



# REVIVAL OF UGANDA'S NATIONAL CARRIER

## FEASIBILITY STUDY



# Table of Contents

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<b>List of Tables</b> .....	<b>iii</b>
<b>List of Figures</b> .....	<b>v</b>
<b>List of Annexes</b> .....	<b>vi</b>
<b>Foreword</b> .....	<b>vii</b>
<b>Acknowledgement</b> .....	<b>viii</b>
<b>Executive Summary</b> .....	<b>ix</b>
<b>1.0 Background</b> .....	<b>1</b>
1.1 The Macroeconomics of Uganda.....	1
1.2 Historical overview of aviation in Uganda.....	2
1.3 History of Airlines in Uganda.....	3
1.4 Historical Overview of Uganda Airlines Corporation.....	4
1.5 Lessons Learned from Successes and Failures.....	5
1.6 Recent Entebbe Airport traffic trends.....	7
1.7 The case for the National Carrier.....	8
1.8 Purpose and Objectives of the feasibility study.....	10
1.9 Methodology.....	11
<b>2.0 Project Concept and Structure</b> .....	<b>12</b>
2.1 Project Concept.....	12
2.2 Airline Investment options.....	13
2.3 Assumptions.....	15
2.4 Scope.....	17
2.5 Analysis techniques.....	19
2.6 Data used.....	20
<b>3.0 Origin Destination Traffic Analysis</b> .....	<b>21</b>
3.1 National Air Traffic Analysis.....	21
3.2 Regional Origin Destination Traffic Analysis.....	22
3.3 International Origin Destination Traffic Analysis.....	23
3.3.1 Passenger Projections.....	23
3.4 Cargo Traffic Analysis.....	24
<b>4.0 Feasibility Evaluations for Aircraft Purchase Option</b> .....	<b>26</b>
4.1 Financial Appraisal: Option1 Regional Airline.....	26
4.2 Financial Appraisal: Option2 International Long Haul Airline.....	27
4.3 Financial Appraisal: Option 3 Abridged Income Statements.....	29
4.4 Financial Appraisal: <b>Option 3</b> Balance Sheets 15 Years.....	31
4.5 Financial appraisal: <b>Option 3</b> Cash Flow Statements 2016-2030.....	32
4.6 Financial Appraisal: <b>Option 3 Regional and International Combined</b> .....	34
4.7 Economic Benefit Appraisal: <b>Option 3:</b> .....	34
4.8 Sensitivity Analysis.....	37
4.9 Direct Employment Benefits.....	37

<b>5.0</b>	<b>Considering the Option of Leasing Aircraft .....</b>	<b>39</b>
5.1	Assumptions under the leasing option.....	39
5.2	Appraisal of Leasing Option.....	40
5.2.1	Financial Appraisal of the Option to Lease and operate only regional Aircraft.....	41
5.2.2	Financial Appraisal of the Option to Lease and operate only International Aircraft .....	44
5.2.3	Financial Appraisal of the Option to Lease and operate both International Aircraft and regional aircraft: Combined Lease.....	47
<b>6.0</b>	<b>High Level Project Risk Analysis .....</b>	<b>51</b>
<b>7.0</b>	<b>Summary of the Feasibility Evaluations.....</b>	<b>54</b>
7.1	Aircraft Purchase Scenario.....	54
7.2	Aircraft Lease Scenario .....	54
7.3	Further Comparative Analysis of Financial and Economic Benefits for the Preferred Option .....	55
<b>8.0</b>	<b>Conclusions and recommendations.....</b>	<b>57</b>
<b>9.0</b>	<b>Annexes.....</b>	<b>58</b>

## List of Tables

---

Table 1: Summary History of the National Carrier .....	3
Table 2: Uganda Airlines Operating Summary 15 Years 2016-2030.....	14
Table 3: Operating Statistics: Uganda Airlines Plan 2016-2030 .....	14
Table 4: Summary of Key assumptions .....	15
Table 5: Conversion Factors .....	16
Table 6: Routes from Entebbe and their associated operator during 2013 .....	22
Table 7: <b>Option:1Regional Operations</b> Income Statements .....	26
Table 8: <b>Option:1</b> Balance Sheets .....	26
Table 9: <b>Option:1</b> Cash Flow Statements .....	27
Table 10: <b>Option:1</b> Net Present Value computation at discount rate of 12% .....	27
Table 11: Option: 2: <b>International</b> Income Statements .....	27
Table 12: Option:2 <b>International</b> Balance Sheets .....	28
Table 13: Option:2 Cash Flow Statements .....	28
Table 14: <b>Option: 2</b> Net Present Value computation at a discount rate of 12% .....	29
Table 15: The Airline's abridged profitability profile is shown below. Full details of the profit & loss accounts are given in ANNEX: 4 .....	30
Table 16: The resulting Balance Sheets for the 15-year plan for the airline are given in the Table below (Details in ANNEX: 6 Page 43). .....	31
Table 17: The Abridged Cash Flow Statements for the 15-year simulation period .....	33
Table 18: The NPV for <b>Option 3</b> .....	34
Table 19: The abridged NPV computation is shown below while full details are at ANNEX: 15 .....	35
Table 20: Economic Benefit Appraisal: Option: 3 Abridged Income Statement (Economic).....	36
Table 21: The computed Economic Benefits Cash Flow Statements for Regional and International combined are shown below. ....	36
Table 22: Sensitivity Analysis for Option 3 of the combined Regional and International .....	37
Table 23: A summary of jobs created: regional operations.....	38
Table 24: A summary of jobs created: international operations.....	38
Table 25: A summary of leasing costs .....	39
Table 26: Profit and loss account for the option to lease and operate regional aircraft.....	41
Table 27: Cash flow statement for the option to lease and operate regional aircraft.....	42
Table 28: Balance sheet for the option to lease and operate regional aircraft.....	43
Table 29: Profit and Loss Account for the option to lease and operate International aircraft .....	44
Table 30: Cash flow statement for the option to lease and operate international aircraft.....	45
Table 31: Balance sheets for the option to lease and operate international aircraft.....	46

Table 32: Financial Profit and loss account for the option to lease and operate international and regional aircraft .....47

Table 33: Economic Abridged Profit and loss account for the option to operate a combined lease of international and regional aircraft.....48

Table 34: Abridged Cash flow statement for the option to operate a combined lease of international and regional aircraft .....49

Table 35: Balance Sheet for the option to operate a combined lease of international and regional aircraft ..... 50

Table 36: Risks and Mitigation measures.....51

Table 37: Summary of feasibility evaluations.....55

Table 38: The share of minimum economic benefits (in USD) .....56

## List of Figures

---

Figure 1: Passenger traffic at EIA.....	8
Figure 2: Project Structure.....	13
Figure 3: Average Yield Passenger.....	18
Figure 4: Passenger Load Factors.....	18
Figure 5: Passenger Traffic at EIA.....	21
Figure 6: Traffic Data for proposed routes.....	23
Figure 7: Passenger projections.....	23
Figure 8: Key Exports and their destinations.....	24
Figure 9: Trends for the main categories of exports out of Uganda.....	25
Figure 10: Option 3; Profit and Loss 2016-2030.....	29
Figure 11: Closing Bank Balances for 15 years.....	32
Figure 12: Option 3; NPV of Net Cash flows.....	34
Figure 13: Uganda Civil Aviation Authority Effective Implementation scores based on the June 2014 ICAO audit review.....	53
Figure 14: Option3 Economic Benefit compared with financial Benefit.....	56

## List of Annexes

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ANNEX 1: FINANCIAL PLANNING ASSUMPTIONS- REGIONAL&INTERNATIONAL OPERATIONS .....	58
ANNEX 2: ECONOMIC BENEFIT ASSUMPTIONS .....	60
ANNEX 3: PROJECTED REGIONAL & INTERNATIONAL ROUTE NETWORKS.....	61
ANNEX 4: DETAILED PROFIT & LOSS ACCOUNTS: 15 YEARS 2016-2030 <b>OPTION: 3</b> TOTAL AIRLINE .....	62
ANNEX 5: DETAILED CASH FLOW STATEMENTS: 15 YEARS 2016-2030 <b>OPTION: 3</b> TOTAL AIRLINE.....	63
ANNEX 6: DETAILED BALANCE SHEETS: 15 YEARS 2016-2030 <b>OPTION:3</b> TOTAL AIRLINE .....	64
ANNEX 7: DETAILED INCOME STATEMENTS: 15 YEARS 2016-2030 <b>OPTION: 2</b> INTERNATIONAL LONG-HAUL SERVICES .....	65
ANNEX 8: DETAILED CASH FLOW STATEMENT: 15 YEARS 2016-2030 <b>OPTION:2</b> INTERNATIONAL LONG-HAUL SERVICES.....	66
ANNEX 9: DETAILED BALANCE SHEETS: 15 YEARS 2016-2030 <b>OPTION:2</b> INTERNATIONAL LONG-HAUL SERVICES .....	67
ANNEX 10: DETAILED PROFIT & LOSS ACCOUNTS: 15 YEARS 2016-2030 <b>OPTION:1</b> REGIONAL SHORT-HAUL SERVICES .....	68
ANNEX 11: DETAILED CASH FLOW STATEMENTS: 15 YEARS 2016-2030 <b>OPTION:1</b> REGIONAL SHORT-HAUL SERVICES .....	69
ANNEX 12: DETAILED BALANCE SHEETS: 15 YEARS 2016-2030 <b>OPTION:1</b> REGIONAL SHORT-HAUL SERVICES.....	70
ANNEX 13: DETAILED ECONOMIC BENEFIT INCOME STATEMENTS <b>OPTION:3</b> TOTAL AIRLINE.....	71
ANNEX 14: DETAILED ECONOMIC BENEFIT CASH FLOWS COMPUTATIONS: 2016-2030 <b>OPTION: 3</b> TOTAL AIRLINE .....	72
ANNEX 15: ORIGIN DESTINATION STUDY RESULTS BEYOND MARKETS.....	73
ANNEX 16: CURRENT LONG HAUL SERVICES FROM ENTEBBE INTERNATIONAL AIRPORT .....	80
ANNEX 17: SUMMARY OF SOME STAFF PROFESSIONAL REQUIREMENTS .....	81
ANNEX 18: UGANDA TRAFFIC ANALYSIS: FUNDS LOST TO OTHER AIRLINES BY CARRIER.....	82
ANNEX19: AIRCRAFT FLEET EVALUATION AND SELECTION .....	83

## Foreword

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This feasibility study was undertaken following a directive from the Presidential Economic Council (PEC) to the National Planning Authority to prepare a Paper on the Revival of Uganda's National Carrier. The Authority undertook this comprehensive investment appraisal for the National Carrier in close partnership with key stakeholders including; the Ministry of Works and Transport, Civil Aviation Authority, Ministry of Finance, Planning and Economic Development, Uganda Development Corporation (UDC), Uganda Air Cargo, Ministry of Defense, State House, among others. In particular, the feasibility study was informed by preliminary studies by Civil Aviation Authority (carried out by Ernst & Young) and UDC.

The feasibility study informed the PEC Paper that was presented to PEC on 3rd October 2016.

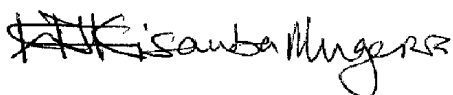
The feasibility study undertook a detailed analysis and review of: the causes of success and failure of Airlines globally, with particular focus on Africa and the collapse of the country's previous National Carrier; Uganda's existing market fundamentals; appropriate aircraft technology; suitable airline management and operational framework; and the financial and economic benefits of the various investment options for the National Carrier, including risk assessment. The study was based on internationally recommended methodologies that use cost benefit analysis techniques as the basis for decision making on the various investment options for the National Carrier.

Overall, the report recommends that investment in the National Carrier should be considered as an infrastructure for enhancing the country's global connectivity and competitiveness beyond direct financial benefits, as the Carrier will play a critical catalytic role in tourism development and promotion, export growth and investment in various priority sectors. The study particularly highlights that the National Carrier will facilitate significant direct foreign exchange savings to the country through cheaper air transport for passengers and cargo.

The study underlines the crosscutting role of the National Carrier in spurring growth and transformation across sectors of the national economy, provides solutions to past mistakes and serves as a useful basis for making financing and management decisions.

It is worthwhile to note that the revival of Uganda's National Carrier will be a key milestone towards improving the country's competitiveness and achieving the middle-income goal.

The Authority intends to continue strengthening its capacity for undertaking feasibility studies of various other cross-cutting projects and for training trainers across sectors and local governments in order to enhance implementation of national projects.



Prof. Kisamba Mugerwa

**CHAIPERSON, NATIONAL PLANNING AUTHORITY**



## Acknowledgement

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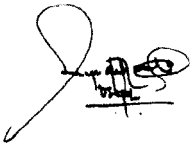
On behalf of the National Planning Authority (NPA) Board and Management, I would like to thank the individuals and Institutions that supported the process of undertaking the feasibility study and preparation of the report on the revival of Uganda's National Carrier. Firstly, I want to thank the Authority's core technical team who worked under my direct supervision, namely: Mr. Dhizaala S. Moses (Head Monitoring and Evaluation); and Mr. Sebukeera Hennerly (Senior Planning Officer, Project Development).

I also thank representatives from institutions that supported and participated in undertaking this feasibility study. These include: Eng. Tony Bafirawala Kavuma – Ministry of Works and Transport; Mr Hannington Banyendera - Civil Aviation Authority; Brigadier Timothy Sabiti – Engineering Brigade, Ministry of Defense; Mr Kyeyune Nyombi – Ministry of Defense; Major Eria Nantamu – Uganda Air Cargo; Prof. Edward Bbale – School of Economics, Makerere University; Col. Emmanuel Kazahura – Uganda People's Defense Airforce; Ms Annet Awori – Ministry of Tourism, Wildlife and Antiquities; and Mr Joseph Ofumbi – State House.

I further wish to recognize the contribution of Ernst & Young and the Uganda Development Corporation that undertook preliminary studies which were useful in informing the feasibility study.

In addition, National Planning Authority is grateful for the comments and ideas, which were critical in informing the final report, from the Presidential Economic Council (PEC), the NPA Expanded Board and Management, Board and senior staff of the former Ugandan Airlines and other Ugandan airline experts. Special appreciation goes to Dr Behman Kashi, an Investment Appraisal and Risk Analysis expert and trainer at Queens University for the peer review.

I urge concerned institutions to make good use of the results and recommendations contained in this report. The academia and researchers will, in particular, find the report a useful reference, as a feasibility case study.



Joseph Muvawala (PhD)

**EXECUTIVE DIRECTOR, NATIONAL PLANNING AUTHORITY**

# Executive Summary

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## Background

The National Planning Authority (NPA) was directed by the Presidential Economic Council (PEC) to prepare and present a Paper on the Revival of Uganda's National Carrier. Following the directive, the Authority in collaboration with key stakeholders undertook a comprehensive feasibility study to inform the Paper. The Authority's leadership on the study is also consistent with its mandate Section 7(2) of the NPA Act 15, 2002, which requires the Authority to study and publish independent assessments of key economic and social policy issues and options as well as to review high priority development issues and needs and make recommendations.

The stakeholder institutions that participated in undertaking this study include: Ministry of Works and Transport; Civil Aviation Authority; Uganda Air Cargo; Ministry of Finance, Planning and Economic Development; Ministry of Tourism, Wildlife and Antiquities; Ministry of Defense; Office of the President; Uganda Development Corporation (UDC); and Uganda Revenue Authority. The Feasibility Study also made use of the preliminary studies by Ernst & Young and UDC.

Overall, the need for a National Carrier for Uganda is based on: (i) the objective to enhance the country's competitiveness by reducing the cost of air transport and easing connectivity to and from Uganda; (ii) the strategy to support faster harnessing of opportunities in the economy (tourism, agriculture and minerals, oil and gas); and (iii) the requirement to establish air transport infrastructure to meet the growing demand for air transport (passenger and cargo).

## Scope of the Study

This Feasibility Study undertook a detailed review of the causes of success and failure of Airlines globally, with particular focus on Africa and the collapse of the country's previous National Carrier; reviewed the relevant market fundamentals; undertook an evaluation of the different aircraft types; designed the national carrier's management and operational framework; and undertook analysis on the financial and economic feasibility of the various investment options for the National Carrier.

The study was based on internationally recommended methodologies that use cost benefit analysis techniques as the basis for decision making on the feasibility of the various investment options for the National Carrier. The study also used historical traffic profiles into and out of Uganda using Origin-Destination data from Sabre, one of the largest Global Distribution Systems (GDS) in the aviation sector. In addition, the Marketing Information Data Transfer (MIDT) source was used to assess the competitive landscape within the regional markets and obtain information on fares for the target routes.

Two (2) possible investment scenarios for the revival of the National Carrier were analyzed, namely: (a) the scenario of purchase; and (b) the scenario of leasing Aircraft. Each of these two scenarios was analyzed based on three options of operating any of the following: (i) Regional only; (ii) International only; and (iii) a combination of both Regional and International operations.

## Summary of feasibility study results, findings and recommendations

- 1) Under-capitalization, use of inappropriate aircraft technology, weak capacity for airline management, failure to appreciate airline value addition to the economy, political interference in airline management, corruption in procurement processes, among others, have been the major causes for failure of African based airlines.

- 2) A comparative technical evaluation of the different aircraft types based on market suitability, aircraft cost, efficiency, reliability and resilience, cargo capacity and configuration, cabin comfort and technology, among others, identified the CRJ 900 and Airbus A300-200 series as the most appropriate aircraft types for the National Carrier's regional and international operations, respectively.
- 3) The scenario to purchase aircraft for both regional and international operations gives the highest financial and economic benefits to Uganda compared to all the options under the scenario of leasing aircraft. All leasing options give financial and economic results that are below the minimum threshold required for investment decision. In particular, it is only the case of leasing aircraft for regional operations that marginally meets the threshold for investment.
- 4) The options of leasing aircraft should be considered after the airline has built sufficient assets for the necessary credit worthiness of the airline. This is necessary because the airline requires capital assets (aircraft fleet or cash equity) to be used as a basis for code sharing and receiving other airline services on credit that are billed monthly. In the case of Uganda's National Carrier Business Plan developed in this study, a total cash equity of USD 140 million will be required to replace the option of using aircraft as the asset base.
- 5) Currently, Uganda loses about USD 540 million annually, in form of higher transport costs (extra charges) to passengers originating and terminating at Entebbe International Airport, due to absence of a National Carrier. The best-case investment scenario (combined regional and international aircraft purchase) would generate a direct Net Present Value (NPV) economic benefit of USD 580 million, after taking care of all the investment and operating costs, over a 15-year period.
- 6) An internationally recognized management team with clear performance targets is recommended by the study for a period of three years, for successful launch and sustainability of the National Carrier and listing of the Carrier on the stock exchange.
- 7) The study recommends operation of domestic air transport routes through franchising and/or partnerships with domestic private operators. With increased traffic, due to the National Carrier, domestic operators will find it viable to invest in modernizing their aircraft fleets.
- 8) For greater focus and highest efficiency, the study also recommends that the airline should undertake its own ground handling, without immediate plans to diversify into ground handling of other airlines.
- 9) Government requires to undertake full capitalization of the National Carrier during the initial years and later divest through public listing, to avoid challenges of risk transfer between Government and private sector. This capital structure will also enable the airline to build from modest equity provided by Government to self-financing from operations thereafter.

## Conclusion

The study recommends that Government implements the investment option for aircraft purchase with a combination of regional and international operations that gives greatest financial and economic benefits to Uganda. The study also recommends that the investment in the National Carrier should be considered as an infrastructure for enhancing the country's global connectivity and competitiveness, beyond the direct financial benefits. In addition, the carrier will play a critical catalytic role in tourism development and promotion, export growth, investment in various priority sectors and global networking.

