





Airline Schedules

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Lecture Overview

- What is a Flight Schedule?
- Airline Schedules: 3 Perspectives
- Frequency Planning
- Timings



What is Flight Scheduling?

- Timetable of what cities are flown to and at what times
- It includes other aspects (aircraft assignment etc) as well
- Timetable usually updated twice a year (for most network carriers)
 - Often March October and October March



What is Flight Scheduling?

- Frequency
- Timings
- Fleet
- Rotation
- Crew

Airline Schedules

- Operational aspects
 - "Putting the schedule together"
 - Optimisation of flying programme
 - Maintenance
 - Crewing
 - Constraints (curfews, slots)
 - Turnaround times

Airline Schedules

- Economic aspects
 - "Do we make money?"
 - Revenues vs costs
 - Resource planning

Airline Schedules

- Marketing aspects
 - Developing a schedule that is attractive to customers and makes money
 - Enabling connections
 - Competitors
 - Seasonal Adjustments
 - Aircraft
 - Frequency
 - Timings
 - Cancellation/Introduction



Frequency Planning

- Higher frequency improves attractiveness for passengers
 - Reduces schedule delay (time between preferred departure and actual scheduled departure)
 - Can be a competitive advantage
- Particularly important
 - on short-haul routes
 - at peak times (morning/late afternoon)
 - for business travellers (higher value of time)
- Dependent on demand forecasting
- Trade-off: higher frequency & smaller aircraft (higher unit costs) vs lower frequency & larger aircraft (lower unit costs)

Timings

- Short-haul
 - High demand for peak time departures (morning/late afternoon)
 - To enable business passengers day return flights
 - But Aircraft/crew availability?
 - But Aircraft utilisation vs load factor:
 - should the aircraft wait until peak time or return immediatelly most airlines opt for aircraft utilisation, particularly LCCs
 - Less important in leisure markets

Timings

British Airways

Depar	Departing from LON London on Tuesday 19 April 2016												
Flights													
Flight number	From	То	Depart	Arrive	Op by	Stops	Sat 16	Sun 17	Mon 18	Tue 19	Wed 20	Thu 21	Fri 22
BA0902	LHR	FRA	07:05	09:40	ВА	0	×	×	×	×	⋇	×	×
BA8732	LCY	FRA	08:05	10:35	CJ	0			×	×	×	×	×
BA0906	LHR	FRA	08:15	11:00	ВА	0			×	×	×	×	×
BA0904	LHR	FRA	10:50	13:30	ВА	0		×					
BA0904	LHR	FRA	11:00	13:40	ВА	0	×		×	×	×	×	×
BA0908	LHR	FRA	13:45	16:30	ВА	0			×	×	×	×	×
BA8734	LCY	FRA	14:45	17:15	CJ	0		×	×	×	×	×	×
BA0910	LHR	FRA	15:10	17:55	ВА	0	×	×	*	×	×	×	×
BA0912	LHR	FRA	16:10	18:55	ВА	0	×	×	×	×	⋇	×	×
BA8738	LCY	FRA	16:55	19:30	CJ	0			×	×	₹	×	×
BA0914	LHR	FRA	17:10	19:55	ВА	0						×	
BA8736	LCY	FRA	19:10	21:40	CJ	0		×	×	×	₹	×	×
BA0916	LHR	FRA	19:40	22:15	ВА	0		×	×	×	×	×	×

Depart	Departing from LON London on Wednesday 22 June 2016												
Flights													
Flight number	From	То	Depart	Arrive	Op by	Stops	Sun 19	Mon 20	Tue 21	Wed 22	Thu 23	Fri 24	Sat 25
BA2556	LGW	RHO	13:10	19:10	ВА	0				×			
BA2556	LGW	RHO	15:25	21:25	ВА	0							×

Depart	Departing from RHO Rhodes on Wednesday 29 June 2016													
Flights														
Flight number	From	То	Depart	Arrive	Op by	Stops	Sun 26	Mon 27	Tue 28	Wed 29	Thu 30	Fri 1	Sat 2	
BA2557	RHO	LGW	20:00	22:05	BA	0				×				
BA2557	RHO	LGW	22:15	00:25*	BA	0							×	

Timings

- Long-haul
 - Time zones critical issue to generate convenient and possible arrival/departure time
 - See BA schedule LHR HKG LHR
 - Aircraft utilisation vs load factor
 - On long-haul routes aircraft will often be parked until demand is higher
 - See BA and TK schedule LHR JNB LHR



Timings

British Airways

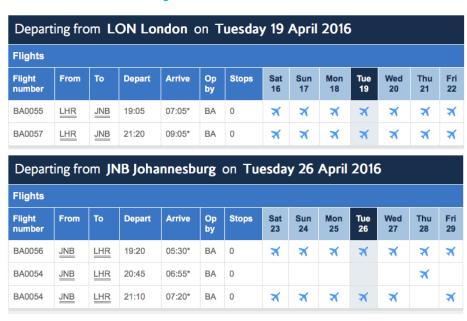
Depart	Departing from LON London on Tuesday 19 April 2016												
Flights													
Flight number	From	То	Depart	Arrive	Op by	Stops	Sat 16	Sun 17	Mon 18	Tue 19	Wed 20	Thu 21	Fri 22
BA0031	LHR	HKG	18:40	13:35*	ВА	0	×	×	×	×	×	×	×
BA0027	<u>LHR</u>	HKG	21:55	16:40*	ВА	0	×	×	×	×	×	×	×

Depart	Departing from HKG Hong Kong on Tuesday 26 April 2016												
Flights													
Flight number	From	То	Depart	Arrive	Op by	Stops	Sat 23	Sun 24	Mon 25	Tue 26	Wed 27	Thu 28	Fri 29
BA0032	HKG	LHR	23:05	04:50*	ВА	0	×	×	×	₹	×	×	×
BA0028	HKG	LHR	23:45	05:35*	ВА	0	×	×	×	*	×	×	*

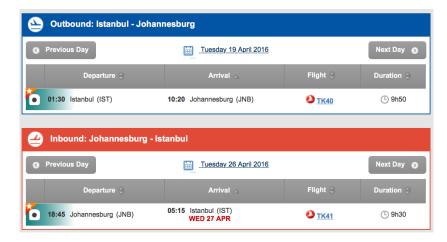


Timings

British Airways



Turkish Airlines



Timings

- Consistency of timings
 - Departure timings same everyday for a certain destination
 - Particularly an issue with business travellers who become familiar with timetables
- Weekend schedules often different to weekday schedules
- Appearance in GDS
 - Block time and frequency
 - Important to be on the first page for a booking enquiry



Conclusions

- Airline scheduling is critical in airline marketing
 - Schedules need to be appealing to customers
 - Airlines can achieve higher yields with a more convenient schedule
- Airline scheduling affects other areas within the airline
 - Operations
 - Aircraft utilisation (ownership costs)