

## Group Air Booking Solutions

*Bob Offutt*

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The company is headquartered in the United States, with offices in Germany and India.

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# Group Air Booking Solutions

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## Introduction

While group bookings represent a sizable portion<sup>1</sup> of airline revenue, most airlines and global distribution systems (GDSs) have neglected to provide automation for these bookings. Instead, travel agents are stuck muddling through the cryptic legacy green-screen commands, which provide little flexibility for dealing with complex group issues. The contracting process between agency and air supplier is not automated either; most of the work is done manually by an airline's group processing desk. Additionally, in many cases, the airline's revenue management system is not equipped to handle groups effectively, resulting in lost revenue.

And the booking isn't even the hard part. After the contracting and booking is complete, the actual management of travelers begins: changing the group names (usually put into booking records as placeholders) into individual passenger names, splitting groups on different flights for the same origin and destination (O & D), gathering a group from multiple origins to one destination, ticketing, and managing adds, changes, deletes and schedule changes.

## Background

All major GDSs and most large airline computerized reservation systems (CRSs) have the capability to book groups under a group passenger name record (PNR). However, these legacy-based systems have struggled to provide the flexibility required for managing the complexities of group business. To compensate for this,

airlines established group processing desks to manually service group bookings.<sup>2</sup> This was expensive, time-consuming and labor-intensive. In addition, revenue management systems were not designed to handle bulk requests, and so revenue was not optimized.

A common approach, particularly in the Asia Pacific region, is for an agency to bridge through the GDS directly into the airline's CRS. Then, using a series of special commands such as those shown in Figure 1, the agency can create a group booking request that is then queued to the airline group desk. The desk agent then processes it manually. From there the group desk develops the fare details and queues these back to the originator. Additional terms and conditions are contained in the agency/airline contract, which is handled separately. Once the group booking is completed in the airline CRS, the PNR is copied back to the GDS so that the agencies' normal mid- and back-office processes can be engaged.

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### **GDS Bridge:**

*Sometimes called direct connect or direct access, the GDS bridge provides pass-through connectivity from the agent's terminal to the supplier's CRS.*

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These host-based processes still play a role, since the PNR – the heart of the processes – is housed in legacy systems (or legacy format). But new products in the marketplace are providing new features and capabilities.

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<sup>1</sup> PhoCusWright's *Groups & Meetings: Marketing Opportunity Redefined*, 2007, found that air represented 32% of the approximately \$95 billion groups and meetings market in the U.S. However, this study is based on a more expansive definition of group travel that airlines would use for operational purposes. Interviews with airlines suggest group business ranges from 6% to 14% of passenger revenue.

<sup>2</sup> "Group space" is people traveling together, usually in a group PNR on a one-time basis. "Block space" is negotiated and contracted space recurring on a regular basis – e.g., leaving every Friday on a flight and returning seven days later on a flight for a period of time, usually months. Space can be sold to individual passengers or to groups. This paper addresses group bookings.

**Figure 1**  
**A Travel Agent Booking a Group Through Worldspan Group Bridge to British Airways**

1. @BAC@LOGON	Select BA Drop Through
2. @A10JUNLONNYC	Basic availability entry
3. @020G2	Request 20 seats in G-class from line
4. @-C/20WORLD TRAVEL/USAGROUP	Add number in group, agency name and group name
5. @-@C/WORLDTRAVEL /NEWGROUP	To amend group name (note this is only possible in PNR creation)
6. @G*C	To move agency profile into booking
7. @3SSR GRPF BA ADHOC GROUP	Add SSR with "ADHOC GROUP"
8. @7T/OK	Ticketing entry
9. @6 MR SMITH	Add received from field
10. @*R	Display all PNR elements including individual names
11. @QEP/STOBA0803/C87 or OSLBA0802/C87 or CPHBA0800/C87	Queue PNR to British Airways

Source: British Airways

## The Ideal Group Booking Management System

An ideal group booking management system would contain the following features:

### AIRLINE/AGENCY PORTAL

Coordinating a group booking requires substantial cooperation between the agency and the airline. Workflow processes and automation to take the group booking from fare quote request to ticketing must be integrated between airline and agency, which requires various actions by both parties. Historically this integration was handled through bridge technology (discussed earlier) and queues. Today's technology involves a portal containing business rules that reflect the agency/airline contract.

### CONTRACTING

Airlines control agency group booking privileges, which vary based on agency size, previous group booking performance and myriad other factors. The airline/agency contract houses these privileges and other business parameters. A contract management system provides the tools to develop, negotiate and implement these contracts between the airline and the respective agencies.

