <-> DUB

Outbound Date 01-June-2020

ADT-1 Inbound Date 07-June-2020

ADT-2 Inbound Date 08-June-2020

# Example Partial Date Change

## Step 1 Order Retrieve RQ

```
<IATA_OrderRetrieveRQ>
  <Request>
    <OrderFilterCriteria>
      <Order>
        <OrderID>0J205UCCJG7KP</OrderID>
        <OwnerCode>0J</OwnerCode>
      </Order>
    </OrderFilterCriteria>
  </Request>
</IATA_OrderRetrieveRQ>
```

# Example Partial Date Change

## Step 1 Order Retrieve RS

```
<!-- ... -->
<ndc:OriginDestList>
  <ndc:OriginDest>
    <ndc:DestCode>HKG</ndc:DestCode>
    <ndc:OriginCode>DUB</ndc:OriginCode>
    <ndc:OriginDestID>OD-1</ndc:OriginDestID>
    <ndc:PaxJourneyRefID>JOU-1</ndc:PaxJourneyRefID>
  </ndc:OriginDest>
  <ndc:OriginDest>
    <ndc:DestCode>DUB</ndc:DestCode>
    <ndc:OriginCode>HKG</ndc:OriginCode>
    <ndc:OriginDestID>OD-2</ndc:OriginDestID>
    <ndc:PaxJourneyRefID>JOU-2</ndc:PaxJourneyRefID>
  </ndc:OriginDest>
</ndc:OriginDestList>
<ndc:PaxList>
  <ndc:Pax>
    <!-- passenger info -->
    <ndc:PaxID>ADT-1</ndc:PaxID>
    <ndc:PTC>ADT</ndc:PTC>
  </ndc:Pax>
  <ndc:Pax>
    <!-- passenger info -->
    <ndc:PaxID>ADT-2</ndc:PaxID>
    <ndc:PTC>ADT</ndc:PTC>
  </ndc:Pax>
</ndc:PaxList>
```

# Example Partial Date Change

## Step 1 Order Retrieve RS

```
<ndc:PaxSegmentList>
  <ndc:PaxSegment>
    <ndc:Arrival>
      <ndc:AircraftScheduledDateTime>2020-06-01T08:00:00.000</ndc:AircraftScheduledDateTime>
      <ndc:IATALocationCode>DUB</ndc:IATALocationCode>
      <ndc:TerminalName>1</ndc:TerminalName>
    </ndc:Arrival>
    <ndc:Dep>
      <ndc:AircraftScheduledDateTime>2020-06-01T02:40:00.000</ndc:AircraftScheduledDateTime>
      <ndc:IATALocationCode>HKG</ndc:IATALocationCode>
      <ndc:TerminalName>3</ndc:TerminalName>
    </ndc:Dep>
    <ndc:Duration>PT8H20M</ndc:Duration>
    <ndc:PaxSegmentID>SEG-1</ndc:PaxSegmentID>
  </ndc:PaxSegment>
  <ndc:PaxSegment>
    <ndc:Arrival>
      <ndc:AircraftScheduledDateTime>2020-06-07T08:00:00.000</ndc:AircraftScheduledDateTime>
      <ndc:IATALocationCode>HKG</ndc:IATALocationCode>
      <ndc:TerminalName>1</ndc:TerminalName>
    </ndc:Arrival>
    <ndc:Dep>
      <ndc:AircraftScheduledDateTime>2020-06-07T02:40:00.000</ndc:AircraftScheduledDateTime>
      <ndc:IATALocationCode>DUB</ndc:IATALocationCode>
      <ndc:TerminalName>3</ndc:TerminalName>
    </ndc:Dep>
    <ndc:Duration>PT8H20M</ndc:Duration>
    <ndc:PaxSegmentID>SEG-2</ndc:PaxSegmentID>
  </ndc:PaxSegment>
</ndc:PaxSegmentList>
```

