JRTechnologies

IATA Strategic Partner

NDC CAPABLE IATA LEVEL 3

NDC - One Order Pilot

InselAir Reaching Higher

AIRLINE CHOICE

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InselAir
Reaching Higher

- **Insel Air**
  - Dutch Caribbean carrier that serves as the national airline of Curaçao.
  - Serves 5 destinations
    - Aruba
    - Curacao
    - St. Maarten
    - Bonaire
    - Paramaribo
  - 3 aircrafts
    - Fokker 50's
    - Embraer 190

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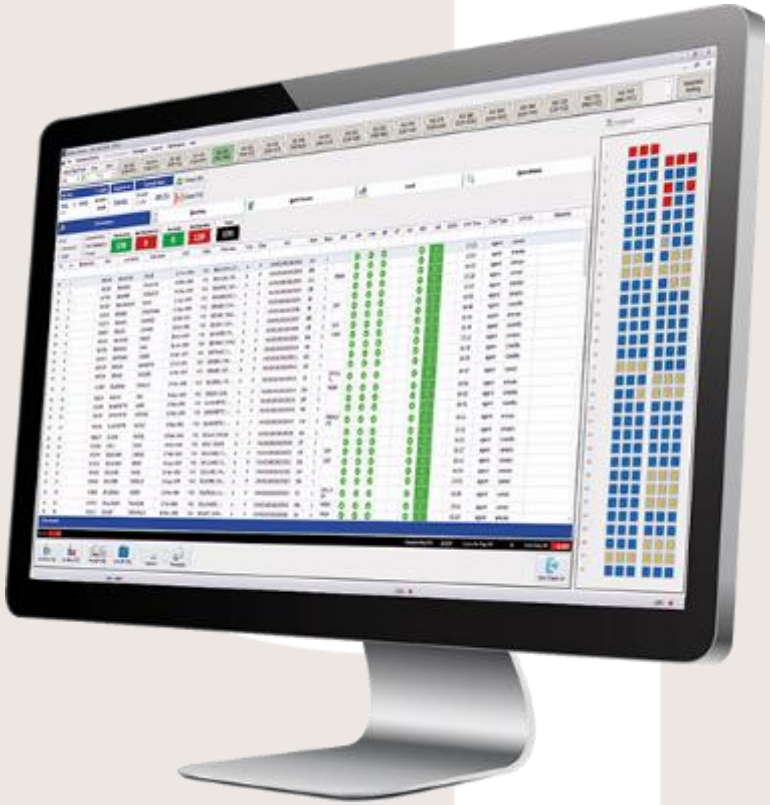
Core Platform Functionality

NextGen Passenger Handling for Airlines, Airports & Ground Handlers

AIRLINE CHOICE
Departure Control System

Serving over 45 Airlines, Handlers, Airports

- Check In
- Kiosk & Web Check In
- Ancillaries
- Bag Drop
- Pax & Crew APIS
- Boarding
- Baggage Reconciliation
- Messaging
- Reporting
- Multi-Platform Support



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NDC Platform Overall Architecture

Customers

IAG INTERNATIONAL AIRLINES GROUP

Enabled IAG strategy to move indirect distribution to a direct channel using:

- Core Retailing Platform
- Travel Agency Portal
- TMC Portal
- Corporate Self Booking Tool
- API

IFG ATA Financial Gateway

A payment hub designed to simplify payment processing for airlines:

- Supports BSP and ARC settlement
- Integrates with your PSP
- Fraud detection
- Travel Agency monitoring
- Easy switch between PSPs

Lufthansa Systems

Enabled an airline Group's Dynamic pricing and bungling strategy:

- Core Retailing Platform
- Mobile App
- True Dynamic Pricing
- Rich Content and merchandising

InselAir Reaching Higher

Moving airline from PSS to full retailing:

- IBE, CBT
- True Dynamic Pricing
- Rich Content and Merchandising
- Implementation of OO connectivity to DCS
- True Order Management
- Customer Communication platform

