UNDERSTANDING THE RELATIONSHIP BETWEEN AIR TRANSPORTATION AND TOURISM

Part 1: Global Trends and Policies

Prepared for:

Standing Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation

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Study Objectives

- To define the conceptual framework for the linkage between air transportation and tourism
- To investigate the latest global trends in air transportation that might affect the development of tourism
- To identify the current status of air transportation practices in the OIC Member States
- To determine the implementation barriers (political, legal, institutional, fiscal, and physical infrastructure) for enhancing better air transportation and especially the interaction between air transportation and tourism in the OIC Member States
- To propose recommendations for improving air linkages to foster tourism activities
UNDERSTANDING THE RELATIONSHIP BETWEEN AIR TRANSPORTATION AND TOURISM
– GLOBAL TRENDS AND POLICIES

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SECTION 1

GLOBAL AND REGIONAL TRENDS IN AVIATION
Aviation has seen unprecedented change during the last 20 years, driven by emerging business models, new technology, and social change.

*Growth in aviation has been fuelled by the following major factors:*

- Expansion of the global economy
- Growth of the tourism industry
- Technological advancement, which makes aircraft and flying
  - Longer distances
  - More cost efficient
Due to its speed and affordability, air travel has become the preferred choice for long distance personal travel

Evolution of World Traffic (RPKs) 1980-2013

Global CAGR=5.1%

GLOBAL AND REGIONAL TRENDS IN AVIATION

Aviation growth varies by region, depending on various characteristics

- **Economic characteristics of the region**
  - e.g., level of GDP, income distribution, and type of economic activities

- **Geographic characteristics**
  - e.g., island nations and mountainous areas

- **Availability of alternative modes of transport**
  - e.g., high speed rail

- **Characteristics of the population**
  - e.g., density, distribution, and age

- **Political factors**
  - e.g., existence of air traffic rights, and level of security
The overall growth in global air traffic has been driven by regional growth in emerging markets as well as explosive growth in the Gulf and Middle East.

Historical Traffic Growth by Carrier Region 1980-2013

RTK Growth Index (1980 = 100)

The largest aviation markets of the world are Asia Pacific, Europe, and North America, which collectively represented 84% of Revenue Tonne Kilometres (RPKs) in 2013.

**Current and Forecast Market Size by World Region**

*RPKS (Billions)*

Source: Boeing Current Market Outlook 2012-2032
Historically, North America and Europe have accounted for the bulk of global aircraft demand, but this market dominance is slowly eroding.

### Current and Expected World Fleet by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Fleet in 2012</th>
<th>Fleet in 2032</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>20,310</td>
<td>41,240</td>
</tr>
<tr>
<td>Latin America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle East</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia Pacific</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Boeing Current Market Outlook 2012-2032
Fuel price has had a significant effect on air transport growth, as fuel prices directly affect the cost base of airlines and therefore fares.

*Evolution of Jet Fuel Price 2000-2014*

USD / Gallon

Source: US EIA, U.S. Gulf Coast Kerosene-Type Jet Fuel Spot Price FOB (Dollars per Gallon)
Volatility has resulted in decreasing financial results for the world’s airlines and the downturn had a dramatic impact on the already thin margins.

*Global Airline Profit 2001-2014*

**Profit (billion USD)**

Source: Industry Financial Forecast Table June 2014 (IATA Economics)
Since the late 1970’s, there has been a trend towards liberalizing international aviation markets

- Often, this process has started with the loosening of regulatory controls applied to domestic air services and is then extended to international services

- While air travel markets have expanded new, liberalized growth has posed greater challenges to old and new airlines alike

- In almost every country where air transport liberalization has occurred, new airlines have been created
  - Focus on short-haul, point-to-point markets where
  - Dramatically lower fares can stimulate significant market growth

- Incumbent carriers tend to respond:
  - First by lowering their own fares
  - Sometimes by establishing low-cost subsidiaries to compete head-to-head in selected markets
Bilateral air service agreements remain the primary vehicle for liberalizing international air transport services

- The liberalization and expansion of these agreements have gained momentum in the past decade, with over one thousand bilateral air service agreements (including amendments) reportedly signed worldwide.

- However, many OIC member states maintain the traditional bilateral regime of international traffic regulations.

- Current bilateral ASAs are protective of national carriers and contain rigorous restrictions on freedoms of the air, as well as frequency and number of designated airlines.
One of the most prominent changes in the last 20 years in the aviation industry has been the emergence of low-cost carriers (LCCs).

