Effective Regulatory Institutions for Air Transport – A European Perspective

Prof. Dr. Hans-Martin Niemeier

Round Table of 2-3 December 2010 on “Effective Regulatory Institutions: The Regulator’s Role in the Policy Process”
Issues

• **Airline airport relationship under stress:**
  - “Airports are exploiting, in many cases, their natural monopoly position” (IATA, 2007)
  - “Airports are in tough competition” (ADV, 2007)

• OECD: Need for rational dialogue

• Evaluate current regulation

• Options for regulatory reform BUT focus:
  - Institutional design of regulation
  - Value chain of air transport

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Agenda

I. Introduction
   • why air transport is special

II. Effective regulatory institutions for air transport
   • Rationale of independent regulator

III. Value Chain of Air Transport and Contracts

IV. Regulatory intervention

V. Summary: Reform of regulatory institutions

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I. Introduction

• Airport commercialisation & partial privatisation
• Regulatory failure & reform: price caps & monitoring
• Competition among airports: De-designation of Manchester, but not of Stansted
• Commercialisation and Privatisation of ATC
• Liberalisation & privatisation of airlines: Access to & pricing of often scarce infrastructure
• External shocks risk of substantial losses
• Policy makers will face substantial rent seeking

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I. Introduction

- Air transport is an industry with a mixture of competitive and monopolistic elements, different forms of ownership and levels of commercialisation all influenced by different types of implicit and explicit regulatory regimes.

- Two research questions:
  1. What parts of the value chain of air transport are ex-ante regulated?
  2. Is this ex-ante regulation carried out by effective regulatory institutions or should the regulatory institutions be reformed?

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II. Effective regulatory institutions

- Two rationales for an effective regulatory institution:
  - *Economic rational of ex-ante regulation*:
    - Persistent market power & welfare gain
    - Regulated private monopoly
    - How to encourage private investment? Not easy, because of
      - durable and immobile assets
      - specific exchange relation
      - information asymmetry and hold up.
    - Necessary: stability and commitment
  - Solution: Independent regulator, an institution with limited discretionary power which provides long term creditability and trust

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II. Effective regulatory institutions

• *Political rationale* independent regulator

• Should politicians delegate discretionary power to an agency in order to avoid both inconsistent decisions over time and opportunistic behaviour?

  – Public air transport infrastructure with long-term immobile asset-specific character

  – BUT elected governments only have power for a short period of time and cannot bind future governments

➤ Solution: Democratically governments should assign limited discretionary power to independent regulators which have expertise and are committed to long-term political goals.
II. Effective regulatory institutions

- Principles and criteria for effective regulatory institutions:
  - Legislative mandate from elected legislature
  - Independency and accountability to democratic bodies
  - Fair, accessible and open process
  - Cost effective regulatory processes
  - Well targeted and temporary
III. Value Chain of Air Transport

National Authorities
(provide legal framework and safety arrangements)

Airframe Manufacturer → Airline

Airline → ATC

ATC → Airport

Airport → Ground Handling

Ground Handling ← Airport Coordinator

Petrol Companies → Airport Coordinator

Travel Agents & GDSs → Airport Coordinator

Airport Coordinator → Airline

Airline ← Airframe Manufacturer

Seeks services from
III. Value Chain of Air Transport

• Forms of organization:
  
  ➢ spot markets, private contracts, concession contracts, discretionary regulation, public enterprises and hybrid forms
  
  ➢ All these organizational forms are practiced in air transport with the exception of a privatized vertically integrated public utility subject to regulation.
  
  ➢ Typically a disaggregated approach has been adopted consisting of regulated infrastructure and a partly liberalized downstream market.
IV. Regulatory intervention

• In which parts of the value chain is it necessary for economic or for overriding political reasons to regulate ex ante?

• Which institution fulfils this task?

• Is this institution well designed or could it be more effective?
IV. Regulatory intervention

- **Airlines**
  - Who decides on air service agreements (ASA)?
  - Who designates which competing carriers?
  - Who designates which competing airports?

- **Department of Transport**
  - ASAs create substantial rents for which stakeholders lobby effectively

- **Australia:**
  - DOT decides on ASA
  - International Air Services Commission allocates capacity

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IV. Regulatory intervention

- **Airports**
  - Are airports regulated by an independent body?

- “**Member States shall ensure that the independent supervisory authority exercises its powers impartially and transparently.**” EU directive on Charges

- BUT: Independence is not clearly defined and the directive allows member states to keep the status quo

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Regulation of European Airports

Independent regulator (all with user consultation)

User consultation without independent regulator

- Improved consultation
- Lack of independent regulator
- Regulatory capture

* User consultation at Malta International Airport

OECD & ITF,
Leipzig, 26 May 2009

Source: Gillen & Niemier, 2006
IV. Regulatory intervention

- **Airports**
  - Who decides which airports are subject to regulation?
  - Who decides which airport services should be regulated?

- **EU:**
  - Directive: 5 Mio passengers
  - Only the UK, Netherlands and Australia have analysed the market power of individual airports

- Only few regulators have analysed in which services airports have market power. E.G. Australia
IV. Regulatory intervention

• **Ground handling in EU**
  - How to provide non-discriminatory access to central infrastructure?
  - How to tender out the right to provide services at airports with a restricted number of providers?

• **Some EU Member States:**
  - Too many activities are declared central
  - Fee for central infrastructure not regulated
  - Tender process done by ministries with a majority share in airport providing ground handling services
IV. Regulatory intervention

- **Slots**
  - How independent is the slot coordinator?
  - And who sets the slot limit?

