MAKING AIR TRANSPORT WORK BETTER FOR THE CARIBBEAN

CARIBBEAN DEVELOPMENT BANK

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FOREWORD

Given the geographical spread of the Caribbean, air transport is vital in linking families and communities, as well as supporting economic activity. Most airlines based in the Caribbean have regularly made operating losses, although this is not a phenomenon unique to the Region. Across the globe, competition in the industry has intensified over the years. Deregulation has generally benefitted passengers at the expense of legacy airlines, with low cost carriers exploiting opportunities for growth. Passengers' expectations of low fares have increased, while many of the costs of providing air transport, particularly fuel, have gone up. The worsening economics are exacerbated in the Caribbean, where economies of scale seem elusive at best.

Globally, airlines have had to adapt. They have done so in a number of ways, for example, through closer cooperation to reduce costs and/or increase passenger numbers and revenues. Three major world alliances, Star Alliance, One World and Sky Team, have emerged. Examples of cooperation among Caribbean operators are few; and none has had significant and lasting impact.

The weak levels of cooperation threatens to prolong financial difficulties at a time when the budgets of shareholder governments are under increasing pressure.

The Caribbean Development Bank (CDB) understands the importance of the Region's airlines to the wider economy and society and that the Caribbean cannot afford to lose the services that regional airlines provide. CDB's expectation is that this study will provide the basis for consensus to be reached on appropriate strategies for improving the financial and operational health of the industry for the benefit of the whole Region. Towards this end, "Making Air Transport Work Better for the Caribbean" sheds light on the difficulties the industry faces. It draws on previous studies and the experiences of operators on the front line, sharing their experiences and their ideas about what could work better. It offers the informed insights of major stakeholders in the industry. It considers a variety of potential solutions, highlighting both the strengths and weakness of each solution. Finally, it proposes frameworks for making these solutions possible.

I invite you to study the Report carefully. My hope is that it will propel the debate about an industry that is so vital to our economic future. My hope also is that it will facilitate consensus building and agreement on a concrete plan of action to transform the industry into one that improves the transportation infrastructure; supports growth of our regional economies; and promotes improvements in the quality of life in all of our communities.

Wm Warren Smith
President
Caribbean Development Bank

May 2015

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ABBREVIATIONS & ACRONYMS

ACI	Airports Council International
AIU	Airline Industry Updates
AJAG	Air Jamaica Acquisition Group
ALTA	Latin America and Caribbean Air Transport Association
ANSP	Air Navigation Service Providers
ASA	Air Service Agreement
ASEAN	Association of South Eastern Asian Nations
ASK	Available Seat Kilometre
AOC	Air Operators Certificate
ATR	Aviones de Transport Regionale
BVI	British Virgin Islands
BWIA	British West Indian Airways
CAA	Civil Aviation Authority
CAGR	Compound Annual Growth Rate
CAL	Caribbean Airlines
CASSOS	Caribbean Aviation Safety and Security Oversight System
CDB	Caribbean Development Bank
CEO	Chief Executive Officer
CSME	Caribbean Single Market and Economy
CTO	Caribbean Tourism Organisation
DGCA	Director General of Civil Aviation
EC	European Commission
ECAA	European Common Aviation Area
EIU	Economic Intelligence Unit
EU	European Union
FAA	Federal Aviation Association
FBO	Fixed Base Operations
GDP	Gross Domestic Product
GDS	Global Distribution Systems
IATA	The International Air Transport Association
ICAO	International Civil Aviation Organisation
ICT	Information and Communications Technology
LAC	Latin America and Caribbean
LCCs	Low Cost Carriers
LIALPA	Leeward Islands Airline Pilots Association
MASA	Multilateral Air Service Agreement
MIS	Management Information Systems
MRO	Maintenance Repair and Overhaul
OAG	Official Airline Guide
OECS	Organisation of Eastern Caribbean States
RPK	Revenue Passenger Kilometres
SA	Surinam Airways
TSA	Transportation Security Administration
UK	United Kingdom
USA	United States of America

EXECUTIVE SUMMARY

The Air Transport Sector in the CARICOM Region is close to reaching a tipping point. Some domiciled carriers that have made significant contributions to the socio-economic welfare of the economies they have served over the years, are going through a period of uncertainty. The airlines continue to make losses, with shareholder governments concerned about having to prop them up indefinitely.

Against this backdrop, the Caribbean Development Bank (CDB) has commissioned an independent study that details the need for a complete rethink of the modus operandi of the regional airline industry, and spells out a set of practical 'how to' recommendations to:

a. limit the vicious cycle of losses, high debts, bankruptcies and bailouts; and

b. to place the industry on firmer footing in order to facilitate its re-launching into the global marketplace as a stronger competitor.

The Study was carried out between Autumn of 2014 and Spring of 2015, and solicited participation from a broad range of air transport industry stakeholders, including the Region's domiciled carriers. Their evidence, along with supporting written statements and secondary evidence, yielded the following key findings and recommendations.

Aggregated accumulated deficits for the three major (all government-owned) airlines of the Caribbean Region amounts to approximately USD1 billion (bn). These airlines cost their respective taxpayers around USD100 million (mn) every year to keep them in business. However, aviation provides a lifeline to the rest of the CARICOM economy, enabling tourism to contribute over USD4 bn to the Gross Domestic Product (GDP) and provide 280,000 jobs.

Airlines in the Region lose money for a number of reasons:

a. The intra-CARICOM markets are too thin. There is simply not enough scale to overcome the high fixed costs of operation. Rising fuel costs exacerbate this problem. Existing Information and Communications Technology (ICT) systems are inadequate, but improvements are very expensive. Industrial relations can also be challenging.

c. Domiciled airlines struggle to compete with better capitalised foreign airlines on services to/from the Caribbean.

d. Bad financial decisions have been made, such as by Caribbean Airlines (CAL) in a short period over 2010/11.

e. There are too few examples in the Region of the type of cooperation that has enabled airlines elsewhere to survive. Airlines, much larger than all the Region's carriers combined, have found it necessary to participate in mergers, equity investments, alliances, code shares and other cooperation imperatives in order to survive and thrive.

f. Taxes and charges are high compared to basic fares, therefore lowering demand and revenues.

g. Airlines are required to operate some unprofitable routes for social reasons. Airline Boards are often not free of political intervention.

h. The regulatory framework across the Region is not integrated. Different laws, regulations and regulatory practices add to airline costs. The body responsible for implementing regulatory harmonisation is under resourced.

Some of these problems are more acute in the Caribbean than elsewhere in the world. However, consideration can be given to a number of transformative options for improving the situation. Many of these have been tried elsewhere and been largely successful:

a. Reforming the governance structure of airlines, increasing professional involvement and improving transparency with respect to appointments and compensation. Independence of Board from shareholders, once objectives and targets have been agreed.

b. Clearer guidelines on strategic and financial objectives.

c. Greater use of hubbing, to lower unit costs and increase connectivity.

d. Consideration of unbundling ticket prices to provide passengers with greater choice and take advantage of willingness to pay for ancillary products.

e. Operation in isolation should cease and a more cooperative approach adopted, with other domiciled and foreign airlines. This can lower costs through economies of scale and, by making it easier (and potentially cheaper) for passengers to travel throughout the Region, increase revenues.

f. Clearer rules on route revenue guarantees and social routes. Consideration of more flexible third tier operators on the thinnest routes. Possible franchising of some routes.

g. Consideration of public private partnerships to increase investment from other sources, thereby minimising burden on both the passengers and the general taxpayers.

h. Increased price discrimination by varying tax charged on individual tickets, to equate to overall tax burden.

i. Progressive moves towards further liberalisation. Multilateral liberalisation provides potentially more opportunities to domiciled airlines than bilateral liberalisation.

j. Standardisation of regulatory responsibilities would create cost-saving opportunities for the Region's airlines, by avoiding costly duplication of capital and labour investments.

Over the last 45 years, there have been efforts to force cooperation among the major airlines of this region (Holder, 2010). Unfortunately, most of these efforts have proven fruitless. Reasons can be advanced as to why there has not been more cooperation. However, the problems remain and further efforts are needed towards resolution.

This study proposes a fresh two-pathway approach:

a. the setting up of a 'Quick-wins' CARICOM airlines association to identify cost reduction and revenue enhancement opportunities that can be pursued jointly; and

b. the establishment of a high-level Air Transport Reform Authority to address the longer-term structural, institutional and industrial barriers. The Authority would consist of proven aviation professionals from each of the CARICOM states, accountable to the Region's taxpayers and reporting directly to their respective Heads of Government.

The Authority would formulate a comprehensive aviation policy for the Caribbean Region, taking into account as wide a spectrum of stakeholder views and interests as possible. The aim of the Policy would be to craft a safe, efficient and reliable regional air transport sector, which operates at a reasonable cost level, is compliant with international safety norms and standards, and follows global industry best practices as much as possible. The Authority would review the aviation network and connectivity needs of the Region as a whole, with a view to integrating network schedules using all available assets – including the smaller aircraft of the third tier carriers.

From this policy, a detailed aviation plan (including airlines and airports) would be developed. The Authority would be tasked with supervising the implementation of the Plan in the shortest possible time with the full support of the aviation shareholders – both government and private. Transparency and accountability of the Authority would be achieved by mandated and regular private and public disclosures.

CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND TO THE STUDY AND INDUSTRIAL CONTEXT

Air transport activities facilitate and often stimulate the movement of people and goods. As a result, many communities have become dependent on air transport for their livelihoods, either directly or indirectly. Tourism is the Caribbean's most well-known global export, but only because of the Region's continued access to global markets through commercial air transport services. In the Caribbean Region, the lack of transportation alternatives in many cases only serves to intensify the contribution of the Sector to the Region's islands and states. Recent analysis by Oxford Economics[1] indicates that the Sector contributes USD2.5 bn to GDP in the Caribbean Region, supporting 112,000 jobs. More significantly, through the catalytic effects of aviation on tourism, the Sector contributes USD12.6 bn of GDP and 845,000 jobs. This equates to 8.6% of regional GDP.

The International Air Transport Association (IATA) represents the world's airlines and has frequently highlighted the global imbalance between the wider economic benefits of aviation, such as those above, and the benefits accruing to the airlines themselves. Post-tax airline margins were just 1.0% in 2012 and 1.5% in 2013 (IATA, 2014). Though on a current upward trend, due in part to more favourable oil prices, this type of return is significantly lower than it has been for airports, aircraft manufacturers, handlers and other suppliers involved in the industry. In the Caribbean Region, this dichotomy between socio-economic benefits and domiciled airline performance is much more extreme, with the situation becoming increasingly unsustainable over the last decade. Governments with tighter budgets and public expenditure pressures elsewhere struggle to keep propping up their region's carriers at the expense of the taxpayer.

It is in this critical context that this timely CDB study entitled *'Making Air Transport Work Better for the Caribbean'* has been commissioned.

1.2 STUDY AIM AND MOTIVATIONS

One clear over-riding aim was set: "To generate 'how to' recommendations for the transformation of the Region's Air Transport Sector into a performing and viable industry."

The motivation for this study was to create a neutral, independent platform from which to derive solutions that can equitably benefit air transport users, players, and the Region's governments and communities. The broad scope of the research is intended to ensure that no single agenda is prioritised over another and also to enable the construction of workable, consensus-driven solutions to the Region's air transport challenges.

1.3 SCOPE OF THE STUDY

The genesis of the Study was the history and present state of the Regional Air Transportation Industry and, in particular, the performance of the state-owned airlines: Caribbean Airlines (CAL); Air Jamaica (AJ); LIAT (1974) Ltd. (LIAT); Surinam Airways (SA); Bahamasair (BAH); and Cayman

[1] Economic Benefits from Air Transport in the Caribbean Islands Oxford Economics 2011.

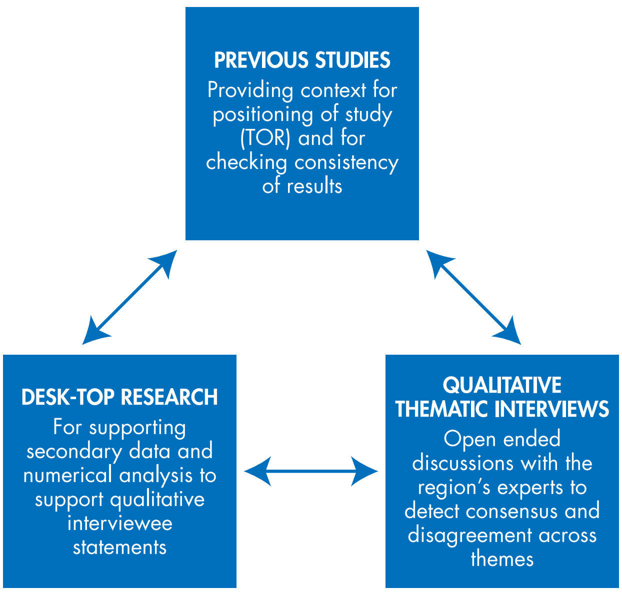
Airways (CA). To ensure completeness of analysis, the Study's geo-political scope extends to all full members of CARICOM (15 states), two CARICOM associate members of the Organisation of Eastern Caribbean States (OECS) [Anguilla and the British Virgin Islands (BVI)] and one non-OECS associate member (Cayman Islands).

To properly assess the state of the Region's air transport industry, it was necessary to include the smaller, private airlines that serve the focus area ('third tier airlines') and to take in the views of a wide range of aviation stakeholders in the operating area served by these airlines. These stakeholders include airports, ground handling companies, regulatory organisations, and tourism-related organisations.

1.4 ROADMAP AND METHODOLOGY

The Study adopted a primarily qualitative approach, based on previous studies; desk-top research; and interviews with key stakeholders. Further primary and secondary data were used, where available, to support the analysis. A triangulation approach (see Figure 1.1) was adopted to ensure consistency in the information sources.

FIGURE 1.1: METHODOLOGY PROCESS MAP



More details of the methodology used in the industry analysis can be found in Appendix 1. The state of the industry, its constraints, challenges, and problems were also gleaned from in-depth interviews and written feedback obtained from the chief executives of thirteen airline and non-airline stakeholders.

The data and opinions obtained resulted in a deduction of reform imperatives, transformative opportunities and modalities for improvement in the industry. Following this, recommendations were formulated for crafting a safe, reliable regional air transport sector at reasonable cost, which is compliant with international operational and safety norms, and follows the global industry's best practices.

1.5 SYNOPSIS OF CHAPTERS

The rest of this chapter considers the findings of previous Caribbean air transport studies. Chapter 2 follows and provides a comprehensive overview of the Air Transport Sector in the Caribbean, in accordance with the Study's agreed geographical scope. It describes the various air transport stakeholders in the Region, the policy and regulatory environment, operational and infrastructural issues, and the regional industry in the global context.

Chapter 3 focuses on a situational analysis of the Caribbean Air Transport Sector detailing constraints, challenges, and reform imperatives gleaned from feedback from the Region's aviation stakeholders. Particular areas covered were: financial management; business strategy formulation and execution; operations policies and management; information and communications technology (ICT); human resource management; and corporate governance.

Chapter 4 explores transformative opportunities for regional air transport. It examines options and modalities for regional cooperation in the industry. Examined in detail are: airline business opportunities; Management Information Systems (MIS) and ICT opportunities; alliance and partnership opportunities; route and revenue guarantee changes and social contribution opportunities; taxes and fee changes; regulatory improvement scenarios; and future vision transformations.

Finally, drawing on Chapters 3 and 4, and using as a backdrop, the best practices of the global airline industry, Chapter 5 proposes a practical, feasible and solutions-orientated "how-to" agenda for meaningful transformation of the Region's aviation industry. It details issues to be addressed and the fastest way to achieve this.

1.6 REVIEW OF CARIBBEAN AIR TRANSPORT STUDIES TO DATE

1.6.1 Description Of Studies

It is important to highlight previous studies of air transport issues in the CARICOM and wider Caribbean Region in order to set this study in a proper context. CARICOM and Caribbean-specific studies aimed at addressing the Region's air transport structural challenges date back to 1993[2] with the Caribbean Regional Airlines Functional Cooperation Study, commissioned by the Caribbean Tourism Organisation (CTO), which specifically addressed the issue of non-cooperation between Caribbean domiciled

[2] The underlying ideas date back further, however, to 1969 when BWIA (which already owned 75% of LIAT) was put forward by the Trinidad Government to be the Region's designated carrier (Hall and Sang, 2012).

airlines. This was followed by a broader thematic study on the Critical Issues Affecting the Regional Air Transport Sub Sector completed in 2001 by Ian Bertrand and the World Tourism Organisation. The 2001 study was updated and garnered further support in 2007 from the CTO with additional European Union (EU) funding from the Caribbean Regional Sustainable Tourism Development Programme to complete a study entitled 'Caribbean Air Transport Study'. This was also related to a World Bank study entitled 'Caribbean Air Transport: Strategic Options for Improved Services and Sector Performance', which had been completed in the previous year. The CARICOM Secretariat thereafter commissioned a study in 2009, again by Ian Bertrand, to facilitate an understanding of the need for efficient air transport services in the CARICOM Region. More recently, the World Bank followed up with more focused studies, one covering OECS was completed in 2013, and the other examining transport connectivity (sea and air) across the Caribbean, which was completed in January 2015.

1.6.2 Major Findings

A summary of the findings of the abovementioned studies is provided in Table 1.1.

1.6.3 Value Added of this Study

While it is accepted that there is some agreement across the findings of previous studies, there remains a need to fill some notable scoping and methodological gaps:

a. It is critical to gain insights from a wider range of stakeholders to include regional Civil Aviation Authorities (CAAs), airports, handlers, tourism organisations, as well as the airlines themselves, to determine areas for possible cooperation and coordination.

b. This study uses a wider net of commercial, safety and security policies and frameworks guiding and influencing air service activity to/from and within the Region.

c. Where possible, gains from adopting recommended pathways are estimated and quantified.

d. This study provides a more detailed situational and business analysis of the Region's domiciled airlines.

It is critical to gain insights from a wider range of stakeholders to include regional Civil Aviation Authorities (CAAs), airports, handlers, tourism organisations, as well as the airlines themselves, to determine areas for possible cooperation and coordination.

TABLE 1.1: REVIEW OF MAIN FINDINGS OF PREVIOUS CARICOM/CARIBBEAN AIR TRANSPORT STUDIES

STUDY NAME	MAIN FINDING(S)
CTO: Caribbean Regional Airlines Functional Cooperation Study (1993).	Identified 33 areas of cooperation, which could have led to USD34 mn of cost containment and USD31 mn of revenue enhancement.
World Tourism Organisation: Study of Critical Issues Affecting the Regional Air Transport Sub-Sector (2001).	All airlines providing airlift to the Region reported losses in 2001. All domiciled airlines, but one, reported increased losses in 2001. Third tier airlines have been ignored by regional policy makers. Countries have adopted a more liberal stance to international air service agreements rather than intra-regional and charter.
World Bank: Caribbean Regional Sustainable Tourism Development Programme Caribbean Air Transport Study (2006).	Stakeholders believed liberalisation of air transport was accepted and practised to different degrees but that further liberalisation, on balance, should not take place; that Community of Interest Principle should be part of all Air Service Agreement (ASA) negotiations. Regional governments believed the socio-economic contribution of domiciled airlines outweighed their operational losses.
CTO and Caribbean Regional Sustainable Tourism Development Programme: Caribbean Air Transport: Strategic Options for Improved Services and Sector Performance (2006).	Lower fares evident in 'open skies' markets to/from the United States of America (USA). Domiciled airlines are undercapitalised and face serious operational and financial problems. Ensuring an ongoing service between Eastern Caribbean states in a liberalised market, is a justifiable concern but can be addressed through Public Service Obligation type subsidies. There is a lack of regulatory capacity to face and manage a liberal air transport environment.
CARICOM Secretariat: Strategic Plan for Air Transport Services in CARICOM (2009).	All CARICOM members are committed to ASA liberalisation to include Open Skies Agreements with countries outside the Region. Four CARICOM states are committed to continued ownership of domiciled carriers. Three CARICOM states are committed to continued ownership of domiciled airlines, even when services to the Eastern Caribbean have been limited. Ten CARICOM states agree with a partially liberal Eastern Caribbean ASA. There is a lack of understanding that the tourism product should be the priority in the Region and that air transport decisions should be secondary.
World Bank: Air Transport in the OECS: Flying Solo? (2013).	Most islands are receiving international tourists directly from their countries of origin instead of building a hub-and-spoke type system that would optimise regional investment in air transport infrastructure. Cost of maintaining airlift for some OECS countries can be as much as 1% of GDP. A hub in Barbados and Jamaica may produce better results for OECS countries.
World Bank: Connectivity for Caribbean Countries (2015).	Huge costs associated with trade in the Caribbean. Caribbean air transport is characterised by fierce competition between islands for incoming tourists. Thus, there are sub-optimal routings based on distorting subsidy schemes indicating a need for route consolidation. There is a need for inter-island ferries and low-cost air shuttle services between the islands to plug the poor air connectivity gap at present across the Region.
A Study on the Factors Inhibiting Intra-Regional Travel in the OECS (estimated completion April 2015).	Not yet released at time of this report going to Press.

CHAPTER TWO: OVERVIEW OF THE CARIBBEAN AIR TRANSPORT SECTOR

The purpose of this chapter is to provide a comprehensive, up-to-date overview of the Caribbean Air Transport Sector, in accordance with the Study's geographical scope. A number of core issues currently impacting the Sector, are broadly outlined in order to pave the way for the detailed assessment of transformative solutions for the Region discussed in Chapters 4 and 5.

This chapter is broken down as follows:

- Section 2.1 provides some key market characteristics and gives a sample of current air transport user experiences;
- Section 2.2 details the current airlines, airports, Air Navigation Service Providers (ANSPs) and other suppliers based in the Region;
- Section 2.3 outlines the key roles and contributions of the Region's main policy, regulatory and legal bodies;
- Section 2.4 contains a discussion of some overriding issues currently affecting the Region's Air Transport Industry; and
- Section 2.5 provides some global context to the Region's industry.

2.1 OVERVIEW OF AIR TRANSPORT SECTOR IN CARIBBEAN

2.1.1 Introductory Market Statistics

The Caribbean Region represents a small percentage of global passenger and freight traffic. In 2012, total airport passenger traffic for the Study's sample of Caribbean states totalled 22.14 million, only 0.004% of global traffic, which was just under 6 billion airport passengers in 2012 (Airports Council International, 2013). In terms of freight traffic in 2013, 96 million metric tonnes of cargo were uplifted at airports worldwide, of which just 0.34 million metric tonnes (0.35%) were handled at Caribbean airports (Airports Council International, 2013, and Boeing World Air Cargo Forecast, 2014-15).

However, propensity to travel in the Caribbean Region is frequently above the world average (0.5 originating air trips per capita with a Real GDP per capita of USD12,000), with countries such as Barbados (5 trips per capita and USD14,500); St. Lucia (4 trips per capita and USD9,000); Surinam (0.6 trips per capita and USD10,500); and the Bahamas (8 trips per capita and USD21,000) all showing a disproportionately high propensity to travel given their respective Real GDPs per capita (Airbus, 2009). There are some Caribbean states, such as Trinidad & Tobago, with a slightly lower than expected propensity to travel (1.5 trips per capita) given the size of its real GDP per capita (USD22,500). Thus, for many countries in the Caribbean, despite the low-traffic volumes, air transport services represent a much bigger lifeline for individuals and companies, especially given the lack of alternatives/substitutes.

