

# InterVISTAS

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## Transforming Intra-African Air Connectivity:

*The Economic Benefits of  
Implementing the Yamoussoukro Decision*



**PREPARED FOR**  
IATA in partnership with AFCAC and AFRAA

**PREPARED BY**  
InterVISTAS Consulting LTD

July 2014

## Executive Summary

Aviation has the potential to make an important contribution to economic growth and development within Africa. Air transport can open and connect markets, facilitating trade and enabling African firms to link into global supply chains. It plays an especially pivotal role in just-in-time global manufacturing production and in speeding fresh produce from agricultural communities in developing economies to markets in the industrialised world. Enhancing air connectivity can help raise productivity, by encouraging investment and innovation; improving business operations and efficiency. Air transport is indispensable for tourism, where convenient air service facilitates the arrival of larger numbers of tourists to a region or country

While many air markets between Africa and countries outside of Africa have been liberalised to a significant extent, most intra-African aviation markets remain largely closed, subject to restrictive bilateral agreements which limit the growth and development of air services. This has limited the potential for aviation to be an engine of growth and development

Recognising that this restrictive arrangement was limiting growth, many African nations adopted the Yamoussoukro Decision in 1999.<sup>1</sup> This agreement committed the 44 signatory countries to deregulating air services and to promoting regional air markets opening to transnational competition. However, the implementation of this agreement has been slow and limited, and thus the potential benefits of liberalising intra-African air markets remain largely unrealised.

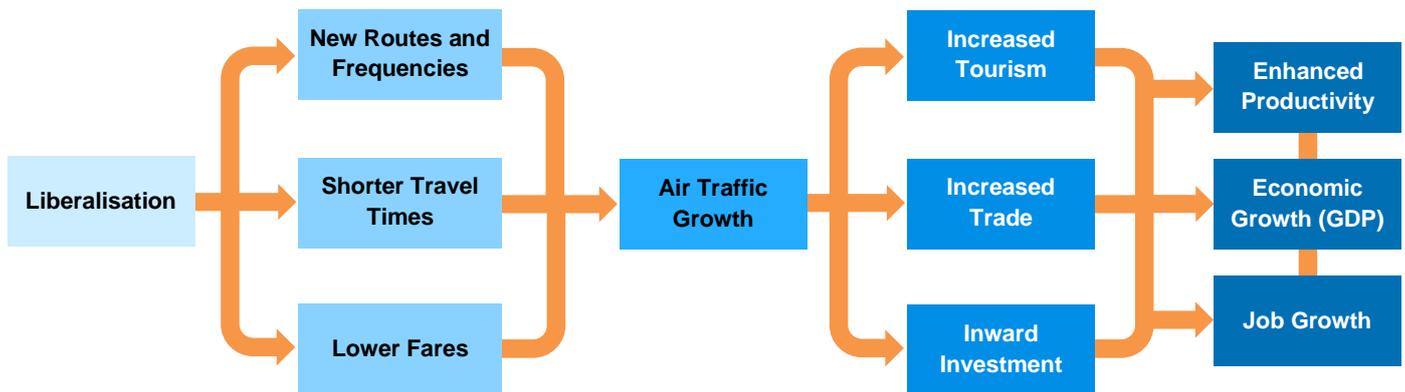
IATA commissioned InterVISTAS Consulting Ltd. (InterVISTAS) to undertake a study to examine the impacts of liberalising intra-African air markets. The study involved modelling the transmission mechanisms by which liberalisation leads to greater air connectivity, resulting in increased traffic volumes and ultimately generating wider economic benefits.

### Benefits of Liberalisation

Liberalisation can lead to increased air service levels and lower fares, which in turn stimulates additional traffic volumes, facilitates tourism, trade, investment and other sectors of the economy and brings about enhanced productivity, economic growth and increased employment, as illustrated below:

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<sup>1</sup> The 1999 Decision followed up on the Yamoussoukro Declaration of 1988, in which many of the same countries agreed to principles of air services liberalisation.