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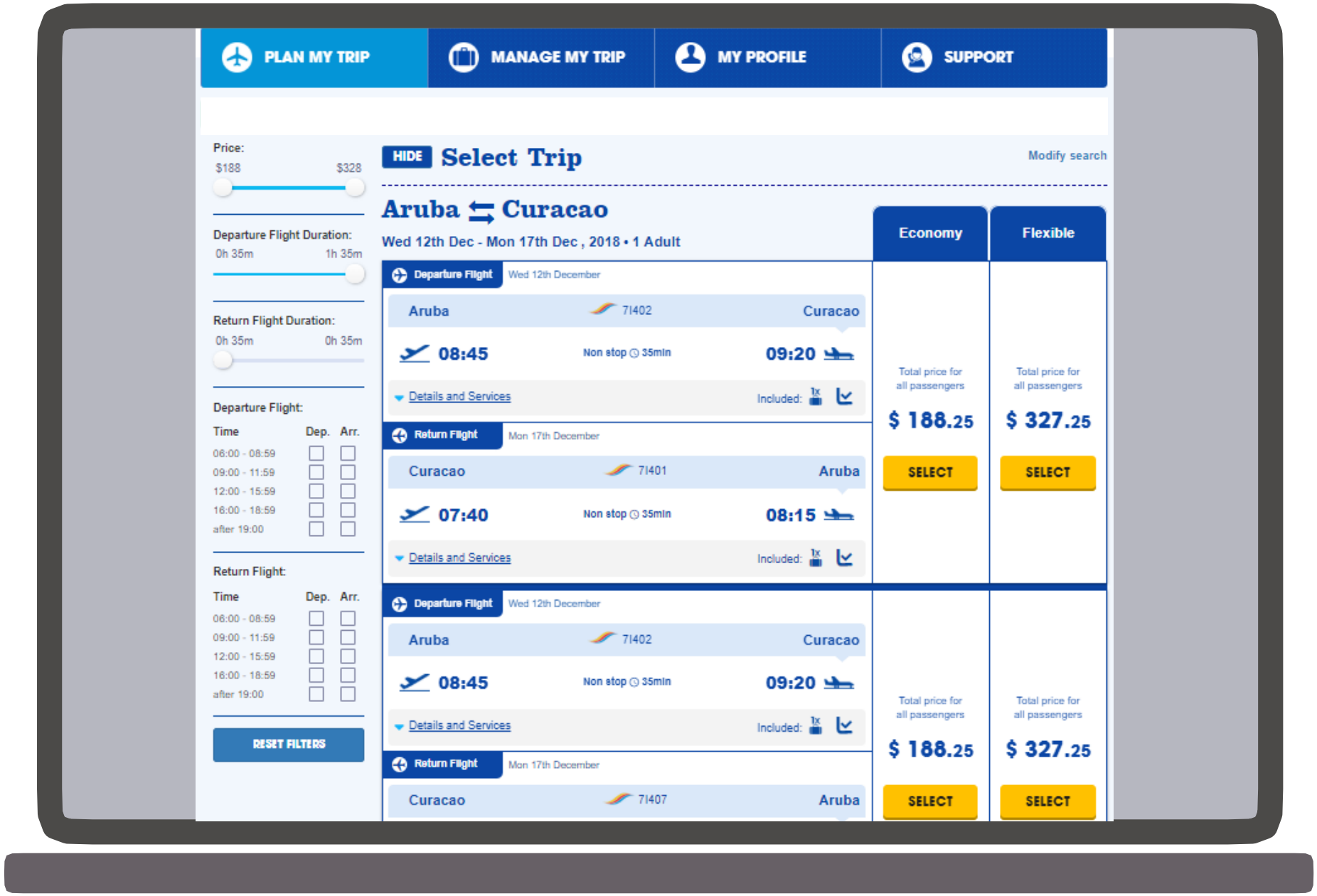
The flow: Step 1
Internet Booking Engine

NDC Shop-Order takes place within **fly-inselair.com**

The site was redesigned, adapted to an NDC flow and directly integrated with the JR Technologies NDC Platform

InselAir
Reaching Higher



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The Pilot: Goal and Use Cases

