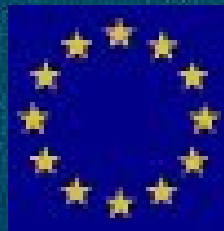


Secondary Slot Trading

Presentation to

Airneth Annual Conference



The Hague
12th April 2007

mm Mott
MacDonald

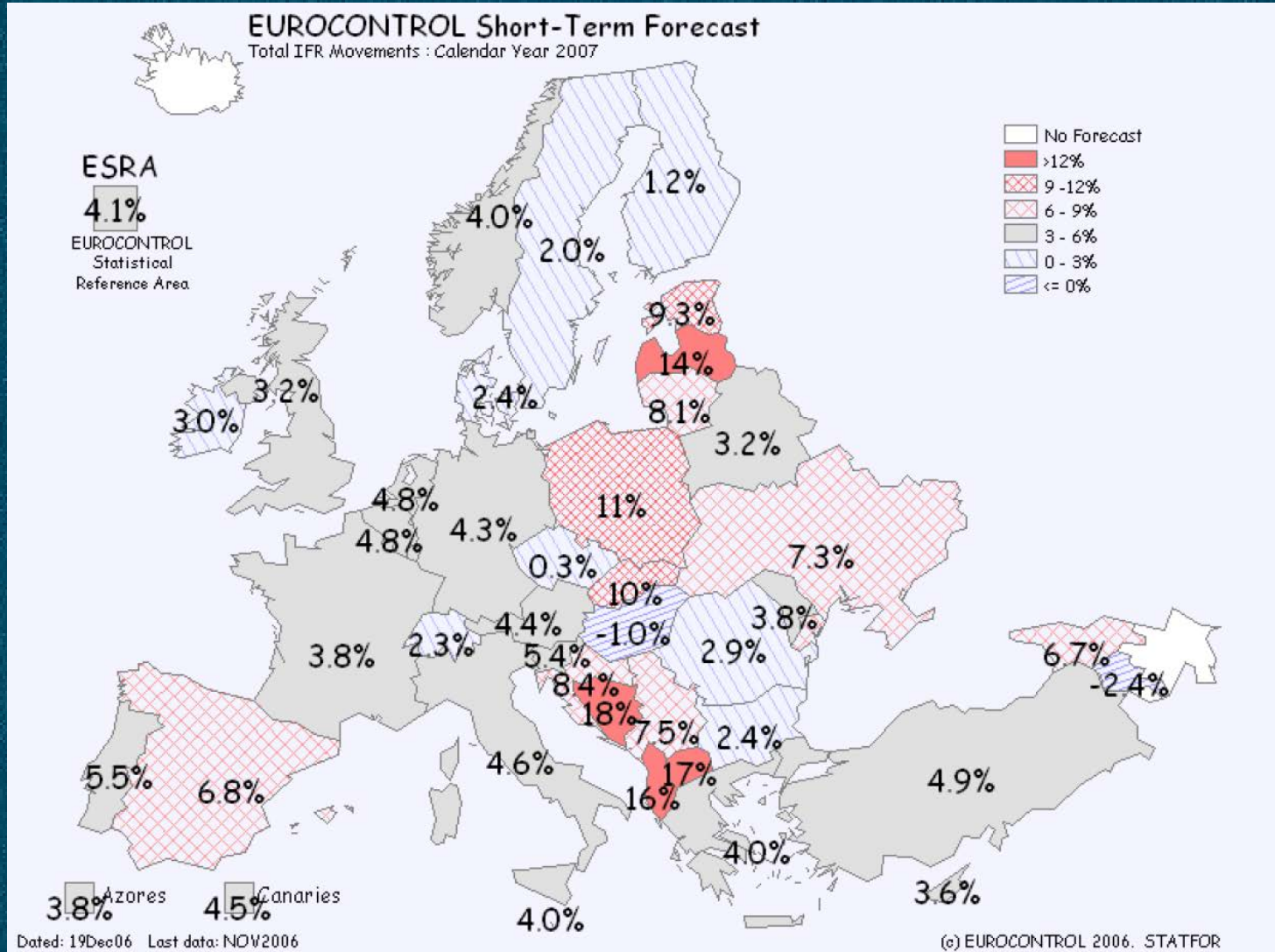
Agenda

- The problem
- Study objectives
- Different experience
- Analysis
- Findings
- Summary
- Questions

The problem!

