



# Airport Slot Management in Europe

NEXTOR workshop

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# Issues to be discussed:

- **Existing slot allocation system in Europe**
- Slot trading experience at London airports
- Key difference between the EU and USA approach to slot allocation

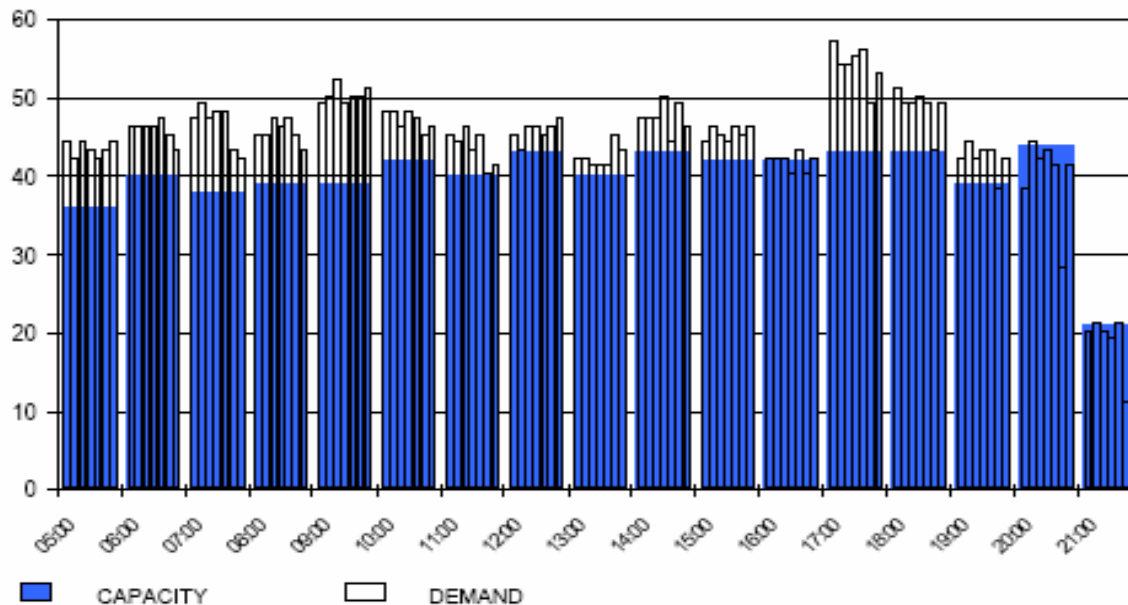


# EC Slot Regulation broadly based on IATA guidelines

- Three types of airports
  - Level 1: non-coordinated airports
  - Level 2: schedules facilitated airports
  - Level 3: coordinated airports ← slot allocation
- Change from level 2 to 3: capacity analysis of the critical subsystem(s)
- Note: a slot covers the full range of airport infrastructure