Air transport markets across and to/from the CARICOM Region can generally be classified as 'thin markets'. The top ten biggest city-pair markets in the Region are shown in Table 2.1. The largest pair in the Region in terms of capacity available, is the Port-of-Spain–Tobago domestic route with 46,652 seats in the month of December 2014. Aside from this pair and the Port-of-Spain–Georgetown route (23,164 seats), the remaining denser pairs in the Region link points in the Bahamas, Trinidad & Tobago, Jamaica and Barbados to points in the United States of America (USA) and the United Kingdom (UK). By way of contrast, the densest pairs globally are as much as 15 times denser than the busiest pairs in the CARICOM Region. The average of the top 10 routes, in terms of capacity, is also much lower for CARICOM pairs in contrast to the global top 10. The average top 10 capacity globally was 702,500 seats (April 14), whereas across the sample Caribbean area it was 25,987 seats (December 2014).

TABLE 2.1: TOP TEN CITY-PAIR MARKETS TO/FROM/WITHIN THE CARICOM REGION

Ranking	Market Pair	No. of seats
1	Port-of-Spain – Tobago	46,652
2	Barbados – London Gatwick	27,390
3	Montego Bay – Toronto	26,748
4	Nassau – Miami	25,772
5	Nassau – Fort Lauderdale	25,508
6	Port-of-Spain – Georgetown	23,164
7	Grand Cayman – Miami	22,426
8	Montego Bay – Atlanta	21,517
9	Port-of-Spain – New York (JFK)	20,666
10	Kingston – New York (JFK)	20,029

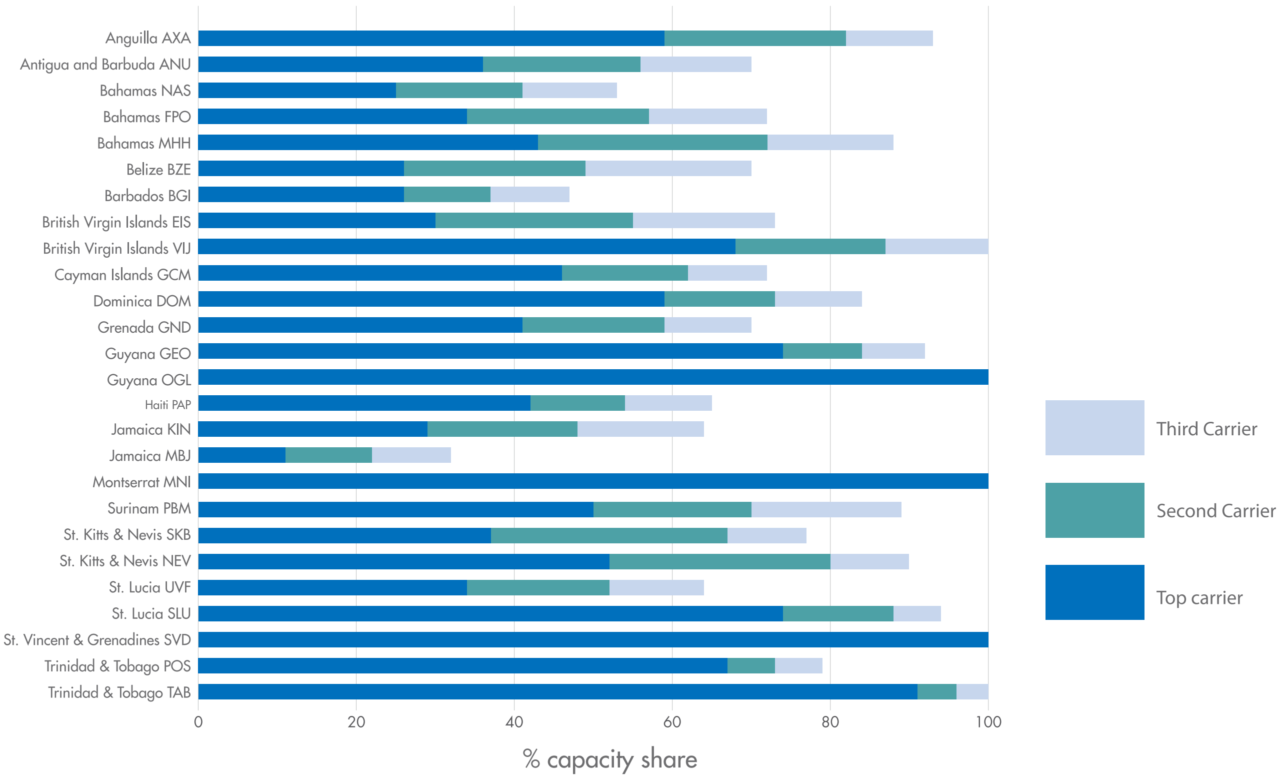
SOURCE: INNOVATA SCHEDULES DECEMBER 2014.

NOTE: DATA IS BASED ON SCHEDULED PASSENGER FLIGHTS, OPERATING AND NON-STOP (ONE-WAY).

The Caribbean represents a small percentage of global passenger [and freight] traffic, but propensity to travel in the region is frequently above the world average.

In all but three of the eighteen sampled Caribbean states, the largest carrier in terms of capacity provided is based in the Caribbean (Innovata December 2014 schedules). With the exception of Jamaica (e.g. Southwest and American Airlines); St. Lucia (British Airways); and St. Kitts (American Airlines) the Region is to a greater or lesser extent reliant on home-designated carriers to provide capacity for the Region's passenger and freight needs. In some countries, the largest home-carrier share is as high as 100%, as is currently the case in St. Vincent (LIAT) and Montserrat (Montserrat Airways). In many others, the largest domiciled carrier share is very high, most notably in Port-of-Spain (CAL – 67%); Tobago (CAL – 91%); Anguilla (LIAT – 60%); Dominica (LIAT – 59%); Paramaribo (SA – 50%); Georgetown (CAL – 64%); and Virgin Gorda (VI Airlink – 68%). In states such as the Bahamas and Cayman Islands, capacity provided by home carriers BAH and Cayman Airways, respectively, form the largest share but their respective share is split more evenly with other home-based and foreign carriers. Figure 2.1 summarises the top three operators at airports across the 18 sampled Caribbean states using November 2014 schedules (Innovata).

FIGURE 2.1: TOP THREE CARRIERS AT AIRPORTS ACROSS CARICOM (PLUS CAYMAN, ANGUILLA, BVI)



SOURCE: INNOVATA SCHEDULES (NOVEMBER 2014).

2.1.2 Users: The Shipper and Passenger Experience

The service experience for air travellers both within and to-and-from the Region has been highly variable, with some travellers reporting good airline and airport experiences while others reported high fares combined with poor (sometimes very poor) overall service levels. However, according to the Caribbean Journal (2014), there are some shining examples of service across some of the Region's airports, with Nassau's Lynden Pindling (airport code NAS) and Montego Bay's Sangster International Airport (airport code MBJ) topping the Journal's recent listing of Caribbean airports in 2014. Among the list of notable amenities at NAS is the presence of US Customs and Immigration pre-clearance, along with its recent terminal renovation costing USD40 mn and its Graycliff airport lounge. MBJ is renowned for its variety of Food and Beverage outlets, Duty Free shopping and airport lounges. It is interesting to note that, in both cases, there is a wide mix of airlines serving, with the largest carrier in Nassau – BAH – having only a 25% capacity share at its base airport. The largest carrier in MBJ fluctuates between American Airlines, Delta and Southwest, with none of them achieving an overall share of more than 12%.

In terms of airline ratings, Skytrax (2014) is at the forefront of tracking and awarding airlines for strong performance in the areas of airport and on-board products and services, as well as the before-and-after travel service experience. Currently no airline flying to/from or within the Region receives a 5-star Skytrax rating. CAL received a 3-star rating, while BAH received a 2-star rating (out of 5). No other home-based carriers received an official rating although, as of November 2014, LIAT had received 81 customer reviews with an average overall rating of 2/10. Cayman Airways (based on only 13 reviews) had a rating of 7.8/10. Surinam Airways (also on 13 reviews) received a higher average rating of 9/10. If other Caribbean airlines based outside the sampled 18 states are included (InselAir and Air Caraibes), then the average review rating was 5.6/10. By contrast, when consumer reviews of foreign carriers serving the Caribbean are averaged, a lower rating of 5.2/10[3] is

[3] Carriers include JetBlue (6.5/10); American Airlines (3.5/10); Delta (5/10); Spirit (3/10); United (6/10); Southwest (7/10); Air France (5/10); British Airways (6.5/10); Virgin Atlantic (5/10); KLM (6/10); Copa (5/10); Lufthansa (7/10); Condor (4/10); Thomas Cook (3/10); and Thomson Airways (5/10).

obtained. This review and official rating data suggest that the overall service experience received by travellers to/from and within the Region is pretty average, regardless of whether a home or foreign carrier is used. In some cases, individual carrier review averages are much higher than the average (Surinam Airways, Southwest Airlines and Lufthansa) and in others, much lower (LIAT, Thomas Cook and American Airlines).

2.2 OVERVIEW OF AIR TRANSPORT PLAYERS IN THE CARIBBEAN

2.2.1 Airlines

CARIBBEAN AIRLINES (CAL) is the state-owned national flag carrier of Trinidad & Tobago and a major player in the CARICOM Region. Historically, CAL evolved from Trinidad & Tobago Airways Corporation [called British West Indian Airways (BWIA)], which was wound down in September 2006 after 66 years of service. BWIA was in private hands for a while, most recently between 1995 and 2004. It rarely made a profit[4], was plagued by heavy losses and required a series of capital injections from the Government of Trinidad & Tobago. It cost the government TTD3 bn (USD0.47 bn) in the final quarter of 2006 when liquidation of BWIA took place, to close down BWIA and replace it with CAL, fully capitalised and free of debt. In its first year of operation in 2007 (before formation, structuring and transition costs), CAL was reported as making a profit of USD6.9 mn[5].

In May 2010, CAL acquired the Jamaican flag carrier, AJ, and merged its fleet and operations onto its existing Air Operators Certificate (AOC) on July 1, 2011. Since then, CAL has become the largest CARICOM-based carrier with around 3 million passengers per annum and an annual turnover of USD400-450 mn. Initially, the strategy was to run a 'two brands one airline' carrier. However, in July 2012, the Trinidad & Tobago CAA notified CAL that, under the terms of its AOC, it could only operate flights under its own name. From 2014, the AJ brand was gradually phased out.

CAL retains its significance in terms of traffic today in both intra-CARICOM and intra-Caribbean markets. According to Official Airline Guide (OAG) Traffic Analyser data, CAL carried as much as 82% of all Caribbean-to-Caribbean, non-stop traffic in November 2014. 60% of all CAL's available seats in January 2015 linked its hub airport in Port-of-Spain with other points in the Caribbean Region, with the domestic Tobago shuttle service constituting 42% of all available intra-CARICOM seats (Innovata).

Recent route changes have seen cutbacks in some Caribbean markets, most notably to Kingston and Montego Bay, despite the Jamaican government retaining 16% ownership following the takeover (Innovata – January 2015). Smaller cut backs in capacity are also being observed to other Caribbean points, as well as Toronto, to make way for capacity increases to the United Kingdom and the United States.

Of late, the carrier has had to contend with some labour relations issues, the most recent example in July 2014 when members of the Trinidad & Tobago Airline Pilots Association called in sick in apparent work action over incentive pay and conditions.

AJ ceased to be an independent carrier in May 2010, when it was acquired by CAL. This took place after a 47-year record of operating scheduled air services to Canada, USA, UK, parts of the Caribbean, and on a limited number of domestic routes. Before the carrier's acquisition, it was a sizeable player in the Region with passenger traffic figures ranging from 1.5–2 million per annum, and annual turnover in the range of USD250-400 mn in the five years leading up to its takeover. At its peak, it transported 69% of all persons travelling to Jamaica and 52% of all visits to the island (Jamaica Observer, 2011).

In the 5½ years preceding the takeover, government-owned AJ recorded USD900 mn of losses, an annual average of USD180 mn. During the prior 10-year period, it had accumulated losses of USD674 mn as part of the privately owned AJ Acquisition Group (AJAG), USD67.4 mn per year on average (Jamaica Observer, 2011). An estimated USD250 mn of these losses could be related directly or indirectly to the downgrading of Jamaica to Category II status by the USA Federal Aviation Administration (FAA) which occurred only a year after AJAG took control. Four new A310 aircraft sat on the ground in Jamaica for eight months, with the airline paying the lease but unable to fly them on their intended routes. Though smaller than losses incurred under government control, the AJ case shows that financial sustainability cannot be achieved through change in ownership alone. BWIA also had shown that private operation is not necessarily more profitable.

LIAT (LI) is a medium-frequency regional carrier based and registered in Antigua and Barbuda, with additional bases in Barbados and Trinidad & Tobago. For some Leeward and Windward islands in the Caribbean, LIAT provides the only regular scheduled air service, and is the only carrier that affords proper accessibility and mobility to residents and visitors of some islands (e.g. St. Vincent and Dominica). For others, it is the only carrier that provides any meaningful inter-island airlift capacity (e.g. Barbados, Antigua and Barbuda and Grenada). The ownership structure at LIAT is more diverse than for other state-owned carriers based in the Region, with as much as 11 separate Caribbean governments having at least a small ongoing stake in the carrier. The main shareholder governments are Barbados, Antigua and Barbuda, and St. Vincent (together holding 92% of all shares).

[4] BWIA made a profit in just 3 years out of 66, according to its Chief Executive Officer (CEO) in 2006.

[5] According to the CEO, reported in Trinidad Press, July 2009.

LIAT has suffered from years of financial and operational difficulties, (at one stage having accumulated debts of XCD311 mn), which it has tried to address by restructuring. In 2013, the carrier embarked on a fleet modernisation programme in an attempt to improve cost and operating performance. The new CEO, David Evans, appointed in 2014, has also initiated further cost-cutting measures which have already started to take effect. These measures include reducing the fleet by two in 2015 and making capacity cuts across significant parts of the network with the potential for some voluntary and/or involuntary job losses. In a February 2015 article by Hemmerdinger (2015a), it was reported that LIAT estimates annual savings of XCD13 mn (USD4.8 mn) from the cuts with one-off severance payments adding to XCD22 mn.

The case of St. Lucia illustrates LIAT's ongoing dilemma. George Charles International Airport (airport code SLU) now has 5 LIAT flights per day, down from 8 at the start of 2014 and as much as 16 a few years ago. As part of the latest capacity cutting drive, SLU non-stop services to Dominica and St. Vincent have ceased completely, while non-stop flights to Antigua have been reduced by 20% (Innovata, 2015).

The reaction to these changes locally in St. Lucia have not been good, with the National Workers Union citing local job losses and reductions in desperately-needed business for taxi drivers, airport restaurants, vendors and sub-branch banks (St. Lucia News, 2014). The St. Lucia case is repeated across many of the stations LIAT serves. The carrier's executive team and regional government stakeholders struggle to balance the conflicting objectives of making LIAT financially viable, while ensuring the carrier's many dependents continue to capture value from the continuation of its services.

SURINAM AIRWAYS (SA) is the state-owned national carrier of Surinam. While it is also a CARICOM carrier with its main base in a CARICOM country, SA services a largely different set of cultural and trade links with its long history of flights to and from the Netherlands and Dutch speaking Caribbean islands; the neighbouring South American states of Brazil, Guyana and French Guiana; and a limited number of services to USA (Miami) and Trinidad & Tobago. With a mixed fleet aircraft (1 A340 and 2 B737-300s), annual traffic of 300,000 passengers and 30 million tonne kilometres of freight (year 2013), SA is one of the smaller players in the Region. The carrier turned over USD115 mn in 2012, and returned a positive operating margin of 24%, though its net margin for the same year was less positive at -8%.

CAYMAN AIRWAYS (CA) is the government-owned national carrier of the Cayman Islands, mainly connecting the island state with points in the northern and north-western Caribbean and USA. With an ageing fleet of four B737-300 aircraft, the airline managed to transport 600,000 passengers in 2013. Its largest routes connect the Cayman Islands with Miami (twice daily); Kingston, Jamaica; Havana, Cuba (both once daily); and the carrier also plays a fundamental connecting role domestically on the air bridge between Grand Cayman and Cayman Brac (4 flights daily)/Little Cayman (also 4 flights daily). Recent traffic increases came largely as a result of targeted route support from the Cayman Islands Government with extra marketing support from the Cayman Islands Airports Authority and the local tourism authority (Cayman Islands Government, 2014). The carrier has also recently taken advantage of new traffic rights[6] to/from Cuba (see below Section 2.3.2) and continued USA sanctions preventing direct services to/from USA and Cuba.

CA has never recorded a profit, and it requires an annual subsidy of about USD20 mn from the Cayman Islands Government. The need to support Cayman Islands is explicitly acknowledged in the Cayman Islands Government's Annual Budget process.

BAHAMASAIR (BAH) is the designated national carrier of the Bahamas and totally owned by the Bahamian Government. The carrier serves 13 local destinations in the Bahamas chain of islands plus some 10 (including seasonal) USA and western Caribbean destinations. The carrier has a mixed fleet of eight Bombardier Dash 8 and older generation B737 aircraft. The carrier contributes more than 600 jobs to the economy. Its annual losses are about USD20 mn, but this is generally deemed acceptable, given the competition it faces from USA and local carriers, and the wider economic benefits it brings through the tourism industry.

OVERSEAS CARRIERS

A significant amount of capacity to and from the CARICOM and wider Caribbean Region is provided by foreign carriers. If the Available Seat Kilometre (ASK) measure is taken in tourism-intensive jurisdictions such as Barbados and the Bahamas (Nassau only), foreign carriers provide as much as 96% and 86% of total capacity, respectively. However, if the more pertinent 'seats provided' measure is used, foreign carrier dominance reduces considerably to 64% and 54% in Barbados and the Bahamas, respectively. In non-tourism intensive states, especially where this is combined with the presence of a home-based carrier, foreign carriers play a less significant role overall. Piarco International Airport (airport code POS) in Trinidad & Tobago, is a case in point with foreign carriers providing only 42% of total ASKs and 24% of total seats available (Innovata, November 14[7]). The capacity role of foreign carriers is even more limited in Guyana, offering just 24% and 15% of ASKs and seats, respectively.

In sizeable markets outside the Caribbean, namely

[6] Traffic rights, also called Freedoms of the Air, stem from the Chicago Convention in 1944. Today there are nine Freedoms in total. Freedoms 1 and 2 are non-commercial and universally accepted in all ASAs. Freedoms 3 and 4 are basic commercial rights that feature in most of today's ASAs. Freedoms 5-9 receive a lower level of acceptance and have to be negotiated on a case-by-case basis between states based on the reciprocity concept.
[7] See Section 2.5.2 for details on the more significant role of foreign carriers on extra-regional routes at Port-of-Spain.

TABLE 2.2: SEATS BETWEEN CANADA AND THE CARIBBEAN (FEB 15 VS FEB 14)

	February 2014		February 2015		% change	
Carrier	**Seats**	**Flights**	**Seats**	**Flights**	**Flights**	**Seats**
Air Canada	66,013	520	73,941	560	12%	8%
Air Transat	70,393	238	105,266	481	50%	102%
CanJet	-	-	10,816	64	-	-
CAL	9,520	56	9,802	58	3%	4%
Cubana	7,128	44	15,408	104	116%	136%
Fly Jamaica	620	4	680	4	10%	0%
Sunwing	107,100	630	117,962	698	10%	11%
WestJet	61,350	424	63,846	420	4%	-1%
TOTAL	**322,124**	**1,916**	**397,721**	**2,389**	**23%**	**25%**

SOURCE: INNOVATA DATA. (HEMMERDINGER, 2015B).

Canada, USA and Europe, it has often been difficult for the Region's carriers to gain a foothold. The Caribbean is often seen as a way for USA and Canadian carriers to divert capacity away from saturated domestic markets, while European carriers have a long history of serving the Caribbean. A recent analysis of the Caribbean-Canada market illustrates the point. With Canadian carriers throwing capacity into the Region and competing heavily with each other, it leaves precious little room for Caribbean carriers to follow suit. It is very difficult for Caribbean carriers to make a commercial success of their intercontinental routes in this type of environment. Table 2.3 shows the increasingly marginal role of Caribbean-based carriers in the Canada market. On the back of the 23-25% capacity increase overall in only one year, airline executives at both Air Transat and WestJet are complaining of increasingly 'thin margins' and a 'softening of the market' (Hemmerdinger, 2015). No statements have been made on the issue by CAL, Fly Jamaica or Cubana but, given their much smaller share of the market in comparison to WestJet and Air Transat, it is obvious that there will be even higher pressure on their operating margins in this market.

Third Tier Carriers

Smaller regional (third tier) carriers play a significant role in plugging the gaps between islands not served by the larger carriers. One such carrier is SVG Air, based in St. Vincent and the Grenadines, which possesses a mix of 11 Bombardier, Britten-Norman and Cessna aircraft with a maximum capacity of 19 passengers and an average sector length of 200 kilometres (Innovata, 2013). As well as providing important scheduled links between the islands of the St. Vincent and the Grenadines, Barbados, Grenada, Martinique and St. Lucia, the carrier also offers private jet services to wealthy individuals and business travellers making onward connections to the Grenadines using two Cessna Citation jet aircraft. In 2013, SVG Air offered a total of only 82,000 seats and carried only 62,500 passengers achieving a respectable load factor of 65.3% for a third tier regional airline. SVG Air and other third tier carriers like it play an important feeder role across the Region, providing the requisite flexibility and frequency to enable scheduled access capability for residents and tourists (Innovata, 2013). Table 2.3 shows a selection of third tier airlines currently offering year-round scheduled services in the CARICOM Region. LIAT's overall traffic, capacity and load factor figures have been added for comparative purposes.

TABLE 2.3: SELECTION OF THIRD TIER CARRIERS IN OPERATION TO/FROM AND WITHIN CARICOM REGION

Carrier Name (Code)	Base	Fleet Details	RPK mn (2013)	ASK mn (2013)	Load factor (2013)
VI Airlink (V6)	BVI	Hawker Beechcraft (2)	5	7	65%
Anguilla Air Services (Q3)	Anguilla	Britten-Norman (2)	-	0.5	-
Tradewind Aviation (TJ)	Connecticut, US	Cessna (4), Daher-Socata (1)	8	15	51%
Southern Air Charter (PL)	Bahamas	Hawker Beechcraft (2)	12	19	65%
Sky Bahamas (Q7)	Bahamas	Saab (4), Hawker Beechcraft (2)	77	97	79%
Seaborne Airways (BB)	USVI	Bombardier DHC-6 (3), Saab (8)	43	67	64%
Air Sunshine (YI)	Florida, US	Saab (2), Beech (1)	2	4	38%
Air Antilles Express (3S)	Guadeloupe	ATR (4), Bombardier DHC-6 (2), Cessna (1)	4	7	63%
Montserrat Airways (5M)	Montserrat	Britten-Norman (2)	-	1	-
Winair (WM)	Saint Maarten	Bombardier DHC-6 (4)	23	40	56%
Maya Island Air (MY)	Belize	Britten-Norman (3), Cessna (8)	-	23	-
SVG Air (SVG)	St. Vincent	Bombardier DHC-6 (6), Britten-Norman (3), Cessna (2)	13	19	65%
BVI Airways (XV)	Tortola, BVI	Jetstream (1)	4	6	65%
Mustique Airways (MAW)	St. Vincent	Britten-Norman (2)	-	-	-
Tropic Air (9N)	Belize	Cessna (10), Bombardier DHC-6 (1), Hawker Beechcraft (1)	20	35	56%
LIAT (LI)	Antigua and Barbuda	ATR (8), Bombardier Dash-8 (4)	409	627	65%

SOURCE: FLIGHT GLOBAL DATA.

Taken together, the CARICOM area relies on a mix of first, second and third tier scheduled and private charter services, reflecting the variety of network requirements (intercontinental, intra-CARICOM and shorter distance air bridge or island hopping services). Sampled CARICOM country traffic shares between the three carrier categories are reported below in Table 2.4, using annual passenger numbers and revenue passenger kilometres (RPK).