# 1.0 Background

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## 1.1 The Macroeconomics of Uganda

- a) The overall focus of Uganda's macroeconomic strategies over the last twenty years has been to ensure macroeconomic stability by maintaining inflation below single digit, sustaining growth and managing the fiscal deficit within sustainable levels. This took into account the need to maintain a balance between macroeconomic stability, sustenance or acceleration of economic growth and continuing progress towards the achievement of set socioeconomic development goals. Government through both the first and the Second National Development Plans (NDPs) envisaged continued pursuance of sound monetary and fiscal policies while making additional public investments in strategic sectors including transport infrastructure, among others (Republic of Uganda, 2015).
- b) Thus since 2010, Uganda has managed to maintain macroeconomic stability with declining inflation rates and the shilling remained stable in the foreign exchange market. However, the recent developments that saw exchange rates go to the highest rates in a decade is unprecedented. Uganda obtains foreign exchange from export trade, foreign direct investment, grants from development partners and loans from the rest of the world. Therefore, to hedge against similar shocks, Uganda needs to bolster its export potential through increasing quality production and access to lucrative regional and international export markets. At this point, it is important to note that air transport provides wider economic benefits not just for its passengers and cargo shippers, but also for the wider economy by connecting businesses and individuals to global markets (IATA, 2008).
- c) GDP growth and growth in trade have traditionally always been significant drivers of air traffic growth, and it appears there is a view that they will continue to do so (Gillen, 2009). The overall GDP growth rate for Uganda over the last five years has improved overtime although remaining below the targeted average of 7.2 percent. Uganda presently ranks as one of the fastest growing economies in Sub-Saharan Africa (World Bank, 2015). Growth increased from 3.3 percent in 2012/13, to 4.5 percent in 2013/14 and to 5.3 percent in 2014/15. The economy is forecasted to grow at a rate of 5.8 percent in 2015/16 with possible rates of 6.4 percent in 2016/17 (NDP2).
- d) The performance of exports and imports is critical to the performance of the airline industry as they determine cargo traffic volumes on top of their contribution to national income and foreign exchange inflow. Between 2010 and 2014, exports generated a total income of \$13,066 million with an annual average of \$2,613million. The performance indicates an increasing trend compared to the period 2005 to 2009 with a total export income of \$8,515million with an annual average of \$1,703million. The key leading export products included: coffee, flowers, tea, fish and its products, and tobacco among others. Imports during the period 2010 to 2014 amounted to \$22,157million, with an annual average of \$4,431.53 million. The performance indicates an increasing trend compared to the period 2005 to 2009 with a total import income of \$13,559million with an annual average of \$2,711million. These improving export-import trends indicate optimistic prospects for airline cargo traffic over the coming years.
- e) The direction of exports during the same period was primarily to COMESA (mainly, Kenya, Rwanda, Sudan and Congo) which accounted for 50 percent of total exports. Over 25 percent of total exports were to the EU, with Netherlands being the key beneficiary of these exports, followed by the UK and Belgium. Internationally, the United Arab Emirates accounted for the largest destination of Uganda's exports. Over 50 percent of the imports come from Asia especially from India and China. Imports from the Middle East and EU are approximately the same and the main sources from these areas are; UAE, United Kingdom and Germany.

- f) The country has huge potential to further develop its tourism, which presently accounts for approximately 7.4 percent of total employment. Uganda is a preferred destination for adventure travel especially gorilla tracking, water rafting and mountain trekking. In 2012, it was listed as the “best choice” holiday destination by Lonely Planet Magazine, the world’s largest travel guide book. National Geographic lists the Virunga mountain range in Kisoro in their top 10 travel destinations. In addition, Kidepo National Park is also listed in the top 10 best parks by CNN Travel. These positive elements will stimulate the growth of air travel to the country and region.

## 1.2 Historical overview of aviation in Uganda

- a) The historical overview of aviation in Uganda starts with the maiden aircraft movement in Uganda’s air space. The humble beginning of civil aviation in Uganda was an extension of aviation in neighboring Kenya where Wilson Airways had started operations in 1929. Aviation services in Uganda Started with flying-boats landing at Port Bell while transporting mail within Africa. However, scanty information is available before 1946 when the Directorate of Civil Aviation (DCA) was formed. Entebbe Airport whose construction started in 1947 and was officially opened in 1951, has been expanded twice in 1959 and 1971-1973 to handle the increase in air traffic. Upcountry aerodromes such as Gulu, Kasese, Tororo, Arua, Masindi and Jinja put in place to handle upcountry air traffic were improved in the 1960s to handle increased tourism traffic.
- b) Prior to formation of the Directorate of Civil Aviation in 1946, the air traffic control services were operated by the Royal Air Force. The DCA came under the East African Common Services Organization (EACSO) in 1954 until the formation of the East African Directorate of Civil Aviation (EADCA) that was established with the coming of the East African Community (EAC) in 1967. After the breakup of the East African Community (EAC) in 1977, Uganda Airlines became the national flag carrier and was designated with the responsibility for cargo, aircraft and passenger handling services at Entebbe airport.
- c) The establishment of the Uganda Airlines, as the country’s national carrier for the first time, followed the collapse of the East African Community and the economic embargo imposed on the government in 1975/6. The airline had an aircraft fleet made up of 15 vessels that were fully owned by the Government and operated routes in Africa, Europe and Middle East. But between the 1990s and 2000, Uganda Airlines suffered from financial difficulties due to several factors leading to its collapse and liquidation in 2001. Since then a number of both public and private sector initiatives have been made to fill the gap left by the lack of a national carrier. These efforts began with the private sector initiative under Africa One, which operated and closed during the same year due to limited capitalization. The East African Airlines was established soon after, in 2001, with flights within East Africa, to Dubai and South Africa. Just after two years of operation, the East African Airlines closed down due to investment shortfalls and poor equipment.
- d) In 1995, Alliance Air, a joint venture between Uganda, South Africa and Tanzania intending to ride on the strength of South African Airways in terms of aircraft, insurance and maintenance started operations covering routes to South Africa and London. Alliance Air was formed in response to the failing Uganda Airlines. The Airline failed to acquire more route rights due to unclear ownership and inappropriate equipment, which led to its ultimate closure. Victoria International Airlines which was 20 per cent owned by Government of Uganda commenced operations in 2006 with regular flights to South Africa (SA), Sudan and Nairobi, but lasted only 2 months, as a result of inadequate capitalization. As part of the preparations for the Commonwealth Heads of Government Meeting (CHOGM), Air Uganda (U7) owned by the Aga Khan Group started regional operations in November 2007. Air Uganda ceased operations in 2014 after CAA withdrew Air Operator Certificates (AOCs), as a result of concerns raised by the International Civil Aviation Authority Organization (ICAO).

- e) Since 2014, after 7 years of filling the gap of a home based carrier, Air Uganda closed. Uganda again suffered the consequences of the lack and benefits of having a scheduled home based carrier in the regional aviation market. In particular, the price of regional airline tickets out of Entebbe rose to unprecedented levels. The high cost of airline tickets out of Entebbe coupled with the increasing outcry for easier air transport connectivity to and from Entebbe led to the directive by the Presidential Economic Council, to the National Planning Authority, to prepare a Paper on the revival of the National Carrier. Consequently, since April 2015, the National Planning Authority in collaboration with the Uganda Development Corporation, Civil Aviation Authority, Ministry of Works and Transport and other key stakeholders embarked on the process of undertaking the pre-feasibility and feasibility studies of the national carrier project. This report therefore presents the detailed feasibility study involving financial and economic appraisal of the Business Plan for the revival of the National Carrier for Uganda.

### 1.3 History of Airlines in Uganda

The historical overview of airlines in Uganda, as traced from 1943 to-date is presented in the table below.

**Table 1: Summary History of the National Carrier**

Period	Comments
<b>1943 - 1945</b>	Formation of East African Airways from the former Wilson Airways. East Africa Airways Corporation in London on 30th October 1945 and the airline operated from 1 January 1946 up till 1977 when the East African Community broke down.
<b>1975/76</b>	Uganda Airlines is formed after the collapse of East African Airways. This was the first national carrier of Uganda. It was established as a result of the collapse of the East African Community and the economic embargo imposed on the government in 1975/6. The airline had an aircraft fleet made up of 15 vessels that were fully owned by the Government with routes in Africa, Europe and Middle East.
<b>1990s - 2001</b>	Uganda Airlines suffers from financial difficulties due to several factors leading to its collapse and liquidation in 2001.
<b>May 2001,</b>	Uganda Airlines (QU) is liquidated after years of losses.
<b>2001</b>	Africa One began operations with regular flights within Africa and bi-weekly services to London and Dubai, but stopped within a year.
<b>2002</b>	East African Airlines began operations with flights within East Africa, to Dubai and South Africa, but also closes down after a year.
<b>1995-2002</b>	Alliance Air a joint venture between Uganda, South Africa and Tanzania intending to ride on the strength of South African Airways in terms of aircraft, insurance and maintenance starts operations covering routes to South Africa and London. Airline fails to acquire more route rights, which together with poor equipment, led to its ultimate closure
<b>2006</b>	Victoria International Airlines which was 20 percent owned by government commences operations with regular flights to South Africa (SA), Sudan and Nairobi, but lasted only 2 months

Period	Comments
<b>November 2007</b>	Air Uganda (U7) starts regional operations and serves under the Aga Khan Group.
<b>September 2014</b>	Air Uganda is closed by the shareholder
<b>April 2015</b>	Preliminary study by Ernst and Young commissioned by CAA was undertaken by a Committee on the National Carrier Project comprising NPA, CAA, Ministry of Works and Transport, Ministry of Defence and Office of the President.
<b>October 2015</b>	NPA in collaboration with UDC and CAA develop Feasibility Study & Business Plan for revival of the National Carrier.

## 1.4 Historical Overview of Uganda Airlines Corporation

Upon the collapse of the former **East African Community** and subsequent dissolution of the East African Airways in 1977, the Government of Uganda established Uganda Airlines as its National Carrier. The Airline was established under the **Uganda Airlines** Corporation Decree of 1976. The Airline was 100 percent owned by Government of Uganda and had an initial share capital of US\$ 70 Million, with a fleet of 15 (fifteen) aircraft as indicated below.

### Uganda Airlines Fleet at inception in 1977

No.	Aircraft Type	Reg. No	No.	Aircraft Type	Reg. No
<b>1</b>	B707-321C	5X-UAL	<b>9</b>	Cessna 402	5X-UWO
<b>2</b>	B707-321C	SU-BAG	<b>10</b>	Cessna 206	5X-UWN
<b>3</b>	Hercules L-100	5X-UCF	<b>11</b>	Cherokee 6	5X-UVI
<b>4</b>	Fokker F27-600	SU-AZN	<b>12</b>	Piper Aztec	U-301
<b>5</b>	Twin Oter HD-6	5X-UVL	<b>13</b>	Piper Aztec	U-302
<b>6</b>	Twin Oter HD-6	5X-UWV	<b>14</b>	Trilander BN3	-
<b>7</b>	Kingair BE100	5X-UVX	<b>15</b>	Foker F27-600	-
<b>8</b>	Kingair BE100	5X-UWT			

Great damage befell the Airline's assets as a result of the 1979 Liberation War that overthrew President Idi Amin Dada, which included looting and destruction of; aircraft, aircraft spare parts and office and ground handling equipment. During that war, one B707 was damaged at Entebbe Airport and another was flown to Libya, while one Kingair was stolen and most of the light aircraft looted and damaged beyond repair. After the 1979 Liberation War ended, Uganda Airlines was compensated for the damaged and lost B707s, and also managed to purchase 2 second-hand B707s in April 1980 and May 1981, respectively. By the middle of 1981, the Airline's fleet comprised of 5 (five) aircraft:

- (1) 2 (two) B707-320C;
- (2) 2 (two) F27-600; and
- (3) 1 (one) Kingair BE100

As part of a fleet rationalization programme of 1989, the Airline sold the Kingair BE100 and later in 1990 sold the Fokker F27 and 1 (one) B707.

The Airlines faced major challenges which included undercapitalization, historical indebtedness, political



interference, poor management and external factors such as increasing aircraft maintenance and fuel costs and devaluation of the Uganda Shilling.

By 1997, Uganda Airlines Corporation owned 3 (three) aircraft, namely;

- i) A Boeing 737-200 on an annual dry lease from Air Zimbabwe (the lease expired on 15 November 1997).
- ii) A Boeing 737-500 on a 3-year dry lease from Ansett Air (the lease expired in June 1998); and
- iii) A Fokker Friendship turbo-prop that was grounded for being uneconomical to operate.

Despite lacking audited financial statements for 1992 – 1995, the Auditor General established in 1998 that the Corporation's current liabilities were UGX 20.8 Billion with assets valued at UGX 10.7 Billion. It had investment shares in: African Joint Air Services (AJAS) of 10percent, Entebbe Ground Handling Services Limited (ENHAS) of 50percent and Uganda Inflight Services of 25percent. It had a large workforce of 325 employees and fixed assets valued at only UGX 5.1 Billion. The Airline was technically insolvent, and coupled with the many challenges it faced, it became ungovernable in that state and ceased to be a going concern. The airline by then operated on weekly subventions from Government.

On 16February 1999 Government agreed to the divestiture of Uganda Airlines Corporation, with Government taking up all the corporation's liabilities. This was expected to attract a Strategic Equity Partner through negotiations with other international airlines by a successor company, Uganda Airlines Holdings Limited (UAHL).

Through an international tender process, Government embarked on identifying a suitable strategic partner, and engaged in several negotiations that were unsuccessful, including those with South African Airlines, British Airways and the Uganda Airline Management Team who proposed an Employee Buyout of the corporation.

The failure to attract a strategic partner subsequently led to the liquidation of Uganda Airline Holdings Limited in 2001, which resulted in the sale of the Airline's remaining assets to settle the Corporation's debts and other liabilities. This effectively left Uganda without a national carrier. As a result, airline fares and services were left to foreign airlines who have used high pricing to the detriment of travelers to and from Uganda. The absence of a national carrier has also affected the country's competitiveness due to poor air transport connectivity and high cost for travel of passengers and cargo.

The realization of the gap created by the absence of a National Carrier has led to various attempts by Government and other stakeholders to re-introduce a semblance of a National Carrier.

## 1.5 Lessons Learned from Successes and Failures

- a) The review above shows a checkered history for start-up airlines with the majority failing and closing within a short period. This trend has been observed for a large number of airlines in Africa and it is important to look closely at some of the principle causes for the high proportion of failures in the industry
- b) Some of the key reasons for failure include:
  - i. **Under-capitalization:** where the airline is formed with minimum capital and the funds are not enough to enable it complete its intended network development. The airline therefore runs out of



money before gaining the trust of passengers, travel agents, tour operators, suppliers and other airlines in the industry. The start-up phase requires substantial cash resources while the airline is establishing its credit rating across all the target airports and destinations

- ii. **Use of old technology aircraft:** these are cheap to lease but expensive to run. The temptation is to use the limited capital to get cheap old aircraft from lessors with a view to upgrade the fleet later when business takes off. The problem is that business will never take off because the old aircraft will cost more in maintenance as the frequency of break down is higher, they will have a poor cabin with poor seats which will not enable the airline to compete with others who have new aircraft, old aircraft also consume more fuel causing the operating costs to be higher, leading to a downward cycle to closure.
- iii. **Political Interference:** national airlines especially are not free to make good business decisions due to politicians interfering in the running of the airline. This starts from the selection of competent Board members, to staff recruitment, procurement, selection of routes, flight operations, demands for free tickets and lack of payment for tickets, etc.
- iv. **Failure to appreciate airline value addition:** national airlines form part of the infrastructure that supports the economy of the country. They provide the necessary connectivity, visibility and access which attracts investments, promotes tourism, exports and imports, supports other industries like agriculture, hotels, restaurant, mining etc and also enables a country to participate in global trade and industry. African countries have been slow to recognize the power that airlines have in transforming living standards through these catalytic impacts. The example of the growth of Dubai is instructive in this regard. Sadly many African countries were in the 80s and 90s led to believe that national airlines were a burden to the economy, and did not take the time or effort to measure the benefits.
- v. **Lack of a long term plan and strategy:** airlines were started without thinking through the role and objectives to be accomplished in the economy and the long term financing and operational issues. It is easy to fail and be discouraged if you are not sure of what you are doing and why. Without a proper vision achievement would not be possible.
- vi. **Lack of technical expertise to run the business:** management not selected on merit and therefore unable to run a high cost low margin industry. In addition, airline business is highly regulated requiring technical expertise in the different specializations across the operational and managerial disciplines. This has been particularly damaging for African airlines when unqualified political appointees are put in charge of such a business.
- vii. **Lack of recognition of value chain:** airline operations are naturally connected to airport operations, hotels, handling business, civil aviation regulations, immigration policy, game parks/ reserves and national parks etc. Policies in one area affect the entire value chain. In Africa, the policy framework in certain areas may lag behind such that instead of promoting the growth of the entire value chain, it stifles it. Airline business thrives when policies are coordinated and in some cases when it can control certain parts of the value chain like handling, hotel, visa etc. For a national airline to establish a hub for example, it needs airport authorities to invest in a good airport terminal and runways to accommodate the traffic targets and provide facilities for the transit and other passengers. The gulf policies are instructive in this regard.
- viii. **Enabling legislative framework:** aviation standards have been harmonized by ICAO at international level for all countries. Weaknesses in the legislative frameworks can stifle the growth of national airlines. Failure to upgrade civil aviation standards and oversight can lead ICAO to issue "Significant Safety Concerns" on the country which may lead certain countries and regions

to refuse flights or impose a blacklist on the country. The government of Uganda is well aware of the damage on the Uganda aviation industry in 2014 when the Uganda CAA was found with deficiencies which led to the withdrawal of Air Operator Certificates and grounding of some airlines in Uganda.

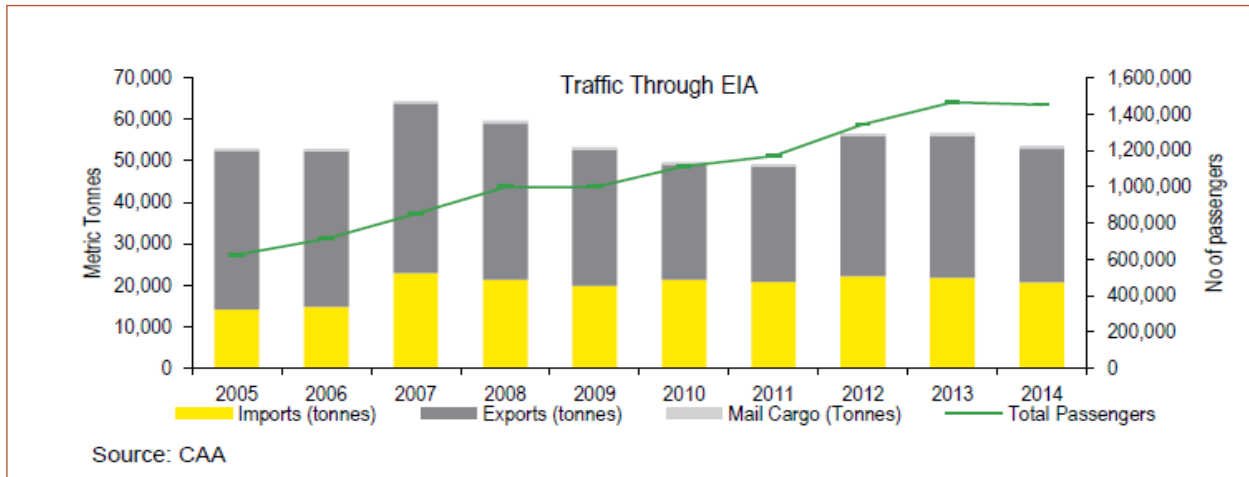
- ix. **Terrorism and communicable diseases:** the threat or existence of terrorism is a big risk to the survival of airlines today. Markets especially tourist arrivals could be wiped out as a result of terror attacks or threat of attack as countries will issue travel advisories to the affected regions. Recently, we also experienced the impact of the Ebola outbreak in West Africa which caused significant damage to the fortunes of carriers like Kenya Airways.
  - x. **Corruption:** in procurement of aircraft and other assets and services causes high costs, damages reputations and leads to poor financial and operational performance leading to failure. The industry is plagued with speculators across the service chain and yet integrity and transparency are key ingredients for success of airlines.
  - xi. **Orphan Syndrome:** governments in some cases treat their national airlines like orphans. They support and favor foreign carriers more than their own whether it be in policies like tax incentives, or in patronage where they prefer to fly foreign rather than their own. The “feed your neighbors child instead of your own” policy leads to starvation and gradual death of one’s own child.
- c) The picture is not all doom and gloom as there are some success stories of national airlines in Africa. Success largely comes by addressing the factors mentioned above and ensuring that;
- i. The national airline is run professionally by competent managers with strategies aligned to the economic objectives of the country;
  - ii. The airline is insulated from political and other influences with a strong corporate governance structure;
  - iii. The airline is properly supported with consistent policies covering the entire value chain allowing it to leverage its growth by vertically integrating its activities across the chain; and
  - iv. The airline is run as a business with sufficient shareholder capital support.