Goal

- Identify gaps in the systems and in the standard
- Test the first official One Order release
- Upgrade the NDC Platform to add the “Delivery” step
- Establish the NDC path from the IBE to the Delivery

Use cases

Use Case 1 – Check-in

- DCS is pulling Orders per flight before departure - PNL
- Services status is updated upon check-in
- Bag tag is send to the Order Manager for checked bags

Use Case 2 - Boarding

- DCS is updating status of boarded Passengers

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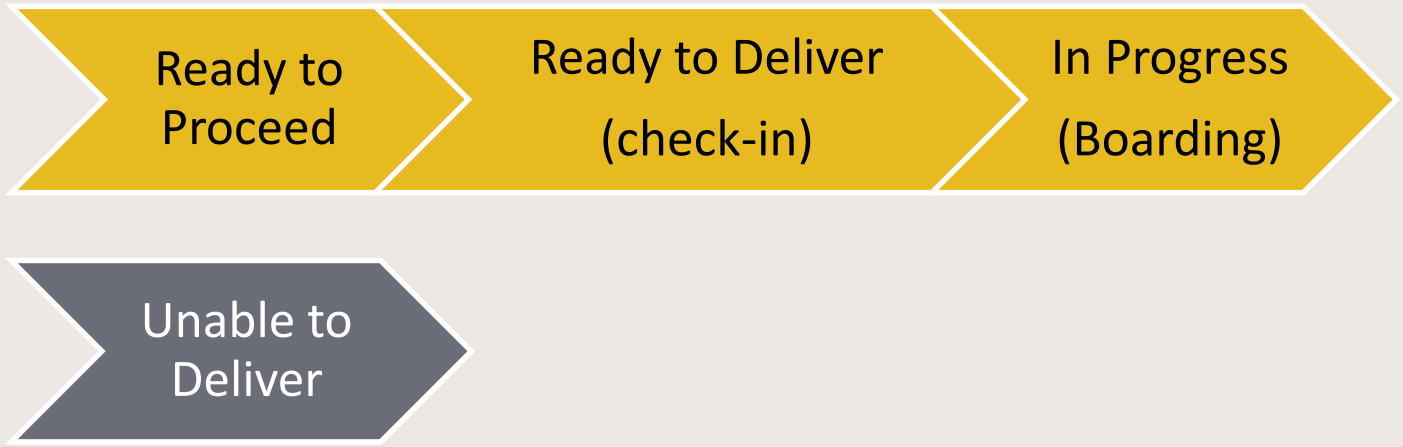
The Pilot: One Order Messages

- Schema used: IATA 18.2
- Messages in scope: IATA_ServiceStatusChangeNotifRQ, IATA_ServiceDeliveryRQ, IATA_UpdateServiceNotifRQ

Statuses:



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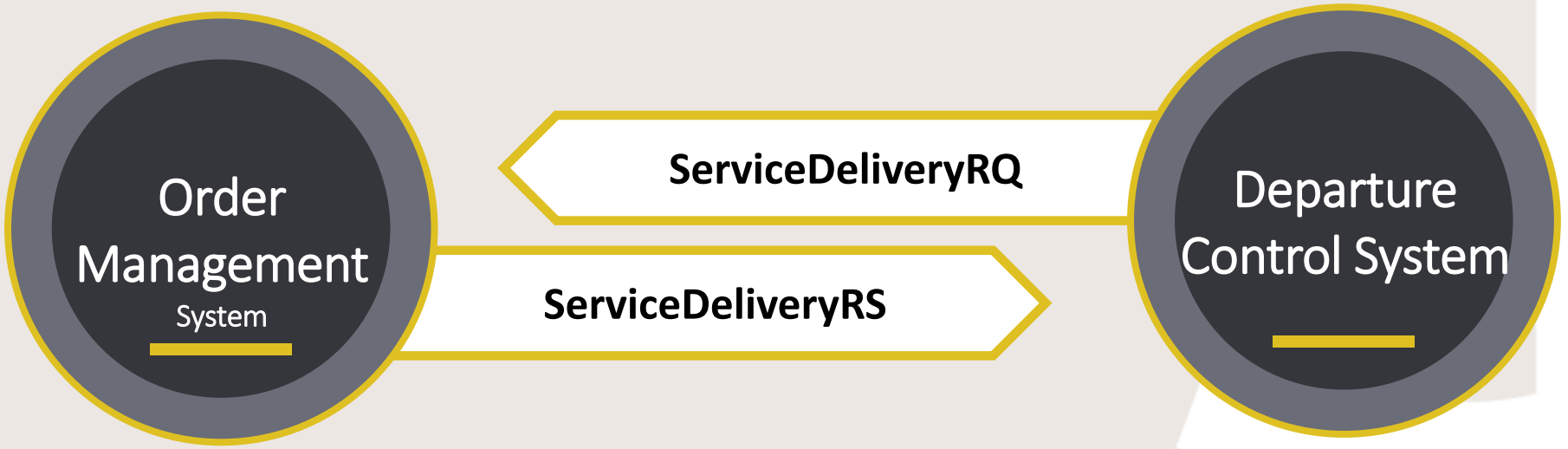
The flow: Step 2 – Load Orders (PNL)