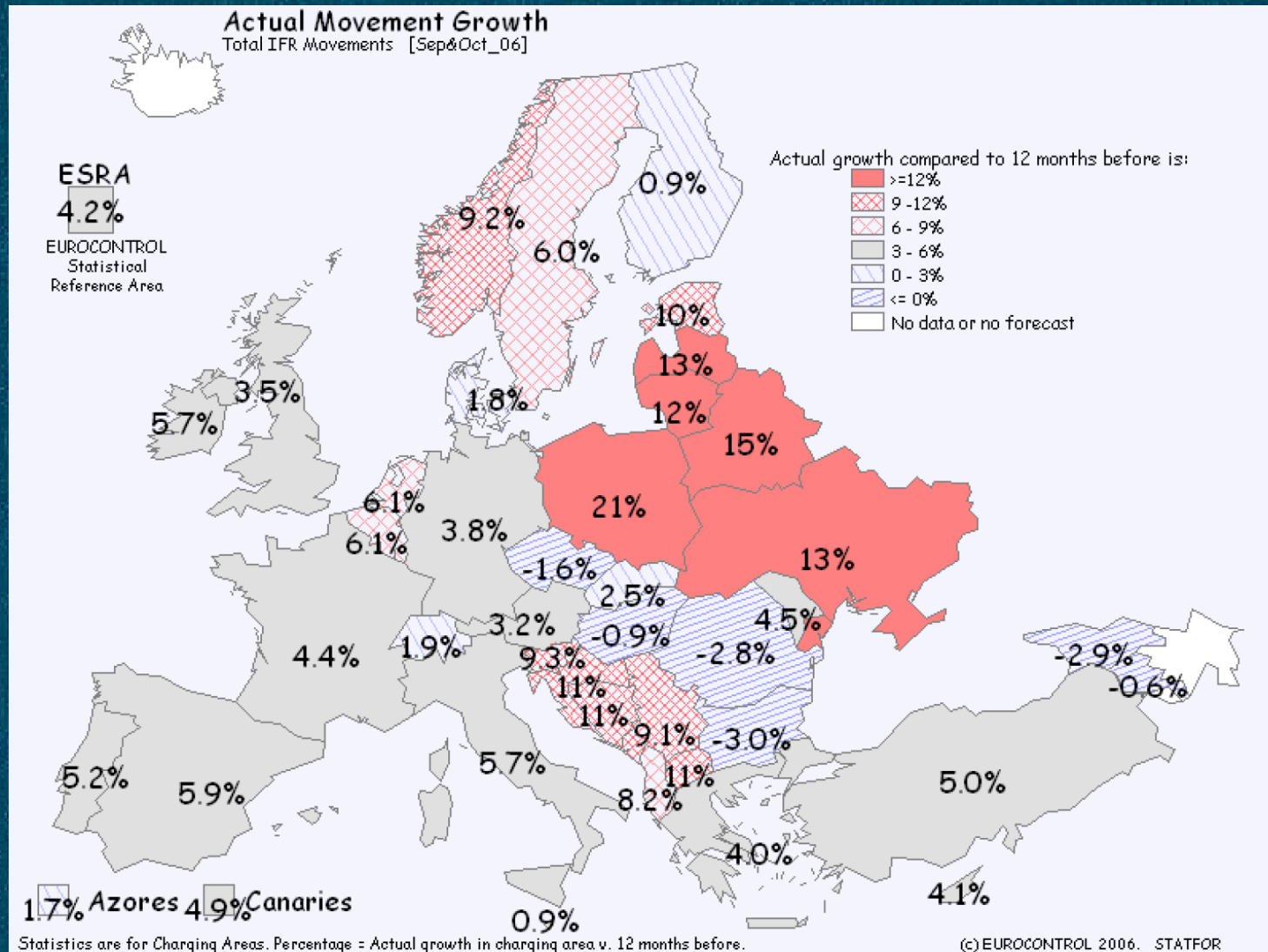


IFR movement forecast for 2007 in Europe



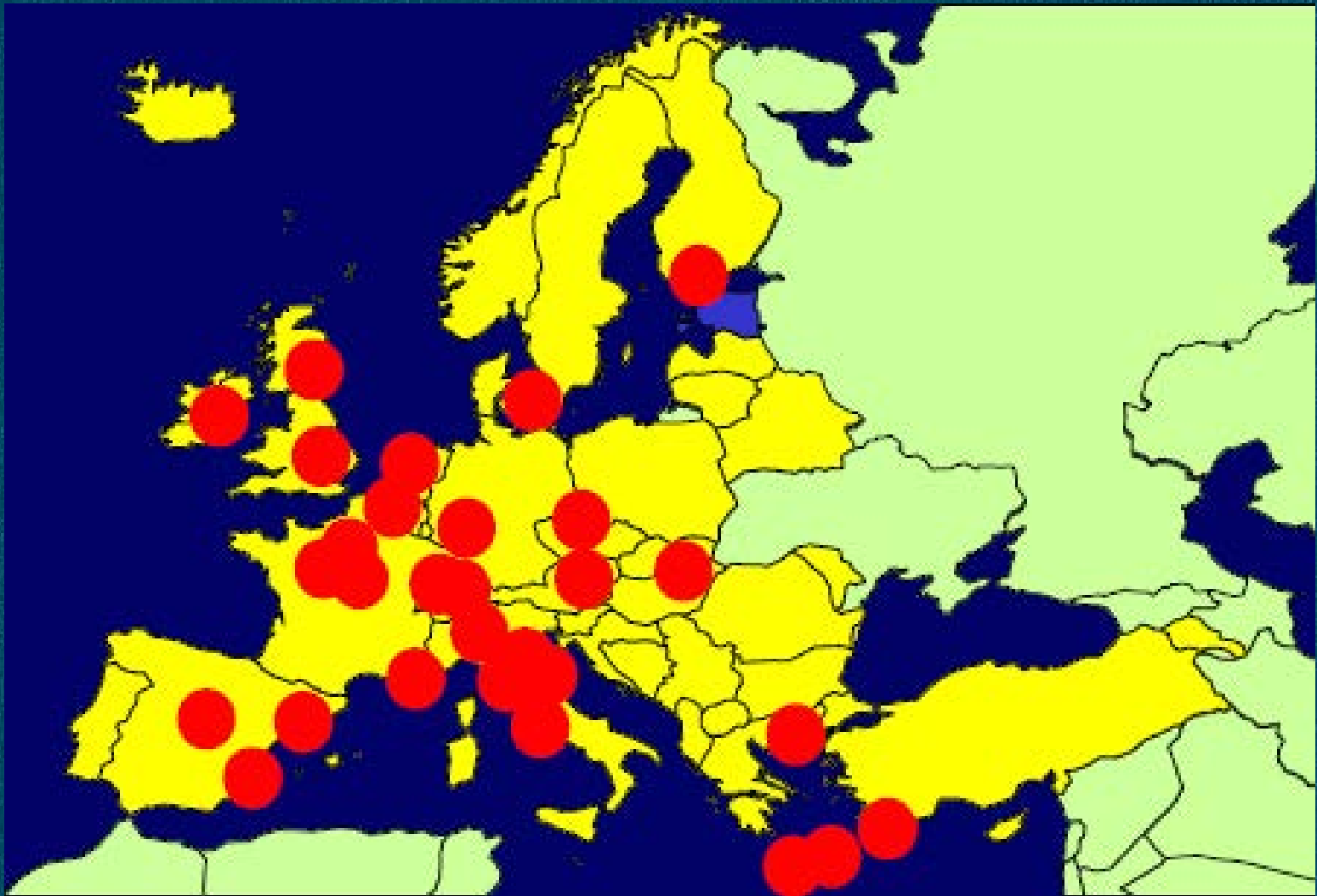
Source: Eurocontrol

European Air Traffic will continue to grow at high rate



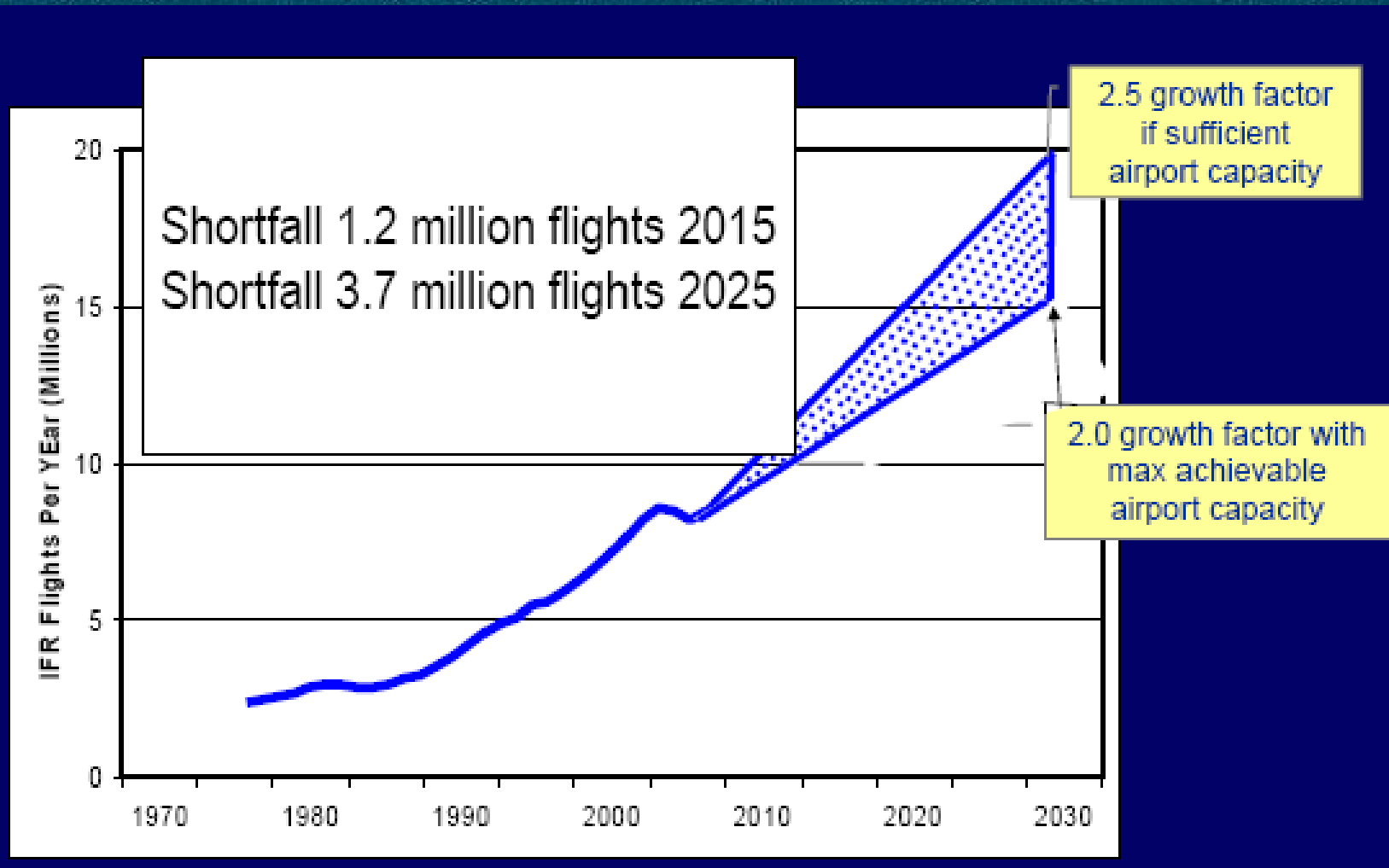
Source: Eurocontrol

Airport capacity problems in Europe



Source: Eurocontrol

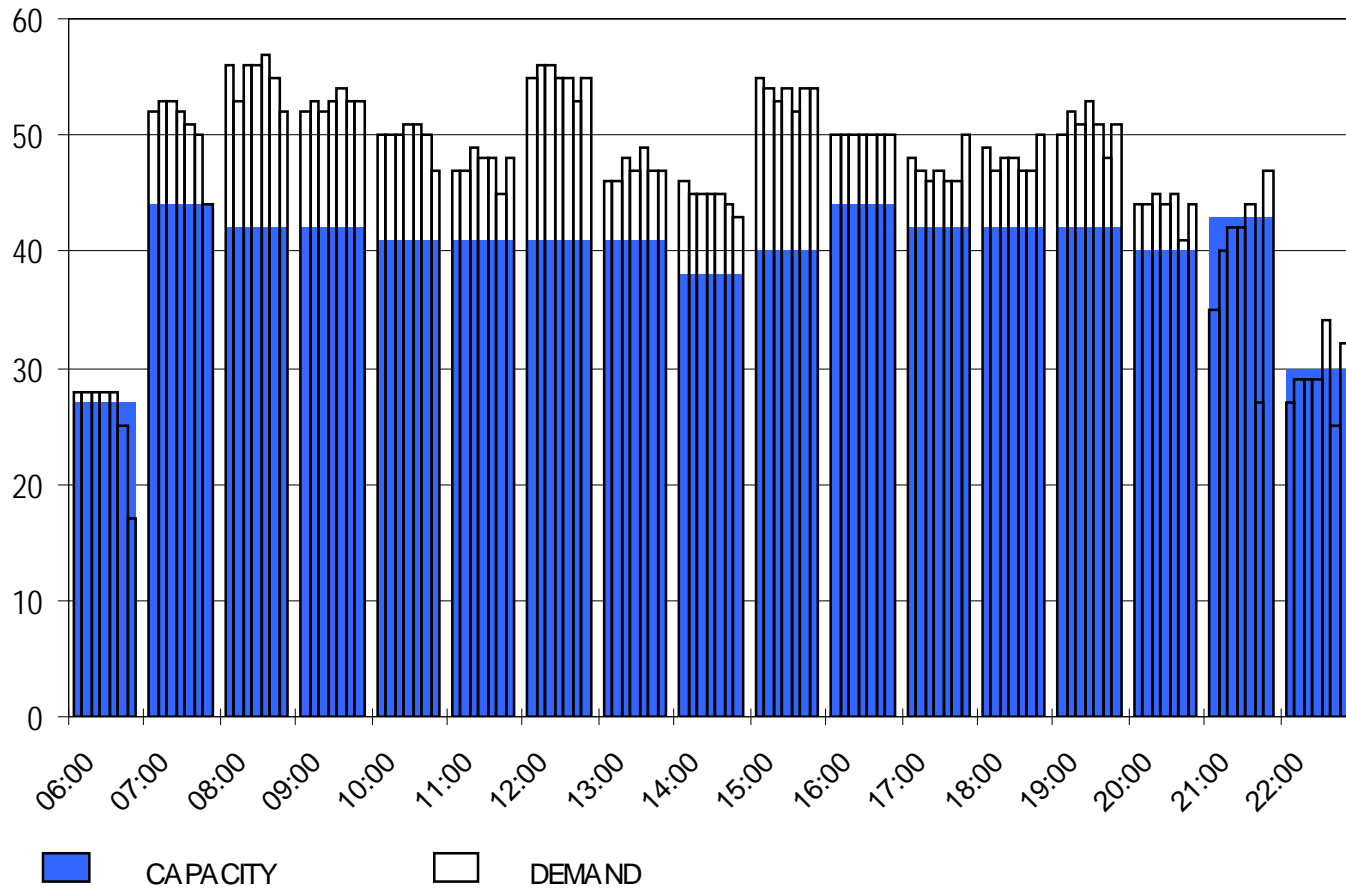
European airport capacity shortfall



Source: Eurocontrol

Heathrow Summer Demand

DEPARTURE MOVEMENTS (Typical week - all times local time)



Source: Airport Coordination Limited (ACL)

Objectives of the Commission

The purpose of the study was to:

- Assess the likely effects of the introduction of secondary slot trading.

The Commission's other primary objectives were:

- To ensure mobility of slots and 'efficient' transport for passengers and cargo
- To strengthen competition at Community airports
- To match secondary trading with the overall EU (air) transport policy
- To ensure compatibility of secondary slot trading with world-wide procedures

