The role of South East airports in providing connectivity for the UK: regional dependence on foreign hubs (Response to the Airports Commission call for evidence on connectivity)

Citation for published version:

Link:
Link to publication record in Edinburgh Research Explorer

Document Version:
Publisher's PDF, also known as Version of record

Publisher Rights Statement:
© Suau-Sanchez, P., Voltes-Dorta, A., & Rodriguez-Déniz, H. The role of South East airports in providing connectivity for the UK: regional dependence on foreign hubs (Response to the Airports Commission call for evidence on connectivity)

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Appendix D: Air connectivity report for Scotland

D.1 This appendix provides an overview of the direct and indirect air connectivity of Scotland by analysing the itineraries of passengers originating or terminating at the region’s airports in international routes during May 2013. As seen in Table D1, slightly over 1 million passengers flew between Scotland and the rest of the world, which represents 18.4% of the total for UK regions. It is worth noting that this does not include Scottish passengers that transfer to other UK regions by road or rail to start their journey. In the absence of detailed information on said transfers, this report does not intend to be an accurate representation of the air transport demand of Scottish residents/visitors, rather than an assessment of the connectivity options that are available in the region’s airports.

<table>
<thead>
<tr>
<th>Traffic originating/terminating in</th>
<th>Passengers ('000)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airports in England (ex-South East)</td>
<td>4,358.7</td>
<td>77.6%</td>
</tr>
<tr>
<td>Airports in Scotland</td>
<td>1,032.2</td>
<td>18.4%</td>
</tr>
<tr>
<td>Airports in Northern Ireland</td>
<td>138.9</td>
<td>2.3%</td>
</tr>
<tr>
<td>Airports in Wales</td>
<td>85.3</td>
<td>1.5%</td>
</tr>
<tr>
<td>Total</td>
<td>5,615.1</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

D.2 Figure D1 indicates that 75.2% of passengers originating or terminating at Scottish airports fly non-stop to their international destinations. The remaining passengers (24.8%) fly indirectly through other airports, of which slightly less than half connect in UK hubs located mostly in England. Overall, 13.6% of total traffic is dependent on foreign hubs. The proportion of direct flights increases to 86.4% for routes to/from European Economic Area (EAA) countries. The other geographical markets for which direct connections are available are: Non-EEA countries (74.2%), North America (32.6%), the Middle East (41.8%), Africa (19.2%), and Latin America & Caribbean – LAC (22.8%). While the contribution of South East England’s airports in terms of connectivity is important in each of these markets, the traffic share of foreign hubs ranges between 15.2% and 54.8%.

D.3 During our sample period (May 2013), there were no direct connections between Scottish airports and countries in the Asia-Pacific region. Again we observe that the airports in South East England cover an important share of this market (28.8% of passengers), but still the traffic share of foreign hubs is very high (70.8%). A similar picture is drawn when focusing only on the connectivity to BRIC countries (Brazil, Russia, India, and China), where the connecting rate is 97.2% and thus the availability of intermediate hubs is crucial. In consonance with the overall UK results, these figures are relevant in which they signal a clear dependence on foreign airports and airlines in order to keep Scotland connected by air to the world’s emerging economies.

D.4 Tables D2 and D3 indicate the top-10 hub choices in each geographical market, measured by the proportion of connecting passengers across all hubs (absolute connectivity indicator: CI)\(^2\). The most relevant result is the dominance of London Heathrow as the most important gateway between Scotland and the rest of the world (30.4% of connecting passengers). It is the top-ranked hub in all markets except for the EEA, LAC, and Asia-Pacific, where it is second to Amsterdam, Gatwick, and Dubai, respectively. In spite of that, Heathrow is the top hub choice in routes to BRIC countries.

D.5 In view of these statistics, the conclusion is that the dependence on foreign hubs in some of the air markets that link Scotland with the rest of the world is not linked to reduced domestic connectivity to London and the South East – it is actually better than other UK regions (See Appendices C, E and F) – rather than just being an issue of poor direct connectivity from Scottish airports. The objective of developing new non-stop connections between Scotland and the Asia-Pacific region should be given appropriate consideration in the relevant policy frameworks.

\(^1\) Part of the direct connectivity to the Middle East is to Sharm el-Sheikh (Egypt).

\(^2\) Note that proportions in Tables D2 and D3 are calculated over connecting passengers, while in Figure D1 they are calculated over total passengers. All these proportions are fully equivalent.
Figure D1. Breakdown of passenger itineraries: Scotland to/from worldwide destinations (May 2013)
### Table D2. Top 10 hub choices in routes to/from Scottish airports by geographical market (May 2013)