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The flow: Step 3 – Check-in

Order Management System

UpdateServiceNotifRQ

Acknowledgement

SHOPPING | BOOKING | PAYING | CHECK IN | BOARDING | ON BOARD

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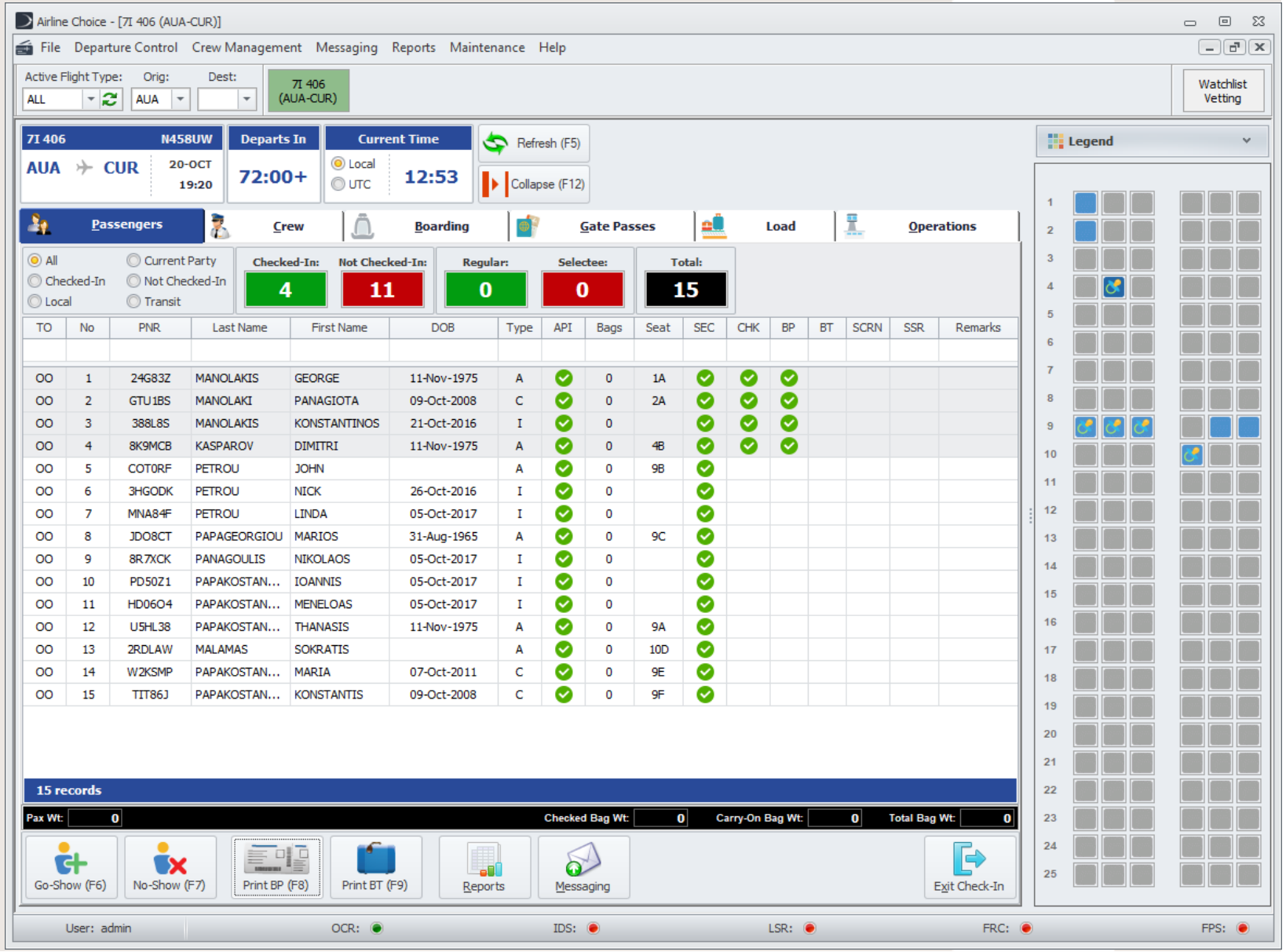
The flow: Step 3 – Check-in