## 1.6 Recent Entebbe Airport traffic trends

- a) Passenger traffic through Entebbe International Airport (EIA) has been on a rising trajectory throughout the period 2005 to 2014. Since 2010 the average growth in passengers has been 10percent with a spike in growth in 2012 to 15percent. 2014 however experienced a decline in passengers at -0.8percent. It is nonetheless expected for more air traffic to pass through EIA as a result of the ongoing modernization of the airport.
- b) The majority of passengers passing through EIA are international passengers. They represent 98percent of the total passengers going through EIA. Although there has been recent growth in domestic passenger numbers, they still however remain inconsequential to overall totals. After Kenya, passengers from Europe represent the most significant air traffic at EIA at 19percent (of which London contributes 4percent), followed by the Middle East at 17percent. East African passengers account for 38percent of air traffic at EIA.
- c) Combined passenger traffic throughout the up country’s airports is less than 30,000passengers,

highlighting the small scale of operations. High growth is, however, expected as a result of ongoing investment, which saw 2013 passenger numbers grow by 66percent. This was mainly attributed from the Arua aerodrome which constitutes over 58percent of all upcountry passenger traffic.

**Figure 1: Passenger traffic at EIA**



- d) Cargo through EIA is made up of imports, exports and mail cargo. Growth shot up in 2012 to 15percent but has since come down to -5.56percent in 2014. The bulk of cargo is made up of exports of fish. Mail cargo still remains undeveloped but is growing at 8percentper annum.
- e) Gross cargo from EIA which includes imports and exports has grown by 4.5percent from 2010 to 2013. It however dropped significantly in 2014 by 5.6percent and this was a result of reduced imports and exports demanded. This was also partially due to the reduced auxiliary costs of importing and exporting through sea freight, improved infrastructure at select ports and the improved processing times, which reduced transit times by 30percent.
- f) Airlines on the continent carried about 788,500tonnes of total global freight carried in 2012, representing 1.8percent of total air freight shipment. Growth in freight has been the norm in the African market with 11.7percent growth in 2012. The Middle East and Africa are recorded as having the highest year-on-year air freight growth and this presents substantial opportunity for new carriers in these markets.

## 1.7 The case for the National Carrier

The need for a National Carrier for Uganda is based on: (i) the objective to enhance the country's competitiveness by reducing the cost of air transport and easing connectivity to and from Uganda; (ii) the strategy to support faster harnessing of opportunities in the economy (tourism, agriculture and minerals, oil and gas); (iii) the requirement to establish air transport infrastructure to meet the growing demand for air transport (passenger and cargo). In particular, revitalization of the national carrier will have far reaching impacts for the economy, which include:

- i) Facilitating the promotion of tourism by offering connectivity to and from source markets abroad. The connectivity provided by international air transport facilitates the fast-growing global tourism industry. It is estimated that over half of international tourists globally travel to their destination by air. Tourism makes a major contribution to the global economy. It directly contributed \$2 trillion to world GDP in

2012 and provided over 101 million jobs globally – 3.4percent of total employment. By 2024, the World Travel and Tourism Council expects direct employment in the tourism industry to be more than 126 million people globally. When looking at the jobs and GDP supported through the indirect and induced impacts of tourism, the figures are significantly higher at 261 million jobs (8.7percent of employment) and \$6.6 trillion, or 9.3percent of the global economy. By 2024, tourism could support some 347 million jobs and \$11 trillion in GDP (ATAG, 2011).

- ii) National carrier has the potential to stimulate growth, employment creation and revenue generation for the government. The air transport industry has a substantial economic impact, both through its own activities and as an enabler of other industries (ATAG, 2011). Of the 5 million direct jobs generated by the air transport industry worldwide, 4.3 million people are employed by the airlines and airports (aviation sector) globally, contributing around US\$ 275 billion of GDP to the global economy. The air transport industry contributes around US\$ 880 billion a year to world GDP, taking into account direct, indirect and induced impacts – equivalent to 2.4percent of global GDP. Its direct impact on GDP is US\$ 330 billion.
- iii) Development of a fully functional national carrier leads to promotion of exports through the facilitation of better access of goods, from rural areas to international markets. One of air transport's most important economic benefits is its spin-off effect on international trade – which plays a key role in promoting economic growth in countries in different stages of development. Air transport is an important trade facilitator. It increases the global reach of companies, enables them to get products to market more quickly and allows them to be more responsive to customer needs, thereby contributing to improved living standards.
- iv) A functional national carrier has potential to improve the trade deficit by saving and generating foreign exchange directly and indirectly through foreign exchange premium savings and spin off activities.
- v) **Reducing the cost of air transport.** Before 2007, Uganda did not have any locally based carrier and Kenya airways was charging an average of \$420 for the Entebbe Nairobi route. After Air Uganda started operations in 2007, prices went down to as low as \$182 and averaging about \$150 by the time of closure in 2014. When Air Uganda was closed, prices immediately shot up averaging about \$ 500-700. Rwanda Air is charging average ticket prices of \$ 330 economy for the same route. As a result, it is important to establish a local based carrier to reduce the cost of air travel.

***Overall, this variation in ticket prices gives a passenger consumer surplus of \$360 per passenger, with the existence of a national based carrier. When this is applied to the 1.525 Million passengers through Entebbe annually, it's an equivalent of \$549,000,000 per annum. This is the consumer surplus (transport cost savings) to passengers with the availability of a national carrier per annum.***

#### **Other key benefits include;**

- vi) Removal of dominance of foreign operators, which would influence the cost of air travel positively
- vii) Balance of aviation opportunities arising from mutually beneficial Bilateral Agreements and benefits only attributable to national carriers
- viii) Marketing and promoting the country abroad thus raising the brand image of Uganda as an investment and tourist destination
- ix) Creating employment and offering citizens the opportunity to develop careers and participate in an essential and growing aviation industry worldwide.

## 1.8 Purpose and Objectives of the feasibility study

- i) The purpose of this feasibility study is to assess the financial and economic benefits (positive and negative) from re-establishing the national carrier, based on the current market and economic conditions, including assessment of all other key possible risk factors. This will be achieved through appraisal of the most plausible business plans and structures for the new airline, including the scope of its services over the next 15 years. The 15 year period is based on considerations for the loan repayment (7 and 10 years, for regional and international loan components, respectively) and the sustainability considerations.
- ii) The study will review the preliminary 15 year Business Plan and critically examine existing and projected market conditions and traffic profiles. In addition, factors that led to the demise of Uganda Airlines in 2001 are assessed against possibility of their recurrence. Benchmarks with existing best practice national carriers are also assessed in order to find the most optimal approach in reviving a profitable and sustainable national airline.
- iii) The feasibility study will thus involve Financial and Economic Benefit Analysis in order to establish whether there is both a business and economic benefit case in reviving the National Carrier. The methodologies will involve conducting evaluations on the investment options using the Net Present Value (NPV), Internal Rate of Return (IRR) and Pay Back period techniques.

Specifically, this feasibility study is intended to:

- a) Develop and conduct an investment appraisal for a regional national carrier Business Plan over a 15-year period. This has concentrated on connecting Uganda within Africa and the region using a fleet of short range regional aircraft;
  - b) Develop and conduct an investment appraisal for the long-haul international services Business Plan over a 15 year period. This includes a review of long range aircraft for transportation of passenger and cargo;
  - c) Develop and conduct an investment appraisal of the composite Business Plan for the national carrier operating both regional and international operations over a 15 year period;
  - d) Conduct sensitivity analyses for the various business cases;
  - e) Conduct stakeholder benefit analysis for best business case; and
  - f) Conduct risk analysis and determine possible mitigation measures for the best business case
- iv) Other feasibility study components include:
- a) Market analyses for the regional and international segments, including route schedules and route performance. This will also include highlighting some of the competitive advantages that may be obtained from the services of the national airline.

- b) Review of available capital expenditure options and highlight the most optimal alternative for financing the airline.
  - c) Recommendations on a strategic airline business model that will ensure the effective management of operations so as to promote and achieve sound operational efficiency.
  - d) The required institutional framework for the airline in line with ICAO Annex 6 to direct and guide management with a sound organizational structure in keeping with international aviation standards
  - e) Profit and Loss accounts, Balance Sheets and Cash flows for the proposed airline covering a period of 15 years from 2016
  - f) Qualitative benefits of having the airline and its contribution to Uganda's economy and people.
- v) This appraisal (pre-implementation evaluation) will enable the National Planning Authority to recommend a way forward to the Presidential Economic Council on whether the revival of a national carrier is a worthwhile venture that is beneficial to Uganda in both financial and economic benefit terms. It will also guide on how the government may fund such a capital intensive business.

The study is therefore expected to enable Government to make an informed decision on the revival of the national airline.

## 1.9 Methodology

### Project description

- a) The background is that in May 2001, the government of Uganda liquidated the then national carrier, Uganda Airlines (QU). This was after failing to get agreement with prospective major partners that included British airways, Kenya Airways, Sabena and South African Airways amongst others under the then privatization program. Since then, various privately owned airlines have set up in Uganda, but have only lasted for short periods. The latest was Air Uganda (U7), which operated in the country for 7 years since 2007 but was closed by the shareholders in 2014 after the ICAO audit process on Uganda Civil Aviation Authority.
- b) Currently, Uganda has a big service gap in this critical sector of the economy. This has, to a large extent, resulted in dominance by foreign carriers who are using predatory pricing on the Ugandan market, to the detriment of citizens and the economy. Government wishes to close this gap and to put in place a strong national airline to secure the long term interests of the country.
- a) The proposed national carrier (new Uganda Airlines), will provide air service links for both passenger and cargo, with a hub at Entebbe International Airport. In 2014, the number of passengers who travelled through Entebbe International Airport were approximately 1.6 million out of whom 60 percent are Ugandan citizens. Passenger numbers have been growing at an average rate of 11 percent per annum over the past 5 years giving an imperative for creating a hub at Entebbe International Airport.

## 2.0 Project Concept and Structure

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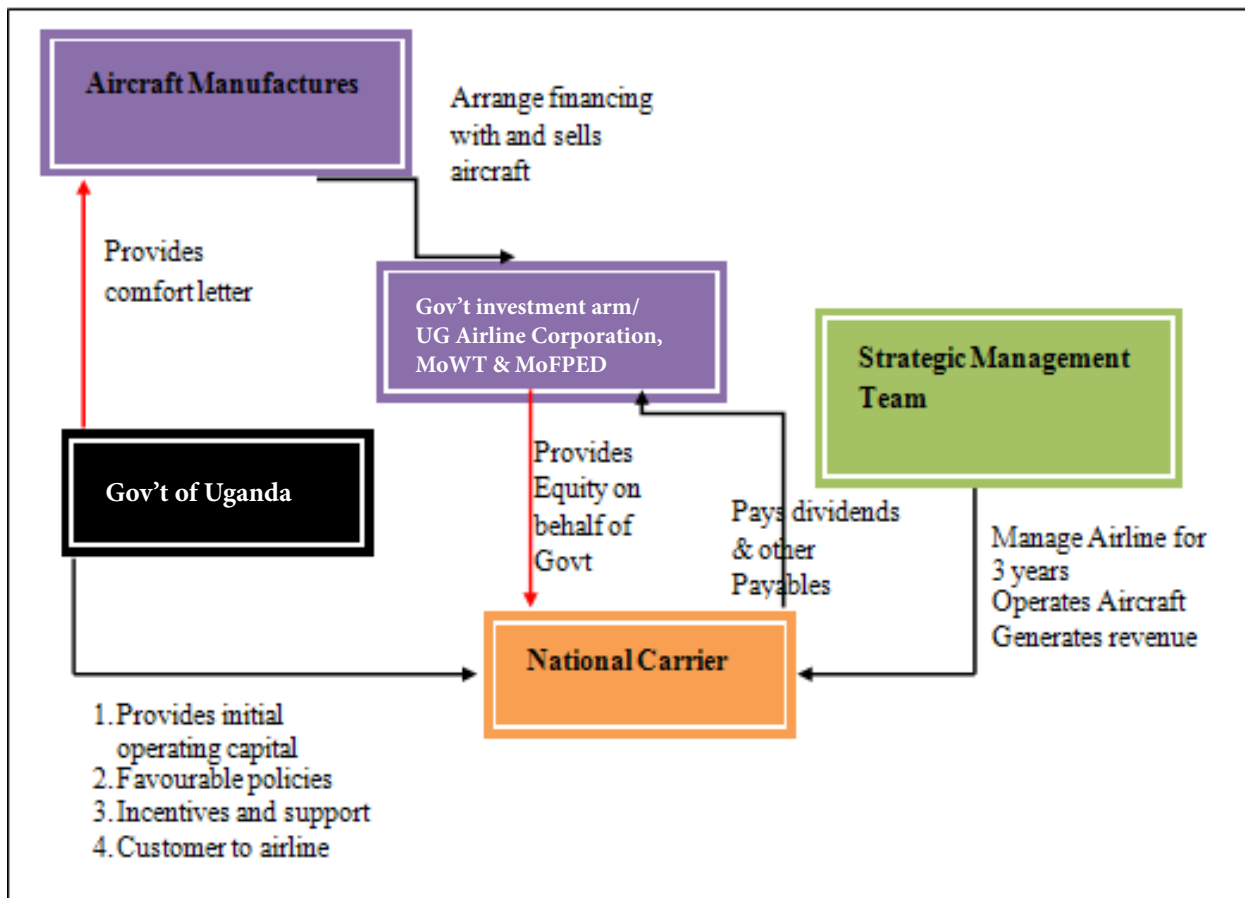
### 2.1 Project Concept

- a) NPA in collaboration with the Uganda Development Corporation (UDC) has prepared a Business Plan that shows how Uganda may be connected both regionally and internationally. The plan identifies the regional feeder network with short-haul aircraft that would then feed traffic to international destinations out of Entebbe International Airport. The national carrier would therefore require two aircraft types, for regional short-haul operations and long-haul international connections. Origin destination data has been used to develop route structures and schedules that have been incorporated into financials for the new airline.
- b) It is proposed that domestic routes shall be developed through franchising and/or partnerships with existing domestic operators as at the moment there is no international feed to upcountry airports to justify investing in small aircraft to serve domestic routes. With the increased throughput due to the national carrier, the local operators would find it viable to invest in modernizing their small aircraft fleets which are hitherto used mainly for charter operations.
- c) The airline will be expected to focus on providing competitive passenger transport and connectivity to and from Uganda. The plan is therefore for the airline to handle itself without immediate plans to diversify into the business of ground handling of other airlines. The airline will be required to focus on its own core business of providing passenger and cargo transport for highest efficiency.
- d) Financing for the project is proposed to be structured in such a manner as to ensure that the airline builds from modest equity from Government, and thereafter finances itself from operations as far as possible. The aim is for it to be budget neutral to the Government of Uganda in the long term.
- e) The national airline is proposed to be formed with Government holding of 100percent share capital. This is important in order to avoid challenges of risk transfer between Government and private sector at the initial stages of the airline. After the airline is operational, Government will look at mechanisms to divesting the minorityshareholding to other parties which may include a public listing on the Uganda Stock Exchange in the long term.
- f) The project concept has been designed on the basis of building capital/equity as opposed to leasing of aircraft. The option to build equity through buying own aircraft is looked at from the point of view of: (i) harnessing state of the art technology by acquiring brand new aircraft as opposed to second hand leasing alternatives, which are often difficult to customize to the country specifications; (ii) the need to ensure sustainability of the airline by limiting operation and maintenance costs associated with leased aircraft; (iii) the need to ensure that the airline builds equity in the aircraft which can be used for future financing (loans, sale and lease backs, trade-ins, etc). For a capital intensive and long term investment industry such as aviation, it makes more sense in Net Present Value terms to build equity to avoid merely working for the advantage of the Lessors; and (iv) the need for the airline to have the freedom to design its own competitive on-board product in line with its markets.
- g) For an initial period of three years, an independent highly competent management company is proposed to oversee the management of the airline. The management period may be extended based on performance and sustainability considerations. From best practice, a part time Board comprising five members representing key stakeholder institutions will be responsible for overall policy and supervision of the airline management.

The proposed project structure is presented in figure 2 below.



Figure 2: Project Structure



## 2.2 Airline Investment options

- Three airline investment options were considered based on market fundamentals and the need to develop core air service connectivity for Uganda regionally and internationally.
- Option 1: looked at establishing a Regional Airline.** Such a national carrier would concentrate on developing a network of services to regional destinations using short haul CRJ900 Next Generation aircraft. It would essentially be a feeder airline through its envisaged hub at Entebbe International Airport. Longer routes would be achieved through cooperation with other airlines.
- Option 2: is the establishment of an International Long Haul airline** that would concentrate on developing intercontinental routes using wide body aircraft. The Airbus A330-200 aircraft was used in the study as it has the range, direct maintenance and operating cost advantage, as well as the optimum payload to identified markets.
- Option 3: a combination of option 1 and two,** which would create a national carrier that has both the regional connectivity and long range international routes. Such a national carrier would have the capability to create a feeder route structure synchronized with its long range services to international destinations. Building such a carrier would also need government to coordinate the upgrade of Entebbe Airport infrastructure to ensure the terminal building is upgraded to support the traffic movements and profiles of a hubbing airline.
- On this basis, NPA has developed a business profile and financials for the airline, covering an initial period of 15 years with operating parameters as shown in the Tables below.



**Table 2: Uganda Airlines Operating Summary 15 Years 2016-2030**

Operational Summary- International		Operational Summary - Regional	
Destination	Weekly	Destinations	Weekly
London	2	Nairobi, Kigali, Bujumbura, Goma	feeder
AMS Brussels	2	Kinshasa, Kisangani, Asmara	feeder
Dubai	6	Dar es salaam, Mombasa	feeder
Doha	2	Kilimanjaro, Juba, Mogadishu	feeder
Lagos	2	Lagos, Hargeisa	feeder
Johannesburg	2	Johannesburg, Addis	feeder
Mumbai	2	Lusaka, Harare	feeder
<b>Total Routes</b>	<b>7</b>	<b>Total Routes</b>	<b>18</b>
Annual frequencies	936	Annual frequencies-Max	4,995
Annual Sectors	1,872	Annual Sectors -Max	9,989
Annual Seats	462,384	Annual Seats	418,350 - 749175
Annual Block hours	10,754	Annual Block hours-Max	15,639
No. of Aircraft	2	No. of Aircraft	4
Aircraft Type	A330-200	Aircraft Type	CRJ900
No. of Seats on aircraft	247	No. of Seats on aircraft	75

A summary of the key operating statistics for the airline covering the 15-year draft operating and business plan from 2016-2030 is shown in Table3 below.

