ATM Challenges and Opportunities in the Asia Pacific

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Regional Director
Safety and Flight Operations
IATA

Shaping Asia Pacific ATM - Global Vision, Regional Action

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CANSO ASIA PACIFIC CONFERENCE
ATM Challenges & Opportunities in Asia Pacific

Blair Cowles
Regional Director, Safety and Flight Operations
Challenges and Opportunities

- **Challenges**
  - Growth
  - Capacity
  - Capability

- **Opportunities**
  - Value of aviation to the region
  - Cost of missed opportunities
Growth

Direct Outbound Passenger Flights & Capacity from Asia Pacific Region (2004-2015)
Growth

2014 Total Outbound Nonstop Seat Capacity (Millions)

- China: +10.6% per annum
- Japan: +1.7%
- India: +11.9%
- Indonesia: +15.2%
- Australia: +4.7%
- Thailand: +7.0%
- South Korea: +3.1%
- Malaysia: +7.8%
- Philippines: +9.7%
- Hong Kong: +4.2%
- Singapore: +5.2%
- Vietnam: +14.7%
- Taiwan: +0.02%
- New Zealand: +1.3%
- Pakistan: +2.7%
- Myanmar: +11.0%
- Sri Lanka: +5.1%
- Bangladesh: +4.8%
- Cambodia: +8.5%
- Macau: +3.7%
Airline Profitability

Net post-tax profit by region

Source: ICAO, The Airline Analyst, IATA Economics
Airline Profitability

Operating profit margins by region, 2016 vs 2010

N America    Europe    Asia Pacific    Middle East    Latin America    Africa

2010 2016

Source: ICAO, The Airline Analyst, IATA Economics
Benefits of Aviation within APAC

**WIDER ECONOMIC BENEFITS**
Air service facilitating:
- Tourism
- Trade
- Investment
- Productivity Growth

**DIRECT**
- At-airport and airport-related businesses

**INDIRECT**
- Supplying and supporting industries

**INDUCED**
- Employees spending in the economy

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<table>
<thead>
<tr>
<th>Impact</th>
<th>Jobs (Millions)</th>
<th>GDP (USD Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asia Pacific Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>2.4</td>
<td>$113</td>
</tr>
<tr>
<td>Indirect</td>
<td>1.9</td>
<td>$64</td>
</tr>
<tr>
<td>Induced</td>
<td>1.8</td>
<td>$40</td>
</tr>
<tr>
<td><strong>WEB: Tourism</strong></td>
<td>9.1</td>
<td>$142</td>
</tr>
<tr>
<td><strong>WEB: Productivity &amp; Trade</strong></td>
<td>18.6</td>
<td>$347</td>
</tr>
<tr>
<td>Total Wider Economic Benefits</td>
<td>27.6</td>
<td>$488</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>33.7</td>
<td>$705</td>
</tr>
</tbody>
</table>

Numbers may not sum due to rounding.
## Capacity Needed to Maximize the Value of Aviation

<table>
<thead>
<tr>
<th>Impact</th>
<th>Unconstrained</th>
<th>Without Capacity Investment</th>
<th>Foregone Economic Benefits from failure to Invest in capacity*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jobs (Millions)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>4.6</td>
<td>3.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Indirect</td>
<td>3.6</td>
<td>2.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Induced</td>
<td>3.6</td>
<td>2.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Wider Economic Benefits</td>
<td>60.4</td>
<td>40.3</td>
<td>20.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72.3</strong></td>
<td><strong>48.5</strong></td>
<td><strong>23.8</strong></td>
</tr>
<tr>
<td><strong>GDP (Billions USD)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>$208</td>
<td>$147</td>
<td>$61</td>
</tr>
<tr>
<td>Indirect</td>
<td>$115</td>
<td>$82</td>
<td>$32</td>
</tr>
<tr>
<td>Induced</td>
<td>$71</td>
<td>$52</td>
<td>$19</td>
</tr>
<tr>
<td>Wider Economic Benefits</td>
<td>$947</td>
<td>$661</td>
<td>$286</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,340</strong></td>
<td><strong>$942</strong></td>
<td><strong>$399</strong></td>
</tr>
</tbody>
</table>

2035 Projected Impacts in Asia Pacific, Unconstrained & Constrained
Managing Growth within APAC

• Maximizing capacity
• Collaboration/partnership
  • “Linked up thinking”
• Airspace and whole of route planning
• Cross-border solutions
Managing Growth within APAC

• Generally States still thinking and planning within their own borders only
  • Some exceptions
    ➢ ISPACG
    ➢ INSPIRE UPR Zone
    ➢ India as a crossroads
    ➢ Multi-nodal ATFM
Managing Growth within APAC

• Seamless ATM Plan = the blueprint
  • Agreed by all States
  • Very slow implementation
    • Mixed capability = mixed implementation success
  • Service defaults to lowest common denominator
Conclusion APANPIRG 25/51 – Consultation with Airspace Users on ANS Charges

That, States be encouraged to adopt the principles of transparency and consultation with airspace users on ANS charges in accordance with Assembly Resolution A 38-14 and as endorsed in ICAO Doc 9082 and Doc 9161.

Accept, Sir/Madam, the assurances of my highest consideration.

Arun Mishra
Regional Director
Collaboration across the value chain is essential.