

## **Reservations and Ticketing with Amadeus**

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# Introduction

## Objectives

*After completing this unit, you should be able to do the following:*

1. Identify the basic components of a computer reservation system.
2. Sign in to Amadeus and sign out.
3. Encode and decode airlines, cities, aircraft equipment, and countries.

A computer reservation system (CRS) is based on a large central computer, or mainframe, in a central location serving many different sites, such as travel agencies and airline ticket offices. A reservation system that provides service to users in both hemispheres may also be referred to as a global distribution system (GDS).

The Amadeus central computer, located in Erding, near Munich, Germany, is the largest reservation system in Europe. Amadeus provides access to airline flight schedules, fare information, hotel rates, car rentals, and other essential travel data.

When a reservation is booked by a travel agency, the information is stored by Amadeus and sent to the vendor. In many cases, Amadeus can provide direct access to the airline's reservation system. Amadeus provides displays for more than 300 participating passenger carriers.

## Sign In/Sign Out

Before Amadeus can be used to access airline fares or book passenger reservations, the travel agent must first sign in at the terminal. The sign-in procedure identifies the agent who will be using the system and the work area in which he or she will be working. The work area is an electronic holding area assigned to each agent set. In the work area, the agent assembles information such as the customer's name, contact telephone numbers, and the desired ticketing date. Together, this collection of data is referred to as a passenger name record (PNR). When the data is complete, the agent inputs the entry to end the transaction. The record is then sent to permanent storage, and the work area is cleared so that another PNR can be assembled.

If the terminal will not be used for a prolonged time period, the agent should sign out of the system. Each travel agent who is authorized to use the Amadeus system has an identification code, called a "sine".

## Sign-In

The sign-in entry is used to identify the agent and gain access to the system. The sign-in entry has the following format:

JJ<Agent sine>/<Duty code>-<Password>

**Example:**

JJ2346TK/GS-MANAGER

Sign in:	JJ
Agent sine:	2346TK
Duty code:	/GS
Password:	-MANAGER

The duty code is used to obtain access to various Amadeus functions. The duty code GS indicates general sales duty. If an agent has only one duty code associated with his or her sine, the duty code may be omitted. The password is defined by the user.

**Sign Out**

Before leaving the terminal for an extended period of time, or at the end of each business day, the agent is instructed to sign out. The sign-out entry has the following format:

JO

A terminal that has been left on and not used for three hours is signed off automatically by Amadeus.

**Entering Commands**

Each Amadeus entry begins with a transaction code and has a specific entry format, which determines the order in which the information must be typed. When a command is input, the appropriate format must be followed exactly. The Enter key is pressed to transmit the command to the central computer.

**Encoding and Decoding**

Official codes are used for airlines, cities, airports, countries, and aircraft equipment. These codes are defined by the International Air Transport Association (IATA) and the International Standards Organization (ISO). The encode function can be used to display the code for a specific term, and the decode function can be used to display the name for a specific code.

**City and Airport Codes**

Cities and airports are indicated by three-character (alpha) codes. For example, the code for Paris is PAR, whereas the code for the Paris Orly airport is ORY. If a city has multiple airports, each airport has a different code. For example, London is served by three major airports. The city code for the London area is LON, whereas the code for Heathrow Airport is LHR and the code for Gatwick airport is LGW. The London area is also served by Stansted airport, which has the code STN, and London City, which has the code LCY.

City and airport codes are designated by the International Standards Organization (ISO) based in Geneva, Switzerland.

### Encoding a City or Airport

The following entry is used to encode a city or airport:

DAN<City or airport>

#### Example

DANLUXOR

This example would be used to determine the city code for Luxor. If multiple cities exist with the same name, the code for each such city is displayed.

### Decoding a City or Airport

The following entry is used to decode a city or airport code:

DAC<City or airport code>

#### Example

DACFCO

This example would be used to determine the name of the city or airport that has the code FCO. If the city is a multi-airport city, the name and code for each airport is displayed with the city name.

### Airline Codes

Passenger airlines, or carriers, are indicated by two-character and three-character (alpha) codes. For example, the two-character code for Air France is AF, and the code for Lufthansa is LH. A three-digit numeric code is also assigned to each carrier. For example, the numeric code for American Airlines is 001, and the numeric code for United Airlines is 016.

Three-character airline codes have also been assigned for use if no further two-character codes are available. For example, the three-letter code FIN may replace the two-letter carrier code AY, now used for Finnair, and AAL may replace the code AA, now used for American Airlines.

The following are examples of carrier and airline codes for different international carriers.