US Experience of secondary Slot Trading

- It has led to a liquid and flexible market in slots
- It has fostered new entry
- It is supported by the industry and generated activity
- The regime works well with minimal regulatory intervention
- Liquidity has been facilitated by a high incidence of slot leasing
- Direct competitors already trade slots with each other
- Slots have been used as security in financings
- The regulatory approach has been adapted to the characteristics of each specific airport

UK Experience of secondary slot trading (1)

- It has led to a liquid and flexible market in slots
- It has fostered new entry
- It is supported by the industry and generated activity
- The regime has permitted slot leasing
- Direct competitors are prepared to trade slots with each other
- Regulatory approach identical at all UK airports
- Use of slots as security in financings has not developed

UK Experience of secondary slot trading (2)

- Key developments:
 - To date BA have been the largest purchaser of slots,
 - Other short-haul carriers have been the main sellers of slots at London-Heathrow.
 - New long-haul entrants have purchased slots.
 - Slot efficiency in ASKs per slot has significantly improved :
 - small short haul aircraft replaced by large long haul aircraft.

Secondary trading in other markets

- There are parallels in other markets:
 - range of market participants;
 - information publication;
 - range of transfers allowed;
 - competition issues.
- Six examples analysed:
 - Capacity rights for the UK–Europe natural gas interconnector
 - Capacity rights for the England–France electricity interconnector
 - Gas entry capacity rights for the UK gas transmission system
 - EU Emission Trading Scheme
 - Spectrum trading
 - Water abstraction rights in the UK
- Key findings
 - Majority of forms of secondary trading are bilateral. Occasional auctions
 - Rights differ according to the nature of the market e.g.:
 - Gas – single day to 17 years.
 - Spectrum rights held indefinitely.
 - Water rights held indefinitely, or for shorter terms.