TABLE 2.4: NETWORK BREAKDOWN BETWEEN FIRST, SECIND AND THIRD TIER CARRIERS SERVING THE CARICOM AREA (2013)

Carrier (Category)	Traffic (passengers) 2013 (% of total)	Traffic (RPK mn) 2013 (% of total)	No. of CARICOM Points Served
1st Tier (mainline int.)	12,738 (54)	19,381 (75)	18
2nd Tier (regional focus)	8,730 (37)	6,229 (25)	23
3rd Tier (sub-regional)	1,939 (9)	231 (0.01)	67
Total	**23,407 (100)**	**25,841.3 (100)**	**67**

SOURCE: FLIGHT GLOBAL (2014).

In terms of RPK's, the network contribution of third tier carriers in the Region is negligible due to the very short sector lengths operated. On the flip side, third tier carriers serve all points and therefore provide the most accessibility across the Region. Mainline international airlines rely (normally without any formal cooperation) on the smaller second and third tier carriers to provide access to smaller gateways and destinations. These network statistics suggest possible scope for improved network coordination between different tier categories across is significant.

2.2.2 Airports

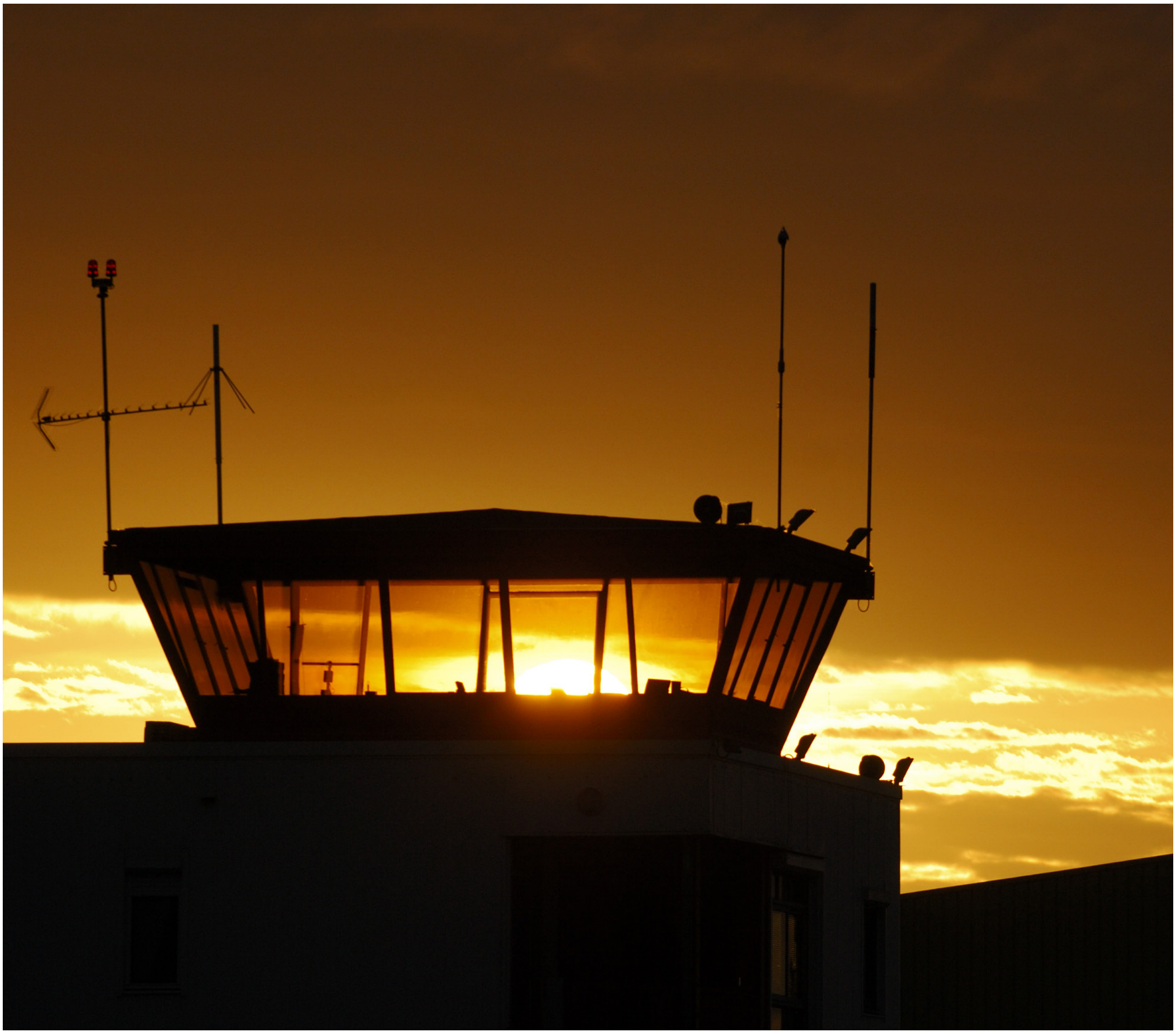
The CARICOM Region (and the Cayman Islands, Anguilla and BVI) has a total of 67 airports with at least some scheduled commercial flights. Due to the geographical nature of the Region's jurisdictions, only Barbados has just one commercial airport. The remaining islands and states, apart from Dominica and St. Lucia[8], consist either of multiple islands, which all have historically been furnished with at least one serviceable aerodrome, or larger land masses that have required the construction of multiple aerodromes as a way of guaranteeing continued access to global markets for passengers and freight. The Bahamas, for instance, has 18 commercial airports of various sizes. Belize, by contrast, is located on the eastern side of Central America, and has 12 active commercial aerodromes with many providing an important domestic feeder role to the main international gateway at Philip Goldson International Airport in Belize City. Table 2.5 below provides a full list of active international/domestic and domestic commercial airports in the CARICOM Region.

TABLE 2.5: LIST OF SCHEDULED COMMERCIAL AIRPORTS ACROSS THE CARICOM REGION

COUNTRY	AIRPORT TITLES	AIRPORTS ABLE TO HANDLE WIDE-BODY A/C
Anguilla	Clayton J. Lloyd International	0
Antigua & Barbuda	V.C. Bird International, Barbuda Codrington	1
Bahamas	Lynden Pindling International, Grand Bahama International, Marsh Harbour, Treasure Cay, Andros Town, San Andros, South Bimini, Arthur's Town, New Blight, Colonel Hill, Governor's Harbour, North Eleuthera, Rock Sound, Exhuma International, Inagua, Deadman's Cay, Mayaguana, San Salvador	3
Belize	Philip S.W. Goldson International, Silver Creek, Sartaneja, San Pedro, Matthew Spain, Punta Gorda, Placencia, Independence, Dangriga, Caye Chapel, Big Creek, Belize City Municipal	1
Barbados	Grantley Adams International	1
British Virgin Islands	Terrence B. Lettsome International, Virgin Gorda	1
Cayman Islands	Owen Roberts International, Charles Kirkconnell International, Edward Bodden	0
Dominica	Douglas-Charles	0
Grenada	Maurice Bishop International	1
Guyana	Cheddi Jagan International, Ogle, Kaieteur International	1
Haiti	Touissaint Louverture International, Port-de-Paix, Antoine-Simon, Jeremie, Jacmel, Hugo Chavez International	1
Jamaica	Norman Manley International, Sangster International, Ian Fleming International, Negril Aerodrome	2
Montserrat	John A. Osborne	0
Surinam	Johan Adolf Pengel International, Zorg en Hoop	1
St. Kitts and Nevis	Robert L. Bradshaw International, Vance W. Amory International	1
St. Lucia	Hewanorra International, George F.L. Charles	1
St. Vincent & the Grenadines	E. T. Joshua, Mustique, Canouan, Palm Island, Union Island, J. F. Mitchell	0
Trinidad & Tobago	Piarco International, A.N.R. Robinson International	2

SOURCE: AIRLINE INDUSTRY UPDATES (AIU) WORLD AIRPORT DIRECTORY (2015).
NOTE: AIRPORT CAPACITY COLUMN REFERS TO NUMBER OF RUNWAYS ABOVE 2,000 METRES.

[8] Both of which have two airports handling scheduled services.



The strategic basis upon which many of the Region's airports have been managed has been to recover operational costs only, with their primary function seen by many of the Region's governments as providing a purely facilitating role for the movement of passenger and freight traffic. However, the elsewhere well-established ideas of airport commercialisation, and sometimes privatisation are slowly being debated, and in a few cases, implemented across the Caribbean Region (Francette-Williams, 2008). This is due to the overriding fiscal pressure on government budgets and the steady rise in airport costs to deal with areas of security, safety, and the need for expansion, which are unaffordable by national governments in some cases. Among the limited moves towards commercialisation so far, Barbados created a separate airport company, GAIA Inc. With a marketing and operational focus, a 30-year concession was awarded to a consortium of four companies at MBJ, in Jamaica, and Birk Hillman Inc. was awarded the contract to complete the North Terminal at POS in Trinidad & Tobago (Francette-Williams, 2008).

2.2.3 Ground Handlers and Other Suppliers

The aviation supply chain consists of many different suppliers and sub-sectors. In the CARICOM and wider Caribbean Region, there is a dearth of local/regional-based suppliers beyond the basic core services needed for safe airport and airline operations. For example, across the 18 sampled states, there are only 5 (according to AIU, 2015) Maintenance Repair and Overhaul (MRO) suppliers based in the Region, and only 2 of these are third-party providers. This means the Region's carriers generally need to import MRO services from other countries with more developed air transport supply systems. The same generally applies to Air Transport Consultancy Services, Airline/Airport Supply Products, and Aircraft Manufacturing, the vast majority of which have to be procured from outside the Region.

However, there are two core sub-sectors, Ground Handling and Fixed Base Operations (FBOs) that are quite well developed across the Region. In the case of Ground Handling, mostly locally-owned providers enjoy exclusive rights to provide handling services. Only in the case of Trinidad has one of the global, third-party handlers been able to break into the market (Swissport). Handling company entry across the Region is still quite strictly controlled, with entry barriers for other Caribbean or non-Caribbean handlers providing limited incentives for improved handling performance. In a small number of cases, carriers are presented with a choice of handlers (namely Barbados, the Bahamas, Haiti, Jamaica, St. Kitts, Trinidad and Antigua). The average number of handlers per CARICOM island was 1.75 in 2015 (AIU, 2015), though this figure is slightly inflated by the higher than average number of handlers located in the Bahamas.

FBOs are also quite numerous in the Region, due to their being a significant, albeit small, market for Executive, Charter, Business and General Aviation in many of the Region's jurisdictions, particularly in areas where there is not enough demand for regularly scheduled services and/or where high-end or time-sensitive travellers and shippers require a more customised air transport product. Peak demand for aircraft charters and private operations occurs over the November to March period.

FBOs such as Vincy Aviation Services and its sister company Canouan Aviation Services, for instance, provide a variety of core and value-added services to residents and visitors to St. Vincent and the Grenadines. Services include Aircraft Permits and Parking; Aircraft Marshalling and Handling; Lavatory Services; Customs; Ground Power Unit service; Hotel Accommodation; Onward Transportation; Catering; Fuelling; Cell Phone Rental; Crew Complimentary/VIP Lounge; and Charter/Other Travel Services. As the sister companies are owned by a local umbrella organisation, Caribbean Aviation Management Inc., the two FBOs are able to offer a greater variety of travel-related services than FBO's based in other regions. It makes sense in the smaller islands for companies to pool resources in order to make handling and FBO services more easily accessible and affordable. As such, Vincy Aviation Services caters for commercial scheduled carriers in St. Vincent as well as private and general aviation flights.

2.2.4 Air Navigation Service Providers (ANSPs)

Responsibility for Air Navigation Services varies. In some jurisdictions, there is a separate government-owned service. Elsewhere, the local CAA retains responsibility. Despite some moves worldwide toward ANSP privatisation, there is currently no sign of this happening across the CARICOM area. There is currently no seamless Air Traffic Flow Management System across the Region. This often hampers efforts to provide flexible airspace capacity and reduced fuel burn routings to affected air carriers.

2.3 POLICY, REGULATORY AND LEGAL ENVIRONMENT

2.3.1 Role and Impact of ICAO and Industry Trade Bodies

Due to the multitude of small island states across the Region, the International Civil Aviation Organisation (ICAO), IATA and other global organisations, which are all responsible for producing air transport recommendations and initiatives, are of particular importance. Without the historical influence of ICAO's Standard Recommendations and Practices, for instance, the amount of fragmentation and convergence in relation to safety, security and economic procedures across the Region would render air transport services impractical and unworkable.

IATA has over 250 airline members including LIAT, CAL and SA. IATA is committed to working with stakeholders and airline suppliers to help reduce airline costs and make their financial position more sustainable. Examples include work on safety and advocacy on the issues of fair airport fees and charges, airport competition, and taxes on aviation fuel. More generally, without IATA's supporting settlement systems, the Region's carriers would find it difficult to distribute the majority of their tickets and settle many of their cargo accounts. IATA Clearing House and Currency Clearing House also help airlines to settle interlined revenue agreements and repatriate revenue earned in foreign currency, respectively. The benefit of these systems for smaller carriers is amplified by the fact that these carriers often do not have enough investable capital to develop or buy-in sophisticated bespoke systems.

Airports Council International (ACI) is the world's airport trade body. It represents 573 airport operators and 1,751 individual airports constituting over 95% of global air traffic. ACI's Latin America and Caribbean (ACI-LAC) arm works with full and associate members in the Caribbean and CARICOM Region to promote airport excellence in safety, airport service quality, cost and economic efficiency among others. However, it is important to note that 73% of ACI-LAC airports have in excess of 4 million passengers per annum, and so more tailored support is needed for the remaining smaller airport members.

2.3.2 Individual Jurisdiction CAAs

CAAs across the CARICOM Region are either responsible for a single jurisdiction's civil air transport sector as is the case in Trinidad & Tobago, Barbados, and Jamaica, or for a group of island states as in the case of the Eastern Caribbean CAA[9], which became an institution of the OECS (see Section 2.3.5) in 1982. As part of a push for harmonisation and knowledge sharing, the Association of Civil Aviation Authorities of the Caribbean

[9] Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines

was founded in Trinidad in 1998, and current members include Barbados, Belize, Guyana, Jamaica, the OECS and Surinam. The main ongoing commitment emanating from the Association, to date, has been the Caribbean Aviation Safety and Security Oversight System (CASSOS), which was established in recognition of the CARICOM Region's need to collaborate further by maximising use of the Region's scarce resources. It became an institution of the CARICOM Secretariat in 2009 (see Section 2.3.4), on the occasion of its formal launch.

The British Overseas Territories[10] have additional oversight capability through the UK CAA. Its subsidiary company, Air Safety Support International, has assisted these jurisdictions in the absence of local capabilities. Examples include issuing foreign airlines operating permits on a seasonal basis in Montserrat, Anguilla and BVI; and obtaining traffic rights for Cayman Airways to conduct services to Cuba when a new bilateral Air Service Agreement was signed in 2011 (DfT, 2012)[11].

Levels of responsibility at the functional level also vary by CAA. The Eastern Caribbean CAA, for instance, has no remit for economic and commercial matters whereas the Jamaica CAA does. In large part, this depends on the level of direct control and involvement government departments want to retain in their air transport sectors.

> Faced with such thin markets, it is an economic reality that few carriers would be able to make a commercial success of running air services in the CARICOM Region even as monopolies.

2.3.3 Government Involvement and Ownership (Individual Jurisdictions)

In the CARICOM area, all the legacy carriers are still government owned. CAL is 84% owned by the Government of Trinidad & Tobago and 16% by the Government of Jamaica. LIAT is part owned by a number of governments across the Region with Barbados, Antigua and Barbuda, Dominica, and St. Vincent being the major shareholders. Cayman Airways is 100% owned by the Government of the Cayman Islands; BAH 100% owned by the Government of the Bahamas; and Surinam Airways 100% owned by the Government of Surinam. There are also privately-owned carriers, however, either based in the Region or on the fringes, with frequent services into the Region. InselAir, based in Curacao, is 100% privately owned, and has weekly services to Trinidad & Tobago, Guyana, Jamaica, Haiti and Surinam. It has a code-sharing partnership with SA for routes into Trinidad (Port-of-Spain). Inside the sampled area for this study, privately-owned carriers include third tier SVG Air (based out of St. Vincent); new Jamaican start-up Fly Jamaica Airways (1 B757 and 1 B767); and Cayman Islands prospective start-up BlueSky Airlines (2 Dash-8 Q400s).

2.3.4 CARICOM: Revised Treaty of Chaguaramas, the Multilateral Air Service Agreement (MASA), the Caribbean Single Market and Economy (CSME)

The Treaty of Chaguaramas, CSME and the stated objectives of the CARICOM Community have all attempted to latch trade in air transport services into wider ideals of a pan-Caribbean single market. In 1996, this led to the signing of the CARICOM MASA, which aimed to liberalise commercial intra-regional air transport between the 15 member states of CARICOM. It was only ratified in 1998 by nine CARICOM member states, however, with the notable absences of Jamaica, The Bahamas, St. Vincent and Surinam. In a 2010 CARICOM-supported Caribbean Trade and Investment Report, inadequate air access was cited as one of 12 major explanatory factors for the Region's declining market share in land-based tourism (CARICOM, 2010). Clearly, the original intention of stimulated markets for air transport as a result of the CARICOM MASA was not fulfilled. The agreement itself was only partially liberal (Warnock-Smith, 2008) and it did not take precedence over existing bilateral ASAs with non-CARICOM countries.

On the positive side, ICAO-instigated CARICOM 'Community of Interest' principle (ICAO Assembly Resolution A24-12 (Abeyratne, 2012 – Description) has been of some benefit to players and jurisdictions across the Region. It has allowed carriers substantially owned and effectively controlled in any CARICOM country, to be designated to operate out of any other CARICOM country. AJ, CAL and LIAT have all taken advantage of this principle over the years. Though it could have been employed on more occasions and as part of more ASA negotiations, the policy is now in place and universally accepted in any future negotiations. As is the case with CASSOS (see Section 2.3.2), it provides the scope and regulatory framework for Small Islands Developing States to pool scarce resources.

[10] Cayman Islands, BVI, Montserrat, Bermuda, Anguilla, Turks and Caicos Islands.
[11] Unlike independent states, the British Overseas Territories cannot independently negotiate agreements with other countries.

2.3.5 OECS

OECS has been instrumental in providing a level of integration between some Caribbean states that has not been repeated on a wider scale throughout the Region. Aside from creation of the Eastern Caribbean CAA, OECS has implemented joint policies in relation to the provision of route revenue guarantees to foreign carriers to secure ongoing air services; has established an OECS single visa regime; and has signed liberal ASAs with countries outside the Caribbean (OECS, 2011 p18). The latter policy decision is made a whole lot easier by the fact that there is currently no OECS domiciled long-haul carrier for which any form of protection is required.

2.3.6 CTO

With tourism representing the main service industry across many of the Region's jurisdictions, CTO has been able to wield considerable influence on issues related to Caribbean regional air transport over the years. With 32 member countries, CTO casts a wider net than any of the aforementioned political and economic associations, and therefore has been able to act as a conduit for integration across the Region by encouraging action with respect to tourism promotion and advancement. Perhaps CTO's biggest air transport-related achievement to date was the convening and signing of the San Juan Accord in October 2007. Regional ministers pledged towards the realisation of ten bold proposals, including the establishment of a Single Caribbean Air Space; a revision of the CARICOM MASA; the introduction of a common travel card; visa policy; and streamlined customs/immigration procedures, all with the aim of making intra-regional travel more seamless.

However, in years since the San Juan Accord was signed, little tangible progress has been made towards the above stated ministerial proposals. An Aviation Task Force was established to continue to push for standardised aviation policies in line with the San Juan Accord. CTO has also campaigned against UK Air Passenger Duty, highlighting its ill effects on tourism in the Caribbean Region. However, continued political and financial support for CTO proposals has been in short supply.

2.3.7 Labour Unions

CARICOM has a number of bodies representing airline and air transport staff. For example, LIAT must deal with 10 unions which have no overall body representing them. This requires agreements with all of them. Various Pilots' Associations ensure that working rights, pay and conditions of pilots are protected even during times of financial turmoil. Cabin crew and ground staff are also quite well represented. Pilot and other staff strikes are not uncommon in the CARICOM area, with notable recent cases being the CAL Pilot sickout in July 2014 and a November 2013 strike by LIAT pilots over pay and conditions.

Currently, major issues being brought to the table by Leeward Islands Airline Pilots Association (LIALPA) members are pilots not being paid salaries on time; new contract negotiations; more control over pensions; and the re-employment of two colleagues who LIALPA believes were unfairly dismissed when a LIAT aircraft was damaged (Caribbean 360, 2014).

Labour Unions across the Region can have an impact on domiciled carrier operating costs, in addition to meeting the cost of strike-related disruption. The recent LIAT announcement of 20% cuts to the overall workforce (Khelawan, 2015) along with any similar announcements by the Region's other state-owned carriers, will clearly need to be managed carefully given the strength of the industry's Labour Unions.

2.4 OPERATIONAL AND INFRASTRUCTURAL ISSUES

TABLE 2.6: TOP CITY-PAIR BY REGION

Region	Top City-Pair	Total Seats in 2013 (top city-pair)	Average Seats in 2013	Daily PAX. Demand (70% LF)
CARICOM	Port-of-Spain–Tobago	1,039,020	20,864 (est.)	40
Caribbean	New York–San Juan	1,849,987	37,258	71
Latin America	Rio de Janeiro–Sao Paolo	14,166,947	110,924	213

SOURCE: ALTA 2014 (BASED ON OAG DATA).
NOTES: AVERAGE SEATS DATA BASED ON A SAMPLE OF 802 CARIBBEAN CITY PAIRS AND 2,590 LATIN AMERICA CITY PAIRS.

2.4.1 The Region's Thin Markets

As stated in Section 2.1.1, many routes to, from and, especially, within the Caribbean Region connect comparatively small passenger and freight markets. Aside from the domestic air bridge service between Port-of-Spain and Tobago, no CARICOM city-pair features in the Caribbean Region's top 20 city pairs by seat capacity (The Latin American and Caribbean Air Transport Association (ALTA), 2014). As shown in Table 2.6, the largest CARICOM city pair (Port-of-Spain–Tobago) is significantly smaller than both the largest Caribbean city pair (New York–San Juan) and, by way of comparison, the largest Latin American city pair (Rio de Janeiro–Sao Paolo).

Perhaps more telling are the average seat data and the resulting daily demand estimates, assuming a constant load factor of 70%. The average city pair across Latin America had over 110,000 seats available in 2013. This translates into an average daily passenger demand of 213 (in both directions). In contrast, the average CARICOM city pair only offered around 21,000 seats in 2013, giving an estimated daily demand of only 40 passengers. One of the main challenges for operators offering services in the CARICOM Region has been to run a financially viable and consistent schedule with such anaemic market conditions.

2.4.2 Intra-Regional Competition with Thin Markets

Faced with such thin markets, it is an economic reality that few carriers would be able to make a commercial success of running air services in the CARICOM Region, even as monopolies. The problem has been compounded, however, by carriers often deciding to compete. This has occurred not just between CARICOM-based carriers and foreign carriers but also between CARICOM-based airlines themselves. A case in point has been CAL and LIAT in the Southern Caribbean. Neither carrier has been afraid to compete head-to-head on important intra-regional city pairs such as Bridgetown-Port-of-Spain (CAL's current 19 flights per week vs. LIAT's 28 one-stop flights); Port-of-Spain-Grenada (CAL's 9 flights per week vs. LIATs 21 flights per week); and Antigua-Barbados (BWIAs 2 flights per week vs. LIATs 8 non-stop flights per week). The seven years of cut-throat competition between Caribbean Star and LIAT was another classic case. A significant amount of destructive competition took place before the two carriers decided to merge in 2007.