There is considerable evidence that liberalisation of international air markets has provided substantial benefits for passengers and for the wider economy. For example, one study of the EU single aviation market found that liberalisation had greatly increased competition on many routes, had resulted in many more new routes operating, and had led to a 34% decline in discount fares in real terms.<sup>2</sup>

Furthermore, other studies have demonstrated a link between increased air traffic and growth in employment and Gross Domestic Product (GDP). For example, one study estimated that each 10% increase in international air services led to a 0.07% increase in GDP, which can translate into millions (or even billions) of dollars of incremental GDP.<sup>3</sup>

### African Successes with Air Service Liberalisation

Where African nations have liberalised their air markets, either within Africa or with the rest of the world, there have been substantial positive benefits, for example (further details are provided in Chapter 3):

- The agreement of a more liberal air market between South Africa and Kenya in the early 2000s led to 69% rise in passenger traffic.
- Allowing the operation of a low cost carrier service between South Africa and Zambia (Johannesburg-Lusaka) resulted in a 38% reduction in discount fares and 38% increase in passenger traffic.
- Ethiopia's pursuit of more liberal bilaterals (on a reciprocal basis) has contributed to Ethiopian Airlines become one of the largest and most profitable airlines in Africa. Research has found that on intra-African routes with more liberal bilaterals, Ethiopians benefit from 10-21% lower fares and 35-38% higher frequencies (compared to restricted intra-Africa routes).

<sup>2</sup> "European Experience of Air Transport Liberalisation", Joint Presentation by the European Union and the European Civil Aviation Conference to the 5<sup>th</sup> Worldwide Air Transport Conference (ICAO), 24-29th March 2003.

<sup>3</sup> InterVISTAS Consulting Inc., "Measuring the Economic Rate of Return on Investment in Aviation", December 2006.

- The 2006 Morocco-EU open skies agreement led to 160% rise in traffic and the number of routes operating between points in the EU and points in Morocco increasing from 83 in 2005 to 309 in 2013.

### **Analysis of the Traffic Impacts of Intra-African Liberalisation**

To understand the potential benefits of Intra-African liberalisation, analysis was conducted examining the impact of liberalising air markets between 12 countries within four sub-regions of Africa:

- **North:** Algeria, Egypt, Tunisia;
- **East:** Ethiopia, Kenya, Uganda;
- **South:** Angola, Namibia, South Africa;
- **West:** Ghana, Nigeria, Senegal

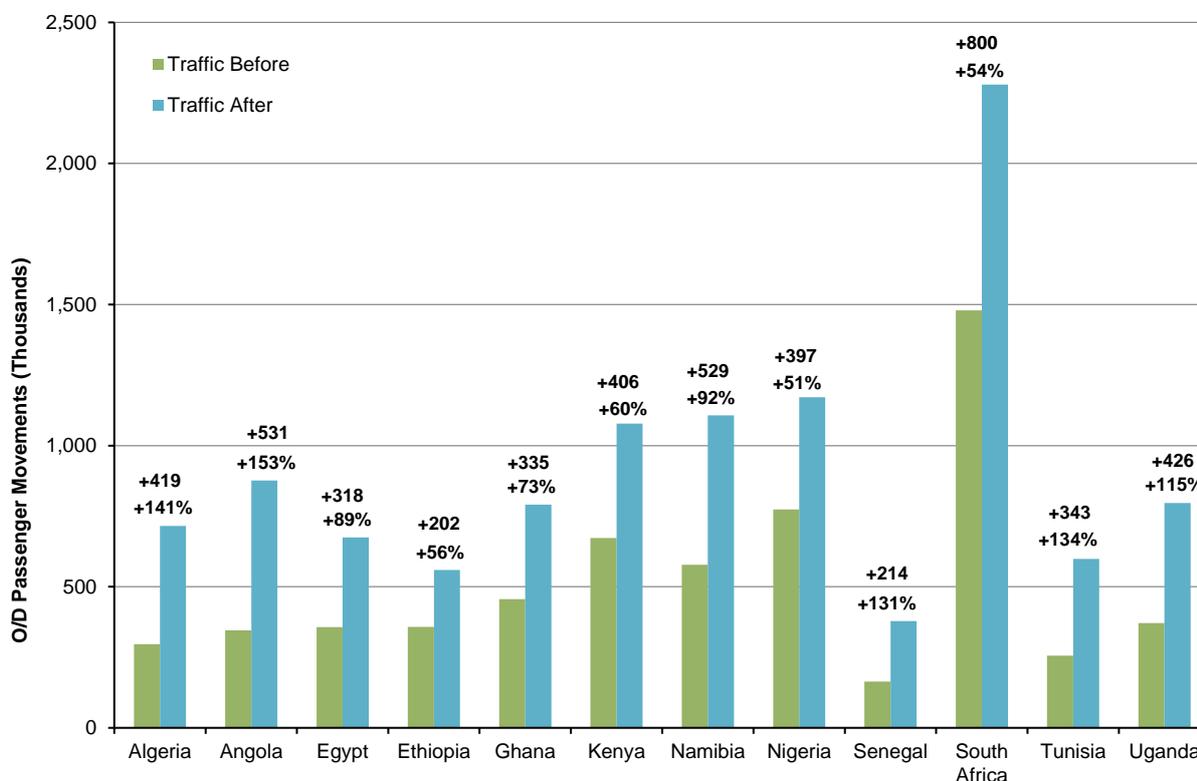
The impacts of liberalising the air market between these 12 countries were estimated using a gravity model developed by InterVISTAS which forecasts traffic between any two countries (or groups of countries) based on the two countries' economic characteristics, trade levels, geographic relationship, and the characteristics of the air service bilateral between the two countries. By specifying changes to the terms of the bilateral, the model can be used to estimate the traffic impact resulting from liberalisation. From this, the model then estimates the resulting employment impacts and GDP impacts.