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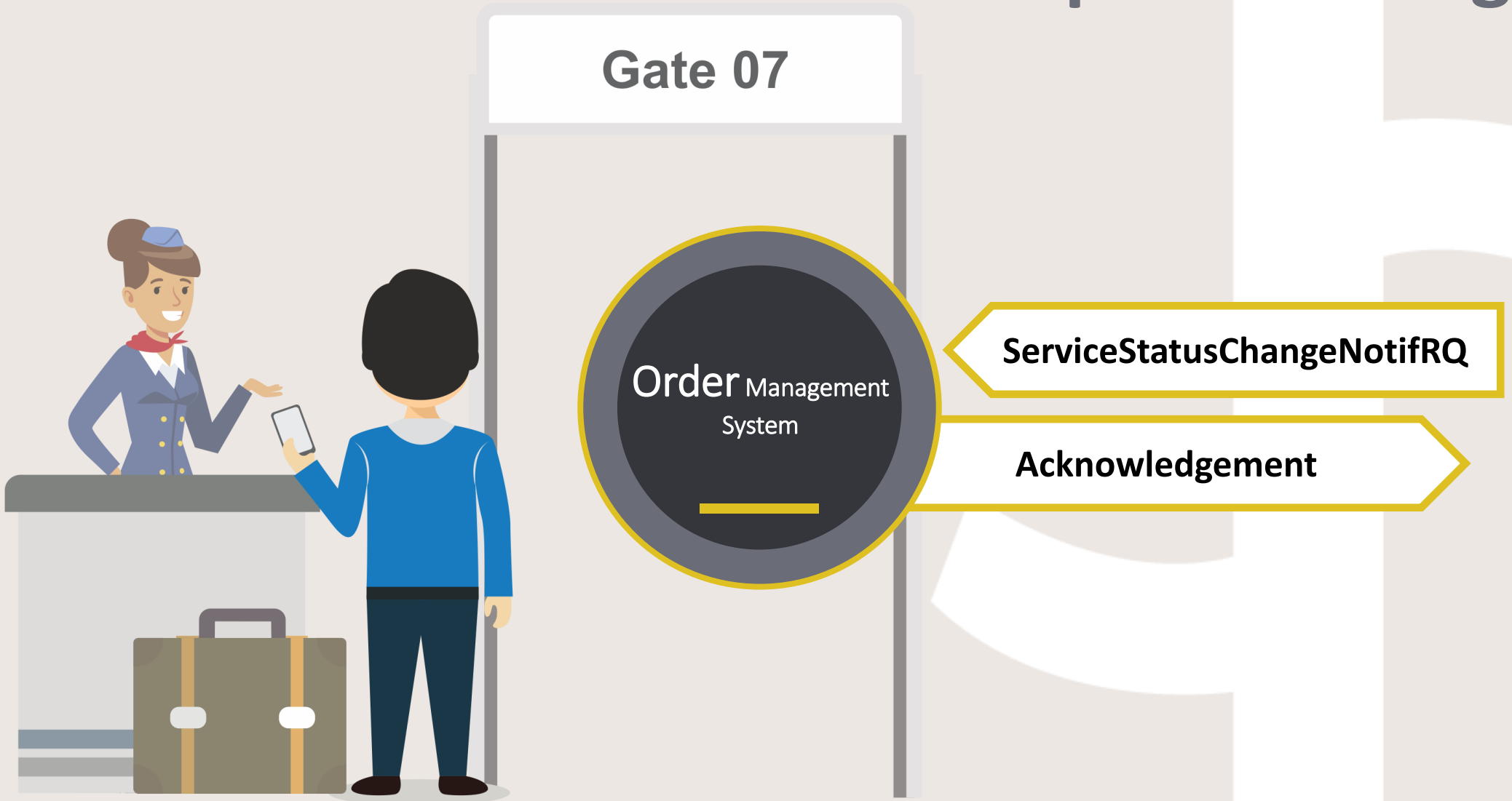
The flow: Step 4 - Boarding



