ONE Order aims to modernize the order management process in the airline industry. This industry initiative led by IATA intends to replace the multiple and rigid booking, ticketing, delivery and accounting methods.

The ONE Order standard enhances the capability of communications between airlines, delivery providers and accounting systems and is open to any third party, intermediary, IT provider or non-IATA member, to implement and use.

It introduces concepts such as delivery status and internal values in order to replace current paper based mechanisms used for delivery tracking and accounting purposes. ONE Order eliminates the current booking and ticketing records and combines the content of those into a single retail and customer focused order.

Full information can be found at: www.iata.org/oneorder

SAP is the world leader in enterprise applications in terms of software and software-related service revenue. Based on market capitalization, we are the world’s third largest independent software manufacturer.

SAP is committed to supporting every customer to become a best run business. Together, we help the world run better and improve people’s lives. Being a best run business means being an intelligent enterprise. Our strategy is therefore to deliver The Intelligent Enterprise for our customers, so they can achieve their desired outcomes.

The specific products used in the ONE Order pilot were:
- SAP Commerce Cloud + Travel Accelerator
- SAP Customer Financial Management
- SAP Convergent Invoicing
- SAP S/4 HANA

Full information can be found at: www.sap.com
The ONE Order pilot

The ONE Order initiative aims to modernise Reservation Management and Revenue Accounting in the Airline industry, replacing Passenger Name Records (PNR), Electronic Miscellaneous Document (EMD) and E-ticket (TKT) into a single customer order.

ONE Order builds on the NDC initiative, adopting retailing capabilities and open systems integration with modern order management and accounting systems using standard APIs.

This shift to open systems has enabled SAP to position its Commerce and Financial Management products as solutions for the ONE Order landscape.

SAP developed a proof of concept project to showcase these solutions, integrated using the latest IATA ONE Order web service standard.

Together with support from IAG, the project was recognised by IATA as an official ONE Order pilot, who received direct technical feedback to further improve the standard.

The Objectives

The core objective was to demonstrate the full end to end customer journey and revenue accounting from initial shopping, right through the order process to include Check In, lounge access, boarding and flight departure.

The scope of the pilot delivered 7 separate use cases that covered basic end to end booking and accounting flow for card and card + miles payment and flight and ground service products. Voluntary and involuntary change use cases were also covered.

1. A simple return order from London Heathrow to Paris Charles De Gaulle paid direct with a credit card
2. Amending the order after outbound flight to add additional ancillary products
3. Including lounge access to the order – consuming and accounting for the service separately to the flight
4. The same return order paid for part with card and loyalty miles
5. To demonstrate the Omni Channel capabilities of SAP Commerce Cloud, the same return order was created using NDC Web Service
6. The voluntary change of an O&D return product from Krakow in Poland to New York JFK via London Heathrow. The return flight changed to a direct flight to Paris Charles De Gaulle, triggering the sale of a change flight product.
7. The Same O&D product was sold and the return flight subject to flight disruption as the JFK to LHR flight was cancelled. An involuntary change was automatically triggered, to auto book the customer to the next available flight.
The Challenges

The delivery involved configuration and mapping of the core SAP Commerce data model to the ONE Order message and then onward mapping to SAP Customer Financial Management. A small amount of development was required to generate the IATA ONE Order web service messages from SAP Commerce and then transform them to the SAP Customer Financial Management API.

Boarding control and flight closure mock-ups were created to simulate the airport delivery systems (DCS) and generated the required ONE Order messages to SAP Commerce Order Management systems (OMS). This enabled the team to simulate passenger boarding and flight closure to update the order consignment status. A further mock up was created to simulate an airport lounge, again generating service status ONE Order messages to the OMS.

Customer master data was preloaded to both commerce and accounting system to maintain the integrity of sales order mapping for revenue accounting. In production consideration is required to deliver live customer data creation to support newly registered customer online.

The Role of Partners

Two partners were involved in the delivery of the pilot; IAG provided airline consulting advice on the use cases and Portaltech Reply providing systems integration and SAP Commerce Cloud design & development services.

IAG developed a set of use cases that provided a broad test of the end to end processes for the ONE Order message set. Specific attention was given to testing booking and accounting scenarios that are either difficult or impossible with today’s systems.

Portaltech Reply – leading SAP Commerce Systems Integrator – completed the overall technical design of the ONE Order solution. The main development work involved building the ONE Order web service and mapping it to the SAP Commerce Cloud data model.

The Lessons Learned

An important finding from the Pilot was that the SAP Commerce Cloud Data Model required minimal change to accommodate the ONE Order standard. The order management system easily adapted to the ONE Order data model for managing and recording the delivering status of each individual service item, especially in an amended state. This really demonstrates how aligned ONE Order is to a true retail order management model, given the core DNA of SAP Commerce Cloud is retail.

The SAP Customer Financial Management solution also required minimal change to deliver granular accounting and revenue recognition of all product revenue, fees, taxes and service charges. This demonstrates the capability of modern financial systems to manage ‘airline order’ revenue accounting.

Adopting a retail mindset to managing customer order changes, enabled services such as flight change, to be modelled as a unique service product with an associated price – instead of traditionally setting change as a flight product attribute.

Modelling products this way enables them to be sold separately as an al-la-carte optional service to basic economy products – increasing the upsell opportunity and tracking/accounting of change services.
The Lessons Learned (2)

The modelling of services as products can be extended for the adoption of involuntary changes and this method was implemented for the disruption use case. An auto amendment service product was created with a price of zero and used to track the involuntary change and associated fare differences waiver.

One change that was proposed to the ONE order message set was to include sales channel in the Order-SalesInformationNotification RQ. This small change enabled the financial order information contained in the One Order, to be used for complete sales analysis and reporting.

The Conclusion

Ultimately the Pilot has proven that an integration between SAP Commerce Cloud and SAP Customer Financial Management, is achievable using the ONE Order standard. Specifically the conclusions were.

The ONE Order data model was proved to be compliant with a typical retail data model, as provided by SAP Commerce Cloud, with the labelling of service entries and consignment entries being the only difference.

The ONE Order standard delivered all the uses cases without need for change and enabled the team to achieve a high degree of velocity delivering the end to end solution and scope in just 4 months.

Finally, storing all ONE Order financial transactions in a central repository, in this case the SAP S/4 HANA Digital Core, enables real time data analysis and reporting directly from the same data source, removing the need for separate data repositories.