The increased passenger volumes resulting from liberalisation are summarised in **Figure ES-1**. The traffic impacts on the 12 countries range from increases of 51% (Nigeria) to increases of 141% (Algeria). In total, traffic flows between the 12 countries are projected to increase by 81%, from 6.1 million passenger movements currently (in 2013) to 11.0 million after liberalisation (an increase of 4.9 million passenger movements).<sup>4</sup> This represents several million passengers who can now travel by air, but who are currently unable to do so for reasons of cost, flight availability, or convenience.

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<sup>4</sup> Passenger movements count each passenger twice – once as a departure and once as an arrival.

**Figure ES-1: Passenger Traffic Impact of Liberalisation**



### Passenger Benefits of Liberalisation

Air service liberalisation is projected to bring about other substantial benefits for passengers:

- **Fare savings:** passengers travelling between these countries are expected to benefit from fare reductions of 25-35%, providing a saving of over US\$0.5 billion per annum.
- **Greater connectivity:** Of the 66 country pairs between the 12 countries, 34 (52%) had some form of direct service in 2013. With liberalisation, it is forecast that an additional 17 country pairs will benefit from direct service, so that 75% of country pairs will have direct service.
- **Time savings:** new routes and greater frequencies will shorten the flying time between many cities. For example, in 2013 there was no direct service between Algeria and Nigeria. The most convenient routing available was via Morocco (Algiers-Casablanca-Lagos). The minimum journey time for this routing is 9 hours, but depending on connecting times could be as much as 17 hours. A direct service (which is forecast by the gravity model) would reduce the travel time between Algiers and Lagos to approximately 4.5 hours.
- **Greater convenience:** Of the 34 country pairs with direct service in 2013, only 21 had service operated at daily frequencies or better. Many had seasonal services or services operated at less than daily frequency. Such services offer passengers very limited choice in terms of their journey timings and prevent passengers obtaining an convenient