SHOPPING | BOOKING | PAYING | CHECK IN | BOARDING | ON BOARD

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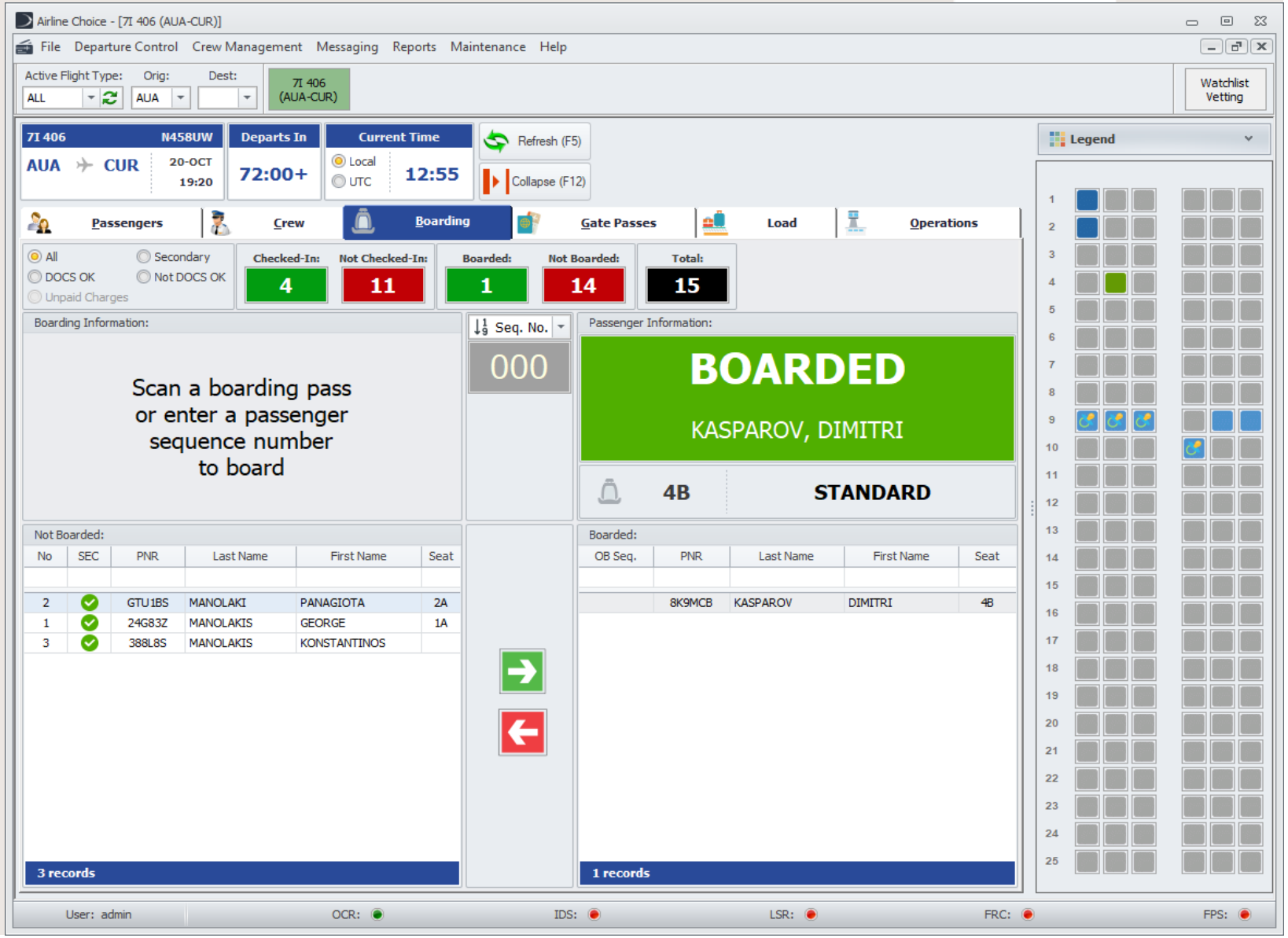
The flow: Step 4 - Boarding