AA	AAL	001	American Airlines
AF	AFR	057	Air France
AI	AIC	098	Air India
AY	FIN	105	Finnair
AZ	AZA	055	Alitalia
BA	BAW	125	British Airways
BD	BMA	236	British Midland
CO	COA	005	Continental Airlines
DL	DAL	006	Delta Air Lines
EI	EIN	053	Aer Lingus

IB	IBE	075	Iberia Airlines
JL	JAL	131	Japan Airlines
KL	KLM	074	KLM Royal Dutch Airlines
LH	DLH	220	Lufthansa
OS	AUA	257	Austrian Airlines
QF	QFA	081	Qantas
SK	SAS	117	Scandinavian Airlines (SAS)
SU	AFL	555	Aeroflot
UA	UAL	016	United Airlines

### Encoding an Airline

The following entry is used to encode an airline:

DNA<Carrier>

#### Example

DNAAER LINGUS

This example would be used to determine the carrier code for Aer Lingus. When this entry is input, Amadeus responds as follows:

**EI/EIN 053 AER LINGUS**

The response includes the two-letter and three-letter carrier codes, the three-digit IATA numeric code, and the airline name.

### Decoding an Airline

The following format is used to decode a carrier code:

DNA<Carrier code>

#### Example

DNABD

This example would be used to determine the name of the airline that has the carrier code BD.

### Equipment Codes

Each type of passenger aircraft is indicated by a three-letter equipment code. For example, 747 is the equipment code for Boeing 747 aircraft, and D10 is the code for McDonnell Douglas DC-10 aircraft. Some equipment, such as 737, DC-10, or L-1011 aircraft, have multiple models. For example, three basic models of the 737 are used for passenger transportation, including the 737, 737-200, and 737-300. Equipment codes are used in flight availability displays to indicate the type of aircraft used on each flight.

The following are examples of equipment codes for common passenger aircraft.

A3B	Airbus Industrie A-300B
DC9	McDonnell-Douglas DC-9
D10	McDonnell-Douglas DC-10
D9S	McDonnell-Douglas DC-9 Super Jet
L10	Lockheed 1011 Tristar
M80	McDonnell-Douglas MD-80
310	Airbus Industrie A-310
320	Airbus Industrie A-320
727	Boeing 727
733	Boeing 737-300
737	Boeing 737
73S	Boeing 737-200
747	Boeing 747
757	Boeing 757
767	Boeing 767

The equipment codes 72S and 73S represent special configurations of the 727 and 737 aircraft. The S indicates that the airplanes have been configured for additional passenger seating. These specially configured aircraft are commonly referred to as "stretch jets." Similarly, the codes 72M and 73M indicate a "multiple" configuration, designed to transport cargo as well as passengers.

### **Encoding Aircraft Equipment**

The following entry is used to encode aircraft equipment:

DNE<Equipment>

#### **Example**

DNEFOKKER F27

This example would be used to determine the equipment code for the Fokker F27 aircraft.

### **Decoding Aircraft Equipment**

The following entry is used to decode an equipment code:

DNE<Equipment code>

#### **Example**

DNEM80

This example would be used to determine the aircraft equipment for the code M80.

## Country Codes

Each country has two-character code designated by the International Standards Organisation (ISO). The following are examples of common ISO country codes:

AT	Austria
AU	Australia
BE	Belgium
CH	Switzerland
DE	Germany
DK	Denmark
ES	Spain
FR	France
IN	India
IT	Italy
JP	Japan
NL	Netherlands
NO	Norway
SE	Sweden
GB	United Kingdom
US	United States

## Encoding a Country

The following format is used to encode a country:

DC<Country>

### Example

DCZIMBABWE

This example would be used to determine the country code for Zimbabwe.

## Decoding a Country Code

The following format is used to decode a two-letter ISO country code.

DC<Country code>

### Example

DCFJ

This example would be used to determine the name of the country that has the ISO code FJ.

## **Review**

Write the correct entry for each of the following:

1. Determine the airline code for Aeroperu.
2. Display the city name for MCT.
3. Determine the aircraft for the equipment code B11.
4. Display the city code for Bologna.
5. Encode Air Afrique.
6. Decode the country code JP.
7. Determine the country code for Austria.
8. Encode Egyptair.
9. Decode the city LCA.
10. Encode the city Gaborone.

# Flight Availability

## Objectives

*After completing this unit, you should be able to do the following:*

1. Display flight availability for a specific departure date and city pair.
2. Interpret the information in an availability display.
3. Input follow-up and alternative availability entries.

In Amadeus, the term **itinerary** refers to the origin, destination, and intermediate points in a journey. Each portion of an itinerary is referred to as a **segment**. As an example, consider the following journey:

1. PAR MAD
2. MAD PAR

This example includes two flight segments. The first segment in the itinerary is called the originating or outbound segment. The first point of the first segment is called the origin. In this example, Paris (PAR) is the origin, and Madrid (MAD) is the destination.

The flight that returns from the destination to the origin is called the return flight. The passenger will travel from Paris to Madrid in the outbound segment, and from Madrid back to Paris in the return segment.