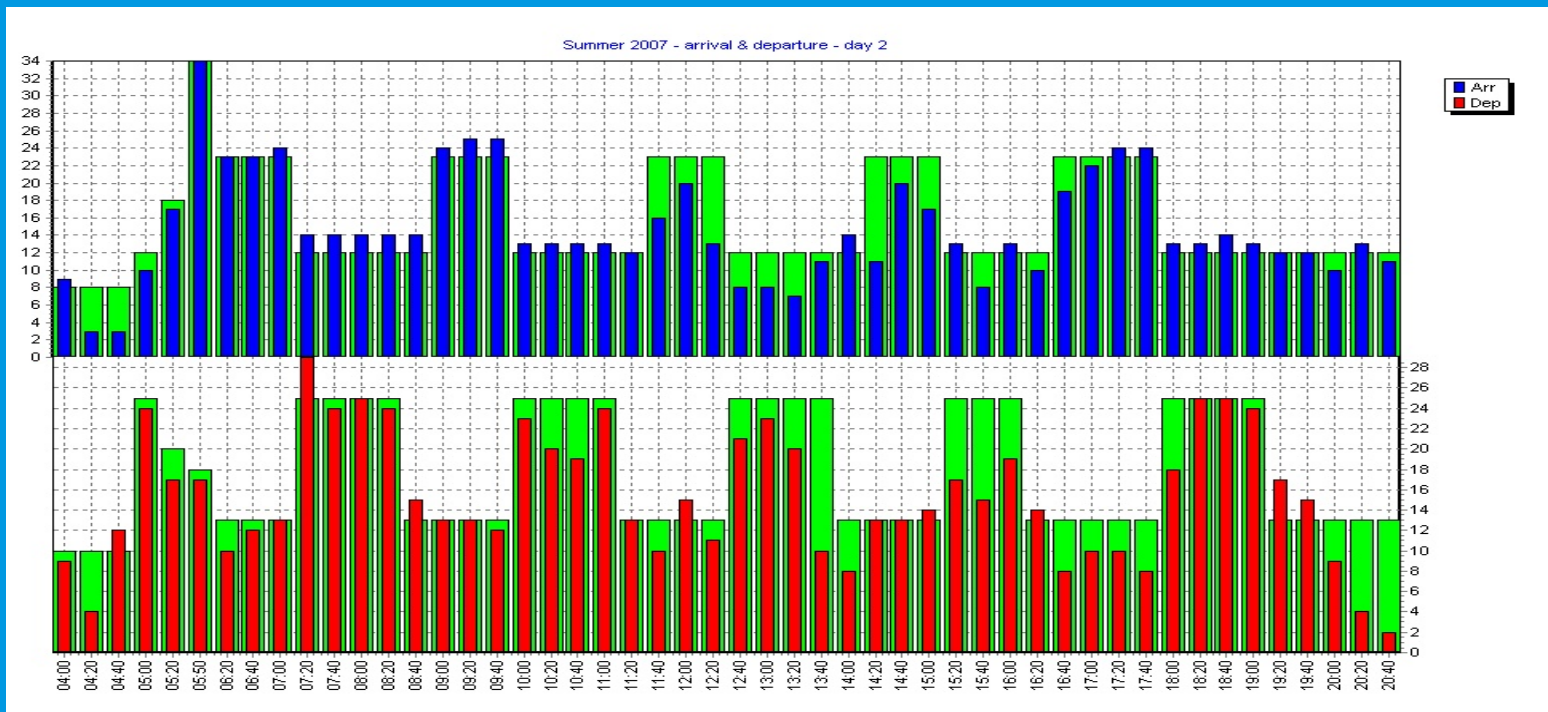
# Declared runway capacity at coordinated airport LHR