<table>
<thead>
<tr>
<th>Scotland to/from World</th>
<th>EEA</th>
<th>Rest of Europe (non-EEA)</th>
<th>Africa</th>
<th>Middle East</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hub airport</td>
<td>CI'</td>
<td>Hub airport</td>
<td>CI'</td>
<td>Hub airport</td>
</tr>
<tr>
<td>Heathrow</td>
<td>30.4% Amsterdam</td>
<td>23.7% Heathrow</td>
<td>37.3% Heathrow</td>
<td>26.7% Heathrow</td>
</tr>
<tr>
<td>Amsterdam</td>
<td>19.8% Heathrow</td>
<td>22.5% Istanbul Atatürk</td>
<td>18.5% Amsterdam</td>
<td>21.8% Amsterdam</td>
</tr>
<tr>
<td>Dubai</td>
<td>8.2% Frankfurt</td>
<td>10.7% Frankfurt</td>
<td>15.7% Paris CDG</td>
<td>21.3% Dubai</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>7.1% Gatwick</td>
<td>6.9% Amsterdam</td>
<td>13.0% Dubai</td>
<td>10.7% Istanbul Atatürk</td>
</tr>
<tr>
<td>Paris CDG</td>
<td>5.2% Copenhagen</td>
<td>4.2% Paris CDG</td>
<td>5.0% Frankfurt</td>
<td>7.2% Frankfurt</td>
</tr>
<tr>
<td>Gatwick</td>
<td>5.0% Paris CDG</td>
<td>4.1% Gatwick</td>
<td>3.1% Gatwick</td>
<td>4.0% Gatwick</td>
</tr>
<tr>
<td>Newark</td>
<td>4.1% Dublin</td>
<td>3.9% Brussels</td>
<td>1.2% Istanbul Atatürk</td>
<td>1.9% Paris CDG</td>
</tr>
<tr>
<td>Dublin</td>
<td>2.6% Stavanger</td>
<td>3.0% Dalam</td>
<td>0.7% Brussels</td>
<td>1.2% Manchester</td>
</tr>
<tr>
<td>Copenhagen</td>
<td>1.9% Manchester</td>
<td>1.9% Dublin</td>
<td>0.5% Dusseldorf</td>
<td>0.5% Cairo</td>
</tr>
<tr>
<td>Istanbul Atatürk</td>
<td>1.5% London City</td>
<td>1.8% Cologne</td>
<td>0.4% Cardiff</td>
<td>0.4% Abu Dhabi</td>
</tr>
</tbody>
</table>

#### Total Passengers
- Scotland to/from World: 1,032,226
- Heathrow: 823,897
- Heathrow: 33,882
- Heathrow: 18,387
- Heathrow: 27,169

#### Share of total
- Scotland to/from World: 100%
- Heathrow: 79.8%
- Heathrow: 3.3%
- Heathrow: 1.8%
- Heathrow: 2.6%

#### Connecting passengers
- Scotland to/from World: 255,991
- Heathrow: 111,938
- Heathrow: 8,737
- Heathrow: 14,851
- Heathrow: 15,814

#### Connecting rate
- Scotland to/from World: 24.8%
- Heathrow: 13.6%
- Heathrow: 25.8%
- Heathrow: 80.8%
- Heathrow: 58.2%

#### Absolute connectivity:
- via SEE hubs: 37.7%
- via rest of UK hubs: 7.3%
- via alt. EEA hubs: 40.1%
- via Rest of World hubs: 14.9%
- Total non-UK hubs: 55.0%

#### Percentage of total
- Heathrow: 40.6%
- Heathrow: 0.6%
- Heathrow: 38.7%
- Heathrow: 54.0%
- Heathrow: 67.9%

### Table D3. Top 10 hub choices in routes to/from Scottish airports by geographical market (May 2013)

<table>
<thead>
<tr>
<th>Scotland to/from Latin America and Caribbean</th>
<th>North America</th>
<th>Asia-Pacific</th>
<th>BRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hub airport</td>
<td>CI'</td>
<td>Hub airport</td>
<td>CI'</td>
</tr>
<tr>
<td>Gatwick</td>
<td>25.0% Heathrow</td>
<td>47.9% Dubai</td>
<td>40.2% Heathrow</td>
</tr>
<tr>
<td>Heathrow</td>
<td>22.4% Newark</td>
<td>18.9% Heathrow</td>
<td>28.3% Amsterdam</td>
</tr>
<tr>
<td>Amsterdam</td>
<td>19.0% Amsterdam</td>
<td>12.7% Amsterdam</td>
<td>18.5% Dubai</td>
</tr>
<tr>
<td>Paris CDG</td>
<td>16.8% Dublin</td>
<td>4.1% Paris-CDG</td>
<td>4.8% Paris-CDG</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>5.9% Gatwick</td>
<td>3.7% Frankfur</td>
<td>3.0% Frankfur</td>
</tr>
<tr>
<td>Newark</td>
<td>4.1% Philadelphia</td>
<td>3.4% Istanbul Atatürk</td>
<td>1.2% Brussels</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>3.1% Keflavik</td>
<td>2.9% Singapore</td>
<td>0.5% Istanbul Atatürk</td>
</tr>
<tr>
<td>Cardiff</td>
<td>0.9% Paris-CDG</td>
<td>2.5% Bangkok</td>
<td>0.5% Gatwick</td>
</tr>
<tr>
<td>Nassau</td>
<td>0.4% Frankfurt</td>
<td>1.7% Gatwick</td>
<td>0.4% Cardiff</td>
</tr>
<tr>
<td>Antigua</td>
<td>0.4% Toronto</td>
<td>0.6% Cardiff</td>
<td>0.3% Copenhagen</td>
</tr>
</tbody>
</table>

#### Total Passengers
- Scotland to/from Latin America and Caribbean: 7,450
- Heathrow: 80,429
- Heathrow: 41,012
- Heathrow: 16,866

#### Share of total
- Scotland to/from Latin America and Caribbean: 0.7%
- Heathrow: 7.8%
- Heathrow: 4.0%
- Heathrow: 1.6%

#### Connecting passengers
- Scotland to/from Latin America and Caribbean: 5,753
- Heathrow: 54,243
- Heathrow: 41,012
- Heathrow: 16,396

#### Connecting rate
- Scotland to/from Latin America and Caribbean: 77.2%
- Heathrow: 67.4%
- Heathrow: 100.0%
- Heathrow: 97.2%

#### Absolute connectivity:
- via SEE hubs: 47.5%
- via rest of UK hubs: 1.2%
- via alt. EEA hubs: 42.5%
- via Rest of World hubs: 8.8%
- Total non-UK hubs: 51.3%

#### Percentage of total
- Heathrow: 51.7%
- Heathrow: 0.7%
- Heathrow: 24.4%
- Heathrow: 23.2%
- Heathrow: 47.6%

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