If a change of aircraft is required, each connecting flight is a separate segment. A point in a connection where a change of aircraft occurs is called a connecting point. Any point that is not a connecting point in an air itinerary is a stopover point.

For example, assume a passenger will travel from Frankfurt to Johannesburg, changing aircraft in Cairo. After attending a meeting in Rome, he will return on a nonstop flight to Frankfurt. This passenger's itinerary will consist of the following air segments:

1. FRA CAI
2. CAI JNB
3. JNB FRA

In this example, the passenger will depart from Frankfurt (FRA) and disembark in Cairo (CAI) to board a continuing flight to Johannesburg (JNB). The Cairo-Johannesburg portion of the trip is a separate segment. In this example, Cairo is a connecting point, and Johannesburg is a stopover point.

## Displaying Availability

The availability function may be used to display scheduled flights for any two designated points. If a date is not specified, the system displays flights departing on the current date. Since schedules often change, it is important to specify the departure date. The day is typed as one or two digits and the month as a three-letter abbreviation. For example, 17 July is typed as 17JUL, and 3 December may be typed as either 3DEC or 03DEC.

### City Pairs

A point at which a passenger boards a flight is referred to as the origin or boarding point, and the point at which a passenger disembarks is referred to as the destination or off point. The appropriate city code or airport code is input for each point. Together, the codes for the origin point and the destination point are referred to as a city pair. The following are examples of city pairs:

Paris-Zurich	PARZRH
Amsterdam-New York	AMSNYC
Madrid-Lyon	MADLYS

The selection of an airport may depend on the passenger's preference. If the passenger requests a particular airport, the applicable airport code should be used. Otherwise, the city code may be used to display availability for all airports in the vicinity. For example, the city code PAR refers to all Paris airports, including Charles de Gaulle (CDG) and Orly (ORY).

### Neutral Availability

The transaction code AN is used to obtain a neutral availability display, as follows:

AN<Departure Date><City Pair>

#### Example

AN10MAYAMSMAD

This example will display neutral availability for departure on 10 May from Amsterdam to Madrid.

A departure time may be specified, as well. To illustrate, assume a client plans to travel from Frankfurt to Paris. He would like to depart on 13 September at about 0900. The following entry would be used to display neutral availability:

AN13SEPFRAPAR0900

When this entry is input, Amadeus will search for flights departing within one hour before the specified time.

Response:

**	AMADEUS	AVAILABILITY	-	AN	**	PAR	PARIS.FR		86	MO	13SEP	0900				
1	AF1445	C9	M9	T9	K9	V9	FRA	1	CDG2A	0945	1100	E0/320	01:15			
2	AF1441	C9	M9	T9	K9	V9	FRA	1	CDG2A	1115	1230	E0/735	01:15			
3	BA3482	C9	D9	M9	S9	B9	L9	Q9	FRA	1	CDG	1	1120	1230	E0/100	01:10
						V9										
4	LH4410	C9	Z9	H9	V9	L9	B9	G9	FRA	1	CDG	1	1240	1350	E0/320	01:10
5	BA3484	C9	D9	M9	S9	B9	L9	Q9	FRA	1	CDG	1	1510	1620	E0/100	01:10
						V9										
6	LH4400	C9	Z9	H9	V9	L9	B9	G9	FRA	1	CDG	1	1525	1640	E0/737	01:15
7	AF1405	C9	M9	T9	K9	V9	FRA	1	CDG2A	1615	1730	E0/320	01:15			
8	LH4378	C9	V9	B9	L9	K9	FRA	1	CDG	1645	1755	E0/310	01:10			
	A	B	C		D		E	F	G		H	I	J	K		L

- |                                    |                              |
|------------------------------------|------------------------------|
| A - Line number                    | G - Departure time           |
| B - Carrier                        | H - Arrival time             |
| C - Flight number                  | I - Stops                    |
| D - Seats per class                | J - Amadeus Access Indicator |
| E - Origin point and terminal      | K - Equipment code           |
| F - Destination point and terminal | L - Elapsed journey time     |

### Carrier

The column to the right of the flight times lists the carrier for each flight. In the example, line 1 is an Air France flight, and line 3 is a British Airways flight. Each airline is indicated by the two-letter carrier code.

### Flight Number

The flight number, shown to the right of the carrier, may consist of one to four digits.

### Seat Quota

To the right of the flight number are several columns consisting of a letter and a number. These columns indicate the number of seats that can be sold in each class of service. This information is called the seat quota or posting level. Nine is the maximum number of seats displayed in each class. The classes offered on each flight depend on the carrier, type of aircraft, route, and other factors. The availability in each class depends on the carrier's agreement with Amadeus. If the digit 9 is displayed, nine or more seats may actually be available. However, nine is the maximum number that can be sold in one transaction and confirmed immediately.