RUNWAY MOVEMENT DEMAND - ARRIVALS  
Peak Week Movements per Hour - All times UTC



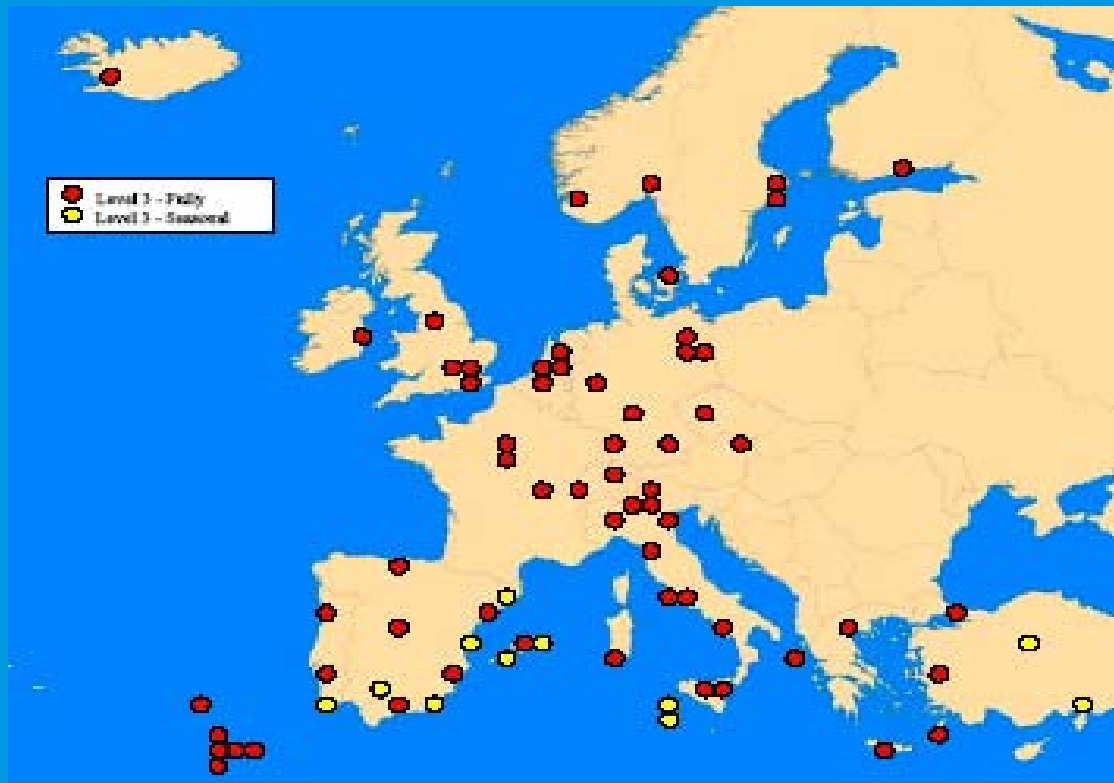
Source: ACL

# Declared runway capacity at coordinated airport AMS



Source: SACN

# 73 level three airports in Europe



- 18 additional airports in Greece have been left off the map
- limited part of the airports is only seasonally coordinated
- Is slot trading relevant for all these airports

Source: Mott MacDonald 2007



# Primary slot allocation at EU coordinated airports

- Made from the slot pool by the slot coordinator
- Based on priority rules
- Allocation subject to:
  - Historical precedence
  - Retimings
  - Local guidelines
- 50% of slots in the pool to new entrants (rather ineffective to stimulate downstream competition)
- Reservations for PSO routes



# Slot exchanges and transfers allowed in the existing system

- **Transfers**
  - by an air carrier from one route to another
  - Between parent and subsidiary companies and between subsidiaries
  - As a part of the acquisition of control over capital
  - In case of a total or partial take-over
  - Slots used by another carrier in joint operations or code sharing
  
- **Exchanges**
  - One for one between carriers ( called 'artificial' if a junk slot is used)



# Slot trading: a British exemption

- **Guernsey case: artificial exchanges are ordinary exchanges; nothing to prohibit monetary consideration**
- **Grey market for secondary trading at the London Airports stimulated**
- **Legality of artificial exchanges still uncertain (ambiguity in the formulation of the Slot Regulation); EC contra: buy and use**
- **Current Regulation is silent as to monetary consideration accompanying exchanges and transfers**



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# Slot trading characteristics at London Airports