Trends in airport capacity and slot demand

- Commercial flights replace general aviation and other ad hoc flights
- Scheduled passenger flights replace cargo and passenger charter flights
- Aircraft size increases
- The average distance of flights increases
- General trend most evident at congested airports
- Demand for slots is likely to grow at a compound rate of 3.1% a year to 2025

Slots are used more efficiently at congested airports - even without secondary trading.

Total Flights at 30 European Airports, 1993 and 2005

| Airport category | Uncongested | Partially congested | Heavily congested | Total |
|------------------|-------------|---------------------|-------------------|-----------|
| Year | 14 | 10 | 6 | 30 |
| 1993 | 1,582,026 | 1,681,929 | 1,460,502 | 4,724,457 |
| 2005 | 2,801,333 | 2,773,710 | 1,779,217 | 7,354,260 |
| Total Growth | 77.1% | 64.9% | 21.8% | 55.7% |
| AAGR % | 4.9% | 4.3% | 1.7% | 3.8% |

Source: OAG

Non-Commercial Flights at 30 European Airports, 1993 and 2005

| Airport category | Uncongested | Partially Congested | Heavily Congested | Total |
|------------------|-------------|---------------------|-------------------|---------|
| Year | 14 | 10 | 6 | 30 |
| 1993 | 260,729 | 127,411 | 79,738 | 467,878 |
| % total movt | (16.5%) | (7.6%) | (5.5%) | (9.9%) |
| 2005 | 307,605 | 97,992 | 70,078 | 475,675 |
| % total movt | (11.0%) | (3.5%) | (3.9%) | (6.5%) |
| Total Growth | 18.0% | - 23.1% | -12.1% | 1.7% |
| AAGR % | 1.4% | - 2.2% | - 1.1% | 0.1% |

Source: OAG

Air Transport Movements at 30 European Airports, 1993 and 2005

| Airport category | Uncongested | Partially Congested | Heavily Congested | Total |
|------------------|-------------|---------------------|-------------------|-----------|
| Year | 14 | 10 | 6 | 30 |
| 1993 | 1,321,297 | 1,554,518 | 1,380,764 | 4,256,579 |
| 2005 | 2,493,728 | 2,675,718 | 1,709,139 | 6,878,585 |
| Total Growth | 88.7% | 72.1% | 23.8% | 61.6% |
| AAGR % | 5.4% | 4.6% | 1.8% | 4.1% |

Source: OAG

Average Passengers per PATM for 19 European Airports, 1993 and 2005

| Airport category | Uncongested | Partially Congested | Heavily Congested | Total |
|------------------|-------------|------------------------|----------------------|-------|
| Year | 7 | 6 | 6 | 19 |
| 1993 | 62.2 | 75.8 | 109.2 | 86.9 |
| 2005 | 77.0 | 100.4 | 120.1 | 100.4 |
| Growth – pax/ft | 14.8 | 24.6 | 10.9 | 13.5 |
| Growth - % | 23.8% | 32.4% | 10.0% | 15.6% |
| AAGR % | 1.8% | 2.4% | 0.8% | 1.2% |