Seat availability may be indicated by any of the following codes:

- 1 - 8 Exact number of seats that are available
- 9 Nine or more seats are available

0	Waitlist is open for a leg
L	Waitlist is open for a segment
W	Waitlist is open, but not under Amadeus control
R	Seats are available on request only

The number 9 indicates that nine or more seats are available in a selected class. A number less than 9 indicates the actual number of seats that are available.

### **Origin and Destination Points**

On the right of the line number, Amadeus displays the origin and destination points. For a multi-airport city, the applicable airport code is displayed. For a multi-terminal airport, the applicable terminal is also shown. In this example, AF 1445 departs from Frankfurt from terminal 1 and arrives at Charles de Gaulle at terminal 2A.

### **Flight Times**

The two columns on the right of the destination point show the departure time and arrival time for each flight. For example, Air France 1445 is scheduled to depart at 0945 and arrive at 1100.

### **Stops**

The digit on the right of the arrival time indicates the number of stops. All the flights in the example display are nonstop flights. If E is displayed before the number of stops, the flight is eligible for electronic ticketing.

### **Equipment**

The column on the right of the flight times gives the equipment code for each flight. In this example, the flight in line 1 is operated with Airbus Industrie A-320 aircraft.

### **Amadeus Access Indicator**

The airline access indicator is displayed after the number of stops. The carrier's status may be indicated by one of the following codes:

/	Amadeus Access
:	Amadeus Access Update
.	Amadeus Access Sell
*	Amadeus Direct Access
(Blank)	Amadeus Access

An *Amadeus Access* airline provides the highest degree of access to users. Availability information is obtained from the airline's own reservation system. When a request to book a seat is made, Amadeus checks the flight in the airline's system.

With an *Amadeus Access Update* airline, availability information is exactly the same as that found in the airline's reservation system. Immediate confirmation is received.

With an *Amadeus Access Sell* airline, Amadeus secures each reservation by checking the flight in the airline's system.

With an *Amadeus Direct Access* airline, availability can be obtained directly from the airline's reservation system through the use of a special direct-access entry.

With a *Standard Access* airline, flight schedules are updated weekly. When a request to book a seat is made, Amadeus sends a teletype message to the airline requesting the reservation.

## Review

1. The entry code for neutral availability is \_\_\_\_.
2. A maximum of \_\_ seats are displayed in each class of service.
3. If the waitlist is open on a connecting flight, \_\_ is displayed.
4. The availability code \_\_ indicates that seats are available on request only.
5. The Amadeus Access indicator \_\_ signifies that the airline provides the highest level of access to Amadeus users.
6. Select by letter the correct entry to display neutral availability on 22 August from Madrid to Athens:
  - (a) 22AUGMADATH
  - (b) AUG22MADATH
  - (c) AN22AUGMADATH
  - (d) AAUG22MADATH
7. Write the correct entry to display neutral availability on 27 June from ROM to PSA.
8. Write the correct entry to display neutral availability on 18 September from PAR to TYO.
9. What entry would display neutral availability for flights from AMS To DUS for departure on 6 February?
10. Write the correct entry to display neutral availability on 16 April from LON to GVA, departing at about 0900.

## **Follow-up Availability Entries**

When an availability display has been obtained, follow-up entries may be input to modify or enhance the information displayed.

### **Moving the Availability Display**

Amadeus displays a maximum of 12 lines of flight information in each availability display. However, in many cases, more flights may exist for the designated origin and destination points. To display additional flights, the following entry may be input:

MD

This entry may be used only when flight availability has already been displayed. Each time the entry is input, Amadeus will "move down" to display more flight information. The following entry ("move up") may then be input to redisplay the previous flights:

MU

The following entry ("move to previous") may be used to redisplay the availability screen last displayed:

MP

The following entry ("move to next day") will display flights one day later:

MN

### **Return Availability**

After availability has been obtained, the following entry may be used to display return flights:

ACR<Return Date><Departure Time>

#### **Example**

ACR10MAY1400

If the date is omitted, the system will display return flights on the same day as the original availability request.

The following entry will display return availability three days later:

ACR3

### **Changing the Departure Time or Date**

The transaction code AC may be used to change the departure time of an existing flight availability display, as follows:

AC1400

When a departure time is input, the system searches for flights departing within one hour of the specified time.

### Alternate Date

After an availability display has been obtained, a different date can be specified by means of the following entry:

AC21MAY

The date can also be moved forward or back by a specific number of days. For example, the following entry will display availability 2 days earlier:

AC-2

The following entry will display availability 3 days later:

AC3

To redisplay the original availability display, the following entry may be input:

MO

The system responds by redisplaying the availability screen that was obtained before any changes were requested.