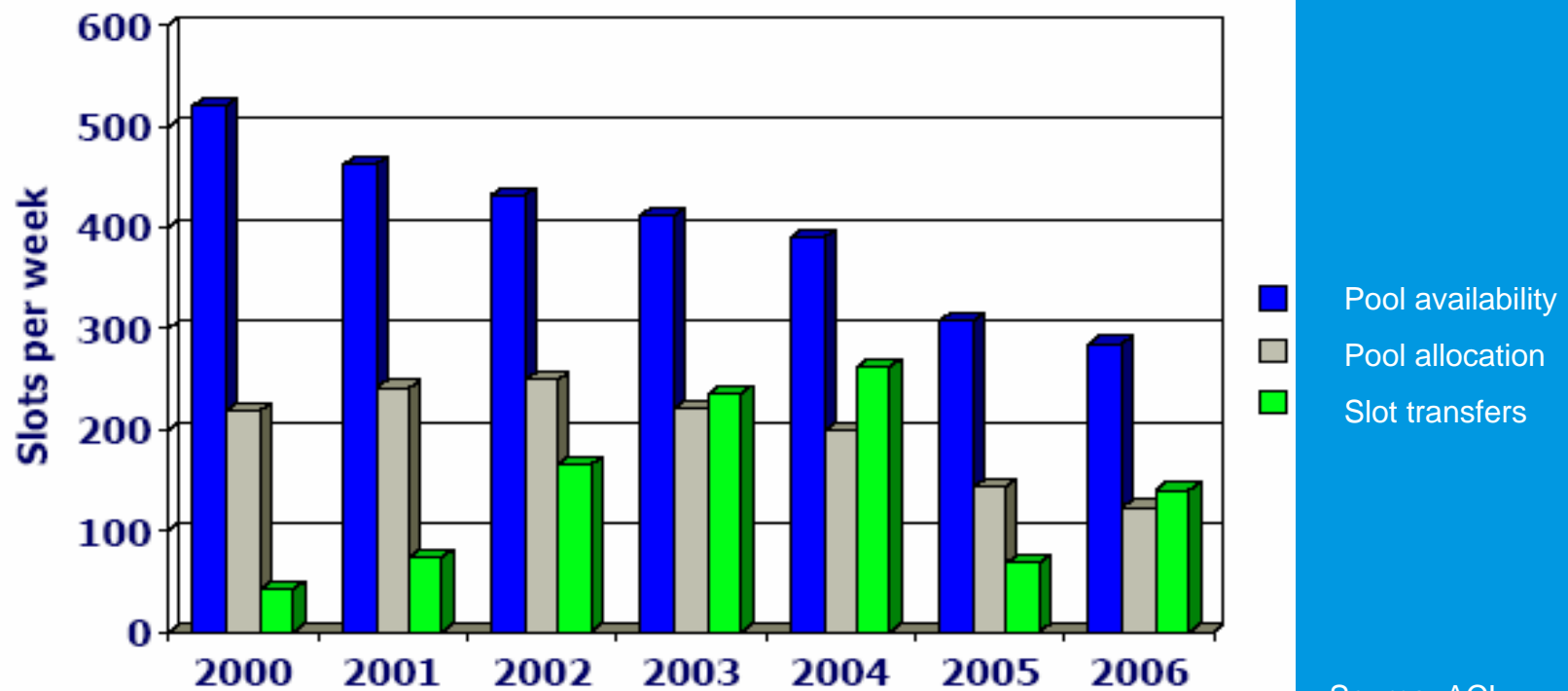
- Artificial slot exchanges
- Trades only partly transparent afterwards, no price disclosure
- Only air carriers can hold and trade slots
- Coordinator must confirm feasibility
- Slots remain subject to use-it or-lose-it rules
- Only grandfathered slots can be traded



# Types of slot trade

- Sale of slots on commercial terms
- Lease of slots on commercial terms (exchange and re-exchange)
- As a part of a route transfer between carriers
- As a part of the restructuring of a bankrupt carrier
- To redeploy slots within an alliance
- To temporarily baby sit surplus slots

# Transfer volumes at LHR



Source: ACL



# Artificial slot exchanges at LHR summer 2001-2005

- 499 summer slots sold, out of a total of 8,700 a week: 6% in five years
- 67 short and long term leases between independent airlines
- 116 traded between alliance partners
- 6 transfers to new operators on the same route
- 120 slots transferred from Sabena to SN Brussels and 112 slots from Swissair to Swiss