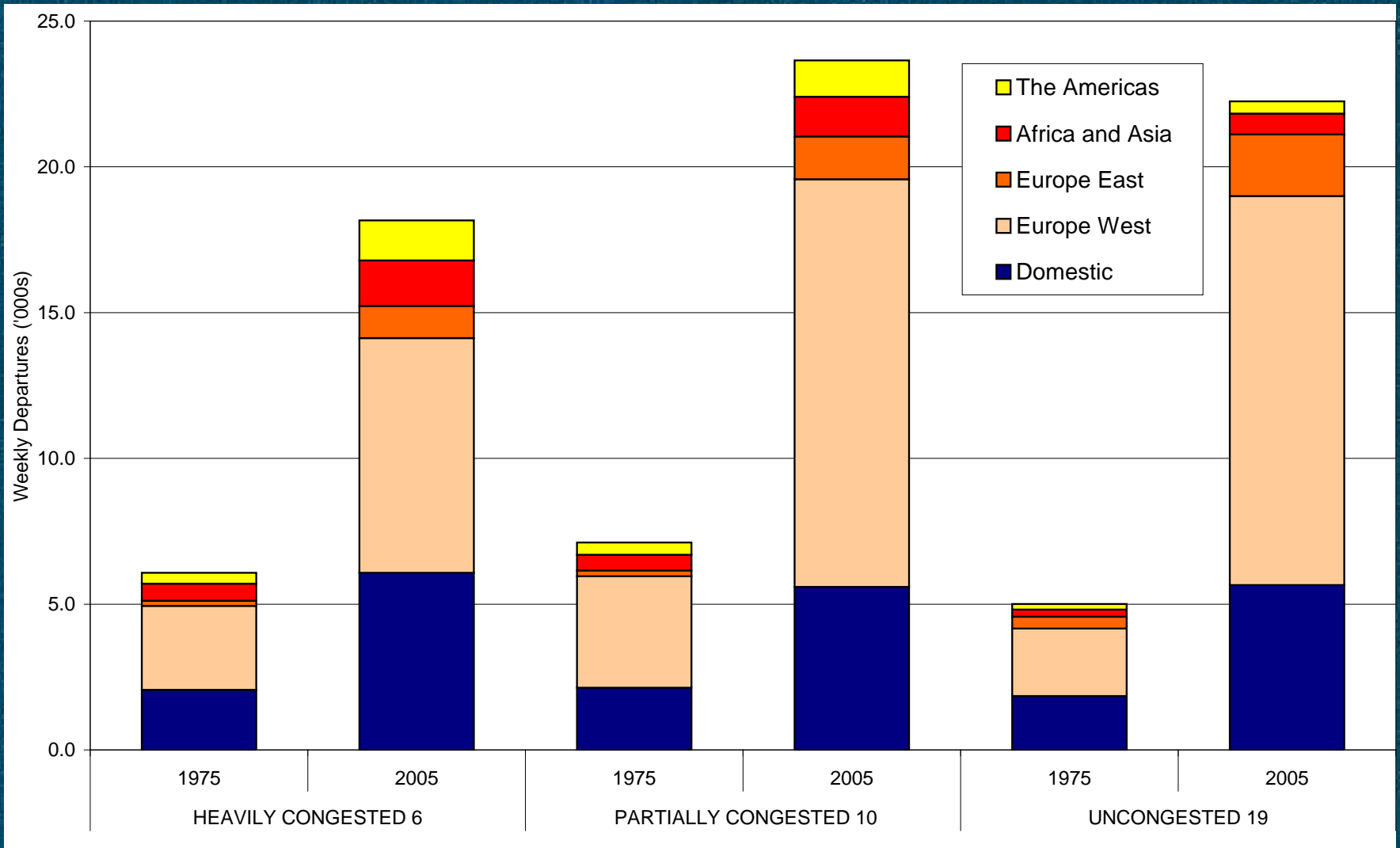
Source: OAG

Growth Rates by Destination by Airport Category, 1975 to 2005

| Airport category | Uncongested | Partially Congested | Heavily Congested | Total |
|------------------|-------------|---------------------|-------------------|-------|
| Destination | 19 | 10 | 6 | 35 |
| Domestic | 3.81% | 3.52% | 2.18% | 3.18% |
| Europe West | 6.00% | 4.83% | 2.90% | 4.66% |
| Europe East | 5.72% | 7.16% | 6.21% | 6.23% |
| Africa and Asia | 3.57% | 3.14% | 3.25% | 3.27% |
| The Americas | 2.72% | 3.70% | 4.48% | 3.86% |
| Total | 5.10% | 4.40% | 2.97% | 4.18% |