2.4.3 Lack of Adequate Airport Infrastructure

It is clear from Section 2.2.2 that there is no shortage of airports in the Region in terms of numbers, but there are clear limitations in relation to the ability of airports across the Region to handle larger aircraft and/or to handle more frequent take-offs and landings. The creation of hub or mini-hub operations has been limited due either to lack of connecting potential or, in cases where there has been connecting potential, incumbent airlines have not shown the inclination to create consistent inter-lining activity to increase the number of transit passengers.

If the number-of-flights measure is used, 13 of the 20 slowest growing airports from 2012 to 2013 were located in the CARICOM Region (ALTA, 2014). Over the period 2004-2013, the average annual flight reduction at these 13 CARICOM airports was -7.4%. The number of flights across the whole Caribbean Region stagnated over the same 10-year period with the average annual number of flights reducing by -0.8% (ALTA, 2014). However, this was significantly less damaging than the situation at some important CARICOM airports (e.g. Montego Bay, Barbados, St. Lucia, Kingston and Port-au-Prince). By contrast, only 4 of the top 20 fastest growing airports in the Caribbean Region are located in CARICOM (Dominica, Grand Cayman, San Salvador, Bahamas and Arthur's Town, Bahamas), showing that the inability of many CARICOM airports to scale up, expand capacity/ capability and create hub-type efficiencies is having an effect.

2.4.4 Operators Without Critical Mass

'Critical mass' refers to a minimum scale of operation before lower, long-run average costs can be recovered.

According to studies by the European Commission (EC), the minimum passenger volumes needed to give airports a chance of being operationally profitable range between 500,000 and 1.5 million per annum (EC, 2005). Although this is a wide range, only five airports in the CARICOM area are currently operating at 1.5 million passengers per annum or more. For the Caribbean, and CARICOM airports particularly, there is currently limited scope for providing commercially viable services unless and until further airline traffic is secured. This in turn will generate additional suppliers (Catering, Fuel, Handling, Transport, Retail, etc.) and economic activity.

As for the critical mass of airlines, start-up specialist Paul Clark (2012) refers to an airline being large enough to be recognised by its target market (p.27) as having achieved critical mass. Clearly the actual size a carrier needs to have to obtain such a 'critical mass' differs between niche and non-niche markets. Third tier carriers in the Caribbean, for instance, may not have the fleet size or sector lengths to benefit from cost economies, but in many cases their presence is of high significance to the niche markets they serve and thus may take advantage from a yield perspective to try and cover their comparatively high unit costs.

2.4.5 Protectionist State Policies

Those CARICOM states that have been more reluctant to ratify and implement liberal, bilateral or multilateral commercial air transport agreements, have a vested interest in a home-based carrier (e.g. the Bahamas and Surinam not ratifying the CARICOM MASA). The time it takes for carriers to receive licencing approvals and journey permits from individual regulators has also represented a tacit form of protectionism across some of the Region's countries, even in situations where the overall stated commercial policy towards air transport services is open and liberal. For example, this contributed to the demise of REDjet. The lack of regulatory approval for its intended Georgetown-Port-of-Spain route led to the costly under-utilisation of its initial fleet of two MD-82s for the first six months of its operation (CAPA, 2012).

2.4.6 Protectionist Policies and Lack of Airline Cooperation and Consolidation

A history of protectionist measures and nationalistic ideals has led to a series of missed opportunities for deeper integration and consolidation between carriers. It has also led to a more diluted role for pan-regional organisations such as the CARICOM Secretariat, which has not been able to find enough areas of common interest among member states to encourage them to follow a uniform air transport policy. For example, the provision of fuel subsidies by the Trinidad & Tobago Government to CAL discouraged entry into the Trinidad & Tobago market from other players. A recent World Bank Study (2015) on Caribbean connectivity explains the situation by fierce competition between the islands to attract tourists from abroad, which has masked the opportunities that might prevail from taking a coordinated approach towards promoting Caribbean tourism. Competition on extra-regional routes was deemed to be suboptimal and unsustainable, while connectivity within the Region has been neglected with missed opportunities for the private sector to have the necessary rights and permissions to establish 'low-cost air shuttle' services between the islands (World Bank, 2015). On many intra-regional markets, the potential for true 'low-cost' operations is actually quite low due to small scale operations, but costs could be lower than they currently are.

2.4.7 Lack of Standardisation with Respect to Aviation Regulation

With respect to the three primary areas of regulation – security, safety and economic, it is economic regulation that currently suffers from the largest degree of fragmentation across the CARICOM and wider Caribbean Region. This is followed by security, especially since the events of September 11, 2001, where a costly duplication of security procedures and checks across the Region came about due to a lack of coordination between Caribbean states. Individual states have preferred to focus on bilateral security partnerships with the United States Transportation Security Administration (TSA) (e.g. St. Lucia took part in the TSA ASSIST (Aviation Security Sustainable International Standards Teams) Programme in 2009/10 – TSA, 2009). The need for baggage to be rescreened can also lead to costly duplication and an increased likeliness of lost bags (e.g. on flights between Barbados and St. Lucia – World Bank, 2015).

Due to the strength of the ICAOs Standards and Recommended Practices for safety, there has been much less scope for differentiation between states in relation to airline and air transport safety. A cursory glance at most of the Region's CAA web pages indicates the degree of adherence to safety procedures. It has also been common for the Region's larger carriers to apply for IATA Operational Safety Audit certification (see Section 2.3.1).

2.4.8 Conflicting Interests Among Stakeholders

The most well-known example of conflicting interests in the Region's air transport industry has been in relation to LIAT, given the carrier's need to try and meet the needs of a variety of Government shareholders. In the past, the major shareholder Governments of Barbados, Antigua and Barbuda and St. Vincent and the Grenadines have pressured LIAT to continue or expand routes into their respective countries as a condition for continued financial support. At times, this has prevented LIAT from: (a) being able to meet the needs of multiple shareholders simultaneously with limited fleet and staff resources; and (b) from making route decisions based purely on commercial considerations. There was a recent push for more countries to invest in LIAT or risk losing their services if deemed to be non-commercial (Holder, 2014). This may help to pay for some of LIAT's network, but may worsen the underlying problem of conflicting shareholder interests unless funding can be appropriated on a route-by-route basis (see Chapter 4). The situation for CAL since its takeover of AJ has also been a sensitive one in relation to recent moves to rationalise and cut staff in the combined carrier's Jamaica hubs.

2.4.9 Fees and Taxes

Airlines often start with a basic fare, which can be related to their own operating costs and present information on added taxes and fees that they collect on behalf of government and their main airport/air navigation suppliers. These sum to the total fare/freight rate payable by their customers. Because air travel in the Region is price elastic, an increase in price would likely lead to a more than proportional decrease in demand. Hence, an increase in airport fees and taxes would likely result in a decline in passenger numbers.

Appendix 2 provides a snapshot of taxes and fees as presented on American Airlines' website for return trips to a range of Caribbean destinations as of December 2014.

Cargo volumes are comparatively low for the Region's air carriers. There is currently a dearth of CARICOM based all-freighter capacity, meaning that any freight business is carried in the belly hold of passenger aircraft.

Six of the 10 highest fare mark-ups were to CARICOM destinations, with Jamaican destinations being USD114 and USD106 per passenger, respectively. At the lower end of the scale, Barbados comes out quite well from/to the US at a more affordable USD55.

On intra-CARICOM routes, taxes and fees can also be disproportionately high. A return trip Barbados-Antigua, for instance in February 2015, was made 34.5% more expensive through additional taxes and fees. Booking for one day in advance for February 2015 cost USD650, of which USD224 (34.5%) was taxes and fees. When booking one month in advance for March 2015, taxes and fees remained relatively static at USD185 while the base fare decreased to USD202, making the taxes and fees 47.8% of total ticket cost or 92% of the base fare.

2.4.10 Labour Laws, Customs and Practices

Since gaining full political autonomy, most Caribbean states have taken unilateral steps to develop labour laws and practices from a common base. Generic labour laws in relation to Employment Contracts; Unfair Dismissal; Redundancy; Collective Labour Agreements; the Right to Strike Action; and Sexual Harassment are applicable in most cases to the air transport industry and to air transport workers (Corthesy et al, 2014). In contrast to airline staff based in some world regions, employees are quite well protected in many CARICOM countries, assuming labour laws are rightfully enforced [e.g. the case of recent Jamaican pilot grievances against CAL, where the Jamaican Government was accused of failing to protect Jamaican staff in accordance with local labour laws (Jamaica Gleaner, 2014)]. In Gulf countries, airline staff have no right to strike, for example, and protection in relation to social security and pensions is much less developed than it is in the CARICOM Region.

2.4.11 Underdeveloped Air Cargo Sector

Cargo traffic between the Caribbean and USA and Europe is forecast to grow at a slower pace than to South and Central America. The expected average annual air cargo growth rate between the Caribbean and USA is 1.5%, and between the Caribbean and Europe is 3.4% between 2007 and 2027 (World Bank, 2010)[12]. The same World Bank Study found that the major impediments to air cargo growth in the LAC Region are: (a) lack of a multilateral open-skies agreement; (b) lack of airport regulatory frameworks aimed at maximising competition in ancillary services (i.e. ground handling); and (c) constraints (customs, information technology (IT) and security) that prevent air cargo companies from offering quicker and more reliable services. As these conclusions were drawn from an assessment of the wider LAC Region, it is reasonable to assume that the same impediments are not only present but more intense across the CARICOM Region. The only city pair involving a CARICOM country in the ICAO top 20 LAC routes was Manaus-Port-of-Spain (0.8% of total LAC traffic in tons). Moreover 89% of all LAC cargo traffic is concentrated in the top 20 routes, giving an indication of the small scale of cargo traffic on routes to, from and within the CARICOM and wider Caribbean Region.

Cargo volumes are comparatively low for the Region's air carriers. There is currently a dearth of CARICOM based all-freighter capacity, meaning that any freight business is carried in the belly hold of passenger aircraft. Since 2011, LIAT has run some cargo charters using an older Dash 8-100 aircraft, but volumes are still marginal given the limited capacity on offer.

2.5 REGIONAL INDUSTRY IN THE GLOBAL CONTEXT

2.5.1 Key Trends in Global Aviation (Wider Caribbean, LAC and Global)

Between 2009 and 2013, the Compound Annual Growth Rate (CAGR) of RPK's for LAC was 9%, the second best performing worldwide. On this basis, Boeing predicts 6.9% growth per year over the next 20 years (ALTA, 2014). However, for the Caribbean and CARICOM regions the numbers are lower. A 2012 ICAO (ICAO 2012b) report by the Caribbean and South American Forecasting Group (CAR/SAM TFG) showed that annual growth for the 9 CARICOM pairs in the top 25 city pairs in the intra-Central America-Caribbean Region was forecasted to be a more modest 3.5% CAGR to 2031. The St. Lucia-Barbados pair is only expected to grow by 2.5% CAGR through to 2031, compared to Aruba-Curacao (9% CAGR) and St. Maarten-St. Barts (6.5% CAGR).

On the more lucrative Caribbean to Europe markets, however, better growth prospects can be observed. Only three city pairs involving CARICOM states make the top 25 city pairs on mid-Atlantic markets, but the average annual

[12] Boeing provides some detail of the breakdown of flows between the Caribbean Basin countries and other regions (Boeing World Air Cargo Forecast 2014-15). Growth between the Caribbean and North America is forecast to grow modestly at 1.8% through to 2033, after a previous period of negative growth between 1993 and 2013 (-1.7 Caribbean to North America and -0.5 North America–Caribbean). The prognosis for Caribbean to Europe air trade is more positive at 3.5% per year until 2033, though this is cautioned by negative Europe to Caribbean trade over the 2003-2013 period. It is stated that growth rates for the Caribbean basin will, in reality, depend on continued political reform and integration in the Region.

growth forecast for these is 8.8%, which is notably higher than on intra-Caribbean city pairs and indeed the non-CARICOM, mid-Atlantic city pairs (5.5% CAGR to 2031). The issue for CARICOM domiciled carriers is that they have historically found it difficult to establish themselves in these markets, as better-capitalised foreign carriers are able to provide a superior service in terms of capacity and frequency. It is likely, therefore, that carriers such as British Airways, Virgin Atlantic, European charter carriers and KLM-Air France will be able to take advantage of these growth prospects to a much greater extent (ICAO, 2012b).

Fuel cost across the Caribbean is estimated to be 14 per cent higher than the world average (Seon, 2014). The Bahamas applies a 7% import duty on jet fuel, in contravention of global standards in relation to jet fuel, which state that it should not be taxed. Jet fuel supply is an issue in the Region. The complexity of the fuel supply and the seasonal demand is costly and difficult, making fuel costs in the Region a challenge for airlines (Seon, 2014).

Airline unit revenues have dropped over the past 30 years. At the regional level, intra-Central America and intra-Caribbean pairs saw the smallest drop in yields throughout the Americas, from 12 US cents per RPK in 1995, to just under 11 US cents by 2011. By contrast, average airline yields on intra-South American routes dropped from 11 US cents per RPK to 9 US cents per RPK (ICAO, 2012b).

2.5.2 Role of Foreign Players in the Regional Market

The role of foreign carriers in intra-regional markets has historically been limited. Alliances and partnerships have not been used enough to facilitate connections, and there has only been some evidence of 5th freedom traffic rights being afforded to foreign carriers to carry traffic between the islands. Currently, of the domiciled carriers sampled in this study, only SA is actively participating in, and seeking, new partnerships with foreign carriers. This includes a prospective agreement with new Florida-based, start-up Eastern Air Lines in areas of operational support, maintenance and training. SA also has a code-sharing deal with InselAir on some southern Caribbean routes. In terms of 5th Freedoms, some of the few current examples include German-based Condor's rights to operate twice weekly flights from Dusseldorf and Frankfurt to Grenada via Barbados, and Brazil-based GOL's right to operate a weekly flight to Sao Paolo from Barbados via Tobago. In the case of GOL's Bridgetown-Tobago service, there is actually no other operator offering any non-stop services between the two countries, thereby harnessing the role of GOL as a foreign carrier in this county-pair market.

As mentioned in Section 2.2.1, foreign carriers also provide much of the capacity in and out of the CARICOM Region from North, South and Central America and Europe. According to the February 2015 schedules, for instance, 53% of all extra-CARICOM capacity to and from Port-of-Spain, Trinidad, is provided by foreign carriers and this is with Port-of-Spain being CAL's main operating base. For other points in the Region without domiciled carrier bases, the role of foreign carriers in providing international air links is greater. Due to a lack of connections and interlining, however, opportunities to link foreign carrier international services with domiciled carrier intra-CARICOM services have hitherto not been exploited.

2.5.3 Comparison with Other Regional Blocs

A deep level of air transport integration is now in effect in the European Economic Area. Integration initially took some time with progressive liberalisation taking place over three stages. However, since the last stage was ratified by European member states and came into force in 1997, a domestic commercial air space has effectively been created across Europe whereby there are zero restrictions on traffic freedoms, carrier ownership and control, and permitted capacity/designation.

A single market with respect to commercial airline services within Europe has paved the way for integration in other areas of air transport policy.

A single market with respect to commercial airline services within Europe has paved the way for integration in other areas of air transport policy. A European Common Aviation Area (ECAA) was signed in 2006, for instance, to include ratifications from Norway, Iceland, Croatia, Albania, Bosnia, Herzegovina, Kosovo, Latvia, Slovakia, Serbia and Montenegro and, in turn, the expanded regional bloc has been in a position to negotiate equally liberal terms with third countries outside the EU, such as Morocco and Jordan. It has also led to parallel moves towards integration and liberalisation in the ANSP, Regulatory and Airport sectors across Europe (e.g. the establishment of Eurocontrol and privatisation/cross-border ownership of European airports).

The advantage of having a single European air transport regulator (EC) is that rules and recommendations can be

standardised in relation to a range of policy issues from Passenger Rights to State Aid; Anti-Competitive Behaviour; Airport Slots; and any other issue of common interest. Regardless of the pros and cons of each policy, at least all ECAA members know where they stand in relation to such issues, and are able to plan and respond accordingly. Market benefits have included reduced average fares across Europe; more point-to-point and connecting services; a greater choice of carriers (ICAO, 2003); and more protection from would-be abuses of consumer rights and anti-competitive behaviour. Producers have benefitted from an increased focus on efficiency and forced moves towards consolidation. Weaker carriers have generally not been protected by ECAA (e.g. 2015 case of Cyprus Airways and 2012 case of Malév), though State Aid rules do apply when three strict conditions are met: where carriers are small scale; where the socio-economic impact from closure is severe; and where a genuine and plausible plan for restructuring is put forward.

The record has been more fragmented within other regional blocs where there has been a comparative absence of underlying economic and political integration between states. Examples include the Agreement on Sub-Regional Air Services (Fortaleza) of the Southern Common Market (MERCOSUR), which has been in force since 1999 between Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay, but does not go as far as ECAA Agreement in permitting all commercial traffic freedoms; and the Association of Southeast Asian Nations (ASEAN) Multilateral Agreement on Air Services signed in 2009 between Brunei, Cambodia, Indonesia, Laos, Myanmar, Philippines, Singapore, Thailand and Vietnam, which again stops at unlimited 5th Freedoms; limited foreign ownership between ASEAN registered carriers; and some scope for regulated air fares/freight rates. The Trans-Tasman Agreement, signed in 1996 between Australia and New Zealand, is the only other isolated example of a true single market for air transport outside of Europe.

A final common feature in other regions, which is currently missing from CARICOM and the wider Caribbean area, is the dedicated regional airline trade body acting independently of IATA and of airlines from other world regions. Other parts of the world have such dedicated bodies. They can pursue issues of common interest between airlines in their respective regions, even if airlines compete with each other on a daily basis. Common benefits include joint training, the compilation of statistics, scholarships and recruitment support, among many others.

CHAPTER THREE: INDUSTRY ANALYSIS

This chapter provides a current situational analysis of the Caribbean Air Transport Sector, covering constraints, challenges, and reform imperatives gleaned from the Region's aviation stakeholders. It highlights problems that are more acute in the Caribbean, because of the inability of the regional industry to adapt to changing market pressures in the way that the industry elsewhere has done. Reasons for this are numerous.

There is no doubt that the aviation industry is beneficial to the Caribbean Region. Analysis by Oxford Economics[13] indicates that the Sector contributes USD2.5 bn to GDP in the Region and supports 112,000 jobs (2009 figures), either directly (aviation providers), indirectly (aviation supply chain) or through multiplier effects. More significantly, through the catalytic effects of aviation on tourism, the sector contributes USD12.6 bn of GDP and 845,000 jobs. This equates to 8.6% of regional GDP.

The Oxford Economics Study does not cover all the CARICOM economies. For those it does, the table below gives an indication of the significance of aviation in terms of direct, indirect, multiplier and catalytic effects. With the exception of St. Kitts and Nevis, the aviation industry is more important in terms of the value it adds to the wider economy than in terms of its own economic footprint.

TABLE 3.1: AVIATION'S ECONOMIC SIGNIFICANCE IN CARICOM ECONOMIES

	JOBS (SUM OF DIRECT, INDIRECT AND MULTIPLIER)[14]	% OF GDP	JOBS IN TOURISM INDUSTRY FROM AVIATION	% OF GDP
Bahamas	10,600	6.6	15,600	8.2
Grenada	1,700	3.7	7,100	17.1
Jamaica	21,100	2.1	132,000	12.8
St. Kitts and Nevis	900	4.6	820	4.1
Trinidad & Tobago	8,100	1.4	22,900	2.9
St. Lucia	2,700	5.1	22,700	32.5
Haiti	15,500	0.7	54,000	1.8
Barbados	5,800	3.9	20,000	15.3
Antigua and Barbuda	2,300	8.0	3,600	13.1

SOURCE: OXFORD ECONOMICS, 2011.

[13] Economic Benefits from Air Transport in the Caribbean Islands Oxford Economics, 2011.
[14] Direct jobs relate to airlines, airports and air service providers; indirect jobs relate to the suppliers of the businesses, e.g. catering and freight; multiplier jobs relate to jobs resulting from the expenditure of those in direct and indirect jobs.

But there is a cost to providing these economic benefits, and the challenge in the Region is to minimise these costs, as far as possible, without affecting the level of benefits. These costs manifest themselves in subsidies to both domiciled and foreign airlines. In addition, the cost is unevenly spread such that some countries in the Region are able to 'free ride' on others. These issues are discussed below.

3.1 FINANCIAL PERFORMANCE

3.1.1 Financial Performance of Region's Major Airlines

In each of the last five years, the regional airlines have consistently recorded losses. The aggregate of balance sheet accumulated deficits for CAL, LIAT and BAH is estimated at approximately USD1 bn[15]. The table below summarises available recent financials for the Region's domiciled airlines.

TABLE 3.2: AIRLINE LOSSES (USD mn)

	2013	2012	2011	2010	2009
Cayman Airways	-7				
BAH		-23	-21	-23	
CAL		-70	-54		
LIAT			-16	-7	3
Surinam Airways	-8*	-8*	-8	-4	-1
AJ			-38	-150	
Average	-8(2)	-34(3)	-27(5)	-46(4)	1(2)

SOURCES: FLIGHT GLOBAL, IATA WATS 58 (FIGURES DISPLAYED ARE NET PROFIT. IN THE ABSENCE OF DATA OPERATING PROFIT* IS USED).

3.1.2 Why the Poor Financial Performance?

Thin Markets

One of the reasons is that the Regional market is not big enough. The airline industry in most of the world is a very low-margin business. Recent figures published by "A4A" show that, in real terms, the price of air travel has fallen relative to USA Inflation and USA Incomes and Airline Costs[16]. "Over multiple decades, the rising cost of running an airline – without a commensurate increase in fares – has meant that airlines have had to fill more seats to break even"[17].

Whereas in the 1980s, Break Even Load Factors (a measure of percentage seat occupancy) for USA airlines were in the region of 57%, in 2013 this rose to around 80%[18]. The downward pressure on ticket prices, in an environment of increasing demand, is mainly caused by market competition – particularly from the recent proliferation of the low cost airlines.

The CARICOM Region, stretching from Belize in the West, to Bahamas in the North, and to Surinam in the South, does not have the density of population required to support the high-cost/low-price demands of air transport.

Lack of Cooperation in the Region

The majority of aviation stakeholders interviewed remarked that this region was uniquely devoid of the type of airline cooperation that exists in the rest of the global industry.

[15] Trinidad & Tobago Sunday Express, April 14, 2013; Trinidad & Tobago Guardian, February 4, 2015; LIAT Business Plan, January 31, 2013; Nassau Business Tribune September 27, 2013.
[16] A4A Industry Review and Outlook, 9 February 15.
[17] Ibid.
[18] Ibid.

Two significant trends have emerged over the years in the world aviation industry, "one of consolidation, partnership and network integration; the other of new entrants, enhanced competition and expanding point-to-point travel."[19] The trend of consolidation, partnership and network integration has involved the rapid growth of three major alliances, plus complex webs of code shares, equity stakes and joint ventures, all of which have served to strengthen links between airlines.

There has been massive consolidation in USA airline market. Since 1950, consolidation has accounted for a reduction in the number of major USA airlines from 47 to 10[20]. There has also been significant consolidation among European airlines: Air France/KLM, (2003); Lufthansa/Swiss/SN; Brussels/BMI/Austrian (2005 to 2011); and BA/Iberia/Vuelling (2011).

> The type of cooperation that has helped airlines globally to survive is almost non-existent among the airlines of the Caribbean.

According to an article by Rick Newman in the US News and World Report of February 14, 2013: "Consolidation is finally helping a money-losing industry become profitable. From 2000 to 2009, U.S. airlines lost a staggering USD45 billion, according to A4A. But the industry turned a profit in 2010 and 2011, and probably will again once the 2012 numbers are in". Since this article, North America has become the most profitable region for airlines recording USD13.6 bn of operating profits in 2014 (Airline Business, 2015).

The Dutch airline, KLM, also saw its post-merger revenues rise by 50% between 2005, when it merged with Air France, and 2013 (CAPA Centre for Aviation, December 12, 2014).