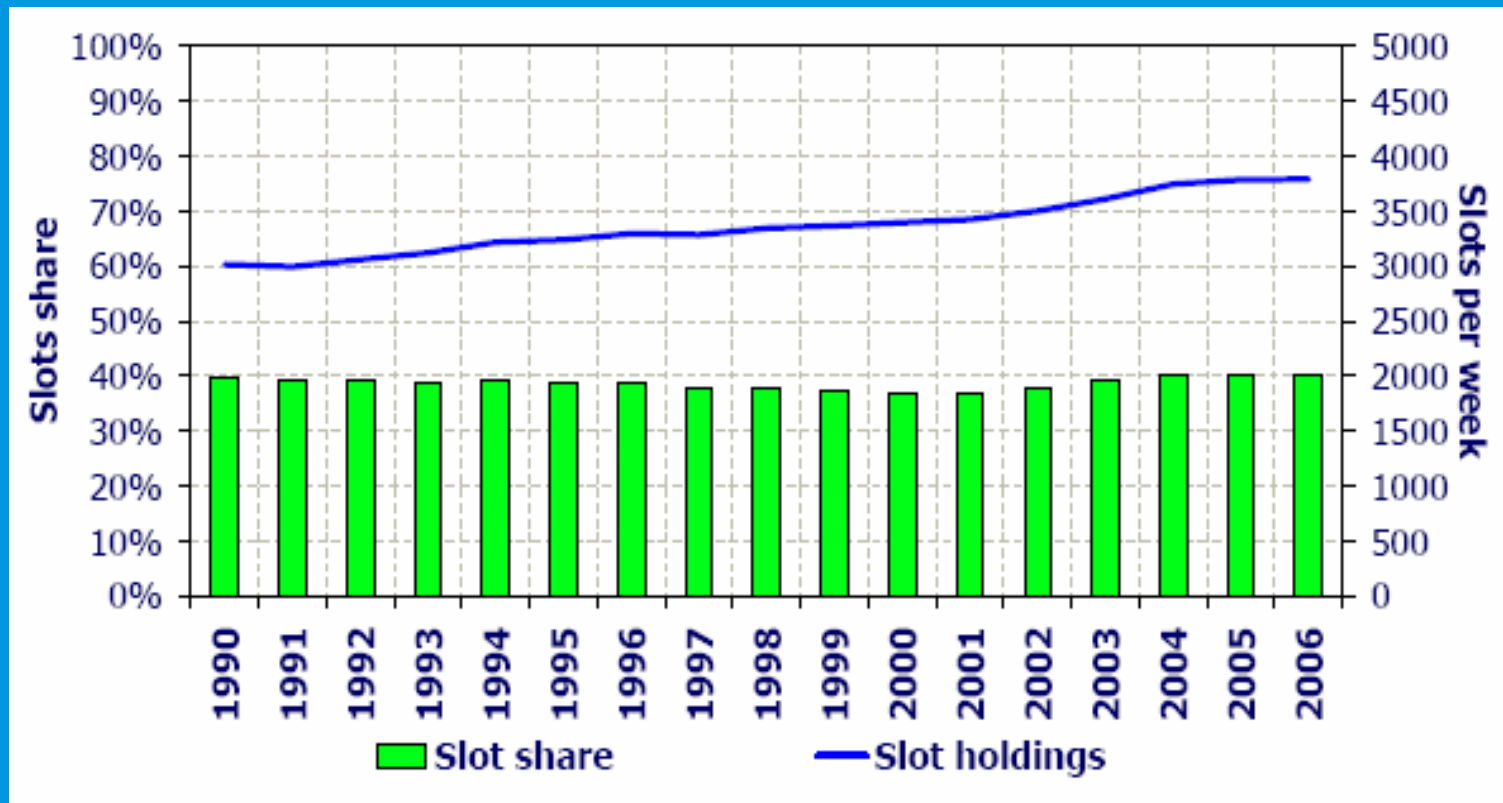


## Of the 499 slots sold

- 73 per cent was acquired by BA
- 13 per cent by Virgin Atlantic
- 11 per cent by Emirates and Quantas
- 3 per cent by a new entrant, Jet Airways