**Table 3: Operating Statistics: Uganda Airlines Plan 2016-2030**

OPERATING STATISTICS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Block Hours Regional	7,957	11,191	12,033	15,639	15,639	15,639	15,639	15,639	15,639	15,639	15,639	15,639	15,639	15,639	15,639
Block Hours International	10,754	10,754	10,754	10,754	10,754	10,754	10,754	10,754	10,754	10,754	10,754	10,754	10,754	10,754	10,754
<b>Total Block Hours</b>	<b>18,711</b>	<b>21,945</b>	<b>22,787</b>	<b>26,393</b>	<b>26,393</b>	<b>26,393</b>	<b>26,393</b>	<b>26,393</b>	<b>26,393</b>	<b>26,393</b>	<b>26,393</b>	<b>26,393</b>	<b>26,393</b>	<b>26,393</b>	<b>26,393</b>
Segments Regional	5,576	7,980	8,264	9,909	9,909	9,909	9,909	9,909	9,909	9,909	9,909	9,909	9,909	9,909	9,909
Segments International	1,872	1,872	1,872	1,872	1,872	1,872	1,872	1,872	1,872	1,872	1,872	1,872	1,872	1,872	1,872
<b>Total Segments</b>	<b>7,450</b>	<b>9,852</b>	<b>10,136</b>	<b>11,861</b>	<b>11,861</b>	<b>11,861</b>	<b>11,861</b>	<b>11,861</b>	<b>11,861</b>	<b>11,861</b>	<b>11,861</b>	<b>11,861</b>	<b>11,861</b>	<b>11,861</b>	<b>11,861</b>
No of seats international	462,384	462,384	462,384	462,384	462,384	462,384	462,384	462,384	462,384	462,384	462,384	462,384	462,384	462,384	462,384
No of seats regional	418,350	598,500	619,800	749,175	749,175	749,175	749,175	749,175	749,175	749,175	749,175	749,175	749,175	749,175	749,175
<b>No. of seats Total</b>	<b>880,734</b>	<b>1,060,884</b>	<b>1,082,184</b>	<b>1,211,559</b>	<b>1,211,559</b>	<b>1,211,559</b>	<b>1,211,559</b>	<b>1,211,559</b>	<b>1,211,559</b>	<b>1,211,559</b>	<b>1,211,559</b>	<b>1,211,559</b>	<b>1,211,559</b>	<b>1,211,559</b>	<b>1,211,559</b>
No of Passengers International	288,569	297,226	306,143	315,327	324,787	334,530	344,566	354,903	365,550	376,517	387,812	399,447	411,430	423,773	436,486
No of Passengers Regional	262,166	375,080	388,408	469,483	503,446	530,652	565,671	599,612	635,588	673,724	714,147	716,528	719,051	721,726	724,561
<b>Total No. of Passengers</b>	<b>550,735</b>	<b>672,286</b>	<b>694,551</b>	<b>784,810</b>	<b>828,232</b>	<b>865,182</b>	<b>910,238</b>	<b>954,515</b>	<b>1,001,139</b>	<b>1,050,241</b>	<b>1,101,960</b>	<b>1,115,974</b>	<b>1,130,481</b>	<b>1,145,499</b>	<b>1,161,047</b>
Load Factor International	62%	64%	66%	68%	70%	72%	75%	77%	79%	81%	84%	86%	89%	92%	94%
Load Factor Regional	63%	63%	63%	63%	67%	71%	76%	80%	85%	90%	95%	96%	96%	96%	97%
<b>Load Factor Total</b>	<b>63%</b>	<b>63%</b>	<b>64%</b>	<b>66%</b>	<b>68%</b>	<b>72%</b>	<b>76%</b>	<b>79%</b>	<b>83%</b>	<b>87%</b>	<b>91%</b>	<b>92%</b>	<b>93%</b>	<b>96%</b>	<b>96%</b>
B/Even Load Factor International	69%	68%	68%	68%	66%	63%	62%	60%	59%	57%	56%	55%	54%	53%	52%
B/Even Load Factor Regional	75%	64%	70%	62%	64%	64%	64%	63%	63%	60%	61%	60%	53%	52%	51%
Average Yield Per Passenger Inte	407	415	424	432	441	454	468	482	496	511	526	542	558	575	592
Average Yield Per Passenger Reg	182	193	203	221	221	227	234	241	248	256	263	272	281	290	300

## 2.3 Assumptions

The following broad assumptions have been used in building the operating and business plan for the national airline.

- a) The Government of Uganda will inject equity of US\$ 70 million required in operating capital for the airline. Of this, US\$ 20 million is intended to serve as start-up capital for the airline. The additional amount of USD50 million will be utilized as a Contingency/buffer for “Working Capital”, being the amount equivalent to three months’ expenses in the first year at zero revenue assumption.
- b) Government will purchase the aircraft using loan finance sourced internationally at an interest rate of 5percent per annum and over repayment periods of 7-10 years. (one A330-200 cost is estimated at US\$109.5M- 2 are required, while a CRJ900 is at US\$27.96M with 4 aircraft needed under the plan)
- c) Maximum daily utilization for the A330 aircraft is 15 hours per day while the utilization for the CRJ900 is 10.7 hours per day
- d) Other key assumptions are shown in the Table below while the rest are given in ANNEX: 1.

**Table 4: Summary of Key assumptions**

Description	Long-Haul Operations	Regional Operations
Capital Injection	\$20 million	\$50 million
Loans -Aircraft Purchase	\$ 219.5M two A330-200	\$111.84M four CRJ900
Senior Loan 5% 10 Yrs	75% or \$164.25M	75% or \$83.88M
Junior Loan 5% 7 Years	25% or \$54.75M	25% or \$27.96M
Load Factor J Class	40% yr1 – 69% yr 15 (15yr Avg 53%)	40% yr1 to 72 yr 15
Load Factor YP Class	60% yr1 – 97% yr 15 (15yr Avg 80%)	None
Load Factor Y Class	65% yr1 – 97% yr 15 (15yr Avg 85%)	65% Yr1 – 99% Yr 15
Annual Block Hours	10,754	7,957 to 15,639
Annual Segments	1872 Two aircraft	5578 to 9989
Annual Seats	462,384	418,350 to 749,175
Aircraft Configuration	3 Classes (J, YP, Y)	2 Classes (Business, Economy)
Total No. of seats	247	75
Business Class	20	7
Premium Economy Class	28	Nil
Economy Class	199	68
Cargo potential	9.4t cargo (max volumetric payload)	Mainly Pax Baggage (Min cargo)
Cargo Revenue	1% of Pax Rev (\$7 per kg)	1% of Pax Rev (\$7 per kg)
Average Yield J Class	\$1,074	\$433
Average Yield YP Class	\$ 472	Nil
Average Yield Y Class	\$ 358	\$239

- e) Economic benefit analysis was performed by assessing the cost and revenue distortions arising from government taxes and levies in the economy. The conversion factors were calculated based on the current taxes and levies as follows:

**Table 5: Conversion Factors**

Item	Description	Comments	Conversion Factors
	<b>REVENUES</b>		
1	Passenger revenue J class	Zero rated	1.00
2	Passenger revenue YP class	Zero rated	1.00
3	Passenger revenue Y class	Zero rated	1.00
4	Cargo revenue	Zero rated	1.00
5	Exchange fees & charges	Zero rated	1.00
	<b>Commercial &amp;Pax Costs</b>		
6	Agents Commissions	Foreign Invoice	1.00
7	Distribution	Vat 18%	0.82
8	Catering	Vat 18%	0.82
9	Other Pax Costs	Vat 18%	0.82
	<b>Variable Costs</b>		
10	Fuel	10% CAA+6% Tax	0.84
11	Airframe maintenance	WHT 15%	0.85
12	Engine maintenance	WHT 15%	0.85
13	Navigation fees	Vat 18%	0.82
14	Landing fees	Vat 18%	0.82
	<b>Direct Costs</b>		
15	Interest payment Senior loan	Foreign Invoice	1.00
16	Interest payment Junior loan	Foreign Invoice	1.00
17	Cockpit crew	PAYE 30%	0.70
18	Cabin crew	PAYE 30%	0.70
19	Pax handling	Vat 18%	0.82
20	Line maintenance	WHT 15%	0.85
21	Maintenance Direct		1.00
22	Maint personnel costs	PAYE 30%	0.70
23	Insurance	WHT 15%	0.85
24	Training	Vat 18%	0.82
	<b>Indirect Costs</b>		
25	Advertising	Vat 18%	0.82
26	Admin Staff costs	PAYE 30%	0.70
27	Overheads	Vat 18%	0.82
28	Management fees	WHT 15%	0.85
29	Depreciation aircraft	Foreign Invoice	1.00
30	Depreciation aircraft retables	Foreign Invoice	1.00

- f) Loan repayment profiles were computed using an annuity at 5percent interest and based on the indicative term sheets received for the regional aircraft. This comprises a Senior Loan portion of 75percent of aircraft price with a term of 10 years, and a Junior Loan portion of 25percent of the

aircraft price with a term of 7 years. This loan profile was also applied on the assumed loan intended to cover purchase of the A330-200 long haul aircraft.

- g) The aircraft amortization period used in the simulations is 20 years, with no residual value.
- h) The assumed average debtor payment cycle for passenger revenues is 2 months (or 16.7percent of sales) based on the IATA Clearing House rules, while the average credit period used is one month (or 8percent) on the aggregate of the operating costs.
- i) Overall cargo revenue was assumed at 1percent of passenger revenue which approximates to \$7 per kg based on the A330-200 maximum cargo payload capacity of 9.4tonnes per segment.
- j) Exchange fees and charges were assumed to be 2percent of passenger revenue based on industry experience. Commissions to agents were pegged at 3percent of passenger revenue.
- k) Staff and personnel costs were estimated from organization profiles and the need to support a fleet of 6 aircraft with technical and operational crew for an international airline. The rates are based on 2014 data for an airline based in Uganda.
- l) Costs of airframe and engine maintenance, fuel consumption, range payload limits, handling and other operating costs including route performance were derived from manufacturers' parameters for the aircraft in Uganda Airlines' operating conditions and targeted route structure and airports.
- m) Passenger growth rates of 3percent per annum were assumed in building the 15-year operating plan. Industry forecast for Africa is 5.5percent growth per annum. Yields were assumed to grow at a modest 2percent while costs were at 1percent per annum for the relevant identified cost items

## 2.4 Scope

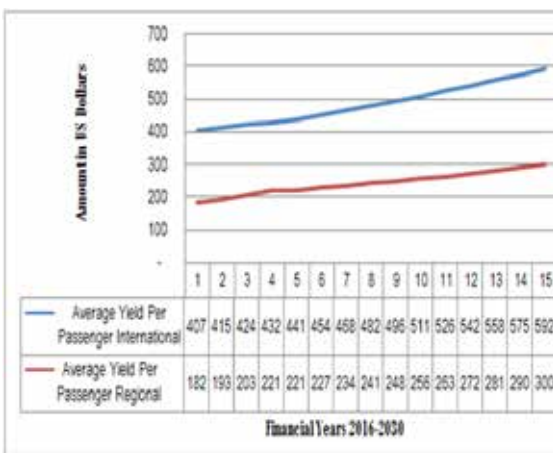
- a) The project scope covers all aspects of airline operations in and out of Uganda for passenger and cargo. It involved looking at historical traffic profiles into Uganda from all regions of the world using Origin-Destination data from Sabre, one of the largest GDS companies in the aviation sector. In addition, MIDT data was obtained on the regional markets to assess the competitive landscape and also derive market information on fares across all products and target airports
- b) Statistical data and historical information on Uganda's exports and imports was also examined in order to assess the potential for air transport growth for specific products and industries.
- c) The review also covered an examination of the rates and charges at all target airports for the specific aircraft types and operations planned for the national airline. This included a detailed review of Uganda's levies and taxes on the inputs and outputs envisaged in the operations of the proposed airline.
- d) Routes and schedules were designed enabling a network of interconnecting flights to be simulated through Entebbe International Airport. The resulting flight schedules were costed and route financials calculated to arrive at a potential indicative Business Plan for the proposed airline. The base plan culminated into a network of flights using 4 regional short-haul CRJ900 aircraft and 2 intercontinental wide body long haul A330-200 aircraft to connect Uganda to regional destination and further afield into Europe, Middle East, Asia, West Africa, South and Central Africa.
- e) Profit and Loss Accounts, Balance sheets, Cash flow Statements were then computed based on

assumed conservative load factors of between 40percent and 65percent across all seat categories and product lines. The associated loan profiles for the aircraft purchases were also computed to arrive at financials reflecting the projected operations and financing of the proposed airline.

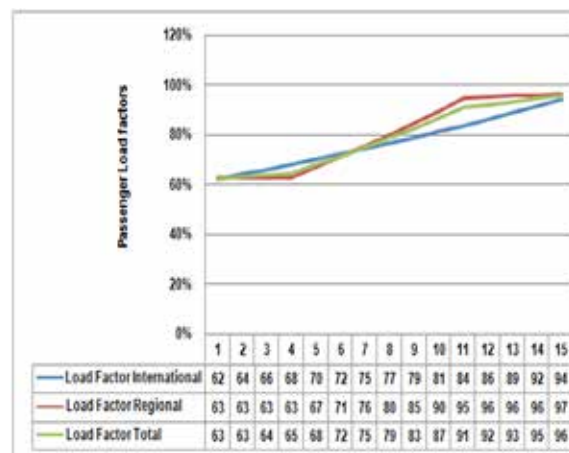
- f) The operating plan was examined in terms of the reasonableness of the results, load factors, yields and the aircraft utilization demanded in the envisaged structure and route network.
- g) On the support side, the plan included setting aside funds intended for ground support equipment, spares provisioning, training, passenger and aircraft handling across the envisaged network.

The following key operating and financial parameters were used in building up the models under the three investment options for the airline.

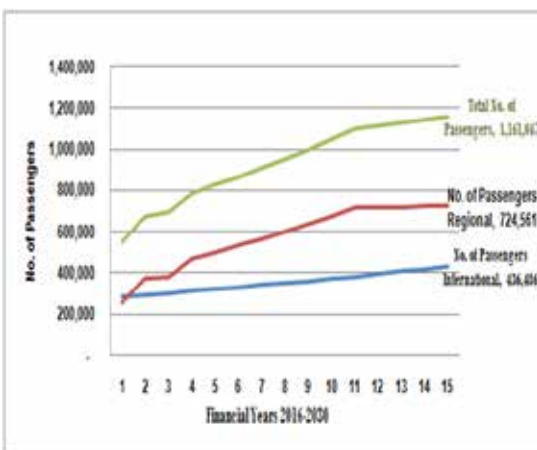
**Figure 3: Average Yield Passenger**



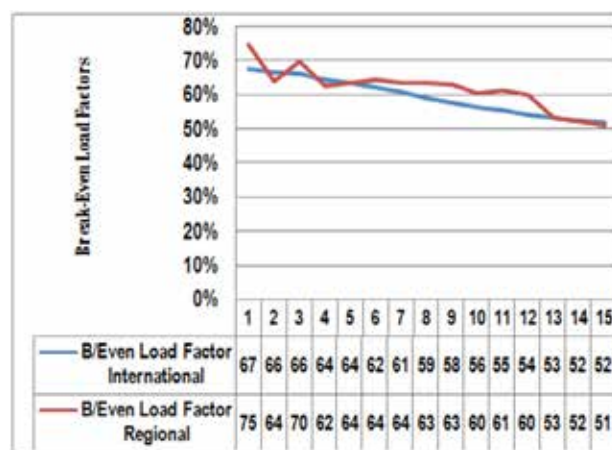
**Figure 4: Passenger Load Factors**



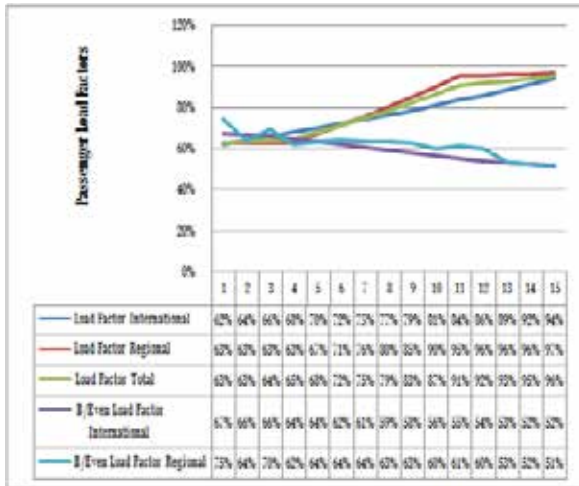
**Seats Offered**



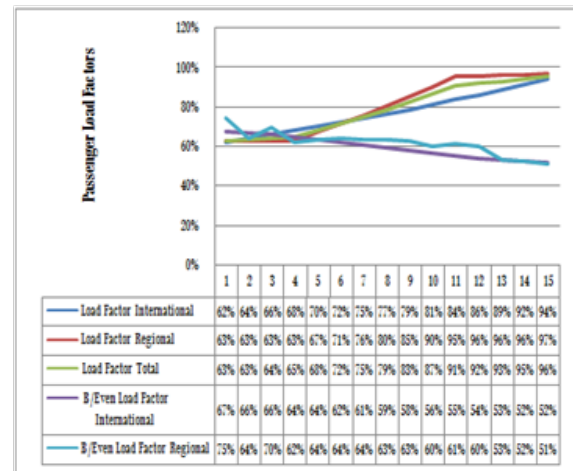
**Break-Even and Actual Load Factors**



### Passengers Carried



### Break-Even and Actual Load Factors



## 2.5 Analysis techniques

- The financial performance of the routes and the entire airline was assessed for each of the 15 years, paying particular attention to the reasonableness of the load factors, yields, profits, losses, cash-flows and bank balances arising from the intended programs.
- The net cash-flows were then computed bearing in mind the initial investment in equity and fixed assets including the aircraft. These net cash flows were then discounted at a rate of 12percent on the US Dollar (opportunity cost of funds) to arrive at the Present Value (PV) of the cash flows.
- The aggregate Net Present Value (NPV) for the project was then computed to assess whether it is positive or negative given all these elements. Generally, a project with a positive NPV is worth undertaking, while one with a negative NPV does not create any wealth and is a cost to the shareholders.
- The project's Internal Rate of Return (IRR) was also calculated to assess whether it is at least equal to the discount rate of 12percent stated above. Ideally projects are desirable if the IRR exceeds the discount rate which in turn reflects the internal cost of funds. IRR is the discount rate at which the present value of benefits are just equal to the present value of costs. For acceptability of the project, IRR should be larger than the cost of funds (12 percent).
- Finally, the Pay-Back period for the total initial investment was also calculated to see how many years it would take to recoup the capital outlay on the airline, at the simulated projected cash flow patterns as derived.
- In order to assess the potential full contribution of the airline to the economy, the annual project financials were also amended to include the embodied Economic Benefit derived from the various taxes and levies imbedded in the supply chains of the industry and economy. To do this it was necessary to derive conversion factors for the various items of cost and revenue and then to recognize them in the NPV computations.



- g) Furthermore, it was also necessary to assess the import substitution potential of the project and to assess its additional contribution to the economy in terms of savings in foreign exchange. This was derived by use of the envisaged foreign exchange premium, calculated from the projected forward rates of the Uganda Shilling/US Dollar exchange rate. This was calculated using data obtained from the Ministry of Finance covering 5 years up to 2019.