### BUSINESS RULES MANAGEMENT

Airlines grant different group booking privileges to individual agencies depending on the agencies' business arrangements and booking histories. These privileges are

included in agency/airline contracts. Keeping these on an agency profile data store ensures consistent use by different sections of the agency. Some example areas for business rules are:

- Maximum credit limit
- Deposit amount per passenger
- Deposit amount per PNR
- Percent of outbound deviation allowed
- Permission to split the group on several flights
- Minimum number of passengers per split
- Fee for passenger name changes

### GROUP REVENUE MANAGEMENT

Normally, airline revenue management systems are focused on how much they should charge for the next seat. But for group processing, the systems need to look at a variety of parameters, including group size, agency credit rating, agency past performance, agency utilization rate (passengers booked/passengers boarded), current flight load factor and time to departure. Because of the complex nature of group travel planning, the revenue management system also needs to be able to process and optimize one-way, round-trip and multiple-destination itineraries, as well as recommend itinerary splits (when passengers in the group travel on different aircraft).

### GROUP BOOKING

Typically in host-based systems, the CRS cryptic-command functionality at the point-of-sale allows submission of group booking requests, airline response, booking of a group and addition of names on the record. As groups become more complicated – with travelers coming from multiple locations, returning to multiple locations, staying at various hotels and doing different activities – the host technology is challenged. Of the GDSs, only Amadeus supports the non-homogeneous PNR, which allows multiple passengers, each with a different itinerary. The other GDSs provide homogeneous itineraries that require separate PNRs for travelers with diverse itineraries. The challenge, then, is to manage separate itineraries within a single group.

When a group is booked, a surrogate name is provided. Group booking capabilities should allow passenger names to be entered as seats are sold. The need to plan seating for the group booking request adds an additional challenge. In addition, the group PNRs need to be managed for ticketing, pricing, invoicing, schedule changes and split optimization. Tools to search for and retrieve group-related PNRs are also important. Ideally, all of this capability would be provided through a modern graphical user interface (GUI).

### **INVENTORY MANAGEMENT**

Because of the number of variables involved, group inventory must be managed through a special set of business rules that first block inventory and associate it with a group name. The group system should monitor the inventory so that if it is not used or is booked and canceled, it can be given back to the airline in a timely manner.

### **GDS SYNCHRONIZATION**

The group PNR must be in both the GDS and the airline CRS. Its presence in the GDS is especially important, because this is where the travel agency performs business processes such as billing and ticketing. The airline CRS needs the PNR because the CRS is the point of service delivery and, in some scenarios, inventory management. Regardless of where the trip is booked (through the airline or through the GDS), active PNRs in both locations should be synchronized.

### **MERCHANDISING CAPABILITY**

Airlines are expanding their service offerings beyond seats to checked baggage, lounge passes, meals, drinks and whatever else they choose to add either a la carte or in bundles. Group bookers want access to these additional services: Some may be included in their group packages, others may be purchased optionally. These add substantial complexity to the group shopping and booking process – complexity far beyond the capability of traditional host-based group booking.

### **REPORTING AND ANALYTICS**

Business intelligence remains a challenge in the travel industry. The traditional host-based systems are not database-oriented. While not an obvious limitation, one main advantage of databases is the ability to provide

multiple views of the same data for different purposes. Non-host based systems use modern database technology to provide a robust suite of reports that address such things as agency historical performance and utilization, revenue generation, group booking patterns and forecasts.

## **Market Insights**

All of the major GDSs (Amadeus, Sabre and the three within Travelport: Apollo, Galileo and Worldspan) and major airline CRSs offer essentially the same core group legacy-based booking technology, with minor differences:

### **AGENCIES DIRECT TO AIRLINES**

This is the process preferred by airlines, especially in the Asia Pacific region. Contracts are established between the airline and travel agencies. Airlines then allocate group inventory space to support these contracts. Agencies use a GDS bridge (a communications path from the agency through the GDS, which provides a pass-through without creating a PNR in the GDS) directly to the airline's CRS to create a group PNR.

Within the airline CRS, an inventory management system contains business rules that determine when allocated inventory must be sold or returned to open booking. Even though there is no active GDS involvement up until this point, many travel agency business processes – such as billing and ticketing – are tied to the GDS, not the CRS. To compensate for this, once the group booking is made in the airline CRS, airlines (using other tools) can copy the PNR to the travel agency's GDS. There are also separate products that allow airlines to transfer control of the PNR to agencies through a "push" PNR process; agencies can obtain control through a "claim" PNR process.

### **AGENCIES BOOK GROUPS IN THE GDS**

The major GDSs also host airline CRSs. They provide their participating carriers with a suite of tools for airlines (or designated travel agents) to define seat allotments, time frames for sale and other parameters in the GDS, and authorize travel agents to use these allotments. In this process, the agency deals only with the GDS. Because the airlines would prefer to have the booking made directly, this solution is often not preferred and not supported.

This group space is fully integrated with the airline's inventory and booking system. Business rules similar to those discussed above determine when inventory is to be returned to the airline. Communication between the GDS and the CRS is done through standard GDS messaging.

Figure 2 shows the names of each of the GDS legacy-based products and additional features and capabilities that they provide to differentiate themselves. Sometimes a GDS can provide additional controls to an airline hosted in its system.