# Example Partial Date Change

## Step 1 Order Retrieve RS

```
<Order>
  <BookingRef>
    <BookingID>AYG9SX</BookingID>
    <BookingRefTypeCode>P</BookingRefTypeCode>
  </BookingRef>
  <OrderID>OJ205UCCJG7KP</OrderID>
  <OrderItem>
    <!-- ... -->
    <OrderItemID>OI-1000</OrderItemID>
    <!-- ... -->
    <Service> [6 lines]
    <Service> [6 lines]
    <Service> [6 lines]
    <Service> [6 lines]
    <!-- ... -->
  </OrderItem>
</Order>
```

```
<ndc:Service>
  <ndc:PaxRefID>ADT-1</ndc:PaxRefID>
  <ndc:ServiceAssociations>
    <ndc:PaxSegmentRefID>SEG-1</ndc:PaxSegmentRefID>
  </ndc:ServiceAssociations>
  <ndc:ServiceID>SERV-1</ndc:ServiceID>
</ndc:Service>
<ndc:Service>
  <ndc:PaxRefID>ADT-2</ndc:PaxRefID>
  <ndc:ServiceAssociations>
    <ndc:PaxSegmentRefID>SEG-1</ndc:PaxSegmentRefID>
  </ndc:ServiceAssociations>
  <ndc:ServiceID>SERV-2</ndc:ServiceID>
</ndc:Service>
<ndc:Service>
  <ndc:PaxRefID>ADT-1</ndc:PaxRefID>
  <ndc:ServiceAssociations>
    <ndc:PaxSegmentRefID>SEG-2</ndc:PaxSegmentRefID>
  </ndc:ServiceAssociations>
  <ndc:ServiceID>SERV-3</ndc:ServiceID>
</ndc:Service>
<ndc:Service>
  <ndc:PaxRefID>ADT-2</ndc:PaxRefID>
  <ndc:ServiceAssociations>
    <ndc:PaxSegmentRefID>SEG-2</ndc:PaxSegmentRefID>
  </ndc:ServiceAssociations>
  <ndc:ServiceID>SERV-4</ndc:ServiceID>
</ndc:Service>
```



# Example Partial Date Change

## Step 2 Order Reshop (Search)

```
<IATA_OrderReshopRQ xmlns="http://www.iata.org/IATA/2015/00/2018.2/IATA_OrderReshopRQ">
  <Request>
    <OrderRefID>OJ205UCCJG7KP</OrderRefID>
    <ReshopParameters>
    </ReshopParameters>
    <UpdateOrder>
      <ReshopOrder>
        <ServiceOrder>
          <AddOfferItems> [17 lines]
          <DeleteOrderItem> [5 lines]
        </ServiceOrder>
      </ReshopOrder>
    </UpdateOrder>
  </Request>
</IATA_OrderReshopRQ>
```

# Example Partial Date Change

## Step 2 Order Reshop (Search)

```
<AddOfferItems>
  <FlightCriteria>
    <OriginDestCriteria>
      <DestArrivalCriteria>
        <IATALocationCode>HKG</IATALocationCode>
      </DestArrivalCriteria>
      <OriginDepCriteria>
        <Date>2020-01-08</Date>
        <IATALocationCode>DUB</IATALocationCode>
      </OriginDepCriteria>
    </OriginDestCriteria>
  </FlightCriteria>
  <Paxs>
    <Pax>
      <PaxID>ADT-2</PaxID>
    </Pax>
  </Paxs>
</AddOfferItems>
```

# Example Partial Date Change

## Step 2 Order Reshop (Search)

```
<DeleteOrderItem>  
  <OrderItemRefID>OI-1000</OrderItemRefID>  
  <RetainServiceID>SERV-1</RetainServiceID>  
  <RetainServiceID>SERV-2</RetainServiceID>  
  <RetainServiceID>SERV-3</RetainServiceID>  
</DeleteOrderItem>
```

# Example Partial Date Change

## Step 2 Order Reshop (Search)

```
<IATA_OrderReshopRS xmlns="http://www.iata.org/IATA/2015/00/2018.2/IATA_OrderReshopRS">
  <Response>
    <DataLists> [72 lines]
    <ReshopResults>
      <ReshopOffers>
        <Offer>
          <AddOfferItem> [23 lines]
          <DeleteOrderItem> [5 lines]
          <OfferID>OFF-1</OfferID>
          <OwnerCode>NH</OwnerCode>
        </Offer>
      </ReshopOffers>
    </ReshopResults>
    <ShoppingResponse>
      <OwnerCode>OJ</OwnerCode>
      <ShoppingResponseID>RESPONSE-1234</ShoppingResponseID>
    </ShoppingResponse>
  </Response>
</IATA_OrderReshopRS>
```