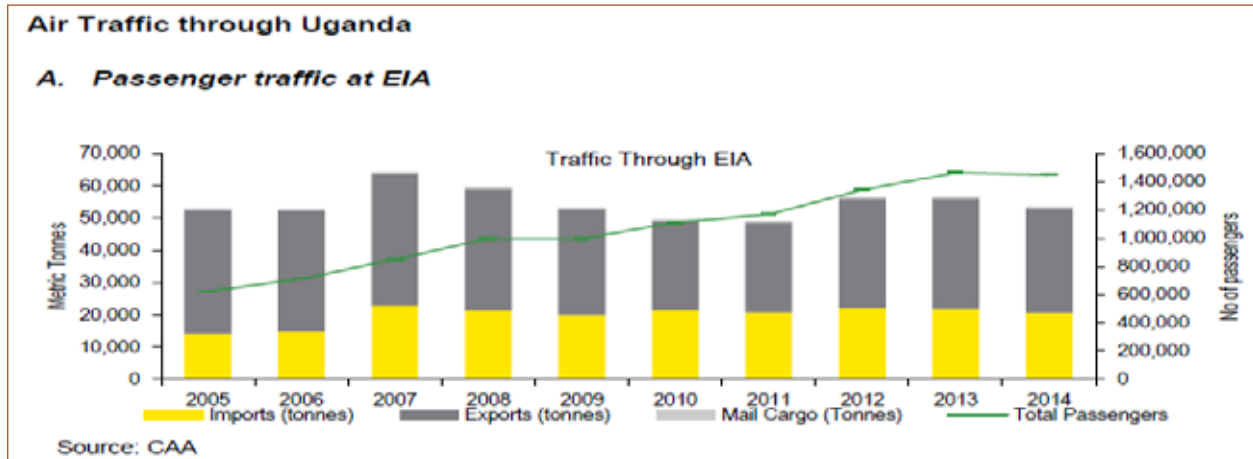
## 2.6 Data used

- a) UGX/USD Forward exchange rates 2015 to 2019 (used to calculate the foreign exchange premium-FX Premium)
- b) Uganda's Tax, VAT, WHT rate; Uganda CAA charge sheets for airline and airport charges
- c) Sabre Origin destination traffic data for regional markets in Africa
- d) Sabre Origin Destination Data for international routes out of Entebbe international Airport.
- e) MIDT data for the regional markets in East and Central Africa
- f) Airport runway data for countries in target regional markets
- g) Manufacturers aircraft performance data for the CRJ900 and the A330-200 aircraft
- h) Seat lay-out and Range –Payload information on the CRJ900 and the A330-200 aircraft
- i) Information on fares to all target destinations derived from airlines operating into Uganda
- j) Statistical information on historical passengers and cargo at Entebbe International Airport
- k) Historical information on imports and exports through Entebbe International Airport

## 3.0 Origin Destination Traffic Analysis

### 3.1 National Air Traffic Analysis

Figure 5: Passenger Traffic at EIA



NB: The chart above shows a summary of the passenger and cargo traffic movements through Entebbe International Airport (EIA) in the past 10 years -2005 to 2014.

- a) From the above summary, passenger traffic through Entebbe International Airport (EIA) has been on a rising trend since 2005. Cargo traffic has also been on a steady trend despite the lack of regular capacity out of Uganda. From 2010 onwards, the average growth in passengers has been 10percent with a spike in growth in 2012 of 14percent. 2014 however experienced a decline in passengers at -0.8percent due to the closure of Air Uganda, which had the majority of frequencies at Entebbe International Airport.

Year	Passengers	Growth rate
2007	781,428	Base year
2008	936,184	19.8%
2009	928,754	-0.8%
2010	1,023,437	10.2%
2011	1,080,000	5.2%
2012	1,230,000	14.1%
2013	1,370,000	11.4%
2014 estimate	1,525,000	11.3%

- b) The majority of passengers passing through EIA, are international passengers and represent 98percent of the total traffic at EIA. Although there has been recent growth in domestic passenger numbers, they still remain negligible when compared to the overall totals.
- c) The main destination is Kenya, because of the Kenya Airways hub which attracts interconnecting passengers to and from Uganda. After Kenya, passengers from Europe represent the most significant air traffic at EIA at 19percent (of which London contributes 4percent), followed by the Middle East at 17percent. East African passengers account for 38percent of air traffic at EIA. The regional market is lacking in capacity and connectivity and Uganda is especially disadvantaged by the lack of a strong home based airline to support its development objectives.



### 3.2 Regional Origin Destination Traffic Analysis

- a) The Regional Passenger Market is very competitive with three main carriers targeting Uganda's markets. Kenya Airways has the most frequencies into Uganda. It is a full member of the SkyTeam Alliance and is the fourth largest carrier in Africa by scheduled capacity. The alliance provides Kenya Airways' passengers with access to the member airlines worldwide network and passenger facilities.
- b) Ethiopian Airlines is wholly owned by the Government of Ethiopia and is a member of the Star Alliance. Currently it is one of the continents leading carriers, serving over 76 international destinations through its hub in Addis Ababa.
- c) Rwanda Air is the flag carrier of Rwanda, with significant government ownership. It currently operates a fleet of 6 aircraft and it has code share agreements with Brussels airlines, Ethiopian airlines and Precision Air.
- d) The chart below shows the key routes from Entebbe during 2013 and their associated operator.

**Table 6: Routes from Entebbe and their associated operator during 2013**

Airline	Airport	Passengers
Kenya Airways	NBO	246,577
Ethiopian Airways	ADD	165,116
KLM	AMS	125,426
Emirates	DXB	101,170
Qatar Airways	DOH	100,732
British Airways	LHR	75,755
RwandAir	KGL	72,597
Air Uganda	NBO	67,253
South African Airways	JNB	63,477
Air Uganda	JUB	59,104

- e) The regional market as a whole has been experiencing health double digit growth and many city pairs in surrounding countries are not yet adequately connected with air services out of Entebbe International Airport. The 2014 Sabre Origin Destination traffic analysis shows great potential for developing an extensive interconnecting network of air services out of Uganda.
- f) The regional route plan comprises 18 potential routes to Nairobi, Mombasa, Juba, Bujumbura, Kigali, Dar-es-Salaam, Kilimanjaro, Addis Ababa, Lagos, Lubumbashi, Khartoum, Kinshasa, Lusaka, Harare, Mogadishu, Hargeisa, Asmara, and Johannesburg.

### 3.3 International Origin Destination Traffic Analysis

- a) Internationally, the Sabre 2014 Origin destination report shows that there are key traffic profiles to Europe, Middle East and Asia, which represent a good customer base for developing viable long haul air services for Uganda Airlines. The key major markets and routes are shown in the table below.

**Figure 6: Traffic Data for proposed routes**

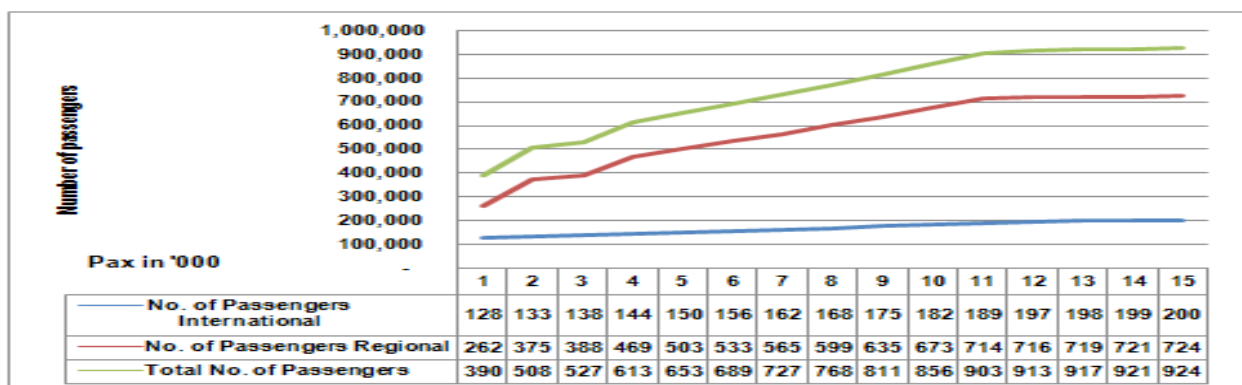


- b) The operation of these long-haul routes would require the use of wide body aircraft like the A330-200 which has the capability to uplift both passengers and cargo. The Uganda Airlines plan therefore includes at least one A330-200 aircraft with a start-up long-haul schedule covering London, Amsterdam-Brussels and Dubai routes.
- c) Long-haul flights are required to connect Uganda to Europe, Middle East and Asia. Based on the traffic figures above, the plan for Uganda Airlines targets flights to London, Amsterdam-Brussels, Dubai, Johannesburg, Lagos, Doha and Mumbai.

#### 3.3.1 Passenger Projections

- d) Based on the above factors we have simulated the potential frequencies and schedules developed for the Regional CRJ900 aircraft and the A330-200 aircraft, to arrive at traffic projections for Uganda Airlines in the next 15 years as shown in the graphs below.

**Figure 7: Passenger projections**



- e) The projections, that show a steady rise in traffic, are consistent with the recent growth rates seen in passengers carried into and out of this market in the past 10 years.
- f) Details of the OD data used to check the traffic profiles are included in the Annexes.

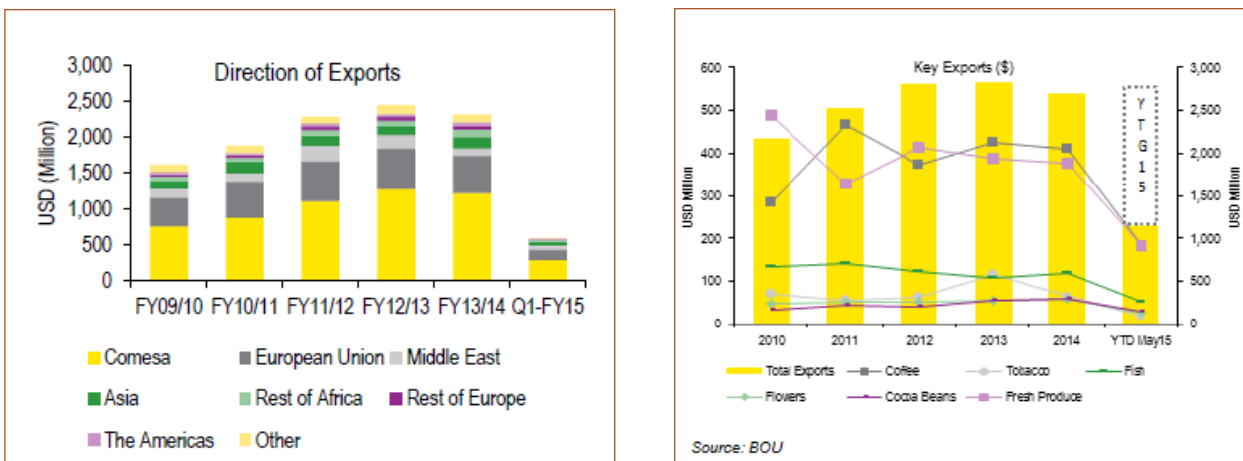
### 3.4 Cargo Traffic Analysis

a) Uganda has always had tremendous potential for developing a cargo hub due to its central geographical location as well as its abundant natural resources. Over the past 20 years, the export of Fish, Flowers and Fresh produce though showing some decline up to 2009/10 has continued to show a rising trend in recent years. This has helped to sustain a good cargo industry with a boom having been reached during the years when DAS Air Cargo operated with its hub at Entebbe International Airport.

The following is worthwhile to note:

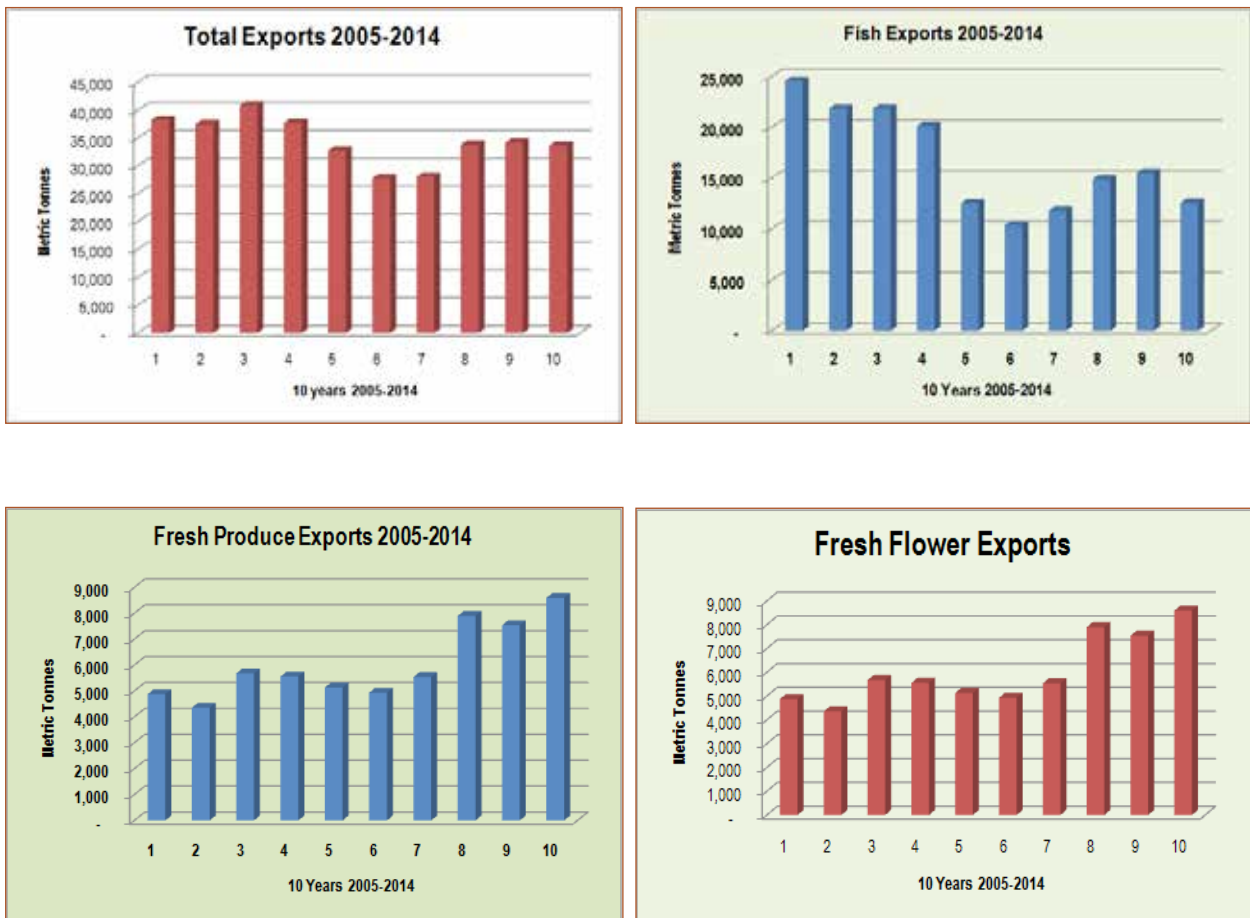
- ◆ Europe commands the greatest market share of Uganda’s air cargo at 46percent, followed by the Middle East with 28percent market share and South Africa at 10percent.
- ◆ Growth in cargo through Entebbe International Airport (EIA) in recent years has been marginal to negative after plummeting during the 2009 recession and has not yet recovered to 2007/8s levels. However, this may be due to the lack of a strong home based airline with regular air services promoting Uganda and its products internationally
- ◆ The Middle East and Europe, however, show the most significant growth, with Europe cargo growing by 25percent in 2014. Collectively, cargo from the other regions has been declining since 2013 by an average of 8percent per annum.
- ◆ Uganda’s agriculture, Flower and Fishing industry has been looking for a strong Ugandan airlines to help support the growth of cargo services in order to promote sector investment and take products to markets abroad.

**Figure 8: Key Exports and their destinations**



b) It would seem that the limitation to the development of a good export industry has been the lack of regular air services to transport what is produced in Uganda to other markets. Trends for the main categories of exports out of Uganda can be seen in the charts below.

**Figure 9: Trends for the main categories of exports out of Uganda**



- c) Imports have equally been rising and primarily consist of machinery, equipment and vehicles which make up 30percent of total imports. Petroleum products are the second largest portion of imports and account for approximately 20percent of total imports and these come primarily by road.
- d) Most of the imports (51percent) come from Asia. Within Asia the bulk of import purchases come from India, followed by China. Although greater volumes of imports come from China as compared to India, the value associated with Indian imports doubles that of China as these are mainly high value pharmaceutical products. Imports from the Middle East and EU are approximately the same with the main sources being UAE, United Kingdom and Germany.
- e) It is envisaged that Uganda Airlines will develop cargo operations in phases in line with the launch of its route structure and network. The regional network will help carry and consolidate non-bulk cargo to and from the different regional destinations, thus allowing cargo consolidators to have regular services for the transport of small to medium size packages. Capability to carry bulk cargo will come when wide body long range aircraft are introduced.
- f) Therefore, the entry into service of the A330-200 aircraft, which will enable the launch of international air services to London, Amsterdam-Brussels and Dubai, which will benefit the cargo export and import industry. The A330-200 aircraft carries 247 passengers and 9.4tonnes of cargo in the simulated 3 class configuration for Uganda Airlines. With the planned 18 weekly long haul flights this will potentially provide 169.2tonnes of cargo capacity per week to long haul destinations.

## 4.0 Feasibility Evaluations for Aircraft Purchase Option

### 4.1 Financial Appraisal: Option1 Regional Airline

a) Financials were simulated on the Regional Airline purchase option for the 15-year plan period to assess the projected performance of the proposed carrier. The results for the first 7 Years are shown below while full details are attached as Annexes.