- **EU:**
  - IATA guidelines attempt to change the old system where slot coordinators cooperated with the dominant airline in the country.
  - DOT on EU member states set slot constraint.

Does the DOT get it right?

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Model of EU and US slot constrained airport

Price

Output

AB  Slot rent in EU
CD  Slot rent in US
E   Optimum

Q_{EU}  Q_{US}  Q_{opt}
V. Regulatory Reform

• **ATC**
  
  – How independent is the regulator of ATC?

• Single European Sky: “*The national supervisory authorities shall be independent of air navigation service providers*”. (Art. 4)
  
  – Dual role of EUROCONTROL
  
  – Australia, Ireland and UK have independent regulator. France not.

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## VII. Conclusions

<table>
<thead>
<tr>
<th>Regulatory reform</th>
<th>Country</th>
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</thead>
<tbody>
<tr>
<td><strong>Air Service Agreements</strong></td>
<td><strong>Australia</strong></td>
</tr>
<tr>
<td>First option, full liberalization. Second option, ASA by DOT and designation be independent commission.</td>
<td></td>
</tr>
<tr>
<td><strong>Airports</strong></td>
<td><strong>UK, Ireland</strong></td>
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<tr>
<td>Independent regulator for airports with market power. Designation of airports by DOT or commission.</td>
<td></td>
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<tr>
<td><strong>Ground handling</strong></td>
<td><strong>Denmark, Ireland, Netherlands, Sweden, UK</strong></td>
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<tr>
<td>First option, full liberalization. Second option, central infrastructure charge regulated by airport regulator and tender by independent airports or independent regulator</td>
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<td><strong>Slot allocation</strong></td>
<td><strong>Australia</strong></td>
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<td>Independent slot coordinator with independent regulator on slot constraint.</td>
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<tr>
<td><strong>ATC</strong></td>
<td><strong>UK</strong></td>
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<tr>
<td>Independent regulator</td>
<td>Prof. Dr. Hans-Martin Niemeier</td>
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VI. Regulatory Reform

- Current regulatory institutions are far from being effective to increase economic welfare.
- The greatest tensions are created when downstream markets are liberalized while the upstream the infrastructure market remains regulated by dependent regulators.
- Parts of air transport are unlikely to be subjected to effective competition
- Dependent regulators might effectively prevent competition by turning former natural monopolies into legal monopolies and allowing access discrimination.

Thank you very much!

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### IV. Regulatory intervention

<table>
<thead>
<tr>
<th>Service</th>
<th>Market power</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>Air craft movement facilities</td>
<td>High</td>
<td>Essential facility</td>
</tr>
<tr>
<td>Passenger processing facilities</td>
<td>High</td>
<td>Essential facility.</td>
</tr>
<tr>
<td>Lounge</td>
<td>Low</td>
<td>No evidence to constrain supply of space</td>
</tr>
<tr>
<td>Vehicle access facilities</td>
<td>High</td>
<td>Incentive to shift demand to car parking</td>
</tr>
<tr>
<td>Car parking</td>
<td>Low/mod.</td>
<td>Short term parking limited by other modes</td>
</tr>
<tr>
<td>Taxi facilities</td>
<td>Low/mod.</td>
<td>Charges limited by competing modes</td>
</tr>
<tr>
<td>Aircraft refueling</td>
<td>Mod./high</td>
<td>High switching cost for refueling</td>
</tr>
<tr>
<td>Aircraft light maintenance</td>
<td>Mod.</td>
<td>Access to side for third parties</td>
</tr>
<tr>
<td>Aircraft heavy maintenance</td>
<td>Low</td>
<td>Low switching costs</td>
</tr>
<tr>
<td>Flight catering facilities</td>
<td>Low</td>
<td>Good off airport locations available</td>
</tr>
<tr>
<td>Freight facility &amp; storage sites</td>
<td>Low</td>
<td>Good off airport locations available</td>
</tr>
<tr>
<td>Waste disposal facilities</td>
<td>Low</td>
<td>Good off airport locations available</td>
</tr>
<tr>
<td>Administrative office space</td>
<td>Low/mod.</td>
<td>Incentive to constrain supply of space</td>
</tr>
<tr>
<td>Commercial &amp; retail services</td>
<td>Low</td>
<td>Retail rentals reflect locational rent</td>
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*Australian Productivity Commission (2002)*

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### IV. Regulatory intervention

#### Ground handling in EU countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Deregulation</th>
<th>Regulation</th>
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<tr>
<td>Austria</td>
<td>Market share of partially privatised Vienna airport from 100% to 93 % in 1996 to 93 in 2002 to 89 % in 2007.</td>
<td>DOT decides on tender. DOT is separated from owner</td>
</tr>
<tr>
<td>France</td>
<td>ADP offers ground handling. AF self and third party handling. Penauille Serviscair is third part provider. Market shares in 2004: AF 65 %, 13 % ADP, Serviscair 13 %, Others 8 %.</td>
<td>Regulatory conflict as DOT is part government with majority stake in ADP and a minority share in AF/KLM</td>
</tr>
<tr>
<td>Germany</td>
<td>All airports offer ground handling except Berlin. Dominant position. Major shifts in Hamburg (0% of independent handler); Düsseldorf 30%, Munic 11 % for independent handler.</td>
<td>Regulatory conflict as Landesluftfahrt-behörde is part of government which has a majority share</td>
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