### Connecting Flights

A flight that requires passengers to change aircraft at an intermediate point between the origin point and the intended destination, with no stopover allowed, is called a connection. A point-to-point flight that does not require a change of aircraft is called a direct flight, regardless of the number of stops. Connections involving more than one city or airport are shown as separate flights. As an example, assume an agent has obtained the following availability display:

**	AMADEUS	AVAILABILITY	-	AN	**	HKG	HONG	KONG	.HK	27	SA	28OCT	0000			
1	CX	290	F4	J9	C9	W9	Y9	B9	H9	ZRH	B	HKG	1410	0910+1	E0*744	13:00
2	LX	178	F4	S9	M9	B9	H9	L9	V9	ZRH	A	HKG	2040	1455+1	E0.M11	12:15
3	SK	602	C9	S9	M9	B9	H9	L9	V9	ZRH		CPH	1220	1405	E0/M80	
						Q9	G9									
	SK	991	D2	C9	M9	B9	G9	V0	Q0	CPH		HKG	1550	0900+1	E0/D9S	14:40
4	LX	792	C9	S9	M9	B9	H9	L9	V9	ZRH		CPH	1200	1330	0.100	
	CX	270	F4	J9	C9	W9	Y9	B9	H9	CPH		HKG	1420	0900+1	0*744	15:05

The departure point of an onward connecting flight is the arrival point of the previous point. Only one line number is displayed for a connection. In this example, SK 602 departs from

Zurich to Copenhagen, where passengers must change planes to SK 991, which continues to Hong Kong.

### **Displaying Connections**

The following entry format is used to display availability with a specified connecting point:

AN21OCTLONSYD0900/XSIN

Note that /X is typed before the connecting point. The system responds by displaying only connections for the specified transfer point. This example will display connections departing on 21 October from London to Sydney at 0900, with Singapore as the connecting point.

### **Changing the Origin or Destination**

When availability has already been requested for a particular city pair, a different origin point can be specified by entering AC followed by the code for the origin city. For example, to change the current availability display to show only flights originating in Brussels, the following entry may be input:

ACBRU

Availability can be redisplayed with a different destination point, by entering AC// and the code for the new destination, as follows:

AC//NBO

The example above will change the destination point to Nairobi.

A neutral availability display lists direct nonstop flights, direct stopping flights, and connections. The display can be ordered by elapsed time, departure time, or arrival time.

## **Alternative Availability Entries**

Alternative entries may be input to customise the availability display.

### **Availability By Arrival Time**

The transaction code AA may be used to order the availability display by arrival time. As an example, assume you wish to display availability on 22 October from Amsterdam to Cairo, arriving at about 1400. The following entry will order flights by arrival time:

AA22OCTAMSCAI1400

When this entry is input, Amadeus will search for flights arriving up to one hour before the specified time.

### **Availability By Departure Time**

The transaction code AD may be used to order the display by departure time. As an example, assume you wish to display availability on 17 June from London to Hong Kong, departing at about 1100. The following entry will order the display by departure time:

AD17JUNLONHKG1100

### **Availability by Elapsed Travel Time**

The transaction code AE may be used to order the display by elapsed travel time. As an example, assume you want to display availability on 22 October from Sao Paulo to Lisbon. The following entry will order the flights by elapsed time:

AE22OCTSAOLIS

### **Availability by Carrier**

An availability entry may include a selected airline, as in the following example:

AN18SEPPROMNRT/AJL

Note that /A is typed before the carrier code. This example will display only flights of Japan Airlines.

### **Availability by Class**

An availability entry may include a selected booking class, as in the following example:

AN24APRPARMAD/CM

Note that /C is typed before the booking class. This example will display only availability in M class. A minimum number of seats may be requested in a desired class, as follows:

AN30AUGBCNLON/B5

This example requests availability for 5 passengers in B class.

### **Availability by Type of Flight**

The option code /F may be used to display availability for a specific type of flight, as follows:

AN10SEPFRAJNB/FD	Display only direct flights
AN21JUNROMLON/FN	Display only non-stop flights
AN18FEBCPHCAI/FC	Display only connecting flights

### **Direct-Access Availability**

The Direct-Access function allows Amadeus users to obtain availability information from the reservation system of an Amadeus Direct Access carrier. Direct-access entries begin with the number 1 followed by the applicable carrier code. For example, the following entry will access the British Airways reservation system and display availability by departure time from London to Delhi on 22 June at 1000:

1BAAD22JUNLONDEL1000

## Review

Write the correct entry for each of the following:

1. Display additional availability.
2. Change the departure time to 1500.
3. Change the departure date to 16 July.
4. Change the date to 2 days later.
5. Redisplay the availability screen originally obtained.
6. Change the date to 3 days earlier.
7. Change the destination point to FLR.
8. Display return availability at 1800 on the same day as the previous availability display.
9. Display return availability on 19 July departing at 1400.
10. Display availability 15 days later.
11. Display availability by departure date on 12 March from FRA to NYC, departing at 0900 and using AMS as the connecting point.
12. Display neutral availability on 25 April from Zurich to Athens.
13. Change the departure point of an existing availability display to VIE.
14. Redisplay the original availability display.
15. Display availability ordered by arrival time on 16 January from MUC to CHI.
16. Display availability ordered by elapsed time on 24 August from AMS to HKG.
17. Display availability ordered by departure time from TYO to SFO on 19 April.
18. Display availability ordered by departure time on 11 February from LON to SYD, showing only flights of QF.
19. Obtain a direct-access display from the BA system and display availability ordered by departure time on 29 June from LON to NBO, departing at 0900.
20. Display only nonstop flights on 5 September from ROM to MAD, ordering the display by departure time.