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Lessons Learned

- DCS has the required information in comparison to current standards (e.g. PNL)
- JR Technologies' NDC Platform managed to leverage the Domain Model allowing Orders to be created in 17.2 (some older orders were in 16.2) and to be tracked using 18.2 One Order
- Real time tracking of the service status is possible
- There was no dependency on the PNR, ticket or EMD

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Points to improve in the standard

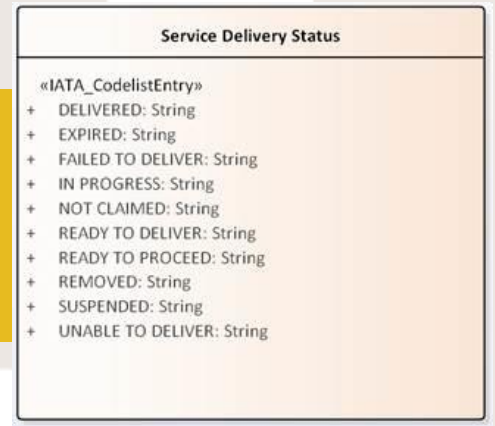
One Order status enumeration

- The semantics are not very clear when it comes to mapping the status codes to actual business functions.

Different implementers might end up using a different status eg. for the check-in

700	No active itinerary
701	Coupon notification
702	Active (the queue is designated for use even if it is empty)
703	Queue placement is inhibited
704	Queue level notification
705	Queue being printed
706	Sub-queue present
707	On hold
708	Exchanged/FIM
709	Passenger deleted
710	Refund taxes/fees/charges only
A	Add
AC	Accrual
AL	Airport control
ALL	Allocated
AVA	Available
B	Flown/used
BD	Boarded
C	Change
CK	Checked in
CLO	Closed
D	Reprint
DB	Deboarded
DN	Denied boarding
E	Exchanged/reissued
F	Critical free text
G	Non air segment
I	Original Issue (Open for Use)
IF	Information only
INU	In use
IO	Irregular operations
K	Confirmed, effective, working, firm, etc
LIM	Limitations on use

One order Statuses – how do I map them to actual business functions?