The next level down in the airline cooperation paradigm is also very widespread. The three major world alliances – Star, SkyTeam and Oneworld have been steadily growing, and presently capture more than 50 of the world's major airlines and more than half of global seat capacity[21].

In contrast, this sort of cooperative activity is almost non-existent among the airlines of the Caribbean Region, although it has happened previously to some extent[22]. The CEO of one of the Region's major airlines remarked that, whereas the rest of the world operates on commercial agreements, code shares, alliances, etc., between airlines, this type of cooperation is noticeably absent in this region. So there is little opportunity to exploit synergies, economies of scale, resource sharing, network rationalisation, capacity sharing, and all the proven ways of improving connectivity, increasing revenue and keeping costs down.

Another airline CEO in the Region suggested that cooperation between airlines in the Region, particularly since most use the same type of aircraft, could extend to the pooling of resources (spares, etc.) and joint purchasing of expensive items such as fuel and pilot training. Even facilities can be shared. In this vein, he mentioned the four states in the Region that enjoyed USA Customs pre-clearance – a very appealing service from the passengers' point of view.

A recent study into USA airline consolidation (Kirby, 2013) demonstrated cost synergies in the order of 1.5% of total costs, and revenue synergies in the order of 3.5% of total revenues annually. If properly managed, deeper forms of airline integration across CARICOM could lead to annual cost and revenue synergies of USD41 mn per annum using current total revenue totals of USD820 mn for the five government-owned CARICOM carriers.

There is a small, but noteworthy, example of such cooperation which emerged in discussions with the owner of a major group of third tier airlines. Further consolidation among the smaller airlines is taking place: bringing in Grenadine Airways; SVG Air; Mustique Airways; and the original Trans Island Airways into a new grouping with bases in St. Vincent and the Grenadines and Barbados. Joint maintenance was one such major synergy that was cited by the owner. The synergies that could result from this consolidation could be an object lesson for the larger aviation players in the Region.

Questionable Financial Decisions

There is evidence of three major areas of financial mismanagement by CAL over the period 2010 to 2011, which caused a massive reversal of CAL's previously strong financial position. An article in the Trinidad Express of May 19, 2012[23] describes two of these, reporting that CAL's mounting debt was based on two investments – the decision to acquire nine aircraft from the manufacturer, Aviones de Transport Regionale (ATR); and the airline's AJ commitments.

[19] UK Airports Commission Interim Report, December 2013.
[20] Aviation Week, February 18, 2015.
[21] As will be seen in Chapter 4, the benefits of alliances membership for airlines include access to extended networks and therefore greater attraction for passengers, and opportunities for cost reductions through sharing of facilities.
[22] For example, LIAT and Caribbean Star operated an agreement involving code sharing between February and October 2007.
[23] http://www.trinidadexpress.com/news/CAL_facing__operational_risk_-152179785.html.

The article suggests that CAL paid cash for the ATR 72-600 aircraft[24]. This would account for a cash drain of over USD100 mn for the five purchased ATR aircraft, a scenario that makes little financial sense bearing in mind that the Export Credit Agencies of ATR's two major shareholders (Italy and France) were more than willing to facilitate soft financing of loans to purchase the aircraft[25]. With the very good credit rating of CAL and the Government of Trinidad & Tobago at the time, and using the guidance of the EADS (parent company of Airbus and shareholder in ATR) presentation "Anatomy of Aircraft Financing" to the Global Investors forum in Munich April 28/29, 2003, it is submitted that CAL could have purchased the aircraft with financing at a rate of less than 4%.

According to the above-quoted Trinidad Express article, the second decision involved CAL investments having to be liquidated to address the costly operations of AJ. The AJ operations proved more expensive and loss making than initial projections had suggested.

The third decision over the period of massive cash haemorrhage by CAL, was the apparent rush to lease two B 767-300s for a new London route. This resulted in the airline having to take on expensive wet leases in parallel with its dry leases from LAN Airlines, because of long delays in obtaining regulatory certification for the London route by the Trinidad & Tobago CAA, as stated in the 30 August 2012 Report from the on-line intelligence provider CH-aviation[26].

It is posited that questionable business decisions; a legacy of shareholder government bailouts; and rescue packages in the Region have created an organisational culture that has been at odds with the efficiency-led culture developed within most airlines worldwide.

Inflexible Bankruptcy Environment

Generally, the bankruptcy regime in the Caribbean does not allow for the kind of protection and recovery period that pertains elsewhere. As a result, stakeholders in the Region feel that failing airlines are not given a fair chance to recover. In USA, for example, most of the major airlines have availed themselves of Chapter 11 bankruptcy protection in recent times and managed to continue operations while adhering to its restructuring requirements. Examples include American Airlines 2012 to 2014; United 2002 to 2006; Delta 2005 to 2007; Northwest 2005 (then merged with Delta); and US Airways in 2002 and again in 2004.

The majority of the Region's stakeholders generally hold the view that some sort of bankruptcy protection would increase investor confidence in the Region's Air Transport Sector. However, a corporate/commuter airline took the view that there should be no change to the bankruptcy protection regime. Its representative reasoned that in this Region, there were too many weak airlines that might abuse the system and "hide" inefficiencies behind bankruptcy protection. Further, it was felt that the regulatory system is not robust enough at present to prevent this abuse. However, much would depend on how strongly the bankruptcy regime is structured.

Some overhaul of the bankruptcy laws in the Region may have to be undertaken with a view to producing a uniform, fair, transparent and cost-effective bankruptcy regime, which has the necessary human and material resources to function properly.

[24] See also Trinidad Guardian, May 6, 2012 – https://guardian.co.tt/news/2012-05-06/200-million – profit-or-loss; and New York Caribbean News, May 15, 2013 – http://www.nycaribnews.com/news.php?viewStory=4101.
[25] See Vietnam News of May 6, 2009; Air Finance of August 14, 2012, re purchase of ATRs with COFACE and SACE financing by Royal Air Maroc; ATR Press Release of May 28, 2014 detailing this type of Export Credit Agency financing for Avianca of Colombia (2013), Jet Airways of India (2010) and Precision Air Services of Tanzania (2009).
[26] http://www.ch-aviation.com/portal/news/12791-caribbean-airlines-takes-delivery-of-first-b767-300er-on-own-aoc.

3.1.3 Reform Imperatives

The more than nine local airlines serving the Caribbean Region are all below critical mass in this low-demand environment. Further, in the absence of meaningful cooperation between the different airline tiers (extra-regional, regional and commuter), connectivity across the Region is poor and inefficient.

More will be discussed in Chapters 4 and 5, but the present situation demands immediate moves to initiate cooperation, at varying levels, between the airline players in the Region. There are, however, ominous signs that players are moving in the opposite direction. It appears that, particularly in the Southern Caribbean, the main players are assuming more competitive rather than cooperative positions. This issue loomed large back in late 2011 when the then CAL Chairman spoke of his intention to buy 11 more ATR aircraft and "…cover the Eastern Caribbean States (OECS) with several flights a day."[27] Again on March 4, 2014, it was reported in Caribbean 360 that CAL was conducting inquiries in Kingstown, St. Vincent, into the possibility of including St. Vincent and the Grenadines on its Caribbean routes[28].

3.2 BUSINESS STRATEGY FORMULATION & EXECUTION

3.2.1 Existing Business Strategies Among the Airlines

This study's interviews and research reveal that the general business strategy of the Region's airlines is centred on business survival. With weak balance sheets and ongoing losses, it is difficult for the airlines' leadership to embark on strategic paths towards business expansion or even the implementation of efficiency-enhancing initiatives.

One major regional air carrier explained that its present business strategy was based on paying intense attention to its "systems, processes and simplicity", all inward-looking expedients based on survival. This carrier also indicated that "politics and labour relations" were its major challenges.

Additionally, there are examples of business decisions being put on hold, and some even reversed, due to government shareholder intervention. The recent words of a major shareholder of LIAT speaks very clearly to this type of challenge: "You will appreciate that the government of Antigua and Barbuda has made – and continues to make – a heavy investment in LIAT, and there are consequences for the economy and the wellbeing of the people of Antigua and Barbuda arising from decisions pertaining to the airline"[29]. The statement was made to explain the Antigua and Barbuda Prime Minister's request that the recent decision of the airline, to restructure its bases and reduce staff by some 20%, be put on hold for the time being.

The responsible Minister of another of the Region's shareholder governments was recently quoted as saying that LIAT had approached his Government regarding the equity position at LIAT, and had asked whether his government could perhaps be a larger LIAT shareholder, as LIAT needed to purchase new aircraft. He responded that his Government intended taking care of business at home first before conversing with anyone else about their problems. The Minister added, "That has become an issue. I told the Government I'm not prepared to consider any further involvement in the airline industry until CAL gets comfortable and sorts out our CAL issues"[30].

3.2.2 Route Revenue Guarantees and Market Support

Route revenue guarantees are one way of ensuring airlift into the Region from outside, and also within the Region, but they are not without criticism. They are perceived as unnecessarily expensive and potentially anti-competitive. They restrict domiciled carriers' ability to compete with

[27] Vernon Khelawan in Trinidad Newsday of December 29, 2011.
[28] http://www.caribbean360.com/travel/st-vincent-and-the-grenadines-may-be-next-stop-for-caribbean-airlines.
[29] Antigua and Barbuda Prime Minister as quoted in the Government's official press release of February 18, 2015.
[30] Trinidad Guardian, May 15, 2013.- http://www.guardian.co.tt/news/2013-05-15/howai-insists-airline-solvent-cal-loses-800m

better-capitalised foreign carriers. This can have knock-on effects on the provision of domestic services.

The general consensus among stakeholders was that providing Revenue Guarantees was a "necessary evil" to encourage start-up of important routes; however, this must be accompanied by joint and robust marketing initiatives to develop the route and obviate the need for the payment of guarantees as quickly as possible.

One airline proffered that Revenue Guarantees should not be given – only marketing support. Representatives felt that the airlines could easily abuse, and historically have, Revenue Guarantees by "sitting on their laurels" and accepting the guaranteed funding while doing little to market the route.

At least one stakeholder was of the opinion that, for local airlines, the support should come as a general subsidy rather than for a particular route, since all benefitted from the operations of the airline.

The CEO of one of the Region's larger airlines lamented that, in recent times, on at least three international routes that his airline pioneered, foreign carriers were invited in and given incentives to fly the route by his own shareholder government.

3.2.3 Ancillary Revenues

Ancillary revenues are revenues from non-ticket sources, such as baggage fees, check-in fees, seat reservations, and on-board food and services. They have grown significantly in the industry globally, particularly in the low cost sector, but not so much in the CARICOM area.

One of the major airlines of the Region observed that, although it does benefit from some ancillary revenues, the local marketplace does not lend itself to the extremes of ancillary revenue opportunities. Another major airline of the Region has publicly announced that it will start "unbundling" its fares and require an additional fee for a second checked bag this Spring[31]. A third airline was about to embark on an upgrade of its Distribution System to allow it to unbundle its offering – particularly with regard to baggage fees.

3.2.4 Government Fees and Taxes

The price that passengers pay for airline ticket prices includes various charges and taxes that the airline passes on. Charges represent the cost of building and operating airports and their facilities. Taxes are levied by governments for other reasons, for example, to address the externalities imposed by air transport, such as climate change or simply to raise revenue.

Most stakeholders were of the view that ticket fees and taxes were necessary to help pay for the expensive aviation infrastructure and that the principle of "user pays" is fair. However, they were of the view that transparency is necessary to reassure all that the fees and taxes are used for the purpose for which they are allegedly collected – to support and improve aviation infrastructure.

Stakeholders indicated that, generally, the government fees and taxes portion of ticket prices range from 30 to 50% in the Region. To the extent that these taxes do not reflect the cost of infrastructure provision and are simply for revenue raising purposes, then government policy is arguably contributing to the financial problems of the airlines. Where such excessive taxes are levied by governments who are not major airline shareholders, there is also a distribution issue. There is a transfer of benefit from shareholder (through airline subsidy) to non-shareholder countries.

We do not know what the balance is between taxes and subsidies, but this does raise questions as to the appropriateness of the tax regime throughout the Region. All stakeholders were of the view that the high fee and tax regime in the Region was actually stifling demand, and that if taxes were reduced, demand would rise and revenue would increase for governments and stakeholders.

In some countries worldwide, air transport is a net contributor to the treasury where taxation is in excess of subsidy and user charges are in excess of infrastructure costs. An IATA-sponsored Mott MacDonald study showed that for three countries (Germany, France and the UK), taxes paid in excess of subsidies and airline user charges in excess of infrastructure costs, equalled an average of €6.8 per journey (or an average of €723 mn per annum) (IATA Economics Briefing, 2005).

The airlines, which act as tax and fee collectors for the governments, all felt that it would be fair for the governments to pay a collection/administration fee for this service.

3.2.5 Air Cargo

Two airlines, while admitting that air freight facilities were necessary for the Region, were not too keen on starting or increasing participation in this part of the industry due to high costs and lower returns. This viewpoint can be also be extended to belly-hold freight due to the fact that regional carriers mainly operate small, single-aisled, narrow-bodied aircraft with little space available for any significant freight volumes even though the marginal costs of doing so would be substantially lower than operating all-freighter aircraft.

3.2.6 How Appropriate are the Current Strategies?

Whereas most governmental and non-governmental organisations in the Region extol the virtues of some sort of airline integration/consolidation (of effort – if not of organisations)[32], at the working level the picture is entirely different.

The Director General of a major aviation regulatory agency said that he was very disheartened that, despite

[31] Trinidad Guardian, December 13, 2014

[32] Press Release 25/2014 (February 14, 2014) CARICOM Secretariat and White Paper of June 2005 produced under the auspices of the (then) Caribbean Hotel Association.

the fact that all air service agreements deliberately included provisions for code-sharing, local airlines chose not to explore this avenue of increasing their reach and market. In fact, in one case, an airline positively objected to a code-sharing clause. He was at a loss as to why this was so, and was certain that the airline was denying itself many business opportunities.

Another Director General of Civil Aviation (DGCA) stated that it was necessary for LIAT to implement code-shares with air taxi operators and operators of smaller aircraft so that connectivity to smaller markets, for example BVI/Anegada, Ogle Airport, Cane Field Dominica and Grenada Pearls/Carriacou, could be improved. This view was shared by a third DGCA from another part of the Region.

However, the CEO of a ground handling organisation thought that the airlines of the Region were too small to attract code-share arrangements with the larger external airlines that service the Region.

The current trend is clearly to look inwards and take a "let's fix ourselves" approach without perhaps trying to see the bigger picture and investigate whether, at the same time, collective efforts and cooperation may assist improvement in performance of the organisations concerned. This aspect will be further explored in Chapters 4 and 5.

3.2.7 Required Changes

The tendency in this region to keep "heads down" and ignore opportunities for integration and consolidation with other players in the aviation sector, is totally at odds with the global industry which has learned to adapt to economic pressures partly because of the type of inter-airline cooperation described earlier.

In his December 2014 CEO brief, Tony Tyler, Director General and CEO of IATA, when explaining the expected doubling year-on-year of the global aviation industry's return on investment to 7%[33] in 2015, said: "The improvement trend in returns is being driven by changes in structure and behaviour. Breakeven load factors are usually on a painful upward trend as yields fall faster than cost reductions. They are falling this year and next because of lower fuel prices and the impact of increasing ancillary revenues. On top of that, consolidation and more rational behaviour have boosted load factors achieved."

The major air carriers of this region continue to produce negative return on investment to their shareholders and will, it is argued, continue to do so unless they make comprehensive policy changes to the type of rational, cooperative behaviour that is exhibited in the global industry.

3.3 OPERATIONS POLICIES AND MANAGEMENT

3.3.1 Operational Performance of Airlines in the Region

The Region's airlines hold excellent air safety records. This has been borne out by the Safety Regulators of the Region. For this study, inputs were received from almost all of these regulators, and no mention was made of any safety issues with the airlines they supervise.

A regional airline system that is performing well ... will attract the kind of extra-regional cooperation and relationships necessary to improve seat occupancy and encourage growth.

However, this good safety reputation for the airlines of the Region is in stark contrast to their Product and Customer Service reviews reported on the major global rating websites[34]. The performance metrics of an airline's service revolve around such items as their level of customer service (customer satisfaction); On Time Performance (punctuality); lost/misplaced baggage; website quality and ease of use; travel seamlessness and connectivity; price; and comfort-based features, among others.

The general consensus among the stakeholders is that the operational problems facing the Region's airlines and aviation infrastructure are the result of the weak financial position of the airlines and the economic difficulties of most regional economies.

When asked to comment about possible structural and resource weaknesses (e.g. aircraft maintenance and ICT)

[33] IATA Fact Sheet, December 2014.
[34] Skytrax: www.airlinequality.com.

in his airline, one CEO suggested that the only way to obtain proper funding for performance improvements was to attract private equity investment into the airlines of the Region. He thought that the governments could maintain control, if they so wished, by the normal equity majority means, "Golden Shares", etc.

3.3.2 Regulatory Barriers

Stakeholders stated that the lack of harmony and resources in the Region's aviation regulatory institutions caused them operational and financial problems, and also hindered growth and attempts at inter-airline cooperation.

Though most stakeholders were reluctant to take issue with the safety regulators, delays in introducing harmony of aviation laws and regulation across the Region, particularly with regard to Personnel Licensing (of pilots and technical staff), were presenting challenges to airlines and airports.

With respect to economic regulation, the complaints by stakeholders (airlines and, to a lesser extent, the airports) were varied. One airline CEO called for a "light touch" from the economic regulators. On the one hand, there were complaints about the over-regulation of route rights and licenses, and concomitant delays in these processes. On the other hand, one airline strongly called for the introduction of robust consumer protection regulation.

There was a general consensus that the CARICOM Secretariat-sponsored MASA had been stalled for too long, and needed more dialogue and agreement between the parties as soon as possible. One airline executive ventured the opinion that the most recent draft of MASA (the new proposed Annex A) favoured the larger airlines and states, to the detriment of the small airlines and small states without their own airlines.

A major regulator pointed out that one obstacle in getting a ratifiable MASA drafted is reaching agreement on competition clauses under the main instrument governing CARICOM: the Revised Treaty of Chaguaramas. Unfortunately, the Treaty speaks to a competitive regime for goods and not services.

A major economic regulator pleaded for a functioning MASA that allowed for Fifth Freedom Rights and "One Caribbean Sky", thus making ASA with third party states easier to negotiate, as is the case with the EU Horizontal Agreement system.

Some stakeholders pointed out, in the context of "One Caribbean Sky", that a temporary single Caribbean airspace was created for the Cricket World Cup in 2007, and it worked well. They proffered that there was no reason why this could not be recreated on a permanent basis.

Another problem facing the aviation stakeholders of the Region, particularly those who need aviation-certified technical staff in their operations (mainly airlines and airports) is the lack of common personnel licensing standards across the Region. Some stakeholders lamented that it is very difficult to obtain from regulators, certification of already-qualified aviation personnel from other territories, both intra and extra-regional. They would be paying these personnel for many months before they obtained the necessary local certification and became productive. All stakeholders urged the acceptance of another (ICAO contracting) state's certifications with minimum extra requirements imposed.

However, there are examples of this positive practice happening. One major CAA indicated that it had updated its pilot and engineer licensing system to make it easier to accept licences granted by other CARICOM states, but reported that this practice was not being universally followed in the Region.

3.3.3 Changes Required to Improve the Performance of the Region's Airlines

The Region's airlines are, by and large, under-capitalised and under-resourced. More cooperation among all aviation stakeholders will deepen connectivity to thin and limited airport markets; bring down unit costs; improve financial and operational performance; and most importantly, attract possible private investment.

Further, a regional airline system that is performing well and serving as wide a regional network as possible, will attract the kind of extra-regional cooperation and relationships necessary to improve seat occupancy and encourage growth – particularly in the local tourism industry. This cooperation with external airlines can be in the form of interline agreements; code-shares; membership of a major alliance; equity partnerships; etc.

3.3.4 Changes Required to Improve the Legal and Regulatory Framework

Harmonisation of aviation laws, regulation and regulatory practice in the Region is essential to facilitate the seamlessness and efficiency of airport and airline operations throughout the Region. Common laws and regulations will ensure certainty to encourage growth and cooperation initiatives among the players.

CASSOS, which evolved from the original Regional Safety Oversight System, was conceived precisely to implement regulatory harmonisation throughout the Caribbean Region. However, when asked why these aims are not being achieved, interviewed professionals stated that CASSOS is woefully under-resourced and does not have enough qualified personnel to support its mission. It has to rely on human resources loaned from the regional CAAs, who are themselves short of resources. A stakeholder added that one major safety regulator in the Region had not paid its dues to CASSOS for four years.

This situation must be remedied as quickly as possible. Resources must be found to ensure that CASSOS can do its essential work to harmonise the Safety and Security Oversight System throughout the Region.

Similarly, economic regulation of aviation in the Region should be both harmonised and liberalised. No longer should out-dated and counter-productive practices be allowed to stall the progress of the Region's aviation sector. At least two stakeholders made the point that despite many promises, the "liberalisation" of Air Services agreements – including the CARICOM MASA – has not occurred. In the global aviation industry, protectionist practices are often prohibited, and resulted in denied access to the wealth of sharing opportunities prevalent in the aviation industry.

3.3.5 Potential Benefits of a More Liberalised Market

As a fully implemented and liberal air policy in the CARICOM Region is not yet in place, it is difficult to forecast industry and user benefits of an advanced agreement regime with any degree of certainty. An indicative approximation from pursuing a pathway towards greater regulatory integration in a liberalised setting can be provided, however, based on historical benchmarks in other regions.

Industry Cost and Revenue Savings:

a. Small airport scale efficiencies have improved in the EU since the formation of the Single Aviation Market, due to the opening of new commercial routes to previously under-served regional and secondary airports. On a smaller scale, CARICOM airports could stand to gain by forming part of a wider network of routes with greater access to intra- and extra-CARICOM markets.

Industry Efficiency Gains:

b. There was a 45% increase in airline productivity (and a 9% increase in salaries) during the 1997–2007 EU Single Aviation Market period (EC, 2008). If a similarly advanced multilateral agreement is pursued within CARICOM, competitive pressures from inside and outside the Region would incentivise domiciled airlines to increase productivity.

User Choice and Availability:

c. The number of routes with more than two carriers increased by over 400% between 1993 and 2011 across the EU Single Aviation Market. Choice particularly increased on denser markets (EC). The number of cross-border, intra-EU routes increased by 220% between 1992-2009 to around 2,750 in the Single Market period (Geil, 2010). The scope for an increase in carriers on thinner intra-CARICOM markets is limited, though liberal horizontal agreements with third party states such as USA, Canada and Europe, might well see an increase in carrier choice and connectivity.

Fares and Consumer Surplus:

d. A 34% reduction in real discount fares occurred between 1997 and 2003 after six years of Single EU Aviation Market (EU and the European Civic Aviation Conference Paper, 2003). Downward pressure on fares, especially on advanced, flexible tickets would also occur in CARICOM markets due to the increased entry or threat of entry on liberalised intra- and extra-regional pairs.

User Connectivity and Time Savings:

e. Proper implementation of the Yamoussoukro Agreement in Africa is forecast to increase the number of direct services by 23% (InterVistas, 2014), leading to significant time savings for passengers and freight. Specifically, the lifting of designation restrictions and the granting of Fifth Freedom Rights across participating African states would see a greater number of airlines wishing to operate intra-continental flights. The same benefits could accrue with a fully-ratified CARICOM agreement, which would offer complete flexibility in relation to carrier designation and traffic rights.

The CARICOM Secretariat should move swiftly to produce a revised draft of a liberal MASA that satisfies a broad range of interests in the Region and follows the best practices of the global aviation industry.