Source: PaxIS, OAG, ICF Analysis
The Maturing Trend of the LCC Market Segment

1. Launch of first LCCs
2. Initial focus on dense routes
3. Big aircraft orders
4. Influx of followers and imitators
5. Cost cutting response from legacies
6. Move to secondary routes
7. Reduction of profit margin due to competition
8. LCCs consolidate/go bankrupt
9. LCCs move to longer routes
10. Search for new revenue streams and ancillary revenues

GLOBAL AND REGIONAL TRENDS IN AVIATION

icfi.com/aviation | Passion. Expertise. Results.
The level of air traffic closely correlates with the level of economic activity.

**Growth in Global GDP and Air Travel 1990-2013**

*Index = 100*

- Global GDP
- RPKs
- RTKs

Note: RTK=Revenue Tonne Kilometre, RPK=Revenue Passenger Kilometre

Aviation supports over 58 million jobs worldwide and is a critical driver of the global economy, contributing USD 2.4 trillion to global GDP

**Global Employment and GDP Generated by Air Travel**

<table>
<thead>
<tr>
<th>Impact</th>
<th>Areas of Impact</th>
<th>Employment Generated (millions)</th>
<th>GDP Generated (USD billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>On-site airport (retail, car rental, customs and immigration, etc.), airlines, air navigation on-site airport work, airlines, air navigation</td>
<td>8.7</td>
<td>$606</td>
</tr>
<tr>
<td>Indirect</td>
<td>Suppliers to the industry; examples: aviation fuel suppliers; construction companies that build airport facilities; suppliers of sub-components used in aircraft; manufacturers of goods sold in airport retail outlets</td>
<td>9.8</td>
<td>$796</td>
</tr>
<tr>
<td>Induced</td>
<td>Activity supported through employees in the industry (whether direct or indirect) that use their income to buy goods and services for private consumption</td>
<td>4.6</td>
<td>$324</td>
</tr>
<tr>
<td>Tourism</td>
<td>Hotels, Restaurants, Cultural Institutions, etc.</td>
<td>35.0</td>
<td>$807</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>58.1</strong></td>
<td><strong>2,533</strong></td>
</tr>
</tbody>
</table>

Source: Air Transport Action Group, "Aviation Benefits Beyond Borders, April 2014 Report"
Each new flight at an airport contributes to a country’s economic development

New flights aid development by expanding business sales for local companies, supporting jobs and income for residents and contributing incremental tax revenues

- **Direct economic effects** are the changes that occur in the local economy as a direct consequence of the operation of the new air service.
  - Business activity for tenants at the airport, visitor spending at off-airport businesses in the tourism sector (e.g. hotels and restaurants), and increased business sales by local exporters

- **Indirect economic effects**
  - Economic activity that occurs when on-airport and off-airport businesses that benefit from the new air service purchase goods and services from other businesses in the area

- **Induced economic effects**
  - Workers that are the direct beneficiaries of new air services re-spend their incomes
The link between GDP growth and air transport can also be seen in the eastward shift of the World’s economic and aviation centres of gravity.

SECTION 2

LINKS BETWEEN AIR TRANSPORT AND TOURISM
Air transport and tourism are inextricably linked

- An increase in one often accompanies an increase in the other
- Increased air links allow tourists to more readily access a destination
- Demand by tourists to arrive at a destination leads to enhanced air service
A tourist must make many decisions that can be swayed by the offerings of a particular destination or country.
Previous studies have examined the relationship between air transport and tourism

- Links between aviation and tourism are tangible, but countries often pay greater attention to promoting tourism, due to its direct and highly visible impact upon the local economy

- Limitations upon air transport (regulatory or otherwise) often create a negative externality: *A limitation on tourism growth*

- Countries can effectively increase tourism levels by making changes within the local air transport industry

- The drivers of airline profitability may not align with optimal tourism economics

- As a country develops, environmental impacts of air transport become more visible and must be considered when making policy

*This study aims to expand previous research to OIC countries and make practical recommendations*
The growth of global tourism continued its momentum in 2013, achieving a new record of 1.1 billion international tourist arrivals.

Worldwide International Tourist Arrivals
1995-2013

Source: United Nations World Tourism Organization
Annual Tourist Arrivals and Weekly Seats, 2012

Source: SESRIC, OAG Schedules
Evolution of a Tourist Destination

Source: Richard W Butler (1980), 'The Concept of a Tourism Area Cycle of Evolution: Implications for the Management of Resources'. Canadian Geographer
Location of Typical Tourist Destinations on the Lifecycle Curve

Note: Prepared for illustrative purposes only
Source: ICAO, ACI
SECTION 3

SITUATION OVERVIEW IN MEMBER COUNTRIES
OIC member countries have been grouped into three groups based on the offering of the tourism sector

- Countries with ‘established’ tourism sectors have significant tourism infrastructure and active marketing campaigns
- Countries with ‘emergent’ tourism sectors have begun to develop tourism as an industry, but it is currently less than 10% of GDP
- Countries with ‘future’ tourism sectors are those with underdeveloped tourism markets often due to political transition
These countries can also be categorized in terms of the type of tourism on offer:

- Beach
- Rest & Relaxation (R&R)
- Ecotourism
- Religious
- Business
- Medical
- Cultural
- Visiting Friends and Relatives (VFR)
The OIC’s combined traffic is in excess of 600m psgrs.