# Example Partial Date Change

## Step 2 Order Reshop (Search)

```
<Offer>
  <AddOfferItem>
    <DifferentialAmountDue>
      <Amount CurCode="HKD">100</Amount>
    </DifferentialAmountDue>
    <OfferItemID>OFF-ITM-1</OfferItemID>
    <Price>
      <BaseAmount CurCode="HKD">1000</BaseAmount>
      <TotalAmount CurCode="HKD">1000</TotalAmount>
    </Price>
    <Service> [6 lines]
    <Service> [6 lines]
    <Service> [6 lines]
    <Service> [6 lines]
  </AddOfferItem>
  <DeleteOrderItem>
    <DifferentialAmountDue>
      <Amount CurCode="HKD">100</Amount>
    </DifferentialAmountDue>
    <OrderItemRefID>ORDERITEM-1000</OrderItemRefID>
  </DeleteOrderItem>
  <OfferID>OFF-1</OfferID>
  <OwnerCode>NH</OwnerCode>
</Offer>
```

```
</Price>
<Service>
  <PaxRefID>ADT-1</PaxRefID>
  <ServiceAssociations>
    <PaxSegmentRefID>SEG-1</PaxSegmentRefID>
  </ServiceAssociations>
  <ServiceID>SERV-1</ServiceID>
</Service>
<Service>
  <PaxRefID>ADT-2</PaxRefID>
  <ServiceAssociations>
    <PaxSegmentRefID>SEG-1</PaxSegmentRefID>
  </ServiceAssociations>
  <ServiceID>SERV-2</ServiceID>
</Service>
<Service>
  <PaxRefID>ADT-1</PaxRefID>
  <ServiceAssociations>
    <PaxSegmentRefID>SEG-2</PaxSegmentRefID>
  </ServiceAssociations>
  <ServiceID>SERV-3</ServiceID>
</Service>
<Service>
  <PaxRefID>ADT-2</PaxRefID>
  <ServiceAssociations>
    <PaxSegmentRefID>SEG-3</PaxSegmentRefID>
  </ServiceAssociations>
  <ServiceID>SERV-4</ServiceID>
</Service>
```

# Example Partial Date Change

## Step 3 Order Reshop (Price)

```
<IATA_OrderReshopRQ xmlns="http://www.iata.org/IATA/2015/00/2018.2/IATA_OrderReshopRQ">
  <AugmentationPoint> [12 lines]
  <Request>
    <OrderRefID>OJ205UCCJG7KP</OrderRefID>
    <ReshopParameters>
    </ReshopParameters>
    <UpdateOrder>
      <ReshopOrder>
        <ServiceOrder>
          <AddOfferItems>
            <FlightCriteria>
              <ShoppingResponse>
                <ShoppingResponseID>RESPONSE-1234</ShoppingResponseID>
              </ShoppingResponse>
            </FlightCriteria>
            <Paxs> [4 lines]
          </AddOfferItems>
          <DeleteOrderItem> [5 lines]
        </ServiceOrder>
      </ReshopOrder>
    </UpdateOrder>
  </Request>
</IATA_OrderReshopRQ>
```

# Example Partial Date Change

## Step 3 Order Reshop (Price)

```
<AugmentationPoint>
  <Extension xmlns="http://www.iata.org/IATA/2015/00/2018.2/OJT/IATA_Extension">
    <SelectedOffer>
      <OfferRefID>OFF-1</OfferRefID>
      <OwnerCode>OJ</OwnerCode>
      <SelectedOfferItem>
        <OfferItemRefID>OFF-ITM-1</OfferItemRefID>
        <PaxRefID>ADT-1</PaxRefID>
        <PaxRefID>ADT-2</PaxRefID>
      </SelectedOfferItem>
      <ShoppingResponseRefID>RESPONSE-1234</ShoppingResponseRefID>
    </SelectedOffer>
  </Extension>
</AugmentationPoint>
```