# Selling Air Segments

## Objectives

*After completing this unit, you should be able to do the following:*

1. Sell air segments from a flight availability display.
2. Sell connecting flight segments.
3. Waitlist a seat request.
4. Sell or waitlist seats directly by carrier and flight number.
5. Book an open segment using the manual format.
6. Input a passive air segment or one booked outside the system.
7. Input an ARNK segment.

Citizens of the ancient Roman Empire could purchase a first-class or second-class ticket to travel by chariot over the Appian Way. The ticket was accompanied by a document called an *itinerarium*, listing all the places where the passenger was entitled to travel. The term itinerary is still used today to identify the origin, destination, and all the stopping points on a passenger's journey. Each portion of the itinerary is referred to as a segment.

Booking an airline reservation is referred to as selling an air segment. If the requested seats are not available, the reservations may be placed on a waitlist. If other passengers who hold confirmed seats later cancel their reservations, the waitlisted seats may be confirmed. The entry code SS is used to sell an air segment.

## Selling From Availability

When an availability display has been obtained, seats may be sold on a selected flight by means of the following entry:

SS<Seats><Class><Line>

### Example

SS1Y1

The transaction code SS is followed by the number of seats, the class, and the line number of the desired flight.

If the availability status is 0 or L, a seat request may be placed on the carrier's waitlist for that flight. The status code W indicates that the waitlist is open, but it is not under the control of Amadeus. The class code must be one of the valid classes of service in the availability display.

As an example, assume an agent has obtained the following availability display:

** AMADEUS AVAILABILITY - AN ** CPH COPENHAGEN.DK										6 TH 23MAR 1200				
1	AZ1390	C4	Y4	B0	M0	L0	T0	W0	CPH	ARN	1255	1405	E0*DC9	01:10
2	SK 412	C9	S5	M2	B2	G0	V0	Q0	CPH	ARN	1320	1425	E0/M80	01:05
3	TP 602	C4	Y4	M4	L4	V4			CPH	ARN	1400	1510	E0 737	01:10
4	SK 414	C9	S9	M5	BL	GL	VC	QC	CPH	ARN	1420	1525	E0/DC9	01:05
5	SK1406	C9	S9	M9	B9	GC	VC	QC	CPH	ARN	1450	1555	E0/M80	01:05
6	SK 416	C9	S9	M9	B9	GC	VC	QC	CPH	ARN	1520	1625	E0/D9S	01:05
7	KL 166	C7	S7	M7	B7	L7	V7	QC	CPH	AMS	0650	0815	E0*737	01:25
	KL 193	C7	S7	M7	B7	L7	V7	QC	AMS	ARN	0905	1110	E0*100	02:05
8	SK 551	C9	S9	M9	B9	G9	V9	QC	CPH	AMS	0915	1035	E0/M87	01:20
	SK 556	C9	S9	M9	B9	G9	V9	QC	AMS	ARN	1055	1245	E0/D9S	01:50

The client requests 3 seats in M class on SK 414. The desired flight is shown in line 4. A maximum of 5 seats are available to sell in M class. The following entry may be used to sell the segment:

SS3M4

Response:

RP/CPHSK2432/														
1	SK 414	M	23MAR	4	CPHARN	HK3		1420	1525	DC9	0	S		

The top line identifies the responsible office. Each additional line of the passenger name record (PNR) is numbered. The system automatically orders the air segments based on the dates.

Each air segment includes the carrier, flight number, class, departure date, and the day of the week. Monday is indicated by the digit 1, and Sunday by the digit 7. After the date, the segment line shows the origin point, the destination point, the segment status, and the number of seats. The status code HK indicates that the reservation is confirmed.

On the right of the number of seats, the departure time and arrival time are given. If the carrier is an Amadeus Access airline, the equipment code, the number of stops, and the meal code are displayed until the transaction is ended. When the reservation is retrieved from storage, the equipment code, stops, and meal code will no longer be displayed.

**Action/Status Codes**

In the example segment, the code HK ("Have confirmed") indicates a secured reservation. When an air segment is booked with a standard access carrier, the system normally responds with SS if the seats are available. If the number of seats requested exceeds the maximum number, the computer may respond with the action code NN (Need/Need), indicating that the seats will be requested from the airline.