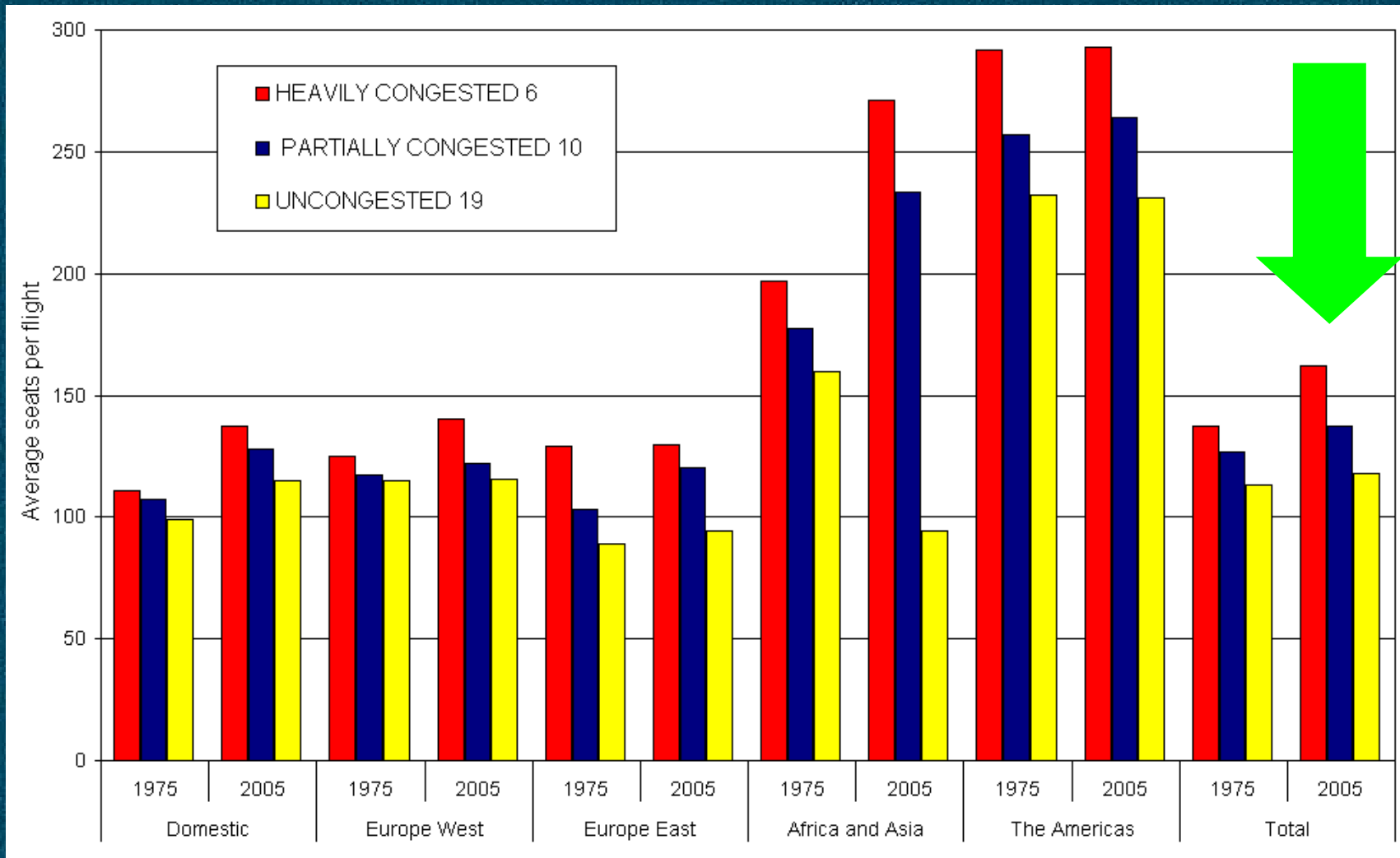
Source: OAG

Weekly departures by region, 1975 - 2005



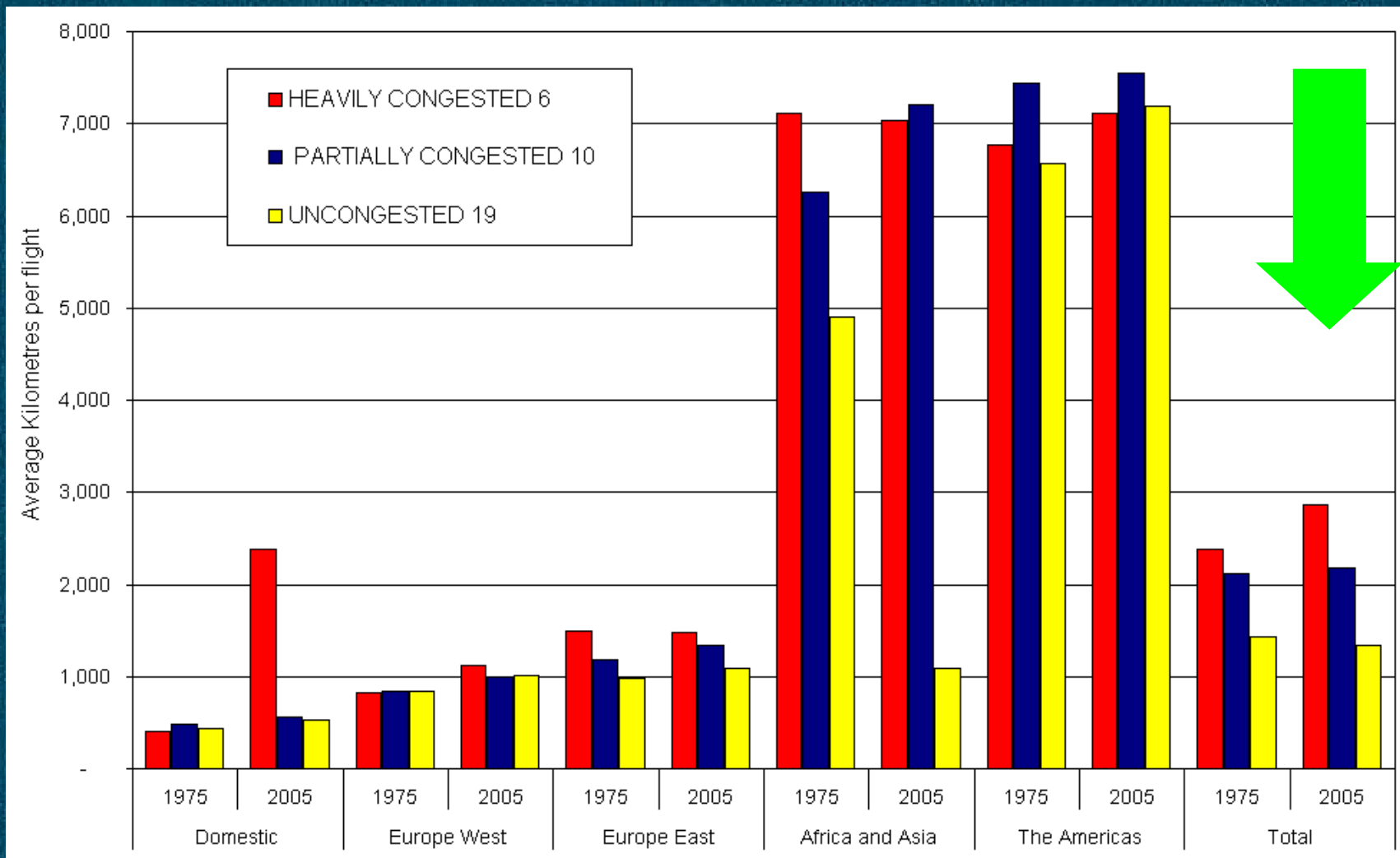
Source: OAG

Average seats per flight, by region



Source: OAG

Average kilometres per flight, by region



Source: OAG

Industry Expectations of the Impact of Secondary Trading

The industry recognises that allowing trading will accelerate the trend towards larger aircraft travelling longer distances.

It is generally agreed that:

- long-haul new entrants and dominant hub carriers will benefit most
- smaller regional carriers and routes to peripheral destinations will suffer most
- short-haul competition may diminish
- long-haul competition is expected to increase.

Statistical Assessment of Impact of Secondary Slot Trading

- Secondary trading at European airports is forecast to:
 - Increase passenger numbers by 7.2%
 - Increase revenue passenger kilometres by 17.1%
 - Lead to an extra 51.6 million passengers at congested European airports in 2025.

Economic and Environmental Impact Assessment

The study also looked at the effects on

- producer and consumer welfare;
- the degree of competition between airlines and between airport hubs;
- the effect on thin community routes;
- airport finances;
- local and wider economic costs and benefits;
- CO₂, NO_x and noise emissions.