# Example Partial Date Change

## Step 3 Order Reshop (Price)

```
<IATA_OrderReshopRS xmlns="http://www.iata.org/IATA/2015/00/2018.2/IATA_OrderReshopRS" >
  <Response>
    <DataLists> [72 lines]
    <ReshopResults> [51 lines]
    <ShoppingResponse>
      <OwnerCode>OJ</OwnerCode>
      <ShoppingResponseID>RESPONSE-1235</ShoppingResponseID>
    </ShoppingResponse>
  </Response>
</IATA_OrderReshopRS>
```



# Example Partial Date Change

## Step 4 Order Change

```
<IATA_OrderChangeRQ xmlns="http://www.iata.org/IATA/2005/06/01/IATA-EDR" >
  <Party> [4 lines]
  <Request>
    <ChangeOrder>
      <UpdateOrderItem>
        <AcceptOffer> [11 lines]
      </UpdateOrderItem>
    </ChangeOrder>
    <Order>
      <OrderID>OJ205UCCJG7KP</OrderID>
      <OwnerCode>OJ</OwnerCode>
    </Order>
    <PaymentInfo>
      <Amount CurCode="HKD">100</Amount>
      <PaymentMethod> [2 lines]
      <TypeCode>CC</TypeCode>
    </PaymentInfo>
  </Request>
</IATA_OrderChangeRQ>
```

```
<AcceptOffer>
  <SelectedOffer>
    <OfferRefID>OFF-1</OfferRefID>
    <OwnerCode>OJ</OwnerCode>
    <SelectedOfferItem>
      <OfferItemRefID>OFF-ITM-1</OfferItemRefID>
      <PaxRefID>ADT-1</PaxRefID>
      <PaxRefID>ADT-2</PaxRefID>
    </SelectedOfferItem>
    <ShoppingResponseRefID>RESPONSE-1235</ShoppingResponseRefID>
  </SelectedOffer>
</AcceptOffer>
```

# Example Partial Date Change

## Step 4 Order Change

```
<IATA_OrderViewRS xmlns="http://www.iata.org/IATA/2015/00/2018"
  <Response>
    <DataLists>
      <OriginDestList> [13 lines]
      <PaxJourneyList>
        <PaxJourney> [3 lines]
        <PaxJourney> [3 lines]
        <PaxJourney>
          <PaxJourneyID>JOU-3</PaxJourneyID>
          <PaxSegmentRefID>SEG-3</PaxSegmentRefID>
        </PaxJourney>
      </PaxJourneyList>
      <PaxList> [11 lines]
      <PaxSegmentList> [55 lines]
    </DataLists>
    <Order> [41 lines]
  </Response>
</IATA_OrderViewRS>
```

# Example Partial Date Change

## Step 4 Order Change

```
<PaxSegmentList>
  <PaxSegment> [17 lines]
  <PaxSegment> [17 lines]
  <PaxSegment>
    <Arrival>
      <AircraftScheduledDateTime>2020-06-08T08:00:00.000</AircraftScheduledDateTime>
      <IATALocationCode>HKG</IATALocationCode>
      <TerminalName>1</TerminalName>
    </Arrival>
    <Dep>
      <AircraftScheduledDateTime>2020-06-08T02:40:00.000</AircraftScheduledDateTime>
      <IATALocationCode>DUB</IATALocationCode>
      <TerminalName>3</TerminalName>
    </Dep>
    <Duration>PT8H20M</Duration>
    <MarketingCarrierInfo> [3 lines]
    <PaxSegmentID>SEG-3</PaxSegmentID>
  </PaxSegment>
</PaxSegmentList>
```

# Example Partial Date Change

## Step 4 Order Change

```
<Order>
  <BookingRef> [3 lines]
  <OrderID>OJ205UCCJG7KP</OrderID>
  <OrderItem>
    <OrderItemID>OI-1000</OrderItemID>
    <Service> [6 lines]
    <Service> [6 lines]
  </OrderItem>
  <OrderItem>
    <OrderItemID>OI-1001</OrderItemID>
    <Service> [6 lines]
    <Service> [6 lines]
  </OrderItem>
</Order>
```