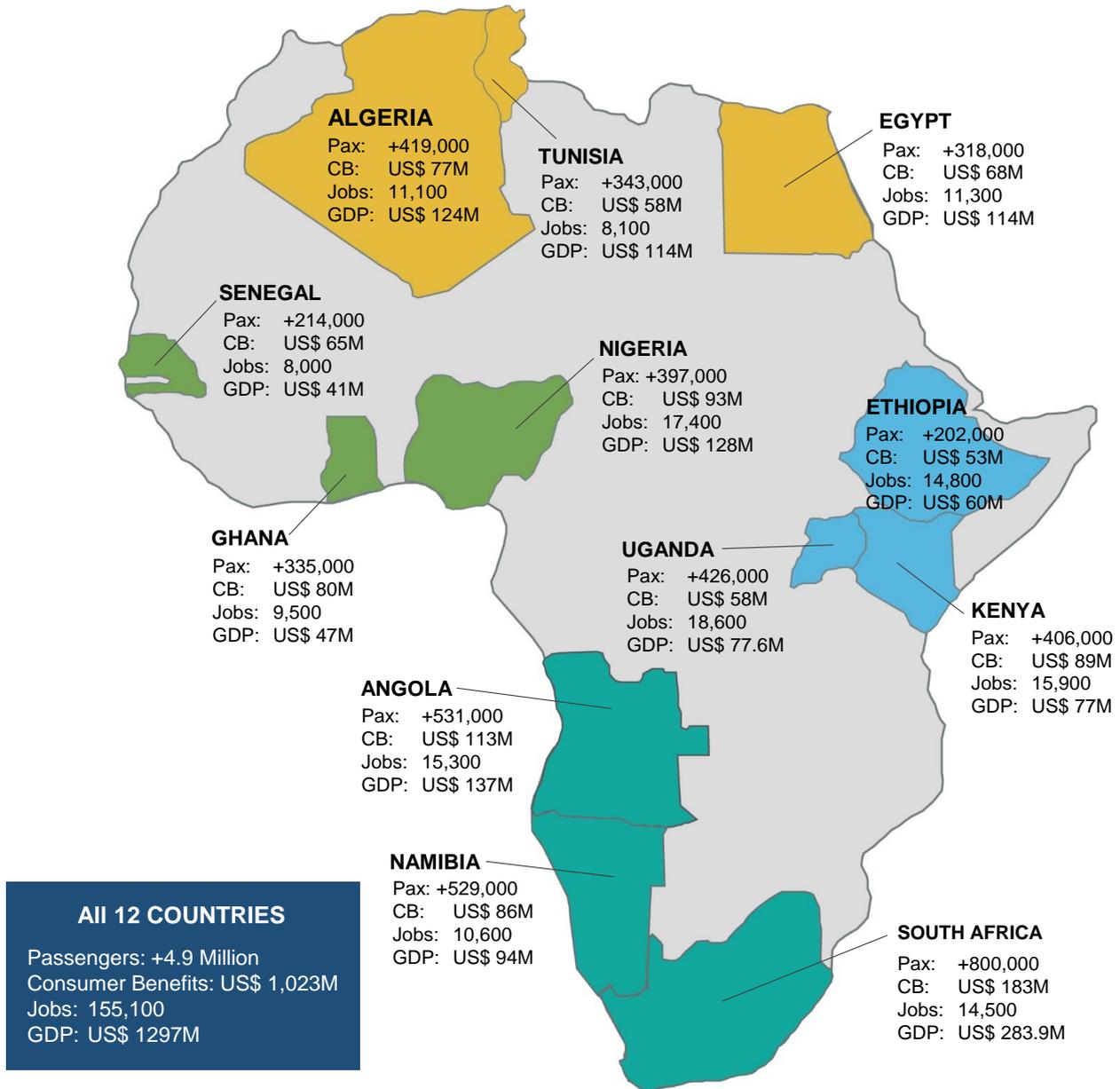
itinerary (e.g., conducting a trip over a single day, which is important to companies trying to minimise the time their staff are out of the office). With liberalisation, greater service frequencies can be supported, providing greater convenience and choice for consumers.

### **Benefits of Liberalisation to the Wider Economy**

The impacts of liberalisation extend beyond the benefits to passengers and cargo shippers . The increased air service levels will stimulate employment in the aviation industry to handle passengers and their baggage and to operate, service, and maintain aircraft. Liberalisation is also expected to stimulate tourism between the countries, generating an estimated US\$1.3 billion in additional tourism spending. Perhaps most significantly, the increase air service can facilitate many other sectors of the economy by supporting increased trade, attracting new businesses to the region, encouraging investment and enhancing productivity. Industries and activities that would otherwise not exist in a region can be attracted by improved air transport connectivity.

The increased aviation activity, tourism, trade, investment, productivity and other economic benefits will generate considerable employment and economic output (Gross Domestic Product) for the 12 countries. The estimated employment and GDP impacts of liberalisation are presented in **Figure ES-2**. Liberalisation between the 12 countries is estimated to generate 155,100 jobs in aviation, tourism, and the wider economy and to contribute US\$1.3 billion to annual GDP (about 0.07% of the GDP of the 12 countries).

**Figure ES-2: Summary of the Economic Impacts of Liberalisation**



All financial figures are in 2013 prices.  
CB = Consumer Benefits, measured in terms of consumer surplus.

## Implications for Air Service and Opportunities for Carriers

Liberalisation will present air carriers with new route opportunities and the opportunity to grow their operations. **Chapter 8** provides analysis of the air service potential following liberalisation using a series of illustrative scenarios. In most cases, the number of frequencies operated between countries would be expected to more than double and, in a few cases, treble. Liberalisation would also lead to a number of new routes starting service.

There is always a great concern that liberalisation will harm the profitability and viability of existing carriers. Indeed, a common result is that liberalisation leads to loss of market share as new competitors enter the market. However, the stimulatory impact of liberalisation also means that the incumbent home carrier often still experiences a growth in traffic volumes despite this loss of market share. Liberalisation offers efficient, competitive carriers an opportunity to enhance profitability by expanding into new markets, accessing a wider pool of investment and through consolidation. The example of Ethiopian Airlines (Section 3.4) demonstrates that African carriers can thrive in a more liberalised environment. Whether the incumbent carriers prosper or suffer under liberalisation will depend in greater part on the quality of management of the carriers and how the carriers choose to respond to liberalisation.