### **Selling Connecting Flight Segments**

If a connection is booked in the same class on all legs, a separate air segment is created for each leg. The following entry may be used to book connecting flights in different classes:

SS1MC4

This example will sell 1 seat in M class on the first leg and in C class on the remaining leg(s) of the connecting flights in line 4.

More than two classes may be booked as follows:

SS1MMC6

This example will sell 1 seat in M class on the first leg, in M class on the second leg, and in C class on the remaining leg(s) of the connecting flights in line 6.

## Review

1. Select by letter the correct entry to sell 3 first class seats on a flight in line 2 of an availability display.

- (a) SSF32
- (b) SS3F2
- (c) SS2F2
- (d) SS2F3

2. Study the following entry, then answer the questions below.

SS3M2

- (a) In what class is the airline space being booked?
- (b) How many seats are being sold?
- (c) What line number in the availability display lists the flight on which the seats will be booked?

3. Refer to the following partial availability display to answer the following questions.

**	AMADEUS	AVAILABILITY	-	AN	**	LYS	LYONS.FR		16	TU	13MAR	0000		
1	SN	827	C4	M4	K4	L4	Q4	BRU	LYS	0740	0905	E0	F28	01:25
2	SN	951	C4	M4	K4	L4	Q4	BRU	LYS	1005	1135	E0	146	01:30
3	SK	593	C9	S9	M9	B9	V9	BRU	LYS	1120	1235	E0/M80		01:15
4	SN	953	C4	M4	K4	L4	Q4	BRU	LYS	1430	1600	E0	146	01:30
5	SN	955	C4	M4	K4	L4	Q4	BRU	LYS	1910	2035	E0	73S	01:25

- (a) Write the entry to sell 4 seats in K class on the flight that arrives at 1135.
- (b) Write the entry to sell 2 seats in C class on the flight that departs at 1430.
- (c) Write the entry to sell one seat in M class on the flight that departs at 1910.

4. Refer to the following itinerary segment and answer the questions below.

1	LH	115	H	12APR	3	MUCFRA	HK2		0700	0805	733	0	C
---	----	-----	---	-------	---	--------	-----	--	------	------	-----	---	---

- (a) In what class of service have the seats been booked?
- (b) How many seats have been booked?
- (c) On what day of the week will the passengers depart?

(d) What is the origin point?

(e) What time is the flight scheduled to arrive at the destination airport?

5. Write the correct entry to sell one seat in F class on the first leg and in C class on the second leg of a connection in line 5.

6. Write the correct entry to sell 3 seats in B class on the first leg, in B class on the second leg, and in K class on the third leg of a connection in line 4.

## Waitlisted Segments

When a flight is sold out and the waitlist is open, the seat request may be placed on the carrier's waitlist for that flight. If other passengers with confirmed seats cancel their reservations, the waitlisted reservation eventually may be confirmed. As an example, assume an agent has obtained the following partial availability display:

** AMADEUS AVAILABILITY - AN **	MUC MUNICH.DE	24 FR 21JUL 1200
1 LH4725 C9 V9 BL LL KL	MAD I MUC 1225 1455 0/737	02:30
2 BA3352 C9 D9 M9 S0 B0	MAD I MUC 1350 1615 0.733	02:25
3 IB3530 C9 Y9 L9 W9 KL	MAD I MUC 1615 1835 0*320	02:20
4 LH4737 C9 V9 B9 LL KL	MAD I MUC 1725 1955 0/737	02:30

The client requests one seat in B class on the Lufthansa flight departing at 1225. The flight is sold out in B class, but the waitlist is open, as indicated by the status code L. Assume the client agrees to be waitlisted in B class on the flight. The following entry may be used to place the seat request on the carrier's waitlist:

SS1B1/PE

The status/action code PE is typed at the end of the entry, preceded by a slash.

The system responds as follows:

RP/MADIB2460/									
1 LH4725 B 21JUL 5 MADMUC HL1	1225	1455	737	0	S				

If the carrier is an Amadeus Access airline, the waitlisted segment has the status HL, indicating a waitlisted reservation. To protect the passenger, an alternative confirmed reservation should be booked, as well. The following entry may be input to book a confirmed segment in M class on the British Airways flight:

SS1M2

The passenger's itinerary would now appear as follows:

RP/MADIB2460/									
1 LH4725 B 21JUL 5 MADMUC HL1	1225	1455	737	0	S				
2 BA3352 M 21JUL 5 MADMUC HK1	1350	1615	733	0	S				

The top line shows the responsible office. Line 1 shows the waitlisted seat on Lufthansa. The action code HL signifies that the seat request has been placed on the carrier's waitlist. Line 2 shows the confirmed reservation on British Airways. If the Lufthansa segment clears the waitlist, you would then confirm the waitlisted segment and cancel the alternative

reservation. When a waitlisted segment and a confirmed segment are booked in the same itinerary, the waitlisted segment should be booked first.