3.4 INFORMATION AND COMMUNICATION TECHNOLOGY

3.4.1 ICT in the Region's Air Transport Sector

An international airline is a very complex institution from the point of view of operations technology (aircraft, aircraft maintenance and flight operations); revenue management (pricing etc.) and collection; product distribution; passenger and baggage handling; network building/management; and crew scheduling, among others. To compound matters, most of these activities are highly regulated by both local and international regulators. To efficiently handle this wealth of complexity and detail, modern and capable MIS and applications are needed. Inadequate MIS solutions mean operational and commercial inefficiencies resulting in reduced revenues and increased costs.

These systems and applications are expensive to purchase and operate. For instance, in the global industry, IT spent for 2013 amounted to 2.1% of revenue for a typical airline.[35] This comprised 1.5% on recurrent expenditure and 0.6% on capital expenditure. To put this in context, LIAT would have to spend some USD2.6 mn a year on its IT solutions to match the industry standard[36].

With their current financial challenges, the Region's airlines have indicated that they cannot afford the IT solutions they require. They address this problem as best as they can. The CEO of one of the larger airlines in the Region explained that this has implications for cooperation opportunities with external airlines. Metropolitan airlines would insist, for example, that a prerequisite for any type of code-share, interline agreement or commercial association, is a matching distribution and reservations platform[37].

[35] Airline Business and SITA: Airline Trends Survey 2014.
[36] The LIAT Business Plan published in January 2013, showed that the LIAT IT total spend for 2012 was approximately USD1.48 mn or 1.31% of revenue.
[37] In an article in the Trinidad Guardian of August 30, 2012, Richard Branson, the Virgin Chairman, pointed out that global airlines pay USD7 bn in GDS fees per year – more than double the expected profit for 2012.

3.4.2 Reform Imperatives

This is a 'chicken and egg' situation that has to be addressed. The lack of funds to purchase and run robust IT solutions is itself a cause of poor financial performance. The answer may lie in intra-regional cooperation and consolidation to achieve economies of scale and also attract outside investment (more in Chapters 4 and 5).

3.5 HUMAN RESOURCE MANAGEMENT

3.5.1 Challenges and Constraints

Most aviation stakeholders in the Caribbean Region spoke to the unique difficulties they experienced in properly managing human resources. They explained that often the labour laws, customs and practices are not "business friendly" and tend to favour the employees to the detriment of the business. Although these can have negative effects, this is not the case across the whole Region. One stakeholder talked of all parties, including labour seeing "the greater good".

In the case of CAL, the Trinidad-based pilots caused the cancellation of 22 flights on July 1, 2014 (Mail on Line, July 2, 2014). Before that, in December 2011, CAL had to get a stop order to prevent its Jamaica-based pilots from striking (Trinidad Express, December 10, 2011). In November 2014, pilots served a 72-hour notice on CAL of intended strike action (Jamaica Observer, November 13, 2014).

LIAT pilots caused schedule disruptions in 2011 (Trinidad Express, December 10, 2011); 2013 (Jamaica Observer, November 5, 2013); and 2014 (Caribbean 360, December 17, 2014).

BAH pilots cost the airline USD1 mn in expenses when flights were cancelled on two days in December 2014 (CBS Miami, 24 December; and Tribune 242, December 23, 2014 and January 5, 2015).

There are other examples. In April 2013, disgruntled workers of the Ground Handler at V.C. Bird International Airport in Antigua interrupted operations of LIAT in a wild-cat, unofficial sick out (see the Antigua Observer, April 22, 2013). This demonstrated the vulnerability of airline operations to any aviation worker group, inside and outside of the airlines.

This prompted LIAT's call to make aviation an Essential Service for the purpose of industrial legislation. On June 5, 2013, the Antigua Observer reported that leaders of two of LIAT's major shareholder governments, Prime Minister Gonsalves of St. Vincent and Prime Minister Spencer of Antigua, had publicly endorsed this call.

The threat of disruption continues to be palpable in the Region due, in part, to strong labour representation. Globally, unions have been much more likely to negotiate with management, however, when the airlines in question are genuinely faced with closure. A case in point has been the established legacy carrier SAS, whose workforce has accepted various rounds of alterations to pay, redundancies and contract renegotiations with minimal disruption due only to the very real and tangible possibility of closure (EurWORK, 2013).

One major stakeholder expressed great sympathy for the management of LIAT whom he said faced an impossible task in having to deal with 10 labour unions spread over their operating network.

A common theme posited, was the need for some harmonisation of the labour laws across the Region. It was felt that CARICOM could play a role in achieving some uniformity of labour relations practice in the Region.

3.5.2 Assessment of the Human Resource Practices

It is difficult to apportion blame for the root causes of these disruptions. Suffice to say that the pilot/employer relationships in these airlines are extremely fragile and have to be improved. Further, the impoverished position of regional airlines gives the management very little "wiggle room" to accede to union demands for better terms. If ever faced with the very real possibility of closure, global evidence suggests that management may find it easier to bring staff and union representatives to the negotiating table.

3.5.3 Reforms Required

When LIAT publicly called for the inclusion of aviation services in the list of Essential Services to curtail wildcat and arbitrary work stoppages (see above), its leadership was quick to emphasise that the Essential Service regulations did not prohibit strikes or industrial action, but meant that issues were "fast-tracked" through the state system before industrial action was allowed.

Bearing in mind the crucial role that the Air Transport Sector plays in the business, social and leisure lives of the people of the Caribbean and, further, the disastrous effect these interruptions have on already-struggling airlines, the debate started by LIAT on this important topic must be continued by the CARICOM heads.

3.6 CORPORATE GOVERNANCE

3.6.1 The Region's Experience

Most stakeholders had a lot to say about governance in the Region's Air Transport Sector. They commented not only on the traditional level of corporate governance – the organisation's Board level – but also on the higher, more

strategic level of the governments control and direction of air transport in the Region.

3.6.2 At the Board Level

Stakeholders mentioned that the Boards of government-owned airlines (all the major of airlines in the Region) tended to be made up of political appointees. This may not be appropriate for success of the enterprises. The head of one large stakeholder said that, in his experience, the government often appointed the wrong people on Boards, and similarly caused to be appointed the wrong people at the executive level. This practice, he suggested, was a root cause of the poor performance of the Region's airlines.

The CEO of one of the larger airlines advocated a mix of public and private directors at Board level and noted that the best way to ensure this would be through equity shareholding from private investors. The governments could retain control by majority shareholding or a "golden share mechanism".

The CEO of a major ground handling company in the Region spoke strongly about the lack of strategic thinking exhibited in the insular way shareholder governments direct their airlines.

The leadership of a large CAA indicated that just changing the representation on the Boards of aviation institutions will not be enough. Boards must have much greater independence. This would require a significant change in government thinking.

In its editorial of September 11, 2013, entitled "Putting LIAT into Perspective, the Antigua Observer suggested the following composition for the LIAT Board: "In our view, a workable Board of Directors could be composed of three nominated members from the major shareholder governments of LIAT, one from the LIAT unions, one from the CARICOM Secretariat, one from the Caribbean Association of Industry and Commerce, and one from the Institute of Chartered Accountants of the Caribbean."

The CEOs of two of the larger airports in the Region, advocated less political interference in the management of the airports. Commenting on the state of airline Boards, one of these CEOs noted that there were not enough aviation experts making decisions at the government level and serving on airline Boards.

The operation of "social routes' – routes that are unprofitable for the airline, but which airlines are compelled to operate – is another governance issue both at Board level and higher. On March 7, 2014 the Jamaica Observer reported that LIAT would take "decisive action" to deal with unprofitable routes as it sought to make its operations financially viable. The LIAT Chairman Holder was reported as saying: "We'll have to take a very hard look at our current schedules and the profitability of our current routes. We have brought in some experts to assist us in looking more deeply into the route analysis issues, but it is clear that LIAT cannot continue to provide essential social services to 21 countries in the Caribbean on a daily basis, offering close to 1,000 flights weekly, and only four countries put any funds into this operation."

This is not the first time that this airline has voiced this intention. Nearly two years before, an article published by the Economist magazine's Economic Intelligence Unit (EIU) on October 19, 2012, highlighted a similar announcement from the LIAT management but, their last paragraph perhaps gave a clue as to why these efforts may not be successful: "Impact on Forecast. LIAT's financial troubles, and the risk that it will trim back the number of its flights and the destinations it services, could hurt intra-regional business and leisure travel, with some negative consequences for the smaller Caribbean economies."

A similar point was made in the Observer editorial mentioned above: "What is not clear is just how these 'social routes' will be serviced. The impression left from the December press conference is that the unprofitable routes will be fobbed off to 'third tier' commuter carriers, a situation which may not sit well with some governments."

The CEO of another regional airline explained that 9 of his 13 local destinations were on very weak demand routes and made losses. However, this was what the airline was mandated to do by the Government Shareholder and as a result, there was an annual subsidy paid to the airline.

One Director General of a large regional CAA mentioned the example of Singapore, which kept the state separate from the governance of the state airline. He made the point that when the then Prime Minister, Lee Quan Yew, asked one of his top civil servants, Mr. Pillai, to start up and chair a national airline, he accepted with the major proviso that interference from Government would be minimal.

3.6.3 Regional Government Level

A common theme running through the comments of the Region's stakeholders is the need for a comprehensive aviation policy framework in the Region. The LIAT CEO in a recent Op-Ed in the Caribbean Journal, on August 11, 2014, spoke of a "Political Framework" among the member states of CARICOM as part of six imperatives needed to improve the efficiency of this region's air transport sector. He postulated that it was time for all the Region's governments to commit to full participation in the CARICOM bodies which touch on aviation policy; the Transportation Commission; CASSOS; and the Advance Passenger Information System.

The CEOs of two of the largest airports in the Region went further, and called for both a regional aviation policy and one comprehensive plan for the Region's Aviation Sector, to include an airline plan as well as an airport plan. This would produce a framework for cooperation by all airlines and airports in the Region and stop the unnecessary, and often crippling, competition between major players, which is so prevalent in the Region. One of these CEOs even quoted an example in which the seaport and the airport in the same country were competing with each other instead of cooperating.

Another manifestation of the absence of a cohesive aviation policy and plan throughout the Region, is the range of different approaches to giving assistance to external carriers to incentivise them to service certain routes. This was discussed earlier in Part 2 of this chapter.

3.6.4 Proposed Changes to Governance Arrangements

From the many stakeholder responses on this point, this is obviously a key area that needs urgent attention if the fortunes of the Region's airlines – and the service they provide – are to be improved.

Throughout the Region's Aviation Sector, starting at the Board/Executive level, there must be a complete rethink of how the institutions are governed. More will be developed in Chapters 4 and 5, but the following issues must be quickly addressed:

a. An end to purely political appointees on Boards and a move to include qualified and competent independent members. Government shareholders should be encouraged to change their approach to how they appoint Board members and to change their general approach to corporate governance.

b. Private investment in the aviation organisations such as airports; airlines; ground handlers; and ANSPs should be encouraged. This would increase the chance of good corporate governance in these entities.

c. An end to government intervention in the management of the aviation organisations, except at the highest strategic, policy-making level.

d. Strategic policy making should be undertaken in unison with other governments throughout the Region. CARICOM is the obvious broker to coordinate these cooperative efforts in the Region's Air Transport Sector.

e. Through the organs at their disposal, CARICOM and OECS secretariats, the Region's governments should formulate comprehensive aviation plans and policies, taking in as many views as possible. These views should include those of the minor players and smaller states, and capture as wide a range of stakeholder opinions as possible, including those of the travelling public.

CHAPTER FOUR: TRANSFORMATIVE OPPORTUNITIES FOR REGIONAL AIR TRANSPORT

The opportunities set out in this chapter will be categorised by theme without reference to the achievability ('how to') of such possibilities in the short, medium or long term (purpose of Chapter 5). Clearly, some of the options presented below are more plausible than others, but this is intentional to ensure that any workable opportunities, based on the interview responses and other sources of information, are not omitted in the final recommendations.

4.1 AIRLINE BUSINESS OPPORTUNITIES

4.1.1 Change in the Corporate Governance Structure

Drawing on statements made through the Study's interview process, there are clearly gains to be made from the Region's carriers having more structured governance arrangements, regardless of size and ownership model. Rules in relation to business professional involvement on boards; member voting rights; balance on boards between executive and non-executive directors; shareholder and stakeholder transparency in areas of strategy, corporate social responsibility; and director compensation and qualifications could be established and made transparent. Many smaller government-owned airlines globally (e.g. Adria Airways based in Slovenia and airBaltic in Latvia) have well-developed and publicised codes of conduct in relation to provision of details on company ownership, strategy, board selection, remuneration and Articles of Association. There is currently a limited amount of governance rules for CARICOM-domiciled carriers. One option will be to time corporate governance changes with changes in ownership structure. This could involve providing a small number of company shares for employees; airline suppliers, such as airports; and handlers, with shareholder governments retaining a majority or golden share.

4.1.2 Financial Management

Shareholder governments need to establish clearly, the financial and strategic objectives for the Region's airlines. Should the goals be output maximisation, providing regular services to many destinations, regardless of market size, or should the goals be profit maximisation to ensure minimal need for subsidy? Pursuing the former provides the wider economic benefits discussed in Chapter 3, but this should still be done in a way that minimises the need for subsidy, even if it cannot eliminate it.

It is clear from the interview process that a profit maximising strategy is not being followed, that too many thin markets have been served, and too much focus has been given to providing complete schedules despite daily, weekly and monthly variation in demand across many destinations. Though it was conceded that maintaining at least some connectivity is vitally important between many countries and islands, the continued connectivity is not being provided sustainably. This requires better financial and operational management, or a more sustainable strategy.

Some of the Region's third tier carriers (many of which are free from government ownership) are typically able to operate on thin markets more flexibly. For example, if demand falls below a certain level of continuity, charters can be offered instead of fixed schedules (assuming regulatory approval) and pricing can also vary based on load factors and fleet utilisation achieved. The downside to this, from an individual island's perspective, is that there may be no regular scheduled routes for residents and visitors.

Regardless of the strategy chosen, airlines should always have incentives to improve financial performance. This will often involve reaching out and working with other carriers and air transport stakeholders to create cost and revenue synergies. Particularly in the current climate of sustained and endemic domiciled airline losses, this should be buttressed by some form of official bankruptcy protection to allow CEOs the time and space to implement the all-important restructuring and industry networking efforts. Examples of recent permitted state aid in the EU include: Austrian Airlines; Air Malta; Czech Airlines; airBaltic; and Adria Airways. In the case of Austrian Airlines, part of Lufthansa's take-over bid of the carrier included a condition that some state funding from the Austrian Government was forthcoming to write off EUR500 mn of historical debt before the figure of EUR366,268 was paid by Lufthansa for the ailing carrier. Because Austrian Airlines was considered a firm in difficulty under Community Law, the Austrian Government was allowed to provide the funding (EU Press Release IP/09/1256). The other benefit of creating a formalised bankruptcy protection process is that competition authorities can ensure from that point onwards, that it would be the only way for airlines to receive financial aid. The recent case of Cyprus Airways[38] proves the effectiveness of EC policing of state aid rules and ensuring that possible distortions in the market, resulting from carriers receiving blanket bailouts from their governments, cannot take place.

4.1.3 Flexibility, Freedom and Autonomy

Chapter 3 gave examples of government involvement in airline decision making across the Region. If airlines are prevented from having the autonomy and flexibility to make decisions to improve their medium to long-term sustainability, then it brings into question the workability of the current ownership/shareholder model. Government shareholders have a right to know how their airlines are performing, and should be prepared to take remedial action if agreed targets are not met. However, an important separation of ownership and management is clearly a transformative option based on the premise that managerial qualifications and experience in running airlines invariably outweigh that of shareholder politicians.

In many global cases where governments wish to retain ownership, the ability to regularly intervene is minimised through the establishment of an 'arm's length' corporatised holding company that can act on behalf of government but at the same time give senior management the time and space to make routine and sometimes tough decisions to achieve efficiencies. Singapore Airlines has benefitted from this type of structure over the years with the establishment of Temasek Holdings[39], where like domiciled Caribbean carriers, the carrier is deemed too critical to the lifeblood of Singapore to sell off into private hands but at the same time benefits from the expertise of a corporatised board and management team with experience in managing investments and generating shareholder returns.

It is understandable why a survival mentality has developed among airline executives of the Region's domiciled carriers but, with additional flexibility and autonomy, it may be possible for airlines to start thinking outside the box to formulate new initiatives and solutions or even to just have the opportunity to implement changes. Many commercial freedom opportunities are linked with having a more facilitating 'light touch' regulatory environment (Section 4.7), where it becomes easier for airlines to open and close routes; obtain the necessary permissions and licences; and have fewer artificial barriers in the recruitment of technical and non-technical staff. In an area of the world where it is naturally hard for domiciled airlines to break-even, it becomes even more difficult when there are substantial delays and uncertainties surrounding the granting of traffic rights and aircraft permits.

Other potentially useful freedoms for airlines in the Region relate to being able to make more sustainable decisions on labour contracts and having additional choices of suppliers (e.g. handlers, caterers, refuellers, etc.). In the case of the latter, choice is often limited and airlines sometimes have to 'take it or leave it' regardless of the service levels provided. In Barbados, for instance, one of the interviewees stated that having the presence of two handlers (albeit one publically and one privately owned), provides carriers with a choice of handler, which may then work in their favour in the negotiation of handling fees and service specification.

4.1.4 Concentration of Routes/ Services Into Hubs

It was recently announced (and later put on hold) that LIAT would transfer additional aircraft to Barbados from Antigua in order to focus on higher growth and hubbing potential in Barbados. Globally, airlines have only been able to fortify their strategic and competitive position by creating an advantage at one or more airports that have good underlying demand potential. This principle applies particularly to mainline and regional carriers that have to rely on feeder and connecting traffic in order to more profitably serve a wider range of thin Origin and Destination pairs. Basing more assets in one place also creates better scale economies, a lack of which was mentioned by interviewees as a significant disadvantage for the domiciled carriers in the Region.

[38] In this case the state aid to the carrier was based on unrealistic and unachievable restructuring plans.
[39] Temasek Holdings currently owns a majority 56% of Singapore Airlines Group.

Due to the dispersed geographic and population distribution in the Region and the small size of the domiciled carriers, any concerted effort towards hubbing in the Region would inevitably lead to some debasement or, at the very least, rationalisation in some of the Region's other gateways. This is clearly what has happened with CAL in Jamaica over the past four years since its acquisition of AJ. Comparing February 2014 with February 2015, the number of seats offered by CAL in Jamaica was reduced by 10,780 or 26%. This has allowed CAL to intensify its base in Port-of-Spain with growth of 4,924 seats or 5% over the same period. It can be reasonably stated that CAL's financial predicament would have been even worse had it continued to operate split hubs in the Northern and Southern Caribbean, given the financial pressures identified in Chapter 3 as well as labour pressures resulting from the Jamaica pull back.

4.2 MIS AND ICT OPPORTUNITIES

4.2.1 Distribution Systems and Ancillary Revenues

Airlines need to be able to provide platforms for users to access their products and services. As discussed in Chapter 3, domiciled carriers need to focus on global distribution systems (GDS) but this can be prohibitively expensive. Providers such as Sabre, Amadeus and Travelport are developing abridged products for smaller users. This will save domiciled carriers some distribution costs, but could go hand-in-hand with providing more quality content online and directly through reservations and call centres. There is also more ancillary revenue potential through this channel, if passengers can be persuaded to approach domiciled carrier products directly. As a controllable cost in an industry of many uncontrollable costs, airlines across the Region need to do more to make their products available in the most efficient way. Low cost carriers (LCCs) such as FlyDubai have tried to circumvent the Middle East problem of high travel agency booking rates by working directly with travel agents to use FlyDubai's website instead of a GDS-based booking system. This allows FlyDubai to distribute inventory through an intermediary while reducing the costs of doing so. Larger airlines in this region also follow this practice by utilising "Travel Agent Portals" on their websites. IATA's innovative New Distribution Capability standard could also be recommended to airlines across the Region as a cheaper XML internet-based way to distribute richer content and a wider range of products via intermediaries.

Airlines already price discriminate on their basic fares (charging higher fares closer to departure and varying fares by flexibility to cancel) and booking systems should allow them to optimise this practice without being too complicated. In addition to this, the systems in place should support charging to raise ancillary revenues. In some regions, ancillary revenues now represent as much as 38% of total revenues, with USA-based Ultra LCC Spirit leading the way (IdeaWorks, 2014). Easy-to-develop ancillaries include the unbundling of products such as advance seat selection, charging for the first and/or second checked bag and a passenger transaction fee, especially if more expensive intermediaries are used.

Unbundling is not only practised by LCCs currently. To a greater or lesser extent regional, mainline carriers and LCCs all practise some form of unbundling. It increases passenger choice, for example, giving the option of how much baggage to carry, where to sit, and how to check in, and in doing so giving passengers the option of cheaper fares. Airlines need to use this strategy carefully, in order to generate additional revenue versus having no unbundling. The Region has a high number of short-sector lengths on which to experiment, providing some passengers with potentially cheaper fares. Carriers across the Region should oblige by giving passengers the option of a more basic product, particularly on intra-regional pairs. Developing more commission-based and loyalty programme sales takes more time and resource investment, but are still longer-term options for the Region's carriers to enhance their ancillary services.

4.2.2 Interlining Systems

Providing interlining opportunities for customers can encourage a greater number of connections. Interlining can be increased either with third tier carriers, non-Caribbean carriers or a combination of both. CAL is currently an interline partner with Winair (third tier carrier based in St. Maarten), for instance, but only for through baggage. There is no through ticketing capability between the two carriers, whereas such agreements are in place between Winair and Air Caraibes, Air France and Copa Airlines. Passengers connecting between CAL and Winair can still make secure connections but have to go through the check-in process twice. CAL appears to have full interline capability on the cargo side of the business, which is clearly advertised on their website. This allows shippers and forwarders to book through rates to destinations beyond CALs destinations. The possibility here is for small domiciled carriers to use the cheapest interlining options available (IATA supported) to help increase market coverage and revenue potential beyond the confines of their small fleet capabilities.

4.2.3 Use of Social Media and SMS/e-mail

As discussed in Chapter 3, domiciled CARICOM carriers generally do not benefit from a good customer service record. Social media has offered airlines globally, a wealth of opportunities to engage with customers. It also offers customers a chance to name and shame perceived perpetrators of poor service in front of a global audience, whether carriers are engaged with social media or not.

KLM, which has won the Best Airline on Social Media award (SimpliFlying Awards) for the last three years, answers over 35,000 questions per week in 10 languages within 20 minutes on average. This type of marketing strategy gives airlines a cheap option of engaging with their customers in real-time, and minimises the chance of passengers venting their frustrations elsewhere (Airline Business, 2015). Developing a small team capable of responding in a timely manner over applications such as Twitter and WhatsApp, may go some way to dealing with the fallout from daily and weekly operational problems facing airlines across the Region. It can also be used to post positive feedback, advertise offers and discounts and as an additional tool for staff recruitment (LinkedIn is an increasingly important source for the latter). Receiving mobile phone numbers (optional) and e-mail addresses (as mandatory) as part of the booking process will allow Caribbean carriers to send SMS messages/emails to passengers affected by cancellations, long delays and other reliability problems that can often befall travellers in the Region. According to the latest figures from Flight Stats (period December 14 – February 15), the five main domiciled carriers in the CARICOM area returned an average on-time performance of 68% and an average flight delay of 32 minutes. This was below the average reliability of a selection of foreign carriers serving the Region with the average on-time performance of JetBlue, American, Delta and Southwest over the same period being 76% and an average delay time of 27 minutes. Keeping passengers informed on a real-time basis is therefore crucially important for the Region's domiciled carriers.

4.3 ALLIANCE AND PARTNERSHIP OPPORTUNITIES

4.3.1 Low Level Cooperation Initiatives

The need to create partnerships and cooperation across the Region gained the highest level of consensus among the interviewees. The more debatable question relates to how far integration between carriers could go and what form it could take. There is a wide range of options.