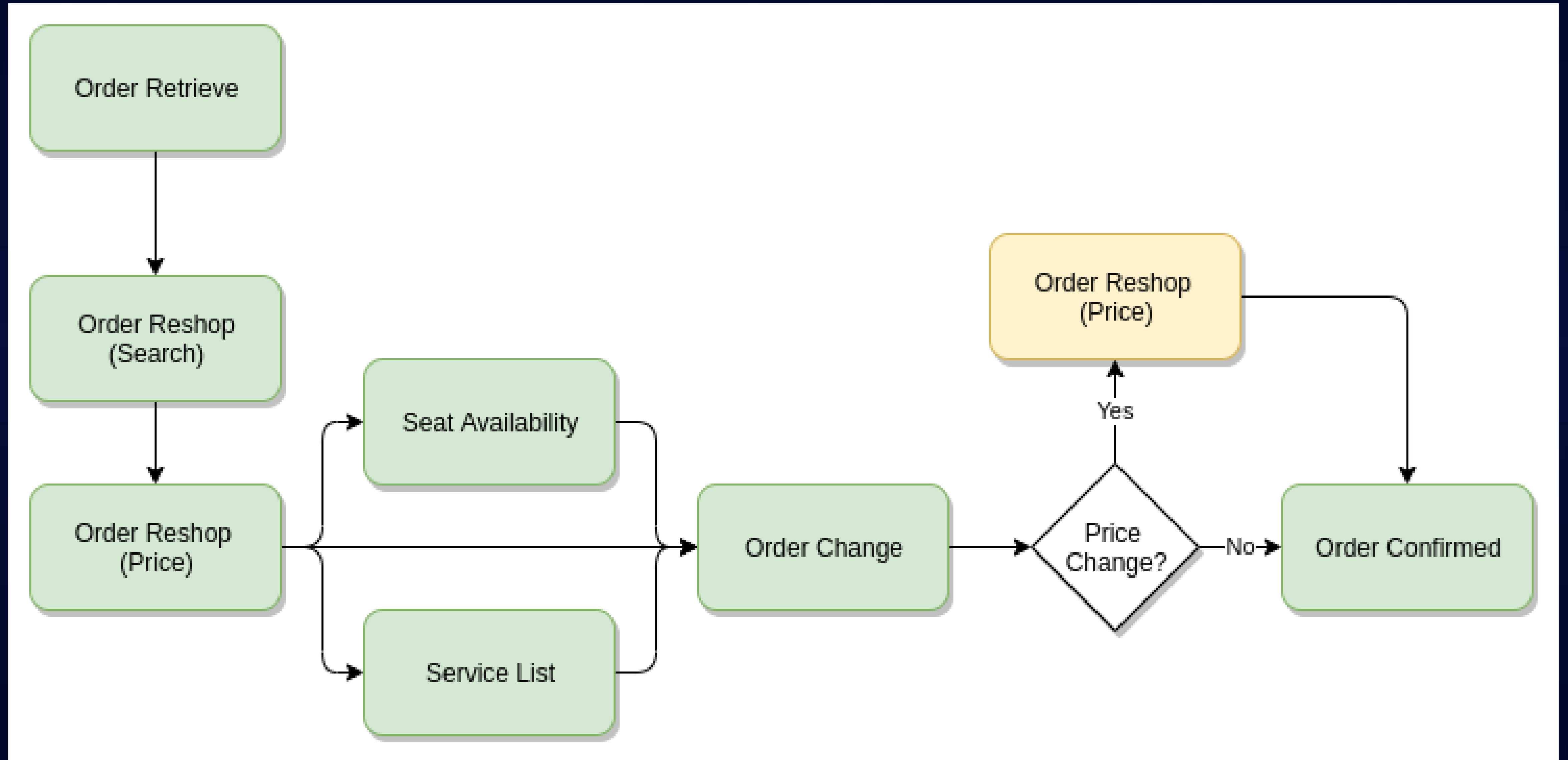
# Example Partial Date Change

## Step 4 Order Change

```
<OrderItem>
  <OrderItemID>OI-1000</OrderItemID>
  <Service>
    <PaxRefID>ADT-1</PaxRefID>
    <ServiceAssociations>
      <PaxSegmentRefID>SEG-1</PaxSegmentRefID>
    </ServiceAssociations>
    <ServiceID>SERV-1</ServiceID>
  </Service>
  <Service>
    <PaxRefID>ADT-1</PaxRefID>
    <ServiceAssociations>
      <PaxSegmentRefID>SEG-2</PaxSegmentRefID>
    </ServiceAssociations>
    <ServiceID>SERV-3</ServiceID>
  </Service>
</OrderItem>
```

```
<OrderItem>
  <OrderItemID>OI-1001</OrderItemID>
  <Service>
    <PaxRefID>ADT-2</PaxRefID>
    <ServiceAssociations>
      <PaxSegmentRefID>SEG-1</PaxSegmentRefID>
    </ServiceAssociations>
    <ServiceID>SERV-2</ServiceID>
  </Service>
  <Service>
    <PaxRefID>ADT-2</PaxRefID>
    <ServiceAssociations>
      <PaxSegmentRefID>SEG-3</PaxSegmentRefID>
    </ServiceAssociations>
    <ServiceID>SERV-4</ServiceID>
  </Service>
</OrderItem>
```

# Servicing Flow With Ancillaries



# Servicing Flow With Ancillaries Key Differences

## Reshop Response

We will now see multiple delete order items in the reshop offers. This will happen even if the seller did not request those OrderItems to be deleted. In cases like this the OMS will return a warning to the seller to indicate that the segment being cancelled has an associated ancillary that will also be lost.

```
<Offer>
  <AddOfferItem> [37 lines]
  <DeleteOrderItem>
    <DifferentialAmountDue>
      <Amount CurCode="HKD">100</Amount>
    </DifferentialAmountDue>
    <OrderItemRefID>ORDERITEM-1000</OrderItemRefID>
  </DeleteOrderItem>