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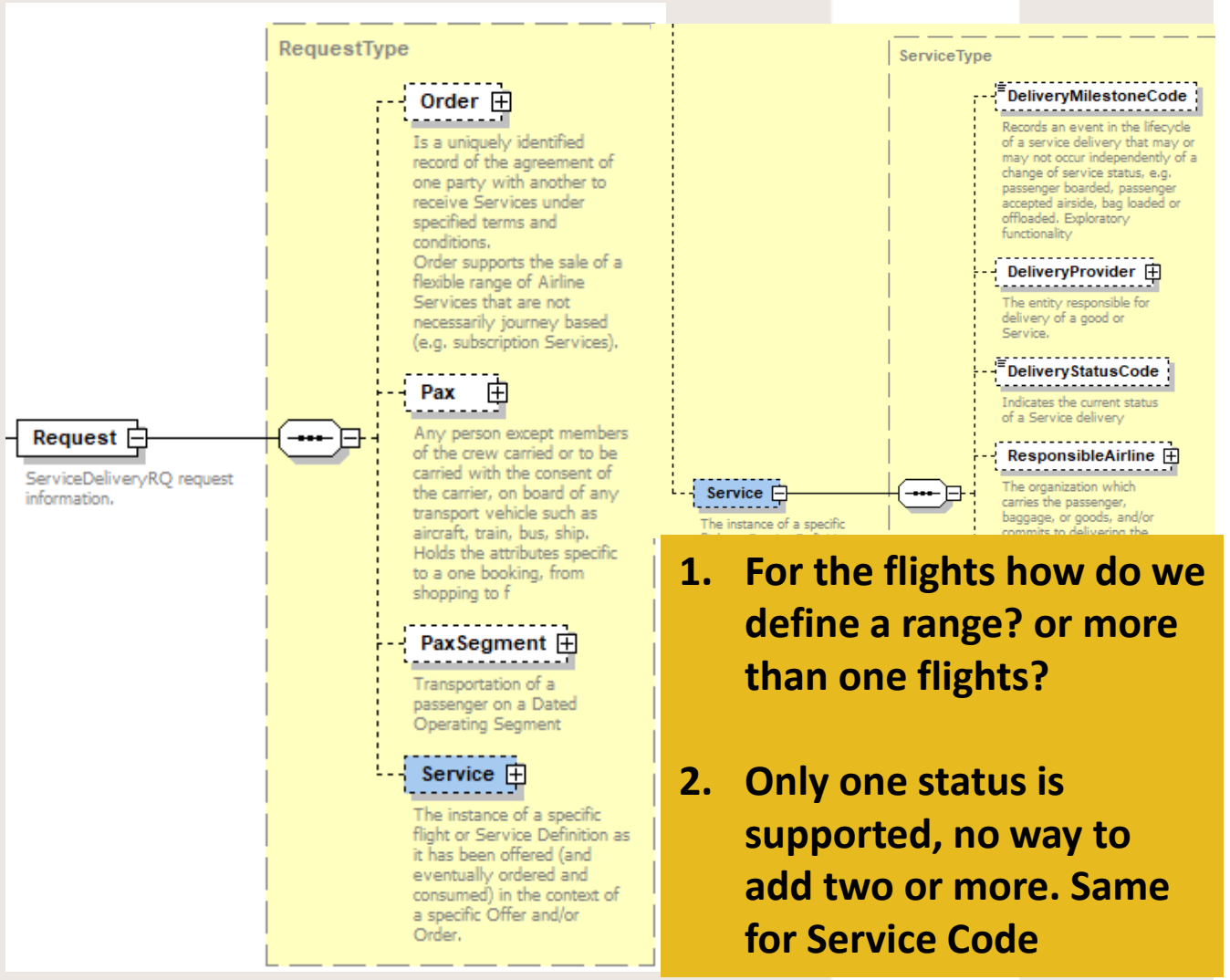
Points to improve in the standard

ServiceDeliveryRQ structure doesn't look very intuitive and flexible to allow more expressive queries

- ❖ get orders for a date range (for example, the caterer needs to know all special meals to be delivered for a specific date range/at a specific airport
- ❖ get orders for a flight with services that have a specific status (how many bags were ordered and paid for and how many bags were checked-in?). Query can be supported but it is not very straightforward



1. **For the flights how do we define a range? or more than one flights?**
2. **Only one status is supported, no way to add two or more. Same for Service Code**

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Points to improve in the standard

Elements like the bag tag are inserted in the **UpdateService** but the rest of the messages do not support them.

For example:

OrderViewRS does not show the bag tad id,

ServiceDeliveryRS does not show it either

Next Steps

- Design changes on the client side of the DCS to reflect the Order based flow
- For the selected airport replace the current check-in or boarding process for specific route
- Add next steps in the flow e.g. Uplift
- Include in a pilot other One Order aspects e.g. Revenue Accounting
- Use the NDC path as the primary and remove dependencies with the PSS (in the shop-order flow)

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Thank you