One possibility is for carriers to push for low level forms of integration, especially if there continues to be an absence of Caribbean/CARICOM integration in overriding policy areas. This could be in the form of isolated block spacing and coordinated scheduling on an individual route basis where it is of mutual benefit between carriers to do so. A related question is whether domiciled regional carriers should look to pursue marketing initiatives with other Caribbean-based carriers (mainline and third tier), foreign-based barriers, or a combination of both. The results from an EC procured 2007 study into code-share agreements (Steer Davies Gleaves, 2007), discovered that code sharing was shown to increase capacity and put downward pressure on fares even on routes where levels of competition were reduced. Despite being permitted in the CARICOM MASA and most bilateral ASAs, the interviewees did raise the issue that code sharing has not proven to be popular to date in the Caribbean, whereas it clearly has been more popular among airlines globally. This and other forms of marketing arrangement could be seriously considered as a precursor to deeper forms of cooperation between carriers later on.

4.3.2 Deeper Integration Initiatives

Given that the Region's carriers do not communicate sufficiently with each other, it becomes difficult to envisage a future scenario that involves deep consolidation between them. It may seem more likely, in fact, for deeper forms of integration to occur between well-capitalised foreign carriers and Caribbean-domiciled airlines, although current ownership rules prevent this.

Deeper forms of cooperation typically involve a shift from a marketing focus to a cost focus. A greater level of trust is assumed between players before cost-sharing initiatives, joint procurement activity and even shared equity initiatives, can take place. Geographically, there is only a realistic merger/acquisition possibility in the Southern and Eastern Caribbean between SA, CAL and LIAT. From a network perspective, post-merger retrenchment into one major hub and rationalisation of the others to become feeders is possible. It would also present substantial cost synergies. Currently, non-cooperation in the Southern and Eastern Caribbean prevails. However, the current climate of acute financial hardship may provide the tipping point with this type of strategy.

A possibility in relation to joint procurement relates to expensive IT software in areas of distribution, revenue management and market intelligence data. One airline interviewee stated the difficulties smaller airlines face when trying to get value for money with such software, for example, software providers such as Sabre, Amadeus, IATA, etc. would take domiciled carriers more seriously if software package licences and subscriptions were jointly purchased in bulk. The sharing of training programmes and facilities is another form of deeper integration between carriers where 'quid pro quo' type relationships can be established.

It is interesting to note that the Caribbean is the last region in the world without full membership of one of the three big strategic alliances. Central American carriers such as Copa Airlines and Avianca have the closest major alliance hubs to the core Caribbean/CARICOM area. There are a number of examples of smaller carriers being members of the alliances (e.g. Adria Airways in Star Alliance since 2004 and Middle East Airlines in Sky Team since 2012). Air Mauritius, with a current fleet size of only 12 has been earmarked as a possible future member of Sky Team. Its characteristics are very similar to the CARICOM-domiciled carriers (size, geographical position, access to tourism destinations), yet it turned an operating profit of EUR6 mn to year ending March 31, 2014.

A longer-term alternative is for one or more of the domiciled CARICOM carriers to retain the current ownership model, but to operate a franchising type system for either one of the larger CARICOM carriers or for a large international carrier. At the moment, the regulatory framework in the Region would need to be amended to support this type of system, though such amendments would be easier through an active CARICOM MASA. The possible benefits from this would be the commencement of proper connections across the Region for the first time and a more exact division of business models with the franchisee providing regional feeder connections and the franchisor being able to focus on international mainline services.

4.3.3 Partnerships Between Airlines and Other Stakeholders

It is quite commonplace in today's global industry for airlines to have healthy, consultative relationships with airports, handlers, manufacturers, and tourism organisations. Ryanair is famous for relentlessly pursuing marketing incentives and initial route discounts from regional airports and regional tourism bodies across Europe, for instance. It is also widely believed that Emirates is playing, and will continue to play, a leading role in current and future developments of the Airbus A380, given that it is by far the largest operator of the type in the world. Caribbean-domiciled carriers do not have the same sway over suppliers as the likes of Ryanair and Emirates, but according to interviewees, there is plenty of scope for the establishment of mutually beneficial relationships.

It is quite commonplace in today's global industry for airlines to have healthy, consultative relationships with airports, handlers, manufacturers, and tourism organisations. Ryanair is famous for relentlessly pursuing marketing incentives and initial route discounts from regional airports and regional tourism bodies across Europe, for instance.

In the recent Routes Americas Marketing Awards 2015, a panel of airline senior executives[40] ranked Sangster International Airport in third place in the under-4 million passenger category for its efforts in providing airlines with marketing services to help stimulate traffic; for providing valuable route analysis data; and for pursuing new techniques in developing new routes and maintaining existing ones. Sangster International was privatised in 2003 by the Airports Authority of Jamaica, and is now managed by a private consortium including established airport groups, Abertis and Vantage Airport Group. Perhaps attracting more established airport group experts in the area of airport marketing can replicate the experiences of Sangster International across the Region. One airport stakeholder from Cayman stated it has embarked on a comprehensive study into the benefits of having a Sangster-type model for the Cayman Islands.

Another benchmark partnership is that of the Bahamas Ministry of Tourism and BA. On numerous occasions, the two organisations have worked closely together to market the launch and development of new routes. In 2012, for instance, the launch of new BAH services to four Mid-Atlantic US destinations (Raleigh, Baltimore, Louisville, and Richmond) from Grand Bahama was timed with the opening of the Grand Lucayan Hotel and Resort, and heavily marketed and promoted by Bahamian Tourism Officials. This benefited both, with BAH reaching break-even point within the first 3-4 months of operation, and Grand Bahama Island receiving an additional 60,000 visitors every year (The Nassau Guardian, 2012). This sort of partnership does not guarantee success for individual carriers operating in open-skies type markets, but it gives good performing airlines a golden opportunity to develop profit-generating market shares and revenues.

4.4 ROUTE AND REVENUE GUARANTEE CHANGES

4.4.1 Formalised Structures for Airline Subvention

There is a trade-off to be made between securing foreign carrier airlift through direct revenue support (Marketing Support Agreements and Minimum Revenue Guarantees) for many islands and distorting the market, thereby adversely damaging domiciled carriers' ability to compete.

[40] Drawn from Alaska Airlines, Avianca, JetBlue, WestJet, Allegiant Air and VivaAeroBus.

However, where domiciled carriers do not compete, they might actually benefit through additional intra-regional travel by passengers from outside the Region. That said, domiciled airlines also receive direct financial intervention from their governments to sustain some services, the key distinction being that supporting governments are also owners and within their rights to insert additional equity when considered necessary[41].

Subsidies could potentially be reduced if airports followed the marketing efforts similar to those used by Sangster International (Section 4.3.3) to work with airlines to make routes profitable. While subsidies may be a 'necessary evil', in some cases serious questions have to be asked about developing a more sustainable alternative if this adds up to 1% of tax revenues as it did for at least one OECS state (World Bank Study, 2013).

One sustainable alternative to receiving airport marketing support involves a pan-region wide, transparent and competitive tendering process for operating routes deemed to have inadequate demand, either all year round or on a seasonal basis. Individual states can also identify routes which should be considered 'Essential Services' and, if not commercially viable or attractive, create specific invitations to tender among domiciled carriers only or among domiciled and foreign carriers if the Essential Services link CARICOM with non-CARICOM states. That way subsidies can be better controlled, as carriers would have to focus on costs and services provided in order to successfully run routes. Tender contract periods could be closely monitored and subsidies stopped, if the routes become commercial or increased if demand worsens. Contract terms can also be fixed, giving incumbents the incentive to perform well in order to stay in prime position for the next round of tendering. Examples of air transport tendering internationally include the EU Public Service Obligation System and the US Essential Air Service System.

Organisations such as OECS and CDB, could also provide financial and/or non-financial support based on a thorough socio-economic evaluation of essential, non-profitable routes across the Region. Ideally, the support will be provided in conjunction with the CARICOM Secretariat and cover all networks involving full and associate member states.

a. Third tier carriers could be invited to serve non-economic thin routes currently operated by the Region's mainline carriers, preferably on a commercial basis with smaller aircraft.

b. A limited number of non-viable services between the more clustered island groupings could be shared out with new sea transport alternatives in line with recommendations in the 2015 World Bank Study on Caribbean connectivity.

c. CARICOM countries, in line with the aspirations of CSME and the Revised Treaty of Chaguaramas, would make employment transferability between islands much more possible allowing skilled air transport staff to relocate more freely between islands. This would enable efficiency-driven changes to domiciled carrier networks.

4.5 TAXES AND FEE CHANGES

4.5.1 User Pays Ideas

As noted in Chapter 3, interviewees across the Region are in favour of the 'user pays' principle in relation to developments and improvements in aviation services. In some cases, this has had a big impact on overall fares

[41] Refer to current debate between Gulf and USA carriers regarding difference between subsidy and equity.

paid (see Chapter 2). A problem with this approach, however, is that it reduces the cost to taxpayers who may not be directly using air transport services, but may benefit indirectly from the opportunities made possible by the availability of aviation services.

With a 'user pays' approach, the burden for tax collection is transferred over to the airlines. If this approach is adopted to its maximum level (which the industry is approaching now), the Region's airlines have made it clear that the administration costs involved would be very high, and there would need to be a mechanism between government and airlines to reimburse the airlines for these costs.

4.5.2 Further General Taxation

The alternative, less popular, view is to increase the burden on the general taxpayer for air transport investment including infrastructure programmes. Some interviewees stated that this would be politically very difficult for the Region's governments to implement. However, there may be a way to offer grants, loans or bonds (or a combination of all three) to airports, ANSP providers and airlines for specific projects and initiatives, especially those that have been imposed on the industry either by ICAO, FAA or by individual jurisdiction CAAs. An example would be to offer specific funding for the building of larger security areas and/or equipment. This might lead, at least, to a small percentage reduction in taxes and fees paid by users and may make overall fares a bit more affordable for some travellers.

Public private partnerships have the potential to induce additional investment, but the way they are structured will determine whether the user or the taxpayer ultimately bears the additional cost. The best examples will be those where the scope for increased earnings from commercial activities (for example shopping, parking) is maximised, thereby minimising aeronautical charges to the airlines (and therefore the passengers) and to the general taxpayer. The expansion of Ogle Airport, Georgetown, Guyana, is a benchmark project that could be pursued more widely across CARICOM countries[42].

4.5.3 Uses of Tax and Marketing of Fares to Travellers (in relation to some fees)

Another measure that could be investigated would be to try and separate the uses of taxes and fees to travellers and shippers in much more detail. Airlines, governments, airports and other players in the industry would then all have to take their fair share of the responsibility to improve communication and information in relation to fees, whether it be fuel surcharges (i.e., at what level it starts and at what rate it increases, and why it has to be shown as being passed on to the user); security fees (what it is for and how it is calculated); or departure tax (airport investments that are currently in progress as a result of the tax collected).

It is also incumbent upon regional players to explain the difference between unbundled products and services, and other taxes and charges. Otherwise, users will tend to think there are far too many extras to be paid on top of the basic fare. This can be disheartening particularly when no explanation is given. It is an uphill task to reduce the amount of disquiet in relation to taxes. However, there are clearly some important steps the Region's industry participants can take in disseminating information about such taxes.

Overall, it may be useful to separate out routes that primarily operate in inelastic markets from those that are primarily leisure-related, where travellers have a greater degree of flexibility with respect to choice of destination. Clearly, there is a strong argument from a pure demand perspective to differentiate taxes and charges based on the effect it has on demand. In this scenario, assuming the overall tax intake has to stay the same, inelastic markets would have to bear a heavier proportion of the tax burden relative to elastic leisure-intensive markets.

4.6 REGULATORY IMPROVEMENT SCENARIOS

4.6.1 Multilateral/Bilateral Path to ASAs or a Combination

Policy makers across the Region have stated in ICAO meetings and publically, that they are in favour of progressive moves towards liberalisation (with certain provisos). The choice then becomes whether this should be pursued bilaterally or multilaterally, and the extent to which traffic rights and ownership rules will be opened up as a result. The bilateral option is currently the preferred route among many of the Region's jurisdictions. It affords them more independent decision-making power but, at the same time, puts them in a weakened position when negotiating traffic rights with much larger country markets. This approach can also shift focus away from intra-Caribbean markets, which in some cases are in desperate need of more clarity and freedoms with which to do business. The signing of separate open-skies agreements with the USA, for instance, has allowed dominant USA carriers to use their size and scale to exercise market power. Domiciled carriers stand to benefit more from a CARICOM-USA horizontal type agreement that serves to reduce the size and scale disparities between the two negotiating party airlines. It would also allow domiciled carriers to use their 'home advantage' to generate 'behind' and 'beyond' traffic in the Caribbean Region through respective hubs and on to the USA. This is something that USA carriers

[42] http://www.kaieteurnewsonline.com/2012/05/09/expansion-of-ogle-airport-runway-completed

would find harder to compete with. A liberalised and revised CARICOM MASA, with consensus reached among all full and associate member states of CARICOM, would expose domiciled carriers to more market risk but would also give them a better chance of achieving a level playing field and gaining access to major North/South/Central America and European gateways, markets and equity (if ownership clauses are also liberalised).

Ownership restrictions stemming from the current mix of bilateral ASAs and CARICOM MASA, limits the Region's carriers from attracting outside investment. Being part of the EU, Guadeloupe-based Air Caraibes, for instance, has been able to take advantage of its mainland France-based owners, Groupe Dubreuil, which recently purchased charter-focused Corsair from TUI Group, thereby increasing the carrier's overall market share between France and the French-speaking Caribbean to 50% (Bonnassies, 2015). This automatically gave Air Caraibes a platform to compete more effectively with other carriers such as European-based Air France and XL Airways France. This is in stark contrast to CARICOM-based carriers which do not have access to similar ownership freedoms. It is also worth noting that no redundancies were planned in the aftermath of the Corsair acquisition and instead, the intention was to use the enlarged fleet and extra Paris Orly slots for expansion into the Caribbean Region.

4.6.2 Multilateral Gains in Areas of Safety and Security

There is also a multilateral framework in place for pan-regional safety and security integration (CASSOS). Its activities are limited due to lack of resources, but it could receive a welcome boost if encouraging parallel developments of the CARICOM MASA take place. Meanwhile, individual CAAs and ANSP providers have been acting bilaterally and at different speeds. One regional CAA at the forefront of movements towards Caribbean integration is Trinidad & Tobago CAA. One recent example involved the signing of a collaborative arrangement with the Dutch Caribbean ANSP provider (DC-ANSP) to jointly procure and implement an IDS Dynamic Aeronautical Information Management System, which will make it easier to coordinate services between their respective Flight Information Regions and, in turn provide more flexibility, safety and efficiency for airlines and aircraft using Caribbean air space (IDS, 2014).

The issue with this approach, however, is that for airlines this represents a piecemeal way to make improvements. There would be simultaneous gains all over the Region if implementation of new Aeronautical Information Management equipment, for example, was region-wide and standardised. Dedicating staff to CASSOS is an issue that was highlighted by stakeholders across the Region. Therefore, it may be advisable for CASSOS to seek alternative sources of funding from within or outside of the Region in the initial stages of its development until such a time as some individual country CAA resources can be permanently transferred across to CASSOS.

4.6.3 The Future Role of the Region's CAAs

The predominantly bilateral approach to commercial agreements and security developments after September 11, 2001, has led to a non-uniform set of responsibilities for the Region's CAAs. The Jamaica CAA for instance, has responsibility for ASA negotiations, safety and security oversight and air navigation services, whereas in the OECS states, commercial negotiations take place directly with responsible Transport Ministries. Standardisation of responsibilities across the Region's CAAs would make life considerably simpler for the Region's airlines. Moreover, some form of OECS-type integration on a wider basis, would create cost-saving opportunities for the Region's airlines and could potentially avoid costly duplication of capital and labour investments. There would be a regional headquarters with overall responsibility for regulatory oversight, with existing facilities being converted into outstations. If this involves the surrendering of too much sovereignty, the alternative is to delegate more power to CASSOS in areas of analysis and research of safety; authorising foreign operators; giving advice for the drafting of CARICOM-wide legislation; implementing and monitoring safety rules (including inspections of member states); providing type-certification for aircraft and components; and advising on how security procedures across the Region can be standardised without reducing the level of security or quality to below international standards. This latter possibility is rather like the existing relationship between the European Aviation Safety Agency and individual member state CAAs in the EU, who retain ultimate responsibility and accountability to their governments.

4.7 SOCIAL CONTRIBUTION OPPORTUNITIES

4.7.1 Maintaining Social Impact in More Liberalised Markets

In liberal markets for air transport, airlines are free to enter and exit routes and shift capacity in a way that best utilises their assets. This could lead to service cuts in some of the more peripheral parts of the CARICOM Region. Even in the partially restricted environment in force today, however, the same peripheral states are not well connected to the rest of the Region (e.g. Belize has no non-stop services to any other part of CARICOM) and so the argument for continued protectionism to safeguard local interests reduces significantly. In the majority of cases where bilateral liberalisation has taken place, traffic and underlying business activity has actually increased as is the case between Jamaica, Haiti, Cayman Islands and USA, for instance. One key stakeholder noted that not having a national flag carrier to protect made it easier to push for liberalisation. Either way, fears in relation to reductions in service levels have not materialised in instances where country-pair liberalisation has taken place.

4.7.2 Using Third Tier Carriers to Better Effect

In addition to the above social route tendering process, the Region's third tier carriers have voiced concerns that they are often the forgotten players during higher-level policy and strategic discussions. Annex 1 of the CARICOM MASA clearly presents an artificial barrier to the provision of non-scheduled services more widely across the Region, and seems counter-productive when the Region's larger carriers are complaining of having to continue running scheduled services when there is just not enough demand. As in Section 4.3.2, it may be possible to involve third tier carriers in partnership initiatives with the Region's main domiciled carriers, benefitting both by allowing the carrier with larger fleets to focus on denser routes, and make savings at the same time. Third tier carriers can become part of a larger outfit either in a formalised franchise type model; in some form of shared ownership model; in the form of a deep alliance where heavy interlining and revenue sharing takes place; or in the form of a simple route specific code share/interline.

Third tier carriers could also serve to reduce the overstretched network coverage and multi-stop routings that currently take place in the Eastern Caribbean. These types of routes are prone to poor service performance on an end-to-end basis and reduce the opportunity for hubbing. With more third tier carrier partnerships, the main domiciled carriers could concentrate services without the pressure and worry that smaller communities in the Region would be cut off or adversely impacted economically as a result. The downside of this approach is that some users may complain about the downsizing of aircraft but, if asked, the same communities would prefer this to the alternative of no regular scheduled service at all.

In CARICOM and the wider Caribbean area, third tier carriers are largely privately owned. While it is highly likely that there is no appetite currently for further government investments in domiciled airlines, if governments are able to divest a part or all of a larger domiciled airline, it might be worth investing a percentage of equity in third tier carriers in return for some commitment to run schedules on thinner routes with appropriate aircraft. There are a number of islands which do not currently have a stake in LIAT. Hence, the other option in this regard is for LIAT to scale back operations in island states that do not support them financially and, instead, the same islands could re-invest equity into third tier carriers. This option can also go hand-in-hand with the main carrier/third tier carrier partnership possibility discussed above.

4.8 FUTURE VISION TRANSFORMATIONS

4.8.1 The Airline Consolidation Path

It is true to say that after years of talk and little action, there is a degree of scepticism across the Region in relation to airline consolidation. That said, it is still critical to have a future vision of the CARICOM and Caribbean Air Transport Industry that involves some form of consolidation. Assuming a greater role for CARICOM in the future, a facilitating regulatory framework could be put in place for airline revenue and cost sharing, the creation of deep alliances and merger/acquisition activity. A transformative opportunity in relation to consolidation may involve foreign carriers either individually or in the form of one of the major strategic alliances, potentially bringing more traffic to the Region. These alliances compete with each other on market coverage and the number of connecting destinations served worldwide. Accordingly, with the right regulatory environment in place, it would only be a matter of time before the Caribbean area becomes a target for one of the big alliances. The Region's carriers may want to create a position for themselves where they eventually become partners or full members of one of these alliances, able to use their respective positions within the alliances to fortify their Caribbean market positions, and benefit from the cost and revenue synergies that take place within them.

4.8.2 The Non-Consolidation Path

A recent CAPA analysis of CAL (2014) suggested that it is not the right time for CAL to start thinking about further consolidation with other carriers until such a time as it get its own house in order, and is able to reach out in a much stronger position to other domiciled carriers. The issue with this viewpoint, is that domiciled carriers have tended to lurch from one short-term crisis to another. Hence, there is rarely a good time to start reflecting and thinking more openly about logical options with a cohesive CARICOM policy framework in place.

To date, CAL has not been able use its merger with AJ to good effect. However, this can be partly explained by the carrier's poor network and financial decisions in the aftermath of the AJ acquisition, rather than the opportunity that the acquisition in itself presented to CAL. An interesting counterargument to the consolidation route refers to the market itself and the objective of traffic and capacity growth. A recent analysis by Aircraft Commerce showed that the only regional market to show reductions in seats and flights over the period 2004 to 2014 was intra-Caribbean. In 2004, there were over 16.7 million seats (two-way) available on over 380,000 flights. By 2014, this had reduced to 11.9 million seats on 304,000 flights representing a reduction of 29% and 20%, respectively. The article explains that the primary cause of this reduction was a result of airline consolidation and network cuts.

Conversely, the Central America-Caribbean market experienced a 159% growth in seats over the same period, which was largely due to the efforts of Panama-based Copa Airlines to expand into different parts of the Caribbean.

The key point here is that the consolidation process often has different phases and only when strong hub positions are created (as is the case with Copa in Panama City), can previous consolidation efforts turn into significant market and traffic growth. It would clearly take a long time for any consolidated CARICOM domiciled carrier to reach the point where they can expand successfully from a strong base city/airport.

4.8.3 Regulator Harmonisation Path

Harmonisation of rules in relation to ASA and traffic rights, foreign ownership and privatisation, aircraft and personnel permits/licencing and provision of route revenue guarantees and subsidies will make the airline business in the Region a lot simpler and, if implemented fairly and without hidden barriers, would do a lot to create a level playing field on which airlines could compete or consolidate, depending on the market. Some options are presented here:

a. ASAs – very liberal, liberal or partially restrictive. Scrap existing bi-laterals or keep them in effect?

b. Privatisation – permitted or not and, if so, what type of privatisation (full, trade sale, consortium) and should foreign carriers/companies be invited to invest.

c. Permits and licenses – should there be one training point and one licensing authority or multiple but all following a standardised policy? What about accompanying work rights and free movement of labour/assets?

d. Route guarantees to foreign carriers – allowed no restriction, not allowed, allowed under strict route criteria only.

4.8.4 Creation of Hub and Feeder System

A future vision of the CARICOM area that leads to greater hubbing activity may involve individual winners and losers in terms of overall traffic volumes, and related job and spending opportunities in the wider economy. It is important to know therefore what the politically acceptable criteria should be for shareholder governments to allow the Region's carriers to do this. Some possible hubbing criteria in the Region could be:

a. Maximum cost efficiency and maximum revenue generating potential (by extension to minimise future government hand-outs).

b. Maximise connectivity and number of Origin and Destination pairs served intra- and extra-Caribbean.

c. The job displacement rate and the extent to which mechanisms would be in place for providing employment alternatives in the same country or in neighbouring countries.

d. Level of union representation and opposition to determine the feasibility of shifting of bases and flights between islands.