**Table 7: Option:1Regional Operations Income Statements**

PROFIT & LOSS ACCOUNTS	2016	2017	2018	2019	2020	2021	2022
Passenger revenue - Economy class	43,392,378	65,957,892	71,957,954	93,159,412	100,325,520	109,535,403	119,590,753
Passenger revenue - Bussiness class	4,357,534	6,569,136	7,011,178	10,768,142	10,768,142	11,756,657	12,835,919
Cargo revenue	477,499	725,270	789,691	1,039,276	1,110,937	1,212,921	1,324,267
Other revenue (exchange fees,miscelle	954,998	1,450,541	1,579,383	2,078,551	2,221,873	2,425,841	2,648,533
<b>Total Revenue</b>	<b>49,182,409</b>	<b>74,702,839</b>	<b>81,338,205</b>	<b>107,045,380</b>	<b>114,426,472</b>	<b>124,930,822</b>	<b>136,399,472</b>
Commercial & Pax Costs	5,889,319	8,551,831	8,972,010	11,099,038	11,891,385	12,801,572	13,782,505
Variable costs	21,401,019	30,203,012	32,231,823	41,312,252	41,312,252	43,674,807	43,823,571
Direct Operating Costs	18,940,759	23,314,399	34,196,175	38,140,581	38,751,908	39,510,772	40,315,995
Indirect Costs	10,540,243	12,084,052	12,405,589	12,847,978	13,165,412	13,175,892	13,669,901
<b>Total costs</b>	<b>56,771,341</b>	<b>74,153,294</b>	<b>87,805,597</b>	<b>103,399,848</b>	<b>105,120,957</b>	<b>109,163,044</b>	<b>111,591,973</b>
<b>EBT</b>	<b>(7,588,932)</b>	<b>549,545</b>	<b>(6,467,392)</b>	<b>3,645,532</b>	<b>9,305,515</b>	<b>15,767,778</b>	<b>24,807,499</b>
Tax	-	164,863	-	1,093,660	2,791,654	4,730,334	7,442,250
<b>Net cash inflows</b>	<b>(7,588,932)</b>	<b>384,681</b>	<b>(6,467,392)</b>	<b>2,551,873</b>	<b>6,513,860</b>	<b>11,037,445</b>	<b>17,365,249</b>

**Table 8: Option:1 Balance Sheets**

BALANCE SHEETS	2016	2017	2018	2019	2020	2021	2022
	US\$	US\$	US\$	US\$	US\$	US\$	US\$
<b>FIXED ASSETS</b>							
Aircraft	106,248,000	100,656,000	95,064,000	89,472,000	83,880,000	78,288,000	72,696,000
Aircraft Rotables	1,900,000	1,800,000	1,700,000	1,600,000	1,500,000	1,400,000	1,300,000
Furniture & Equipment	1,600,000	1,200,000	800,000	400,000	-	-	-
	<b>109,748,000</b>	<b>103,656,000</b>	<b>97,564,000</b>	<b>91,472,000</b>	<b>85,380,000</b>	<b>79,688,000</b>	<b>73,996,000</b>
<b>CURRENT ASSETS</b>							
Account receivables	8,213,462	12,475,374	13,583,480	17,876,579	19,109,221	20,863,447	22,778,712
Bank Balances	34,988,094	38,634,778	28,140,810	24,210,317	27,364,437	35,706,366	52,167,632
	<b>43,201,556</b>	<b>51,110,152</b>	<b>41,724,290</b>	<b>42,086,895</b>	<b>46,473,658</b>	<b>56,569,814</b>	<b>74,946,344</b>
<b>CURRENT LIABILITIES</b>							
Account payables	3,698,488	4,965,539	6,032,001	7,244,150	7,356,444	7,678,972	7,833,766
<b>NET CURRENT ASSETS/(LIABILITIES)</b>	<b>39,503,068</b>	<b>46,144,613</b>	<b>35,692,290</b>	<b>34,842,746</b>	<b>39,117,214</b>	<b>48,890,841</b>	<b>67,112,578</b>
<b>TOTAL ASSETS</b>	<b>149,251,068</b>	<b>149,800,613</b>	<b>133,256,290</b>	<b>126,314,746</b>	<b>124,497,214</b>	<b>128,578,841</b>	<b>141,108,578</b>
<b>LONG TERM LIABILITIES</b>							
Senior Loan 10 years	83,880,000	83,880,000	77,230,586	70,244,546	62,904,837	55,193,556	47,091,890
Junior loan 7 years	27,960,000	27,960,000	24,532,482	20,931,447	17,148,109	13,173,239	8,997,142
	<b>111,840,000</b>	<b>111,840,000</b>	<b>101,763,069</b>	<b>91,175,993</b>	<b>80,052,946</b>	<b>68,366,795</b>	<b>56,089,033</b>
<b>SHARE CAPITAL</b>							
Share Capital	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000
<b>RESERVES</b>							
Opening Reserves	-	(7,588,932)	(7,039,387)	(13,506,779)	(9,861,247)	(555,732)	15,212,047
Profit & Loss Account For Year	(7,588,932)	549,545	(6,467,392)	3,645,532	9,305,515	15,767,778	24,807,499
	<b>(7,588,932)</b>	<b>(7,039,387)</b>	<b>(13,506,779)</b>	<b>(9,861,247)</b>	<b>(555,732)</b>	<b>15,212,047</b>	<b>40,019,545</b>
<b>TOTAL LIABILITIES + EQUITY</b>	<b>149,251,068</b>	<b>149,800,613</b>	<b>133,256,290</b>	<b>126,314,746</b>	<b>124,497,214</b>	<b>128,578,841</b>	<b>141,108,578</b>

**Table 9: Option:1 Cash Flow Statements**

CASHFLOW STATEMENTS	2016	2017	2018	2019	2020	2021	2022
<b>Operating Activities</b>	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Earnings Before Taxation	(7,588,932)	549,545	(6,467,392)	3,645,532	9,305,515	15,767,778	24,807,499
Depreciation Aircraft	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000
Depreciation Rotables	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Depreciation Furniture etc	400,000	400,000	400,000	400,000	400,000	-	-
<b>Net Cash Flow from Operations</b>	<b>(1,496,932)</b>	<b>6,641,545</b>	<b>(375,392)</b>	<b>9,737,532</b>	<b>15,397,515</b>	<b>21,459,778</b>	<b>30,499,499</b>
<b>INVESTING ACTIVITIES</b>							
Purchase of Aircraft	(111,840,000)						
Purchase of Aircraft Rotables	(2,000,000)						
Purchase of Furniture & Equip	(2,000,000)						
<b>Net Cash Flow from Investing</b>	<b>(115,840,000)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>FINANCING</b>							
Equity Contribution	45,000,000						
Loans Received	111,840,000						
Repayments Senior Loan	-	-	(6,649,414)	(6,986,040)	(7,339,709)	(7,711,281)	(8,101,665)
Repayments Junior Loan	-	-	(3,427,518)	(3,601,036)	(3,783,338)	(3,974,869)	(4,176,097)
<b>Net Cash Flow from Financing</b>	<b>156,840,000</b>	<b>-</b>	<b>(10,076,931)</b>	<b>(10,587,076)</b>	<b>(11,123,047)</b>	<b>(11,686,151)</b>	<b>(12,277,762)</b>
<b>WORKING CAPITAL</b>							
Changes in Receivables	(8,213,462)	(4,261,912)	(1,108,106)	(4,293,098)	(1,232,642)	(1,754,226)	(1,915,264)
Changes in Payables	3,698,488	1,267,052	1,066,461	1,212,149	112,294	322,529	154,794
<b>Net Working Capital Changes</b>	<b>(4,514,974)</b>	<b>(2,994,860)</b>	<b>(41,645)</b>	<b>(3,080,949)</b>	<b>(1,120,348)</b>	<b>(1,431,698)</b>	<b>(1,760,471)</b>
<b>Net Changes in Cash Flow</b>	<b>34,988,094</b>	<b>3,646,685</b>	<b>(10,493,968)</b>	<b>(3,930,493)</b>	<b>3,154,120</b>	<b>8,341,930</b>	<b>16,461,266</b>
Opening Bank Balance	0	34,988,094	38,634,778	28,140,810	24,210,317	27,364,437	35,706,366
<b>Closing Bank Balance</b>	<b>34,988,094</b>	<b>38,634,778</b>	<b>28,140,810</b>	<b>24,210,317</b>	<b>27,364,437</b>	<b>35,706,366</b>	<b>52,167,632</b>

**Table 10: Option:1 Net Present Value computation at discount rate of 12%**

Financial Measure	Value
<b>NPV</b>	73,769,335
<b>IRR</b>	22%
<b>Pay Back</b>	7

## 4.2 Financial Appraisal: Option2 International Long Haul Airline

- a) Financials were simulated on the International Airline investment option for the 15-year plan period to also assess the projected performance of the proposed carrier. The results for the first 7 Years are shown below while full details are in the Annexes.

**Table 11: Option: 2: International Income Statements**

PROFIT & LOSS ACCOUNTS	2016	2017	2018	2019	2020	2021	2022
Pax revenue	117,494,270	123,439,480	129,685,518	136,247,605	143,141,734	151,859,066	161,107,283
Cargo revenue	1,174,943	1,234,395	1,296,855	1,362,476	1,431,417	1,518,591	1,611,073
Exchange fees & charges	2,349,885	2,468,790	2,593,710	2,724,952	2,862,835	3,037,181	3,222,146
<b>TOTAL REVENUES</b>	<b>121,019,099</b>	<b>127,142,665</b>	<b>133,576,084</b>	<b>140,335,034</b>	<b>147,435,986</b>	<b>156,414,838</b>	<b>165,940,501</b>
<b>Commercial &amp; Pax costs</b>	<b>9,821,019</b>	<b>10,242,153</b>	<b>10,693,055</b>	<b>11,164,058</b>	<b>11,656,070</b>	<b>12,214,271</b>	<b>12,800,355</b>
<b>Variable costs</b>	<b>77,032,677</b>	<b>77,032,677</b>	<b>95,008,593</b>	<b>95,691,820</b>	<b>96,381,879</b>	<b>97,078,839</b>	<b>97,782,769</b>
<b>Direct Costs</b>	<b>23,711,646</b>	<b>23,794,466</b>	<b>23,969,493</b>	<b>24,146,270</b>	<b>24,324,814</b>	<b>24,505,144</b>	<b>24,687,277</b>
<b>Indirect costs</b>	<b>16,422,498</b>	<b>16,588,255</b>	<b>16,792,407</b>	<b>16,005,639</b>	<b>16,228,380</b>	<b>16,491,449</b>	<b>16,768,333</b>
<b>Total Costs</b>	<b>126,987,841</b>	<b>127,657,552</b>	<b>146,463,547</b>	<b>147,007,786</b>	<b>148,591,143</b>	<b>150,289,704</b>	<b>152,038,735</b>
EBT	(5,968,742)	(514,887)	(12,887,463)	(6,672,753)	(1,155,157)	6,125,134	13,901,767
Tax						1,837,540	4,170,530
<b>Net cash inflows</b>	<b>(5,968,742)</b>	<b>(514,887)</b>	<b>(12,887,463)</b>	<b>(6,672,753)</b>	<b>(1,155,157)</b>	<b>4,287,594</b>	<b>9,731,237</b>

**Table 12: Option:2 International Balance Sheets**

BALANCE SHEETS	2016	2017	2018	2019	2020	2021	2022
<b>INTERNATIONAL</b>	US\$	US\$	US\$	US\$	US\$	US\$	US\$
<b>FIXED ASSETS</b>							
Aircraft	182,400,000	172,800,000	163,200,000	153,600,000	144,000,000	134,400,000	124,800,000
Aircraft Rotables	7,600,000	7,200,000	6,800,000	6,400,000	6,000,000	5,600,000	5,200,000
	<b>190,000,000</b>	<b>180,000,000</b>	<b>170,000,000</b>	<b>160,000,000</b>	<b>150,000,000</b>	<b>140,000,000</b>	<b>130,000,000</b>
<b>CURRENT ASSETS</b>							
Account receivables	20,210,189	21,232,825	22,307,206	23,435,951	24,621,810	26,121,278	27,712,064
Bank Balances	29,666,296	38,169,090	35,695,393	38,000,376	45,768,210	60,508,715	82,937,467
	<b>49,876,485</b>	<b>59,401,915</b>	<b>58,002,599</b>	<b>61,436,327</b>	<b>70,390,019</b>	<b>86,629,993</b>	<b>110,649,531</b>
<b>CURRENT LIABILITIES</b>							
Account payables	8,845,227	8,885,544	10,373,691	10,480,172	10,589,021	10,703,860	10,821,632
<b>NET CURRENT ASSETS/(LIABILITIES)</b>	<b>41,031,258</b>	<b>50,516,371</b>	<b>47,628,908</b>	<b>50,956,155</b>	<b>59,800,998</b>	<b>75,926,132</b>	<b>99,827,899</b>
<b>TOTAL ASSETS</b>	<b>231,031,258</b>	<b>230,516,371</b>	<b>217,628,908</b>	<b>210,956,155</b>	<b>209,800,998</b>	<b>215,926,132</b>	<b>229,827,899</b>
<b>LONG TERM LIABILITIES</b>							
Senior Loan 10 years	144,000,000	144,000,000	132,584,697	120,591,495	107,991,137	94,752,885	80,844,447
Junior loan 7 years	48,000,000	48,000,000	42,115,850	35,933,814	29,438,814	22,615,003	15,445,738
	<b>192,000,000</b>	<b>192,000,000</b>	<b>174,700,547</b>	<b>156,525,309</b>	<b>137,429,950</b>	<b>117,367,888</b>	<b>96,290,185</b>
<b>CAPITAL &amp; RESERVES</b>							
Share Capital	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000
Opening Reserves	-	(5,968,742)	(6,483,629)	(2,071,640)	9,430,846	27,371,048	53,558,244
Profit & Loss account For Year	(5,968,742)	(514,887)	4,411,989	11,502,485	17,940,203	26,187,196	34,979,470
	<b>(5,968,742)</b>	<b>(6,483,629)</b>	<b>(2,071,640)</b>	<b>9,430,846</b>	<b>27,371,048</b>	<b>53,558,244</b>	<b>88,537,714</b>
<b>TOTAL LIABILITIES + EQUITY</b>	<b>231,031,258</b>	<b>230,516,371</b>	<b>217,628,908</b>	<b>210,956,155</b>	<b>209,800,998</b>	<b>215,926,132</b>	<b>229,827,899</b>

**Table 13: Option:2 Cash Flow Statements**

CASH FLOW STATEMENTS	2016	2017	2018	2019	2020	2021	2022
<b>INTERNATIONAL</b>	US\$	US\$	US\$	US\$	US\$	US\$	US\$
<b>EARNINGS BEFORE TAXATION</b>	(5,968,742)	(514,887)	4,411,989	11,502,485	17,940,203	26,187,196	34,979,470
Depreciation aircraft	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000
Depreciation rotables	400,000	400,000	400,000	400,000	400,000	400,000	400,000
<b>Net Cash Flow from Operations</b>	<b>4,031,258</b>	<b>9,485,113</b>	<b>14,411,989</b>	<b>21,502,485</b>	<b>27,940,203</b>	<b>36,187,196</b>	<b>44,979,470</b>
<b>INVESTING ACTIVITIES</b>							
Purchase of fixed assets aircraft	(192,000,000)						
Purchase of fixed assets aircraft rotables	(8,000,000)						
<b>Net Cash Flow From Investing</b>	<b>(200,000,000)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>FINANCING</b>							
Equity injection	45,000,000						
Loans received	192,000,000						
Loan repayments senior	-	-	(11,415,303)	(11,993,202)	(12,600,358)	(13,238,251)	(13,908,438)
Loan repayments junior	-	-	(5,884,150)	(6,182,035)	(6,495,001)	(6,823,810)	(7,169,266)
<b>Net Cash Flow From Financing</b>	<b>237,000,000</b>	<b>-</b>	<b>(17,299,453)</b>	<b>(18,175,238)</b>	<b>(19,095,359)</b>	<b>(20,062,062)</b>	<b>(21,077,704)</b>
<b>WORKING CAPITAL</b>							
Changes in receivables	(20,210,189)	(1,022,636)	(1,074,381)	(1,128,745)	(1,185,859)	(1,499,468)	(1,590,786)
Changes in payables	8,845,227	40,316	1,488,147	106,481	108,849	114,839	117,772
<b>Net Working Capital</b>	<b>(11,364,962)</b>	<b>(982,319)</b>	<b>413,767</b>	<b>(1,022,264)</b>	<b>(1,077,010)</b>	<b>(1,384,629)</b>	<b>(1,473,014)</b>
<b>Net changes in Cashflow</b>	<b>29,666,296</b>	<b>8,502,794</b>	<b>(2,473,697)</b>	<b>2,304,983</b>	<b>7,767,834</b>	<b>14,740,505</b>	<b>22,428,753</b>
Opening bank balance	0	29,666,296	38,169,090	35,695,393	38,000,376	45,768,210	60,508,715
<b>Closing Bank balance</b>	<b>29,666,296</b>	<b>38,169,090</b>	<b>35,695,393</b>	<b>38,000,376</b>	<b>45,768,210</b>	<b>60,508,715</b>	<b>82,937,467</b>

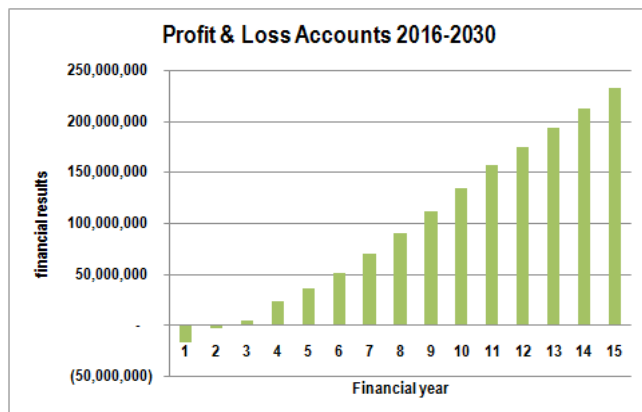
**Table 14: Option: 2 Net Present Value computation at a discount rate of 12%**

Financial Measure	Value
NPV	41,747,906
IRR	17%
Pay Back	10

### 4.3 Financial Appraisal: Option 3 Abridged Income Statements

- a) The airline is projected to make financial losses in the first two years of operation and to break even in the third year. From year four onwards, profitability improves as the airline gains traction in its markets and cements its brand with customers, resulting in modest increases in Load Factors and Yields. As mentioned in the sections above, the plan assumes the generation of Load Factors of between 40% and 65% with an average of 62% across all three product lines in the initial 3 years.
- b) The airline will be adding routes in the first 3 years reaching its full schedules in year 4 especially on the regional routes. From year four onwards, results improve as passengers and cargo volumes increase and the airline benefits from economies of scale across all routes and product lines. It is in year 4 that we expect to have a full hub structure for the national carrier at Entebbe International Airport.

**Figure 10: Option 3; Profit and Loss 2016-2030**





**Table 15: The Airline's abridged profitability profile is shown below. Full details of the profit & loss accounts are given in ANNEX: 4**

PROFIT & LOSS ACCOUNTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Pax revenues	165,244,182	195,966,508	208,654,649	240,175,159	254,235,397	273,151,126	293,533,955	315,502,157	339,183,866	364,717,920	392,254,776	411,455,839	431,720,459	453,113,429	475,703,785
Cargo revenue	1,652,442	1,959,665	2,086,546	2,401,752	2,542,354	2,731,511	2,935,340	3,155,022	3,391,839	3,647,179	3,922,548	4,114,558	4,317,205	4,531,134	4,757,038
Exchange fees & charges	3,304,884	3,919,330	4,173,093	4,803,503	5,084,708	5,463,023	5,870,679	6,310,043	6,783,677	7,294,358	7,845,086	8,229,117	8,634,409	9,062,269	9,514,076
<b>TOTAL REVENUES</b>	<b>170,201,507</b>	<b>201,845,504</b>	<b>214,914,288</b>	<b>247,380,414</b>	<b>261,862,459</b>	<b>281,345,660</b>	<b>302,339,973</b>	<b>324,967,221</b>	<b>349,359,382</b>	<b>375,659,458</b>	<b>404,022,420</b>	<b>423,799,515</b>	<b>444,672,073</b>	<b>466,706,832</b>	<b>489,974,898</b>
Commercial & Pax costs	15,710,339	18,793,984	19,665,065	22,263,096	23,547,455	25,015,844	26,582,860	28,255,547	30,041,474	31,948,779	33,986,213	35,110,553	36,386,725	37,726,651	39,133,942
Variable costs	92,791,269	101,593,262	104,335,977	114,137,447	114,865,699	117,963,788	118,855,442	119,756,012	120,665,588	121,584,259	124,727,382	125,664,519	126,611,027	127,567,000	128,532,533
Direct Costs	48,294,832	52,751,292	63,770,654	66,978,238	66,809,795	66,743,712	66,676,467	66,608,796	66,541,538	61,795,081	62,152,511	61,753,899	50,789,298	51,264,560	51,748,293
Indirect costs	26,962,741	28,672,306	29,197,996	28,853,617	29,393,792	29,667,342	30,438,235	31,263,461	32,147,236	33,094,119	34,109,040	34,750,849	35,422,157	36,124,606	36,859,946
<b>TOTAL COSTS</b>	<b>183,759,181</b>	<b>201,810,845</b>	<b>216,963,691</b>	<b>232,232,397</b>	<b>234,616,741</b>	<b>239,390,686</b>	<b>242,553,004</b>	<b>245,883,817</b>	<b>249,395,836</b>	<b>248,422,238</b>	<b>254,975,147</b>	<b>257,279,820</b>	<b>249,209,207</b>	<b>252,682,818</b>	<b>256,274,714</b>
<b>EARNINGS BEFORE TAXATION</b>	<b>(13,557,674)</b>	<b>34,658</b>	<b>(2,055,403)</b>	<b>15,148,017</b>	<b>27,245,718</b>	<b>41,954,974</b>	<b>59,786,969</b>	<b>79,083,405</b>	<b>99,963,547</b>	<b>127,237,220</b>	<b>149,047,273</b>	<b>166,519,694</b>	<b>195,462,866</b>	<b>214,024,014</b>	<b>233,700,185</b>
Tax		10,397	(616,621)	4,544,405	8,173,715	12,586,492	17,938,091	23,725,021	29,989,064	38,171,166	44,714,182	49,955,908	58,638,860	64,207,204	70,110,055
<b>Net cash inflows</b>	<b>(13,557,674)</b>	<b>24,261</b>	<b>(1,438,782)</b>	<b>10,603,612</b>	<b>19,072,002</b>	<b>29,368,482</b>	<b>41,850,878</b>	<b>55,358,383</b>	<b>69,974,483</b>	<b>89,066,054</b>	<b>104,333,091</b>	<b>116,563,786</b>	<b>136,824,006</b>	<b>149,816,810</b>	<b>163,590,129</b>