Consumer Welfare Outcomes Resulting from Introducing Secondary Trading (€m)

| Airport Flight Category | London-Heathrow | London-Gatwick | Paris-Orly | Paris-C. de Gaulle | Amsterdam | Dusseldorf | Frankfurt | Milan-Linate | Total Eight Airports | EU Total |
|---------------------------------|-----------------|----------------|------------|--------------------|--------------|------------|--------------|--------------|----------------------|---------------|
| Long-haul | 4,418 | 1,639 | 187 | 5,941 | 4,198 | 203 | 3,168 | 0 | 19,754 | 32,594 |
| Dominant incumbent | 2,728 | 518 | 0 | 2,596 | 1,665 | 0 | 1,163 | 0 | 8,670 | 14,306 |
| Other incumbent | 603 | 252 | 78 | 786 | 0 | 0 | 0 | 0 | 1,719 | 2,837 |
| New entrant | 1,087 | 868 | 109 | 2,560 | 2,533 | 203 | 2,005 | 0 | 9,365 | 15,452 |
| Short-haul >100 seats | -404 | 192 | 624 | 194 | 296 | 116 | -28 | -1 | 989 | 1,632 |
| Dominant incumbent | 75 | - | -100 | 130 | 231 | 0 | 73 | 14 | 362 | 597 |
| Other incumbent | -479 | 61 | 272 | -175 | 0 | 0 | -203 | -19 | -407 | -672 |
| Low-cost | 0 | -85 | 26 | -54 | -97 | 0 | 0 | -15 | -224 | -370 |
| New entrant | 0 | 141 | 426 | 293 | 161 | 116 | 102 | 18 | 1,258 | 2,076 |
| Short-haul <100 seats | -9 | -6 | -18 | -43 | -78 | -8 | -45 | -2 | -209 | -345 |
| Dominant incumbent | 0 | -6 | -14 | 0 | -48 | 0 | -10 | 0 | -77 | -128 |
| Other incumbent | -9 | 0 | -4 | -43 | -27 | -8 | -36 | -2 | -129 | -213 |
| Low-cost | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New entrant | 0 | 0 | 0 | 0 | -3 | 0 | 0 | 0 | -3 | -5 |
| Charter | 0 | -46 | -9 | -101 | -49 | -24 | 0 | 0 | -229 | -378 |
| Cargo | 0 | -84 | 0 | -867 | -398 | 0 | -262 | 0 | -1,611 | -2,658 |
| Total | 4,006 | 1,696 | 784 | 5,124 | 3,969 | 287 | 2,832 | -4 | 18,694 | 30,845 |

Summary of Economic and Environmental Impacts from Slot Trading

| Parameter | Impact |
|-----------------------|----------------------------|
| Consumer welfare | €31 bn |
| Producer welfare | 0 to €1.2 bn |
| Competition | Neutral to slight negative |
| CO ₂ | - €1.3 bn to - €6.7 bn |
| NO _x | - €50 mn to - €134 mn |
| Noise | Neutral |
| Local economy | Neutral to slight positive |
| Thin community routes | Slight negative |

Secondary Slot Trading – The Effects

- Secondary trading would support the Commission's objective of 'ensuring mobility of slots and efficient transport for passenger and cargo':
- It will increase the mobility of slots
- Improve the ability of airlines to trade and to respond to market demand
- But may be limited once a new equilibrium is reached so may not lead to a continuing high turnover of slots.
- New entrants, especially intercontinental carriers, will find it easier to gain access to congested hubs
- Other airlines with small slot shares will have an improved mechanism enabling them to grow.

Objective to strengthen competition at Community airports

- Existing dominant hub carriers at congested airports increase their share of slots from average 47% to 49%
- Significant network benefits Competition between major European hubs will increase in line with major carrier hub dominance.
- Competition will increase for long-haul flights and reduced on intra-EU flights as slots are traded.
- Routes to peripheral regional airports may be lost from congested hub airports
- Possible increasing role for Public Service Obligations [PSOs] protection.

Objective - Match the secondary trading with the overall EU (air) transport policy

- It increases consumer welfare some €31 bn in 2025 and producer welfare by some €1.2 bn.
- It improves the finances of major airports by 7%
- It increases the broader economic contribution of major hub airports.
- The direct environmental impacts of congested airports will be marginally worsened, despite significant increases in throughput
- The broader environmental impact of specific airports may be more considerable, reflecting the expansion of long-haul services, and the transfer of short-haul services

Consistency with other EC Policies

- Trade – EC / US Open Skies
- Regional development
- Environmental
- Competition

Primary Slot Allocation Issues

The Commission also asked the study to conduct initial analysis of three areas of the current Primary Slot Allocation regulations that could be amended:

- Amending the 80/20 rule on slot usage to a higher percentage
- Auctioning any large tranches of new slots at an airport (though without specifying which party would receive the revenues)
- Withdrawing a set percentage of 'historic' slots on an annual basis, for re-allocation to the highest bidder
- The study concluded that there would be no benefits in amending the current 80/20 rule.
- It also recommended that the US policy in relation to New York-LaGuardia be closely monitored - the FAA has proposed withdrawing all (domestic) slots over a ten year period, for auctioning to the highest bidder for a period of ten years.

Summary of secondary slot recommendations

- Secondary slot trading was recommended for broader use throughout Europe
- The general approach should be similar to that currently adopted by the U.K.
- In addition, it is recommended that coordinators regularly publish details of all slot trades, but excluding the price paid
- Following US domestic practice, although currently against IATA Guidelines, it was recommended that further consideration be given to allowing any party to purchase and own slots, not just airlines

Questions

Thank you

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