4.8.5 Role of Foreign Carriers

The role of foreign carriers based principally in Central America, North America, South America and Europe has to be carefully considered. In countries like the Dominican Republic, and now increasingly in Jamaica, a greater presence of foreign carriers and a reduced domiciled carrier presence has coincided with traffic growth especially in leisure-intensive markets. There is no reason to think that the same would not be repeated in other parts of the Caribbean, if and when it becomes easier for foreign carriers to gain a foothold in these jurisdictions. The potential downside is that foreign carriers are purely commercially focused and, in the absence of basing and cabotage rights, they are not able to partake in much Foreign Direct Investment or intra-regional transport in the Caribbean area. It is important for regional level discussions to take place about the sort of role and function foreign carriers should play in the future beyond the important role they currently play today in extra-regional markets. Armed with requisite traffic rights, foreign carriers have been known to establish bases and grow in foreign countries (e.g. Ryanair across Europe), but they have also been known to be less tied down to individual regions and countries, and would waste little time in making cuts if it made commercial sense to do so.

There are clearly important and pressing choices to be made both on this issue and on all the other themes discussed in this chapter.

CHAPTER FIVE: AGENDA FOR MEANINGFUL TRANSFORMATION

Building on the previous discussion of the many issues facing the Region's airlines, and drawing on best aviation practices elsewhere, this chapter proposes practical and feasible recommendations for meaningful transformation of the Regional Air Transport Sector. First, we revisit the major issues contributing to the parlous state of air transport in the CARICOM Region.

5.1 WHAT MUST BE ADDRESSED: THE PRIORITY AREAS.

5.1.1 Financial Performance of the Region's Major Airlines

Over the last five years, the airlines of the Region have consistently recorded losses. By way of example, the aggregate of accumulated deficits for CAL, LIAT and BAH are estimated at approximately USD1 bn.

Some measures can be taken unilaterally by airlines. For example, some routes or airlines may be overstaffed or some practices may be inefficient. Fare structures may not maximise revenues, or ancillary revenue opportunities may be foregone. However, other forms of cost control or measures to improve returns on expenditure rely on economies of scale and scope, which point to better cooperation by aviation organisations in order to rationalise schedules, improve load factors, increase revenues, drive down costs, and generally improve balance sheets. A CARICOM carrier to industry comparison of competitiveness in these areas is a reminder of the need for improvement, which additional coordination could enable (see Table 5.1).

TABLE 5.1: COMPETITIVENESS INDICATORS – CARICOM CARRIER AVERAGE AND GLOBAL AVERAGE

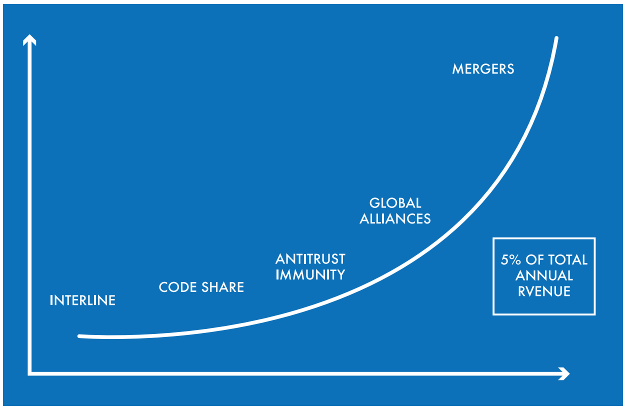
COMPETITIVENESS BENCHMARK	CARICOM AVERAGE (LATEST FIGURES 2012/13)	INDUSTRY AVERAGE (LATEST FIGURES 2013)
Cost per ASK (US cents)	9.5	11.4
Revenue per ASK (US cents)	7.54	12.2
Average load factor (%)	71	80
Average sector length (km)	1,104	1,881*
Net margin (%)	-15.4	1.8

SOURCE: IATA WATS 58 (2014), FLIGHT GLOBAL AND CAPA WORLD AVIATION YEARBOOK (2013).

*BASED ON 13 EUROPEAN NETWORK CARRIERS ONLY IN THE YEAR 2012.

Consolidation and cooperation could come about gradually as knowledge and trust are built up between players across the Region, or between players in the Region and external carriers. Historically, the industry at large goes through an evolutionary process that moves from lower levels of cooperation through to fully merged entities (with the right regulatory permissions). Figure 5.1 demonstrates the different cooperation stages available to carriers and a conservative estimate of annual cost/revenue benefits from full consolidation.

FIGURE 5.1: COST AND REVENUE SYNERGIES FROM DIFFERENT STAGES CONSOLIDATION



SOURCE: KIRBY, 2013

The above synergy estimates are based on average yearly cost/revenue data for the four recent USA mergers (Kirby, 2013). An average of 70% of overall synergies has come from the revenue side of the business and a further 30% has come from cost synergies. All other forms of cooperation are assumed to have a lower synergy potential than mergers due to the lower level of commitment required.

5.1.2 Better Governance

As indicated in Chapter 3, governance reform needs urgent attention if the fortunes of the Region's airlines are to be turned around. Starting at the Board/Executive level, there must be a complete rethink of how the institutions are governed. There needs to be an end to government intervention in the day-to-day operations of the aviation organisations.

From the many stakeholder responses on this point, this is obviously a key area that needs urgent attention if the fortunes of the Region's airlines and the service they provide, are to be turned around. There has to be an end to government intervention in the management of the aviation organisations, except at the highest strategic, policy-making level. This strategic policy making should be done in unison with other governments throughout the Region, and CARICOM is the obvious broker to coordinate these cooperative efforts in the Region's Air Transport Sector.

5.1.3 Improved Air Transport Network

In Chapter 4, it was noted that it may be possible to involve third tier carriers in partnership initiatives with the Region's main domiciled carriers. This could create a win-win situation, allowing the carrier with larger fleets to focus on denser routes and make standardisation savings at the same time. Meanwhile, third tier carriers can become part of a larger outfit either in a formalised franchise-type model, in some form of shared ownership model or in the form of a deep alliance where heavy interlining and revenue sharing takes place.

5.1.4 Harmonisation of Regulatory System

In Chapter 3, it was noted that harmonisation of aviation laws, regulation and regulatory practice in the Region is essential to facilitate the seamlessness and efficiency of airport and airline operations throughout the Region. Common laws and regulations will ensure certainty to encourage investment, growth and cooperation initiatives among the players.

All airlines interviewed stated that the lack of harmony and resources in the Region's aviation regulatory institutions caused them operational and financial problems, and also hindered growth and attempts at inter-airline cooperation. Further, it was reported that the agency established to drive and implement regulatory harmonisation in the Region cannot do its job due to lack of funding from certain state members.

It was also stated in Chapter 4, that harmonisation of rules in relation to air service agreements and traffic rights; foreign ownership and privatisation; aircraft and personnel permits/licencing; and provision of route revenue guarantees and subsidies will make the airline business in the Region a lot simpler. If the foregoing are implemented fairly and without hidden barriers, this will contribute immensely to the creation of a level playing field.

5.2 HOW CAN THESE ISSUES BE ADDRESSED?

There have been many attempts to solve the obvious problems of Caribbean aviation collectively and by collaboration over the years. Jean S. Holder in his seminal work Don't Burn Our Bridges (2010, Chapter 4), points out that these efforts started as early as 1969.[43]

The possible reasons for the lack of progress in these endeavours are:

a. frequent changes at government level;

b. a better state of CARICOM economies in earlier times; and

c. a lack of definitive transformative and feasible pathways for change in previous studies.

We previously indicated (Section 2.4.6) that a history of protectionist measures and nationalistic ideals has led to a series of missed opportunities for deeper integration and consolidation between carriers, marginalising pan-

[43] He goes on to describe these efforts over the following decades.

regional organisations such as the CARICOM Secretariat, which has not been able to find enough areas of common interest among member states to encourage them to follow a uniform air transport policy.

For instance, the Trinidad & Tobago Government's fuel subsidy to CAL discouraged entry into the market by other players. A World Bank study noted that fierce competition between the islands to attract tourists from abroad had masked the opportunities that might prevail from taking a coordinated approach towards promoting Caribbean tourism.

So what can be done? It is submitted, that a totally fresh Two Pathway Solution must be embarked upon:

a. a quick-wins pathway to immediately start addressing the financial problems of the airline sector; and

b. a longer-term pathway to comprehensively fix the underlying problems of the aviation sector.

5.2.1 The Quick-Wins Pathway

An airline association of the CARICOM-domiciled airlines must be immediately established so that best practice, synergies and economies of scale could be exploited as quickly as possible.

The new association would quickly appoint a working group to examine ways to act together to identify measures to bring costs down and to increase revenues. The avenues investigated should be, but not limited to:

a. joint negotiating and purchasing of consumables (fuel, oil, etc.);

b. pooling of aircraft parts and joint purchase of parts, where appropriate;

c. cooperation in use of components overhaul – Components Services Program;

d. pooling of maintenance and MRO activity;

e. pooling of passenger handling activity, where possible;

f. code sharing, where possible;

g. dove tailing and rationalisation of schedules;

h. sharing of IT platforms, such as reservation and check-in systems; and

i. pooling of training facilities; and

j. identifying best practice from elsewhere for increasing revenues.

In the interest of time, the activity of this working group could start as soon as at least three airlines have joined the new CARICOM Airline Association, and expand as more airlines join.

5.2.2 The Longer-Term Pathway: Setting up of an Air Transport Reform Authority

Many stakeholders and commentators have expressed the view that the notion of "one Caribbean Airline" is probably "pie-in-the sky" and impossible to achieve in reality. However, closer cooperation in terms of long-term policy and strategy is vital.

The 15 CARICOM member states should immediately establish an Air Transport Reform Authority (the Authority), representing each member state[44]. This would be a full-time body made up of experienced air transport professionals who would jointly have two or three main responsibilities:

a. to develop a region-wide binding aviation policy, that best serves the interest of the Regional Aviation Industry as a whole; and

b. to develop a plan for implementing the Regional Policy.

The 15 Authority members would be highly-qualified and experienced aviation professionals, with proven track records in the management of aviation enterprises. Members would report directly to their Prime Ministers/ Heads of Government in an official capacity, as for example "Regional Aviation Advisors", to avoid a clash with existing constitutional protocols and ministerial responsibilities.

The Air Transport Reform Authority is envisaged as an aviation "super-body" within CARICOM, and supported by the CARICOM Secretariat, but deriving its powers from the Heads to whom they report directly.

Funding would initially come from the governments constituting the Authority, and the Heads who are directly responsible for the Authority, would guarantee the necessary funding level. The proration of the individual country subscription would be decided by the Heads, based on an assessment of the gain to be expected from each country by the work of the Reform Authority. Consideration could also be given to a "Trust Fund" mechanism, as used in the establishment of the Caribbean Court of Justice.

The Authority would produce regular progress reports against pre-agreed targets in developing and implementing the Policy. Further, the Authority would satisfy the necessary expedients of transparency and accountability, by being mandated to:

a. keep the public informed of all facts and information relating to their work, current and past, via a publicly

[44] CARICOM associated members could have "observer status".

accessible web site;

b. hold regular public information sessions (e.g. via press conferences) to keep the public informed about their work and answer questions.

The first task of the Authority would be to draft a comprehensive aviation policy and plan for the entire CARICOM Region, taking into account the views of as wide a range of the Region's aviation stakeholders as possible, including the travelling public. The Authority would then continue on to supervise the implementation of the Pan-Region Aviation Plan.

5.2.3 Creation of a Regional Air Transport Policy

The Policy would speak to all aspects of regional air transport, tackling a range of difficult topics in the following categories:

a. Strategies for Airline and Network Restructuring:

   i. a common vision and mission for CARICOM aviation that would set the road map for the rationalisation and improvement of the Caribbean Air Transport Sector;

   ii. expansion of the association of CARICOM-domiciled airlines to include other members. This organisation could exist either within or outside of ALTA.

   iii. a regional network for optimal connectivity throughout the Region;

   iv. identification of the best possible deployment of existing aviation assets to achieve optimal connectivity and, if necessary, identification of additional assets needed, etc.;

   v. the role of the Region's airports in improving connectivity throughout the Region. This would include, resulting from the built network, identification of airports that would serve as hub airports and as secondary airports; expected throughputs; infrastructure requirements; etc. The Policy should include connectivity provisions with inter-modal travel; and

   vi. the strategy for regional development of air freight that seeks to address interviewee and secondary data concerns about low revenue potential and high costs of provision (World Bank Study, 2015).

a. Governance

   i. reformed corporate governance of the state-owned and state-run organisations, to include commitment to suitably qualified and capable professionals in positions of power in these organisations and a mechanism for selection and oversight of this top management. Clear and comprehensive guidelines for Boards of Directors (Boards) to include qualifications for membership, their roles and responsibilities with emphasis on independence in the management of the enterprises;

   ii. mechanisms for supervision by the Authority of the Boards of aviation organisations to ensure transparent and proper use of public funds and to provide guidance on major commercial and fleet decisions; and

   iii. rigid financial reporting mandates for the aviation entities in the Region in recognition of the need for these tax-payer-owned enterprises to be accountable to the public.

b. Harmonisation of the Regulatory System and of Regional Policy in Critical Areas

   i. funding of CASSOS to enable harmonisation of aviation laws and regulations, as well as personnel licensing practices;

   ii. a regional policy on CARICOM representation on the ICAO Council – one of the two governing bodies of ICAO;

   iii. regional economic/commercial regulation of aviation in compliance with the Revised Treaty of Chaguaramas (Chapter 8) on competition policy and consumer protection;

   iv. a regional approach to MASA with foreign states. The role of state entities in the provision of aviation services, such as ground handling and air navigation services;

   v. common strategies to encourage private participation and investment in the Air Transport Sector.

   vi. a regional policy for outside investment in the Region's state-owned aviation sector, that is – foreign ownership (% shareholding) limits; and retention of control over certain decisions (e.g., network, fleet, headquarter location, etc.);

   vii. a common approach towards revenue guarantees to foreign carriers;

   viii. a regional approach to aviation taxes and fees;

   ix. the role of CARICOM institutions in possible harmonisation of labour laws and practices, and bankruptcy laws; and

   x. a common approach to consumer protection legislation – beyond that covered in the Revised Treaty of Chaguaramas.

The overall aim of the Policy must be to craft a safe, efficient and reliable regional air transport sector operating at a reasonable cost level, which is compliant with international safety norms and practices and following global industry best practises, as much as possible.

The Policy would have to be agreed upon by all the CARICOM member states and have the backing of the majority of aviation stakeholders. The outcome of the interviews conducted in this study would suggest that this type of consensus among the Region's aviation stakeholders would not be difficult to obtain.

An airline association of the CARICOM-domiciled airlines must be immediately established so that best practice, synergies and economies of scale could be exploited as quickly as possible.

5.2.4 Development of a Regional Air Transport Plan

Having crafted a region-wide aviation policy, the Authority will be tasked to develop a regional aviation plan that details the steps necessary to implement this policy. This plan could be drafted through a series of working consultations with the relevant aviation stakeholders, organised into working groups of experts.

The Plan must be comprehensive and would include details of an airport plan for the Region in support of the network and plans for all the aviation service providers such as ground handlers.

5.2.5 Implementation of the Plan

The Authority would closely supervise the implementation of the Regional Aviation Plan. It would have a continuing role to ensure that the Regional Aviation Policy is properly carried out in the form and manner as originally intended. The Authority will screen appointments to the decision-making bodies of all aviation organisations owned or run by the states.

The Policy, and therefore by definition the Plan, would have to be adjusted and amended from time-to-time in order to meet changing circumstances in the global aviation industry and in the regional market's needs and circumstances.

It must be stressed that, at all stages, the Authority must have the backing and authority of all the relevant shareholders government as well as private sector. Notions of sovereign competitive interests, political considerations and short-term business/economic expedients must be subjugated to the overriding need to attend to the Region's Aviation Sector first and foremost, bearing in mind the historical crippling losses incurred by the aviation shareholders and the taxpayers of the Region.

It is submitted that the above two-track agenda would be the quickest and most widely accepted methodology for addressing the question of how to make air transport work better for the Caribbean. We do not expect that this would turn the industry into a highly profitable one, but the extent to which it can reduce the cost of providing benefits to the wider economy would be welcome. Indeed we could expect to see these benefits increase as connectivity into and within the Region increases.

APPENDIX 1: APPROACH AND METHODOLOGY

In accordance with the objectives set in CDB's Terms of Reference for this study, namely to provide fresh thinking on the transformative shifts in policies, practices and institutions that are required for the enhanced performance and improved viability of the industry, the following approach and methodology was selected.

The Study adopted a primarily qualitative approach, with some supporting cost, efficiency and market estimates. The transformative 'how to' agenda for the industry to first select corrective actions and then devise the necessary steps required for implementation, goes far beyond the powers of a detailed quantitative assessment. Therefore, the following methods were selected in order to maximise chances of obtaining a fair reflection of industry players' views and opinions and in order to detect levels of agreement/disagreement:

a. Expert interviews with domiciled airlines and other key air transport stakeholders in the study region.

b. Supporting desktop research and data analysis.

c. Triangulation of interviews, desktop research and previous studies on the subject, see Figure A1.1.

For the completion of this study, well-established industry databases, namely, OAG Schedules, Flight Global, Innovata Schedules and DIIO traffic data were employed to provide background assessments of CARICOM markets and firm behaviour taking place around the time of the expert interviews.

Expert Interviews

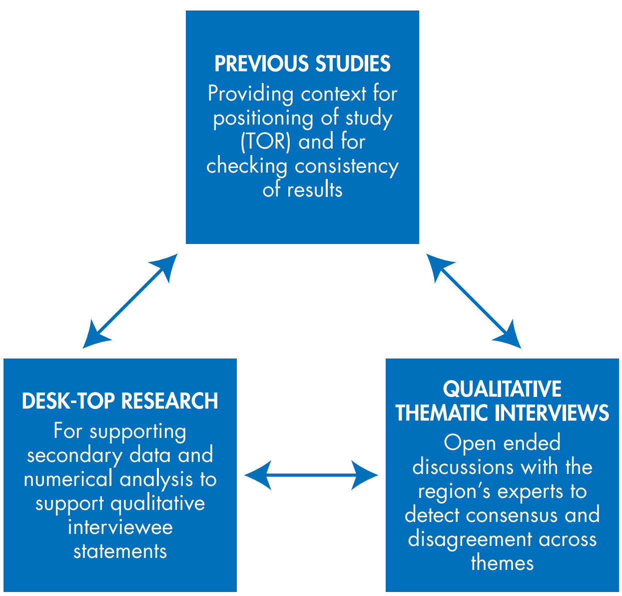
In-depth interviews based on pre-set questions, but with some scope for participant deviation, were selected to

A thorough literature search was carried out. This purpose of the review was not only to inform this study of the issues faced by the Caribbean Air Transport Industry, but also to help to put a historical time-frame on these issues and assist in identifying the remaining gaps that paved the way for this study.

maximise scope for open and frank discussions. The teleconferencing/meeting style of the interviews (with two interviewing consultants and sometimes an interviewee team) served to enhance the quality of the discussions and the richness of the information provided. Over 25 hours of oral transcripts were collected. An accompanying data request was forwarded to participants with the objective of providing a high level of factual support to the opinions and views expressed in the interviews. This supporting request did not form a central part of the data collection effort. Participants were furnished with a CDB confidentiality statement, which generally meant points made by individuals, could not be attributed to them directly. Despite having access to this agreement, no airline stakeholder wished to divulge detailed financial and business data in relation to their operations.

Initial interviews lasted between one and two hours and in some cases follow-up conversations took place where it was necessary to fill some gaps. Due to the interviewees being Chief Executives or Managing Directors, the information provided was deemed to be reliable, current and credible. Secondary sources were still used to draw out any remaining inconsistencies, however, as part of the triangulation process (see below).

FIGURE A1.1: METHODOLOGY PROCESS MAP



Desktop Research

Desktop research formed a central part of the Study. The range of stakeholders involved and the number of separate countries affected meant that many different sources were consulted in order to fill in any remaining gaps after the interviews, to support or oppose expert interviewee viewpoints and opinions, and finally to support the quantitative estimations related to potential cost saving, efficiencies or market benefits that might accrue. A non-exhaustive list of published and unpublished categories of material was used:

a. Government statements, either directly or indirectly through the established press in relation to air carrier financial positions and strategic operational moves.

b. Subscription only databases such as Flight Global and OAG for secondary market data, directory information and to examine aviation specific new items and other areas of performance.

c. Published material from aviation bodies including ICAO, IATA, ACI, ALTA, Civil Aviation Authorities, Boeing, Airbus for access to Caribbean-related meeting and conference material, aggregate market, cost and performance statistics, airport data and rankings and Caribbean-specific forecast data.

d. On-line sites such as Flight Stats for airline reliability data, Skytrax for airline service data and AIU for directory information.

e. Related bodies with an influence or interest in air transport for air transport facilitated tourism data and socio-economic indicators/publications that make at least some reference to air transport issues across the Region.

Literature Search and Triangulation

A thorough literature search was carried out. This purpose of the review was not only to inform this study of the issues faced by the Caribbean Air Transport Industry, but also to help to put a historical time-frame on these issues and assisting in identifying the remaining gaps that paved the way for this study. Previous studies were separated out into core studies that covered similar themes and geo-political area and global, neighbouring region studies that covered similar air transport themes and issues. Previous literature was frequently used as part of the positioning and scoping of recommendations and findings, and to make checks on reliability and validity of the data collected for this study.

Note: Confidentiality and Anonymity

Many of the interviewees asked for the Report to be written without making specific reference to 'who said what' but rather to summarise the key messages and consistencies coming out of the interviews as well as any sources of disagreement. It was still possible to contrast different airline viewpoints as well as compare airline opinions with those of other air transport stakeholders in the Report. The remit of this study is quite broad and relevant generalisations to the CARICOM/wider Caribbean area, as a whole, had to be formulated, so while it is a limitation in itself to have a published work without direct attribution, it has had no substantive impact on the Report's ability to make recommendations for the industry and nor does it impair the reader's ability to comprehend and respond to such recommendations.

APPENDIX 2: CARIBBEAN AIRPORT TAXES & FEES (CHARGED INDIRECTLY THROUGH AIRLINES)

CITY	COUNTRY	AIRPORT CODE	TAXES & FEES (USD)
Kingston	Jamaica	KIN	114.40
Montego Bay	Jamaica	MBJ	106.11
Santo Domingo	Dominican Republic	SDQ	105.70
Punta Cana	Dominican Republic	PUJ	105.70
Puerto Plata	Dominican Republic	POP	105.70
Port-au-Prince	Haiti	PAP	99.20
Nassau	Bahamas	NAS	99.10
	Antigua	ANU	98.10
Providenciales	Turks and Caicos Islands	PLS	93.10
Fort de France	Martinique	FDF	90.20
Mexico City	Mexico	MEX	89.95
Pointe-A-Pitre	Guadeloupe	PTP	89.40
Grand Cayman	Cayman Islands	GCM	87.75
	Grenada	GND	77.40
San Jose de Cabo	Mexico	SJD	75.26
	St. Marten	SXM	75.01
Managua	Nicaragua	MGA	73.10
	Aruba	AUA	70.60
	St. Kitts and Nevis	SKB	70.10
Belize	Belize	BZE	67.95
Cozumel	Mexico	CZM	67.24
	Bermuda	BDA	66.40
Panama City	Panama	PTY	65.60
Cancun	Mexico	CUN	65.49
Port-of-Spain	Trinidad & Tobago	POS	64.70
Roatan	Honduras	RTB	63.10
San Salvador	El Salvador	SAL	60.23
Marsh Harbour	Bahamas	MHH	59.10
Georgetown	Bahamas	GGT	59.10
North Eleuthera	Bahamas	ELH	59.10
	St. Lucia	UVF	58.50
Guatemala City	Guatemala	GUA	55.70
Bridgetown	Barbados	BGI	55.30
San Jose	Costa Rica	SJO	47.43
Liberia	Costa Rica	LIR	46.92
	St. Croix	STX	16.20
	St. Thomas	STT	16.20
San Juan	Puerto Rico	SJU	11.20
Key West	Florida	EYW	11.20

SOURCE: PRIOR TO BOARDING (2014).

NOTE: TRAVELLER RESEARCH FROM AMERICAN AIRLINES WEBSITE VALID FOR DECEMBER 2014.

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