### 4.4 Financial Appraisal: Option 3 Balance Sheets 15 Years

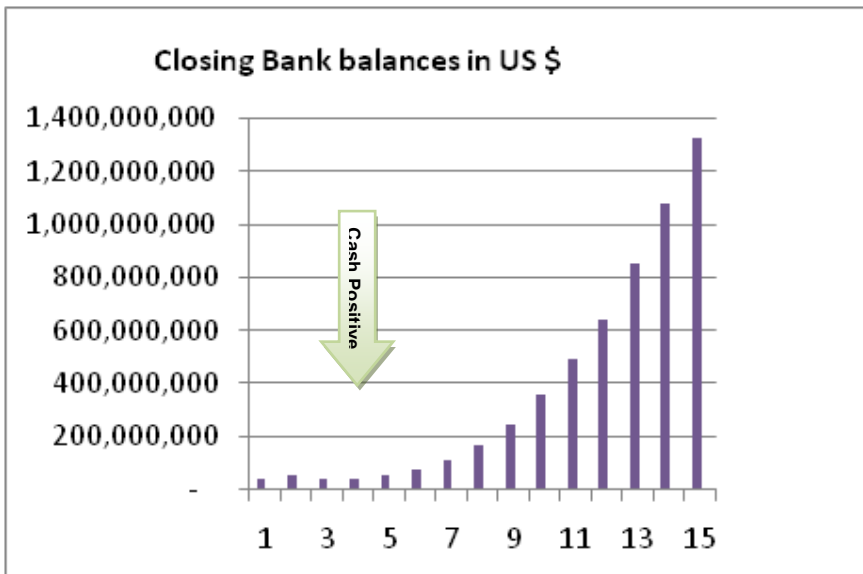
**Table 16: The resulting Balance Sheets for the 15-year plan for the airline are given in the Table below (Details in ANNEX: 6 Page 43).**

<b>COMBINED OPERATIONS - WHOLE AIRLINE</b>		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>FINANCIAL BASIS</b>		US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
<b>FIXED ASSETS</b>																
Aircraft		288,648,000	273,456,000	258,264,000	243,072,000	227,880,000	212,688,000	197,496,000	182,304,000	167,112,000	151,920,000	136,728,000	121,536,000	106,344,000	91,152,000	75,960,000
Aircraft Reserves		9,500,000	9,000,000	8,500,000	8,000,000	7,500,000	7,000,000	6,500,000	6,000,000	5,500,000	5,000,000	4,500,000	4,000,000	3,500,000	3,000,000	2,500,000
Furniture & Equipment		1,600,000	1,200,000	800,000	400,000	-	-	-	-	-	-	-	-	-	-	-
<b>CURRENT ASSETS</b>		<b>299,748,000</b>	<b>283,656,000</b>	<b>267,564,000</b>	<b>251,472,000</b>	<b>235,380,000</b>	<b>219,688,000</b>	<b>203,996,000</b>	<b>188,304,000</b>	<b>172,612,000</b>	<b>156,920,000</b>	<b>141,228,000</b>	<b>125,536,000</b>	<b>109,844,000</b>	<b>94,152,000</b>	<b>78,460,000</b>
Account receivables		28,423,652	33,708,199	35,890,686	41,312,529	43,731,031	46,984,725	50,490,776	54,269,526	58,343,017	62,735,129	67,471,744	70,774,519	74,260,236	77,940,041	81,825,808
Bank Balances		44,654,389	56,803,868	43,836,203	42,210,693	53,132,646	76,215,081	115,105,099	171,343,479	246,407,287	358,694,879	492,388,728	643,324,515	848,869,982	1,075,127,894	1,320,862,836
		73,078,041	90,512,067	79,726,889	83,523,222	96,863,677	123,199,806	165,595,875	225,613,005	304,750,304	421,430,009	559,860,472	714,099,034	923,130,228	1,153,067,935	1,402,688,644
<b>CURRENT LIABILITIES</b>																
Account payables		12,543,715	13,851,083	16,405,692	17,724,321	17,945,465	18,382,832	18,655,398	18,941,209	19,241,155	18,516,611	19,024,975	19,226,636	17,102,964	17,324,657	17,553,181
<b>NET CURRENT ASSETS/(LIABILITIES)</b>		<b>60,534,326</b>	<b>76,660,984</b>	<b>63,321,197</b>	<b>65,798,901</b>	<b>78,918,212</b>	<b>104,816,974</b>	<b>146,940,477</b>	<b>206,671,795</b>	<b>285,509,149</b>	<b>402,913,398</b>	<b>540,835,497</b>	<b>694,872,399</b>	<b>906,027,264</b>	<b>1,135,743,278</b>	<b>1,385,135,463</b>
<b>TOTAL ASSETS</b>		<b>360,282,326</b>	<b>360,316,984</b>	<b>330,885,197</b>	<b>317,270,901</b>	<b>314,298,212</b>	<b>324,504,974</b>	<b>350,936,477</b>	<b>394,975,795</b>	<b>458,121,149</b>	<b>559,833,398</b>	<b>682,063,497</b>	<b>820,408,399</b>	<b>1,015,871,264</b>	<b>1,229,895,278</b>	<b>1,463,595,463</b>
<b>LONG TERM LIABILITIES</b>																
Senior Loan 10 years		227,880,000	227,880,000	209,815,283	190,836,041	170,895,974	149,946,441	127,936,338	104,811,973	80,516,938	54,991,966	28,174,793	(0)	(0)	(0)	(0)
Junior loan 7 years		75,960,000	75,960,000	66,648,332	56,865,261	46,586,923	35,788,243	24,442,880	12,523,168	(0)	(0)	(0)	(0)	(0)	(0)	(0)
		303,840,000	303,840,000	276,463,616	247,701,302	217,482,896	185,734,683	152,379,217	117,335,131	80,516,938	54,991,966	28,174,793	(0)	(0)	(0)	(0)
<b>SHARE CAPITAL</b>																
Share Capital		70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000
<b>RESERVES</b>																
Opening Reserves		-	(13,557,674)	(13,523,016)	(15,578,419)	(430,401)	26,815,316	68,770,290	128,557,260	207,640,664	307,604,211	434,841,432	583,888,704	750,408,399	945,871,264	1,159,895,278
Profit & Loss account For Year		(13,557,674)	(13,523,016)	(15,578,419)	(430,401)	26,815,316	68,770,290	128,557,260	207,640,664	307,604,211	434,841,432	583,888,704	750,408,399	945,871,264	1,159,895,278	1,393,595,463
<b>TOTAL ASSETS</b>		<b>360,282,326</b>	<b>360,316,984</b>	<b>330,885,197</b>	<b>317,270,901</b>	<b>314,298,212</b>	<b>324,504,974</b>	<b>350,936,477</b>	<b>394,975,795</b>	<b>458,121,149</b>	<b>559,833,398</b>	<b>682,063,497</b>	<b>820,408,399</b>	<b>1,015,871,264</b>	<b>1,229,895,278</b>	<b>1,463,595,463</b>

### 4.5 Financial appraisal: Option 3 Cash Flow Statements 2016-2030

- a) The financial simulations indicate generation of sufficient positive cash flows to pay for the capital outlay, loans and initial fixed asset investments. **Cash is tight in the initial four (4) years and remains at break-even levels** (with receipts nearly equal to payments) up to 2019, but the airline becomes cash positive from year 5 onwards.
- b) Thereafter, the airline has potential to generate more cash than its envisaged liabilities and as a result, bank balances build up rapidly. The cash generation potential increases even more from year 10 when the airline completes payment of the loans for the 6 initial aircraft, i.e the 4 CRJ900 aircraft for Regional Operations and the 2 Airbus A330-200 aircraft targeted for Long-Haul Operations.

**Figure 11: Closing Bank Balances for 15 years**



From deficit of \$5.3M in 2016 to bank balance of \$1.3bn in 2030

Table 17: The Abridged Cash Flow Statements for the 15-year simulation period

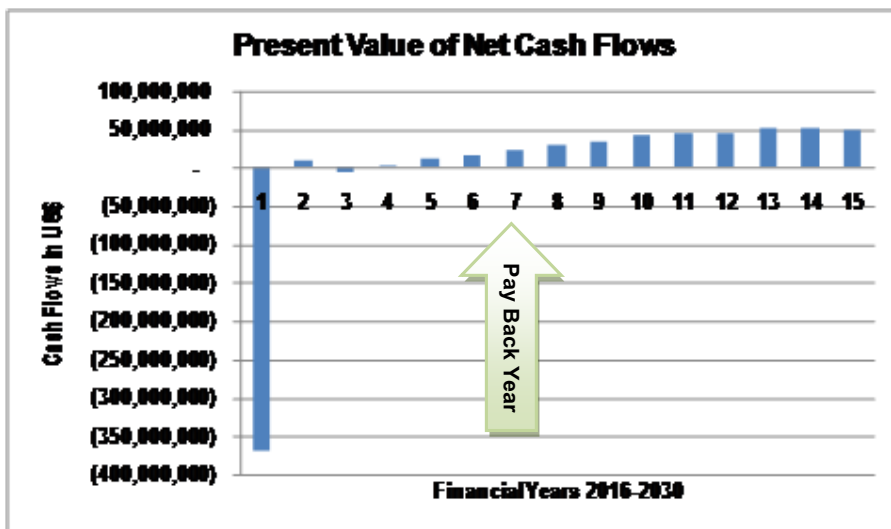
CASH FLOW STATEMENTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Net Cash Flow from Operations	2,534,326	16,126,658	14,036,597	31,240,017	43,337,718	57,646,974	75,478,969	94,775,405	115,655,547	142,929,220	164,739,273	182,211,694	211,154,866	229,716,014	249,392,185
Net Cash Flow From Investing	(315,840,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow From Financing	373,840,000	-	(27,376,384)	(28,762,314)	(30,218,406)	(31,748,213)	(33,355,466)	(35,044,086)	(36,818,193)	(25,524,972)	(26,817,173)	(28,174,793)	-	-	-
Net Working Capital	(15,879,936)	(3,977,180)	372,122	(4,103,213)	(2,197,358)	(2,816,327)	(3,233,485)	(3,492,939)	(3,773,545)	(5,116,657)	(4,228,251)	(3,101,114)	(5,609,389)	(3,458,112)	(3,657,243)
Net changes in Cashflow	44,654,389	12,149,479	(12,967,665)	(1,625,510)	10,921,953	23,082,435	38,890,018	56,238,380	75,063,808	112,287,592	133,693,848	150,935,788	205,545,477	226,257,902	245,734,942
Opening bank balance	-	44,654,389	56,803,868	43,836,203	42,210,693	53,132,646	76,215,081	115,105,099	171,343,479	246,407,287	358,694,879	492,388,728	643,324,515	848,869,992	1,075,127,894
Closing Bank balance	44,654,389	56,803,868	43,836,203	42,210,693	53,132,646	76,215,081	115,105,099	171,343,479	246,407,287	358,694,879	492,388,728	643,324,515	848,869,992	1,075,127,894	1,320,862,836

## 4.6 Financial Appraisal: Option 3 Regional and International Combined

### Financial Appraisal Computations

- a) In financial cash flow terms, and at the NPA discount rate of 12% on the US Dollar, the project generates a positive **Net Present Value of \$201.7M** considering all net cash flows across the Regional and International business lines.
- b) The project also has an **internal rate of return (IRR) of 28%**, which is one percent above the cost of capital and as such meets the thresholds for approval. The **pay-back period is 7 years** which reflects the aircraft loan repayment periods under the assumed financing terms.
- c) In addition to the initial investments in the 6 aircraft, aircraft spares and furniture & equipment, both computations take into account the proposed **US\$70M equity** to be injected into the airline in Operating Capital by the Government of Uganda.

Figure 12: Option 3; NPV of Net Cash flows



Generation of Positive NPV of US\$201.7M overall

Table 18: The NPV for Option 3

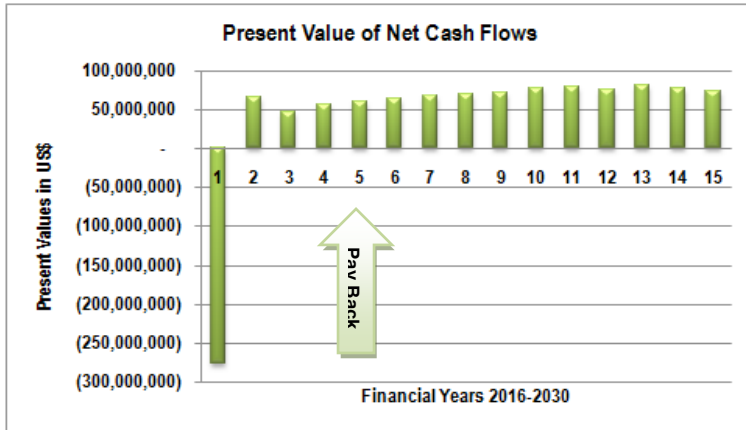
Financial Measure	Value
NPV	201,698,596
IRR	28%
Pay Back	7 years

## 4.7 Economic Benefit Appraisal: Option 3:

### Net Present Value Computation

- a) In Economic Benefit terms at the NPA discount rate of 12% on the US Dollar, the project generates a positive **Net Present Value of \$582.6M** considering all net cash flows across the combined Regional and International business option.

- b) The project **internal rate of return (IRR)** also improves greatly to **70%**, which reflects the high level of potential benefits of the airline to the economy of Uganda. In comparative terms, the NPV derived from considering the project impact on the economy is nearly two times greater than the total project investment of \$335.8M. The **pay-back period is now 5 years** which is half the period calculated on page 19 using financial cash-flows only.
- c) The direct economic benefits of the investment in the airline is clearly evident in these results.



**Table 19: The abridged NPV computation is shown below while full details are at ANNEX: 15**

Measure	Value
NPV	582,620,361
IRR	70%
Pay Back Period	5 Years

The Financial Statements and Cash-Flows used to obtain the above Economic Benefit Analysis results are given in Tables 20 and 21 below.

**Table 20: Economic Benefit Appraisal: Option: 3 Abridged Income Statement (Economic)**

PROFIT & LOSS ACCOUNTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Passenger revenue	175,158,832	207,724,499	221,173,928	254,585,669	269,489,520	289,540,194	311,145,992	334,432,286	359,534,898	386,600,996	415,790,063	436,143,190	457,623,686	480,300,235	504,246,012
Cargo revenue	1,652,442	1,959,665	2,086,546	2,401,752	2,542,354	2,731,511	2,935,340	3,155,022	3,391,839	3,647,179	3,922,548	4,114,558	4,317,205	4,531,134	4,757,038
Exchange fees & charges	3,304,884	3,919,330	4,173,093	4,803,503	5,084,708	5,463,023	5,870,679	6,310,043	6,783,677	7,294,358	7,845,096	8,229,117	8,634,409	9,062,269	9,514,076
<b>PSC &amp; VAT</b>	<b>25,884,536</b>	<b>31,597,436</b>	<b>32,643,880</b>	<b>36,886,066</b>	<b>38,926,919</b>	<b>40,804,585</b>	<b>42,781,173</b>	<b>44,862,205</b>	<b>47,053,523</b>	<b>49,361,309</b>	<b>51,792,098</b>	<b>52,450,797</b>	<b>53,132,613</b>	<b>53,838,441</b>	<b>54,589,216</b>
<b>TOTAL REVENUES</b>	<b>206,000,694</b>	<b>245,200,930</b>	<b>260,077,448</b>	<b>298,676,990</b>	<b>316,043,502</b>	<b>338,539,313</b>	<b>362,733,183</b>	<b>388,789,555</b>	<b>416,763,938</b>	<b>446,903,842</b>	<b>479,349,805</b>	<b>500,937,662</b>	<b>523,707,913</b>	<b>547,732,079</b>	<b>573,086,341</b>
Commercial & Pax costs	14,593,869	17,450,118	18,270,221	20,694,280	21,888,340	23,262,408	24,729,365	26,295,884	27,969,142	29,756,860	31,667,341	32,734,982	33,942,173	35,210,041	36,542,039
Variable costs	83,785,676	91,763,143	94,244,844	103,122,309	103,779,155	106,610,424	107,411,583	108,220,753	109,038,015	109,863,450	112,735,182	113,577,208	114,427,654	115,286,604	116,154,144
Direct Costs	42,746,834	46,522,772	57,427,926	60,108,723	59,726,497	59,433,948	59,126,342	58,803,454	58,465,095	58,117,553	57,770,179	57,422,811	57,075,443	56,728,075	56,380,707
Indirect costs	24,663,567	25,992,480	26,408,349	26,009,837	26,424,625	26,619,519	27,216,974	27,856,511	28,541,400	29,275,178	30,061,670	30,566,516	31,094,783	31,647,783	32,226,913
<b>TOTAL COSTS</b>	<b>165,789,946</b>	<b>181,728,513</b>	<b>196,351,340</b>	<b>209,935,149</b>	<b>211,818,616</b>	<b>215,926,300</b>	<b>218,484,264</b>	<b>221,176,603</b>	<b>224,013,653</b>	<b>227,326,040</b>	<b>227,945,931</b>	<b>229,870,457</b>	<b>221,399,499</b>	<b>224,458,344</b>	<b>227,623,442</b>
<b>EBT</b>	<b>40,210,747</b>	<b>63,472,417</b>	<b>63,726,108</b>	<b>88,741,841</b>	<b>104,224,885</b>	<b>122,613,013</b>	<b>144,248,919</b>	<b>167,582,953</b>	<b>192,750,285</b>	<b>224,577,802</b>	<b>251,403,874</b>	<b>271,067,204</b>	<b>302,309,414</b>	<b>323,273,735</b>	<b>345,462,899</b>
tax	12,063,224	19,041,725	19,117,832	26,622,552	31,267,466	36,783,904	43,274,676	50,274,886	57,825,085	67,373,340	75,421,162	81,320,161	90,692,824	96,982,120	103,638,870
<b>Net Cash Inflow</b>	<b>28,147,523</b>	<b>44,430,692</b>	<b>44,608,275</b>	<b>62,119,289</b>	<b>72,957,420</b>	<b>85,829,109</b>	<b>100,974,243</b>	<b>117,308,067</b>	<b>134,925,199</b>	<b>157,204,461</b>	<b>175,982,712</b>	<b>189,747,043</b>	<b>211,616,590</b>	<b>226,291,614</b>	<b>241,824,030</b>

**Table 21: The computed Economic Benefits Cash Flow Statements for Regional and International combined are shown below.**  
(full details are given at ANNEX: 14)

<b>CASH FLOW BASED ON ECONOMIC BENEFIT VALUES</b>	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>CASH FLOW STATEMENTS</b>															
Net Cash Flow from Operations	56,230,747	79,492,417	79,746,108	104,761,841	120,244,885	138,305,013	159,940,919	183,274,953	208,442,285	240,269,802	267,095,874	286,789,204	318,001,414	338,965,735	361,154,899
Net Cash Flow From Investing	(915,840,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow From Financing	373,840,000	-	(27,376,384)	(28,762,314)	(30,218,406)	(31,748,213)	(33,355,466)	(35,044,086)	(36,818,193)	(25,524,972)	(26,817,173)	(28,174,793)	-	-	-
Net Working Capital	(15,879,936)	(3,977,180)	372,122	(4,103,213)	(2,197,358)	(2,816,327)	(3,233,485)	(3,492,939)	(3,773,545)	(5,116,667)	(4,228,251)	(3,101,114)	(5,609,389)	(3,458,112)	(3,657,243)
Net changes in Cashflow	98,350,811	75,515,238	52,741,945	71,896,314	87,829,121	103,740,474	123,351,988	144,737,927	167,850,546	209,628,173	236,060,449	255,483,298	312,392,025	335,507,623	357,497,657
Opening bank balance	-	98,350,811	173,866,048	226,607,893	298,504,207	386,333,328	490,073,802	613,425,771	758,163,698	926,014,244	1,135,642,418	1,371,692,867	1,627,176,165	1,939,568,190	2,275,075,813
Closing Bank balance	98,350,811	173,866,048	226,607,893	298,504,207	386,333,328	490,073,802	613,425,771	758,163,698	926,014,244	1,135,642,418	1,371,692,867	1,627,176,165	1,939,568,190	2,275,075,813	2,632,573,470



## 4.8 Sensitivity Analysis

The sensitivity of NPV to changes in revenue, fuel price and load factor were undertaken and the results are given in Table 20.