**Figure 2**  
**Unique GDS Legacy Booking Features**

GDS	Product Name	Comments
<b>Amadeus</b>	Amadeus Negotiated Space	Unique among GDSs, Amadeus provides tools for GDS users and hosted airlines to create a non-homogeneous PNR with up to 99 names, each with different itineraries.
<b>Sabre</b>	Group Manager (for hosted carriers)	Interfaces with a group revenue management system and a contract management system.
<b>Sabre</b>	Group Management Tool (for agencies booking groups through the GDS)	
<b>Apollo</b>	Galileo Groups	
<b>Galileo</b>	Galileo Groups	
<b>Worldspan</b>	WorldGroup	Available to hosted airlines for use in their own reservations offices.

Source: PhoCusWright Inc.

## NEW PRODUCTS AND NEW CAPABILITIES

Group booking is ripe for technology to replace or augment the current labor-intensive and limited-legacy capabilities. Given the size of the market this segment represents, it is surprising that companies have not done more. Here are the details for new products and capabilities currently planned or implemented:

### *Amadeus*

Amadeus is planning Group Negotiator as part of its Altéa Suite for hosted carriers. Group Negotiator will provide automated assistance to the group revenue management specialist in establishing the fares to be offered in a group booking. It is comprised of a suite of decision-support

tools integrated with the Altéa inventory system, and will enable analysts to accurately establish group fares. It targets airlines that currently rely on manual group booking processes.

### *Sabre*

In order to enable group bookings from multiple sources, including agencies and other airline partners, Sabre is delivering AirVision Group eCommerce, a Web-based portal designed to be an online self-service group booking system for hosted carriers. With a GUI, it provides a facility for agencies and others to make and manage group bookings easily and quickly. Using Web technology, it even features a shopping cart that allows choices to be held until checkout.

AirVision eCommerce enables a true electronic contract and includes an extensive array of reporting and analysis tools, as well as the ability to establish, enforce and bypass business rules. In the future, AirVision eCommerce will support merchandising, fare families and dynamic packaging as part of its up-sell/cross-sell features.

Its customer relationship management (CRM) module allows the integration of profile and historical data to provide an understanding of the customer's value and to support intelligent service decisions during the customer relationship life cycle.

Even though AirVision eCommerce is Web-based, it integrates well with Sabre's other group tools – Group Manager and Group Management Tool – which enable PNR synchronization and group revenue management.

### *Wipro*

A newcomer to this space, Bangalore, India-based Wipro is introducing a new online group booking solution called GBoS (Group Booking System). Traditionally a services company, Wipro is making ongoing investments in various industries.

GBoS is designed to be a Web-based portal that exercises business rules based on the contracts in place between the airline and the agency and synchronizes PNRs between airline CRSs and the agency's GDS of choice. The GBoS contract management system provides synchronization between the agency, the airline and the agency's profiles, which drive the portal business rules. Planned but not yet

in place is a group revenue management system that will assist airlines in setting the optimum price and routing to maximize revenue.

Through a GUI, GBoS enables agents to interact directly with the airline over the Internet (no GDS bridge required) and manage all aspects of group bookings once the space allocation is made. The tool includes a mechanism to track group reservations throughout the life cycle of a booking; automated workflow between agents, airlines, revenue management, CRSs and GDSs; and automated notifications such as due date reminders, alerts and action items.

Designed from scratch with an eye to the future, GBoS supports merchandising and fare families. The tool enables a single point of booking that includes air, ancillary items offered by airlines (checked bags, lounge passes, food), transfers, hotels, events and activities, broadening the airline's revenue base.

Built on database technology, GBoS features a full suite of analytics and reports. Its reporting package includes the ability to track interaction between agents who did not complete the booking process, to develop forecasts based on historical performance, to observe agency performance and to track sales and revenue.

Even though it is relatively new to the marketplace, the GBoS solution has been validated by several airlines in the U.S. and Asia Pacific.

## ANALYSIS

There are a variety of group bookings solutions in the marketplace. One would think that in 2010, a modern Web-based solution would not only be accepted but embraced – but the airline and travel agency industries have long relied on the legacy, text-based screen. Besides human resistance to change, a number of other factors will shape the future of technology in this space:

- The strong business relationships between airlines and travel agencies
- The unwillingness of airlines to distribute group space through GDSs (which would give GDSs more leverage)

- The reluctance of airlines to take on new, non-legacy based technology or to allocate resources to support the necessary changes
- The fact that many airlines do not know the real value of group booking, and therefore have difficulty developing a business case for new capability

It appears that Wipro and Sabre are developing capability in line with [the ideal group management system](#) discussed above. But is the marketplace ready? Only time will tell.

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## Glossary

**CRS:** Computerized Reservation System

**GBoS:** Group Booking System

**GDS:** Global Distribution System

**GUI:** Graphical User Interface

**Non-homogeneous PNR:** A PNR that lists multiple travelers, each possibly with a different itinerary

**O & D:** Origin and Destination

**Passive segments:** Records of bookings that are stored on the CRS/GDS but have no active processing, such as those for schedule changes

**PNR:** Passenger Name Record

**Utilization rate:** The ratio of reservations made to passengers actually boarded