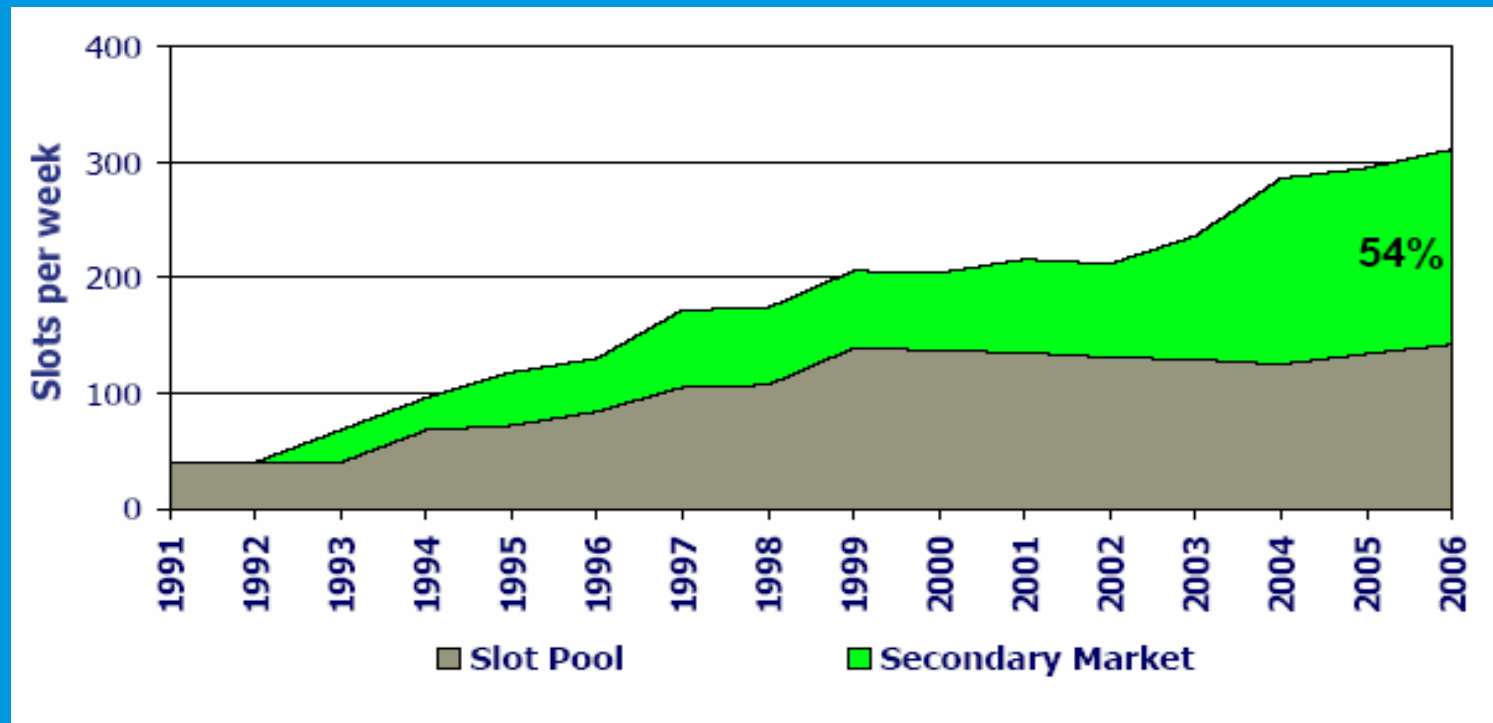
Source: Mott McDonald 2007/ACL

# BA's slot holdings



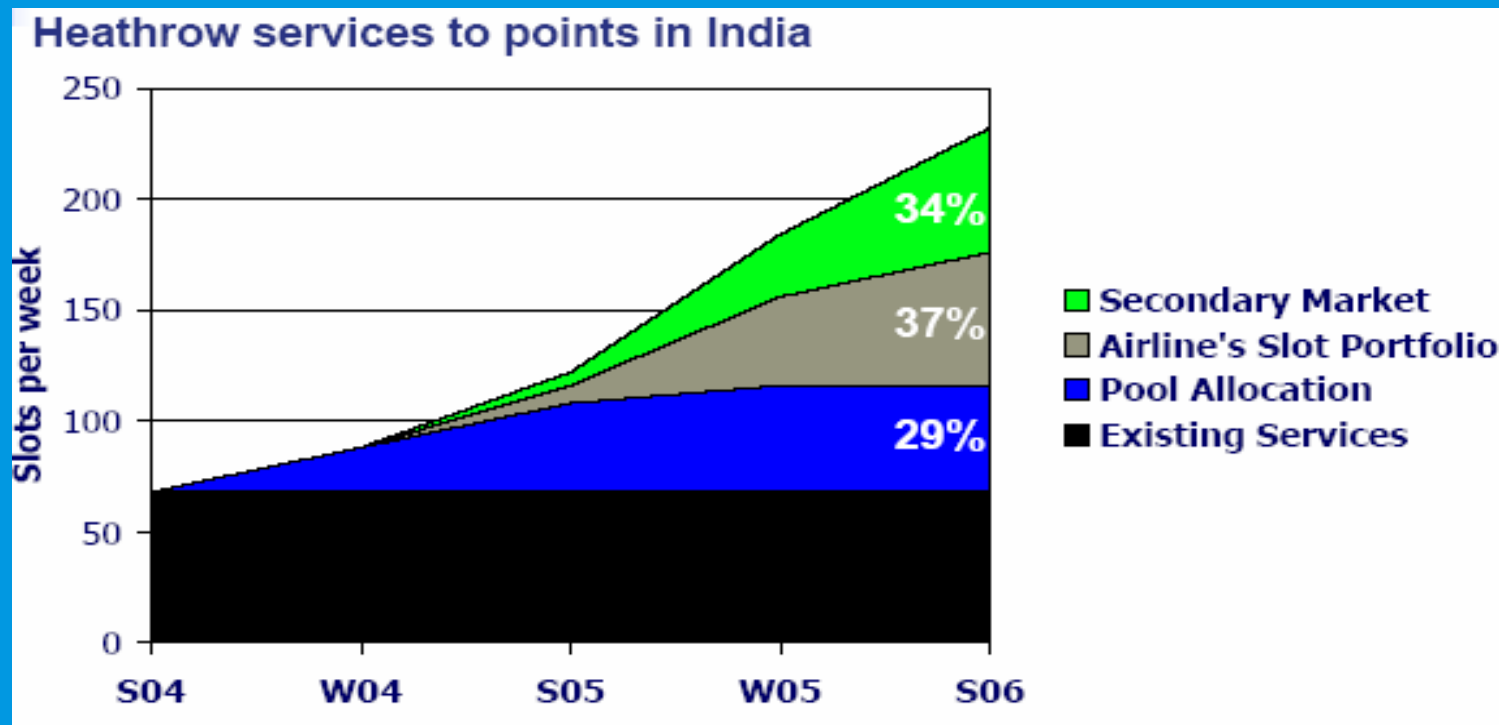
Source: ACL

# Virgin's slot holdings at LHR



Source: ACL

# Liberalisation of the UK-India BASA



Source: ACL



# Impacts of slot trading at LHR:

## 1. airport capacity utilization

- ACL indicates a more efficient use of slots:
  - larger aircraft (135 – 255 seats)
  - more long haul operations (575 – 6,800 km sector length)
- BA, largest buyer, comments that short haul- long haul substitution was intended anyhow within its existing slot portfolio
- Is congestion or trading the main driver?



## Impacts of slot trading at LHR: 2. market concentration?

- BA's slots share increased from 37% to 41%: limited impact whereas other EU hubs are severely dominated without slot trading
- Two opposing views on the consequences of slot concentration in downstream markets
  - GAO (1999): higher fares reflect monopoly rents due to reduced competition at route level
  - Starkie (2006): higher fares reflect scarcity rents in upstream market (market clearing levels for airport capacity through ticket prices instead of peak pricing)



## Impacts of slot trading at LHR: 3. competition/new entrants

- Competition improved in specific downstream markets:
- Trans Atlantic: Virgin built up its slot holdings through secondary trading
- New entrants: Etihad and Emirates
- Liberalized markets: UK-India



## Impact of the slot trading at LHR: 4. Size of the slot market

- NERA (2004) estimate: 5-10 per cent per annum
- Mott MacDonald (2007): 499 summer slots out of a total of 8,700 per week or 6% in a 5 years period
- Different market size to be expected at other congested European hubs? Less congestion, more dominance already. What might be the impact of the new EU-US open skies agreement on the slot trading at LHR?



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# Five key differences in slot allocation between the EU and US

## 1. Different levels of coordination

- 4 in the US versus 73 in the EU
- US runway capacity based on VMC/VFR
- Maximum ATMs per time of the day (EU) versus aircraft queuing up (USA)
- EU slot covers all necessary infrastructure. In US, facilities are subject to separate negotiation



# Five key differences in slot allocation between the EU and US

2. US DoT residual right to deal with congestion (withdrawal numbers for slots), no legal basis for EU Member States to claim slot property to withdraw slots
3. Regulatory moves in US triggered through political initiatives rather than by the regulators themselves: political climate against regulation



## Five key differences in slot allocation between the EU and US

4. In case of regulation USA split up domestic and international slots (fair and equal opportunity). Vast majority of slot trades concerns the domestic market. In EU international and domestic carriers only have access if slots can be obtained.
5. In the USA individuals and entities other than air carriers are permitted to hold slots. In the EU only air carriers.



**Thank you for your attention**