## Selling by Flight Number

Often, seats can be sold on a specified flight without an availability display, if the agent knows the flight number and departure date. Selling air space on a specified flight is called direct selling. The following entry is used to direct-sell a flight:

SS<Carrier><Flight><Class><Date><Origin><Destination><Number of Seats>

### Example

SSUA189Y18SEPSFOHNL2

The above example will book 2 seats on UA 189 in Y class on 18 September, from SFO to HNL. The specific airport codes must be used for the origin point and the destination point. To illustrate, assume you want to book 2 seats on SK 526 in C class on 27 August from London-Heathrow to Stockholm-Arlanda. In this instance, the airport code LHR must be input to indicate Heathrow airport, and ARN must be input to indicate Arlanda airport, as follows:

SSSK526C27AUGLHRARN2

(Optionally, the segment action code NN may be typed before the number of seats.) The system responds as follows:

```
RP/LONSK0880/  
1 SK 526 C 27AUG 2 LHRARN HK2 0920 1245
```

## Review

1. Write the direct-sell entry to book 2 seats in Y class on AZ 131 on 21 May from DEL to FCO.
2. Write the entry to direct-sell BA 510 in C class on 13 December, from LHR to LIN for one passenger.
3. Write the direct-sell entry to book one seat in H class on KL 241 on 15 September from AMS to FRA.
4. Write the entry to book 3 seats in Y class on AZ 420 on 22 April from FCO to FRA.
5. Write the entry to book four seats in C class on OA 269 on 14 January from ATH to LHR.

### **Waitlisting By Flight Number**

To waitlist an air segment with a direct-sell entry, type the waitlist code before the number of seats. For example, to waitlist 2 seats on KL 245 in C class on 16 April from Amsterdam to Frankfurt, the following entry would be input:

SSKL245C16APRAMSFRAPE2

### **Information Segments**

The transaction code SI may be used to input a reservation for information only. When an information segment is input, the segment status code HK is typed before the number of seats, as follows:

SIVT278S22SEPPPTBOBHK2

### **Segments Booked Outside Amadeus**

If a reservation is booked through a source other than Amadeus, the segment can be input to the system with the transaction code SS, as follows:

SSSQ25Y12AUGFRASINPK2/11300645+1/GH2WQE

Note that the flight times are typed after the number of seats. The 6-character code at the end of the entry is the airline record locator. This code may be used to retrieve the reservation on the airline's computer system. Optionally, the airline agent's identification code may be input instead of the record locator.

### **ARNK Segments**

When the origin point of a flight segment differs from the destination point of the previous flight, an ARNK (Arrival Not Known) segment may be inserted in the itinerary for continuity. To illustrate, assume a client will travel from Madrid to Athens on Iberia. He will travel by ship from Athens to Rome, and then board a return flight to Madrid. To maintain continuity, an ARNK segment may be inserted in the itinerary between the Madrid- Athens segment and the Rome-Madrid segment.

The ARNK segment indicates that the air itinerary is interrupted by a means of transportation other than air travel. The following entry is input to indicate an ARNK segment:

SIARNK

The following itinerary illustrates the use of an ARNK segment:

2	KL 238 S 12OCT 2 FRAAMS HK1	1025	1140		
3	ARNK				
4	LH4305 V 17OCT 7 BRUFRA HK1	1440	1545	AB3	0 S

In this itinerary, the passenger will disembark in Amsterdam, but he will board the next flight in Brussels. The ARNK segment maintains continuity between the flight segments.

## Review

1. What two-letter transaction code is used to waitlist seats with normal priority?
2. Select by letter the correct entry to waitlist 2 coach seats on AC 24 on 12 June from Vancouver to Sydney:
  - (a) SSAC24Y12JUNYVRSYD2
  - (b) SSAC24Y12JUNYVRSYDPE2
  - (c) SSAC24Y12JUNYVRSYD2/PE
  - (d) PEAC24Y12JUNYVRSYD2
3. Write the correct entry to waitlist one passenger in T class on BC 858 on 15 December from CDG to LCY.
4. Write the entry to waitlist one passenger in F class on UA 15 on 10 July from LAX to AKL.
5. Write the entry to waitlist 3 seats in Y class on TP 441 on 13 April from BRU to LIS.
6. What term is used to describe a segment inserted in an itinerary to maintain continuity for faring, when the destination of one air segment is different from the origin of the next air segment?
7. What entry will enter the type of segment described in question 6 above in the passenger itinerary?
8. Assume you booked a flight directly by phone with Sunflower Air (PI) and reserved 2 seats in S class on flight 14 from Nadi (NAN) to Savusavu (SVU) on 20 July. Write the entry to input an information segment in the itinerary.