- The Established group has increased significantly over the past 20 years as the number of airlines increase as barriers to entry are lowered.

- The Emergent and Future groups have seen growth with a significant increase in 2007 in the emergent countries led primarily by the resuming of services in Iraq.

- It is far more difficult to track the growth of Future and to a lesser point Emergent tourism markets as many do not report annual passenger figures.

Source: ACI
In terms of aviation capacity the best used metric is departing/arriving seats from a country.

- The importance of home carrier growth is best highlighted by the Established group’s strong growth driven by the Middle East carriers in 2006.
- For Emergent and Future markets, growth has been limited by foreign carriers who drive the majority of traffic outbound into their home markets.

Source: OAG
Prior to 2008, fares were increasingly in tandem with rising demand – *When the Recession hit, fares fell by 11% in an effort to maintain demand*

- Future markets saw significant cost cuts in average fares post 2008 largely due to the withdrawal of the more expensive long haul routes operated by foreign carriers
- Average fares in future countries have historically been around $100 more than those in the Established and Emergent groups

Source: ICF SH&E Analysis, IATA
Ten country-pairs accounted for 11.7% of the OIC’s total passengers as of 602.6m, including both tourism and non-tourism travel.

- Passenger traffic between Indonesia & Malaysia has grown swiftly in recent years due to the emergence of several LCCs, which have stimulated traffic.

Source: ICF SH&E Analysis, IATA
Historical growth of passenger traffic between OIC member states and non-OIC member states.

- Passenger traffic in Established markets has increased two-fold since 2006 and was the least affected group by the 2008 global recession.
- Passenger traffic in Emergent markets has grown 150% since 2006.
- Future tourism states have more than doubled passenger traffic since 2006.

Note: ‘Extra-COMCEC’ refers to travel between COMCEC and non-COMCEC countries.
Source: ICF SH&E Analysis, IATA
Strong linkages exist between seat capacity within a country and the number of inbound tourists

The trend line indicates whether a country is attracting the expected level of tourists based on its aviation sector.

- Countries which are above the line are underperforming in the level of tourists they are attracting.
- Those who are beneath the line are showing a strong tourism sector reliant on an adequate aviation industry.

Source: ICF SH&E Analysis, OAG, UNWTO
Tourism Arrivals – *International*

### Evolution of International Tourist Arrivals in OIC Member States (2012)

- Since the late 1990s the established market has greatly increased its global market share
- Emergent markets have seen slightly faster growth than Established markets, but albeit from a much lower baseline
- The Future markets should begin to recover as national carriers start to increase capacity

Source: ICF SH&E Analysis, SESRIC
There is generally a close correlation between the growth in hotel stocks and the growth in tourist arrivals.

Over the past five years the number of hotel beds per 1000 people has increased with jumps in 2009 and 2011.

As hotel infrastructure takes a period of years to complete it is very rare to witness a smooth and gradual increase over time.

Source: UNTWO
For OIC member states the vast majority of inbound visitors come from three key markets; Europe, East Asia and the Americas.

- The European market is by far the largest for international tourism throughout OIC member states.
- East Asia, in particular China and Singapore, is the fastest growing market.

Source: UNWTO, ICF SH&E
For Established markets, the vast majority of international tourists arrive via air transport with land transport, road or rail, providing less than 20% of the total arriving tourists.

Methods of Transportation – Established Tourism Group

- The disadvantage of land travel is that a nation limits its catchment to the surrounding nations who could share a very similar climate and geography which obviously limits the appeal to local tourists.

- Air transport provides a truly global catchment zone for a nation’s tourism sector as aircraft are able to pass over all types of terrain and into major hub airports which multiply the demand for a particular route as individual demand is combined.

Source: UNTWO
Future tourism nations attract far fewer tourists via air than their Established and Emergent counterparts which leaves them missing the previously discussed benefits.

**Methods of Transportation – Future Tourism Group**

- As a country develops and markets air services it increases its ability to attract higher yielding foreign passengers who will spend more while they are visiting a country.

- While land is chosen by 45% of arrivals in Future tourism countries it does not indicate a strong preference for land travel but rather indicates a lack of variety and selection from the air transport sector.

Source: UNTWO