  <DeleteOrderItem>
    <DifferentialAmountDue>
      <Amount CurCode="HKD">100</Amount>
    </DifferentialAmountDue>
    <OrderItemRefID>ORDERITEM-1002</OrderItemRefID>
  </DeleteOrderItem>
  <OfferID>OFF-1</OfferID>
  <OwnerCode>NH</OwnerCode>
</Offer>
```

# Servicing Flow With Ancillaries Key Differences

## Seat Availability/Service List Response

In the responses to ancillary requests we will now have an additional discount applied to the value of the previously cancelled ancillary.

```
<ndc:ALaCarteOffer>
  <ndc:ALaCarteOfferItem>
    <ndc:Eligibility>
      <ndc:FlightAssociations>
        <ndc:PaxSegmentRefID>SEG-1</ndc:PaxSegmentRefID>
      </ndc:FlightAssociations>
      <ndc:PaxRefID>PAX-ADT-1</ndc:PaxRefID>
    </ndc:Eligibility>
    <ndc:OfferItemID>OFFIT-ANC-SEAT-FREE-1</ndc:OfferItemID>
    <ndc:Service>
      <ndc:ServiceDefinitionRefID>SEVD-SEAT-FREE-1</ndc:ServiceDefinitionRefID>
      <ndc:ServiceID>SVC-SEAT-FREE-1</ndc:ServiceID>
    </ndc:Service>
    <ndc:UnitPrice>
      <ndc:BaseAmount CurCode="HKD">200</ndc:BaseAmount>
      <ndc:Discount>
        <ndc:DiscountAmount CurCode="HKD">200</ndc:DiscountAmount>
      </ndc:Discount>
      <ndc:TotalAmount CurCode="HKD">0</ndc:TotalAmount>
    </ndc:UnitPrice>
  </ndc:ALaCarteOfferItem>
  <ndc:OfferID>OFF-SEAT-01</ndc:OfferID>
  <ndc:OwnerCode>NH</ndc:OwnerCode>
</ndc:ALaCarteOffer>
```



# Servicing Flow With Ancillaries Key Differences

## **Order Change Request**

Finally in the OrderChange request we will enforce that the selected ancillary can not be booked standalone and will need to be booked with the reshopped offer provided in the request.



Thank You