**Table 22: Sensitivity Analysis for Option 3 of the combined Regional and International**

Reference Scenario for Option 3						
NPV Financial	201.6M					
IRR	28%					
Pay Back	7 years					
Sensitivity Scenarios						
Change		5%	10%	15%	20%	40%
Decline in Ticket Price	NPV	\$140M	\$78M	\$16M	\$(44M)	N/A
	IRR	23%	18%	13%	8%	N/A
Increase in Fuel Price	NPV	\$184M	\$165M	\$151M	\$134M	\$68M
	IRR	26%	25%	23%	22%	17%
Reduction in Load Factor	NPV	\$152M	\$93M	\$40M	\$(13M)	N/A
	IRR	24%	19%	15%	11%	N/A

The sensitivity analysis results indicate that there is significant inelasticity in the NPV to as a result of changes in fuel price, which is a commonly disruptive factor in the airline industry, as NPV values remain way above 12% for the whole range of the sensitivity analysis of 5%-40%. Changes in NPV remain above the mark of 12% with changes in air tickets and load factor of between 5% and 15%. It is worthwhile to note that the break-even load factors are already set at conservative level of between 40% and 65% for the Business Class and Economy Class, respectively.

## 4.9 Direct Employment Benefits

The airline will provide direct jobs to about 300 employees for regional operations and about 139 employees for international operations within a five year period. Within the first year of operation, the airline will create about 225 direct jobs which will expand to about 299 jobs in its fifth year of operations for regional operations and 139 employees for international operations. Nonetheless, the airline is likely to induce many indirect jobs in other related services in a ratio of 1:5 for direct and indirect jobs, respectively. The planned direct employment creation by airline functional job category is given in Table 21 and Table 22.

**Table 23: A summary of jobs created: regional operations**

Department	Year1	Year2	Year 3	Year4	Year5
Airport Direct	45	50	50	56	56
Aircraft Direct	20	20	20	20	25
Cockpit Crew	16	22	22	22	22
Cabin Crew	24	36	36	36	36
Maintenance Personnel	20	20	30	40	40
Admin Staff	100	100	100	120	120
TOTALS	225	248	258	294	299

**Table 24: A summary of jobs created: international operations**

Department	Year1	Year2	Year 3	Year4	Year5
Airport Direct	20	25	25	25	25
Aircraft Direct	15	16	16	16	16
Cockpit Crew	10	12	12	12	12
Cabin Crew	12	16	16	16	16
Maintenance Personnel	10	15	15	15	15
Admin Staff	50	55	55	55	55
TOTALS	117	139	139	139294	139

## 5.0 Considering the Option of Leasing Aircraft

### 5.1 Assumptions under the leasing option

In order to analyze the option of leasing Aircraft, Financial Statements and cash-flows are adjusted for the cost of the aircraft equipment. The loans for aircraft purchase are therefore reduced from the liabilities and replaced by cash equity from Government to enable the inherent credit operations of the airline. The cash equity requirement has been established to be USD 140 million, which is required to keep the airline operational (with positive balance sheet) right from Year1.

Also, the lease rates are calculated and inserted into the financial analysis as a cost at a monthly rate of an average of 1.25% (it ranges between 1% and 1.5% of the new price of the new aircraft), which is estimated at USD 45 million per annum. The summary of the direct aircraft leasing costs is given in Table 23 below.

**Table 25: A summary of leasing costs**

s/n	Type of Aircraft	Rate per month	Total Per year
01	A330/ B737	\$1.39M	\$16.7M
02	CRJ/319	\$1.5M	\$17M
03	Other costs (insurance, maintenance)	\$0.95M	\$11.5M
	<b>Total (Annually)</b>		<b>\$45.2M</b>

In addition, as for the case with aircraft purchase option, a three-month initial airline fitness “contingency/ working capital” requirement of USD 50 million will be required to cushion the airline during the initial phase of airline operations. The airline is expected to be able to withstand operations at load factor zero (0%) during the initial three months, before it picks up. This contingency (USD 50 million) and the start-up capital of USD 20 million are not included in the cash-flow computations, since the former is optional while the latter is a one-off expenditure on infrastructure such as office space, recruitment, training, etc, which will be expended before the airline becomes operational.

Therefore, a total of USD 210 million will be required in year1 to launch the national carrier under the leasing option.

## 5.2 Appraisal of Leasing Option

As for the Aircraft Purchase option, the three (3) options are also evaluated using the financial and economic appraisal techniques of NPV, IRR and Pay Back Period, based on leasing data and assumptions.

The three options are:

- i) Lease and Operate Only Regional Aircraft
- ii) Lease and Operate Only International Aircraft
- iii) Lease and Operate Both Regional and International Aircraft

The models constructed for financial computations, cashflows and Balance Sheets are based on the following data/assumptions:

- i) Aircraft are removed as assets from the computations, cashflows and Balance Sheet
- ii) There is no more loan servicing and interest payment
- iii) Annual Aircraft lease payment of USD 45.2 million is included in the financials as a direct operational cost
- iv) Four (4) Regional Jets and two (2) wide body aircraft are maintained under the leasing option for effective execution of the Business Plan involving regional and international air transport services
- v) A minimum equity cash contribution of USD 140 million is included in the financials to enable the airline to operate normally under the civil aviation credit systems
- vi) A start-up capital requirement of USD 20 million and a contingency/Fitness test of USD 50 million are both assumed as explained in 5.1 above.

The Financial and Economic evaluations/appraisals for the leasing option are given in the sections below.

### 5.2.1 Financial Appraisal of the Option to Lease and operate only regional Aircraft

**Table 26: Profit and loss account for the option to lease and operate regional aircraft**

INCOME STATEMENT (P&L)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenue	49,182,409	74,702,839	81,338,205	107,045,380	114,426,472	124,930,822	136,399,472	148,920,943	162,591,886	177,517,821	193,813,957	200,789,357	208,080,596	215,706,935	223,689,107
Commercial & Pax Costs	5,889,319	8,551,831	8,972,010	11,099,038	11,891,385	12,801,572	13,782,505	14,839,773	15,979,416	17,207,960	18,532,455	18,907,883	19,297,297	19,701,520	20,121,439
Variable costs	21,401,019	30,203,012	32,231,823	41,312,252	41,312,252	43,674,807	43,823,571	43,973,822	44,125,576	44,278,848	46,648,916	46,805,268	46,963,184	47,122,679	47,283,769
Direct operating costs	35,281,966	39,655,606	40,460,430	44,404,856	45,016,183	45,775,047	46,580,271	47,435,054	48,342,824	49,307,247	50,332,248	50,641,054	50,956,192	51,277,953	51,606,630
Indirect costs	5,048,243	6,592,052	6,913,589	7,355,978	7,673,412	7,683,892	8,177,901	8,711,652	9,288,338	9,912,249	10,586,795	10,870,052	11,163,599	11,467,992	11,783,823
<b>Total costs</b>	<b>67,620,547</b>	<b>85,002,500</b>	<b>88,577,872</b>	<b>104,172,123</b>	<b>105,893,233</b>	<b>109,935,319</b>	<b>112,364,248</b>	<b>114,960,302</b>	<b>117,736,355</b>	<b>120,706,304</b>	<b>126,100,414</b>	<b>127,224,457</b>	<b>128,380,272</b>	<b>129,570,144</b>	<b>130,795,681</b>
EBT	(18,438,139)	(10,299,662)	(7,239,667)	2,873,257	8,533,240	14,995,503	24,035,224	33,960,641	44,855,331	56,811,518	67,713,543	73,565,099	79,700,324	86,136,791	92,893,426
Tax						4,498,651	7,210,567	10,188,192	13,456,659	17,043,455	20,314,063	22,069,330	23,910,097	25,841,037	27,868,028
<b>Net cash inflows</b>	<b>(18,438,139)</b>	<b>(10,299,662)</b>	<b>(7,239,667)</b>	<b>2,873,257</b>	<b>8,533,240</b>	<b>10,496,852</b>	<b>16,824,657</b>	<b>23,772,449</b>	<b>31,398,672</b>	<b>39,768,062</b>	<b>47,399,480</b>	<b>51,495,569</b>	<b>55,790,227</b>	<b>60,295,754</b>	<b>65,025,398</b>
PV of Net cash inflows	(16,462,624)	(8,210,827)	(5,153,032)	1,826,007	4,841,989	5,318,032	7,610,620	9,601,293	11,322,748	12,804,252	13,626,218	13,217,630	12,785,680	12,337,706	11,879,897
Equity for Investment Required		(70,000,000)													
PV of Equity Investments		(70,000,000)													
<b>NPV</b>		<b>17,345,570</b>													
<b>IRR</b>		<b>14%</b>													
<b>Pay Back period</b>		<b>10</b>													

The project has an **internal rate of return (IRR) of 14%**, which is just two percent above the cost of capital, NPV of \$17.3million and a payback of 10 years. Although the project meets the thresholds for approval in NPV and IRR terms, it does not outperform the option to purchase aircraft which results into an IRR of 22%, NPV of \$73 million and payback of seven years.

Table 27: Cash flow statement for the option to lease and operate regional aircraft

CASHFLOW STATEMENTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Earnings Before Taxation	(18,438,139)	(10,299,662)	(7,239,667)	2,873,257	8,533,240	14,995,503	24,035,224	33,960,641	44,865,531	56,811,518	67,713,543	73,565,050	79,700,324	86,136,791	92,803,426
Depreciation Aircraft	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Depreciation Rotables	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Net Cash Flow from Operations	(17,838,139)	(9,699,662)	(6,639,667)	3,473,257	9,433,240	15,195,503	24,235,224	34,160,641	45,065,531	57,011,518	67,913,543	73,765,050	79,900,324	86,336,791	93,003,426
INVESTING ACTIVITIES															
Purchase of Aircraft	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchase of Aircraft Ratables	(4,000,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Furniture & Equip	(2,000,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow from Investing	(6,000,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FINANCING															
Equity Contribution	70,000,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loans Received	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repayments Senior Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repayments Junior Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow from Financing	70,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WORKING CAPITAL															
Changes in Receivables	(8,213,462)	(4,261,912)	(1,108,106)	(4,293,098)	(1,232,642)	(1,754,226)	(1,915,264)	(2,091,096)	(2,203,047)	(2,482,631)	(2,721,455)	(1,164,892)	(1,217,637)	(1,273,599)	(1,333,023)
Changes in Payables	5,005,704	1,267,052	200,307	1,212,149	112,294	322,529	154,794	164,904	175,933	187,699	377,505	67,247	60,997	70,830	72,776
Net Working Capital Changes	(3,207,758)	(2,994,860)	(947,799)	(3,080,949)	(1,120,348)	(1,431,698)	(1,760,471)	(1,926,191)	(2,107,114)	(2,304,932)	(2,343,890)	(1,097,645)	(1,148,640)	(1,202,760)	(1,260,246)
Net Changes in Cash Flow	42,954,184	(12,694,522)	(7,487,467)	392,308	8,012,891	13,763,805	22,474,753	32,234,540	42,948,417	54,796,585	65,569,653	72,667,454	78,751,685	85,134,034	91,833,190
Opening Bank Balance	0	42,954,184	30,259,662	22,772,195	23,164,503	31,177,394	44,941,199	67,415,952	99,650,492	142,586,909	197,305,495	262,875,148	335,542,603	414,284,287	499,428,318
Closing Bank Balance	42,954,184	30,259,662	22,772,195	23,164,503	31,177,394	44,941,199	67,415,952	99,650,492	142,586,909	197,305,495	262,875,148	335,542,603	414,284,287	499,428,318	591,261,498

Overall, the project starts with a positive change in cash flow mainly explained by financing activities that bring in \$70M capital injection, as minimum requirement to operate the airline sustainably. The negative changes in cash flow in the second and third years are explained by the operating losses registered for the first 3 years, and changes in net working capital.

d) In addition to the initial investments in the 6 aircraft, aircraft spares and furniture & equipment, both computations take into account the proposed **US\$70M equity** to be injected into the airline in Operating Capital by the Government of Uganda.

Table 28: Balance sheet for the option to lease and operate regional aircraft

BALANCE SHEETS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
FIXED ASSETS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aircraft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aircraft Rotables	3,600,000	3,600,000	3,400,000	3,200,000	3,000,000	2,800,000	2,600,000	2,400,000	2,200,000	2,000,000	1,800,000	1,600,000	1,400,000	1,200,000	1,000,000
Furniture & Equipment	1,600,000	1,200,000	800,000	400,000	-	-	-	-	-	-	-	-	-	-	-
CURRENT ASSETS	5,400,000	4,800,000	4,200,000	3,600,000	3,000,000	2,800,000	2,600,000	2,400,000	2,200,000	2,000,000	1,800,000	1,600,000	1,400,000	1,200,000	1,000,000
Account receivables	8,213,462	12,475,374	13,583,480	17,876,579	19,109,221	20,863,447	22,778,712	24,869,798	27,152,845	29,645,476	32,366,931	33,531,823	34,749,460	36,023,058	37,356,081
Bank Balances	42,954,184	30,259,662	22,772,195	23,164,503	31,177,394	44,941,199	67,415,952	99,650,492	142,598,909	197,305,495	262,875,148	335,542,603	414,294,287	499,428,318	591,261,498
	51,167,646	42,735,036	36,355,675	41,041,081	50,286,615	65,804,647	90,194,664	124,520,290	169,751,754	228,950,971	295,242,079	369,074,425	449,043,747	535,451,376	628,617,579
CURRENT LIABILITIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Account payables	5,005,784	6,272,836	6,533,143	7,745,292	7,857,586	8,180,114	8,334,908	8,499,892	8,675,825	8,863,524	9,241,090	9,308,336	9,377,334	9,448,172	9,520,949
NET CURRENT ASSETS/(LIABILITIES)	46,161,861	36,462,200	29,822,533	33,295,790	42,429,029	57,624,533	81,859,756	116,020,398	161,075,929	218,087,447	285,000,989	359,766,089	439,666,413	526,003,204	619,096,630
TOTAL ASSETS	51,561,861	41,262,200	34,022,533	36,895,790	45,429,029	60,424,533	84,459,756	118,420,398	163,275,929	220,087,447	287,800,989	361,366,089	441,066,413	527,203,204	620,096,630
LONG TERM LIABILITIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Senior Loan 10 years	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Junior loan 7 years	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SHARE CAPITAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Share Capital	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000
RESERVES	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Opening Reserves	-	(18,438,139)	(28,737,800)	(35,977,467)	(33,104,210)	(24,570,971)	(9,575,467)	14,459,756	48,420,398	93,275,929	150,087,447	217,800,989	291,366,089	371,066,413	457,203,204
Profit & Loss Account For Year	(18,438,139)	(10,299,662)	(7,239,667)	2,873,257	8,533,240	14,995,503	24,035,224	33,960,641	44,855,531	56,811,518	67,713,543	73,565,099	79,700,324	86,136,791	92,893,426
	(18,438,139)	(28,737,800)	(35,977,467)	(33,104,210)	(24,570,971)	(9,575,467)	14,459,756	48,420,398	93,275,929	150,087,447	217,800,989	291,366,089	371,066,413	457,203,204	550,096,630
TOTAL ASSETS	51,561,861	41,262,200	34,022,533	36,895,790	45,429,029	60,424,533	84,459,756	118,420,398	163,275,929	220,087,447	287,800,989	361,366,089	441,066,413	527,203,204	620,096,630

Overall, compared to the purchase option, the value of the investment reduces from an initial \$149 million to \$51 million in the initial year of operation. The reduction in the value of the investment is majorly due to the loss of asset value that is embedded in the aircraft as fixed assets. The level of the asset value determines the degree of freedom for accessing credit by the airline and therefore be able to determine its own fortunes in operation.



5.2.2 Financial Appraisal of the Option to Lease and operate only International Aircraft

Table 29: Profit and Loss Account for the option to lease and operate International aircraft

YEAR	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenues	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Pax revenue	117,494,270	123,439,480	129,685,518	136,247,605	143,141,734	151,859,066	161,107,283	170,918,717	181,327,666	192,370,521	204,085,886	216,514,716	229,700,463	243,689,221	258,529,894
Cargo revenue	1,174,943	1,234,395	1,296,855	1,362,476	1,431,417	1,518,391	1,611,073	1,709,187	1,813,277	1,923,705	2,040,859	2,165,147	2,297,005	2,436,882	2,585,299
Exchange fees & charges	2,349,885	2,468,790	2,593,710	2,724,952	2,862,835	3,037,181	3,222,146	3,418,374	3,626,553	3,847,410	4,081,718	4,330,294	4,594,009	4,873,784	5,170,988
TOTAL REVENUES	121,019,089	127,142,665	133,576,084	140,335,034	147,435,986	156,414,838	165,940,501	176,046,278	186,767,496	198,141,637	210,208,463	223,010,158	236,591,477	250,999,897	266,285,791
Commercial & Pax costs	9,821,019	10,242,153	10,693,055	11,164,068	11,656,070	12,214,271	12,800,355	13,415,774	14,062,057	14,740,819	15,453,759	16,202,670	17,089,428	18,025,131	19,012,503
Variable costs	67,646,251	67,646,251	68,322,713	69,005,940	69,686,000	70,392,960	71,096,889	71,807,858	72,525,937	73,251,196	73,983,708	74,723,545	75,470,781	76,225,488	76,987,743
Direct Costs	61,151,646	61,234,466	61,409,493	61,586,270	61,764,814	61,945,144	62,127,277	62,311,232	62,497,026	62,684,678	62,874,206	63,065,630	63,258,968	63,454,240	63,651,464
Indirect costs	7,222,498	7,388,255	7,592,407	7,805,639	8,028,380	8,291,449	8,598,333	8,959,809	9,366,688	9,828,870	10,345,245	10,918,798	11,549,558	12,239,615	12,999,280
Total Costs	145,841,414	145,511,125	148,017,668	148,561,907	150,145,263	151,843,824	153,592,855	155,394,673	157,251,718	159,166,563	161,141,919	163,180,644	165,385,735	167,669,474	170,035,633
EBT	(24,822,316)	(19,368,460)	(14,441,584)	(8,226,873)	(2,709,277)	4,571,013	12,347,646	20,651,605	29,515,779	38,975,074	49,066,544	59,829,514	71,205,741	83,330,423	96,249,958
Tax						1,371,304	3,704,294	6,195,482	8,854,734	11,692,522	14,719,963	17,948,854	21,361,722	24,999,127	28,874,387
Net cash inflows	(24,822,316)	(19,368,460)	(14,441,584)	(8,226,873)	(2,709,277)	3,199,709	8,643,352	14,456,124	20,661,045	27,282,552	34,346,581	41,880,660	49,844,019	58,331,296	67,374,971
PV of Net cash inflows	(22,162,782)	(15,440,418)	(10,279,234)	(5,228,327)	(1,537,317)	1,621,072	3,909,814	5,838,586	7,450,580	8,784,252	9,873,821	10,749,722	11,422,963	11,935,739	12,309,155
Equity for Investment Required	(70,000,000)														
NPV	(40,752,374)														
IRR	8%														
Pay back	14														

The project generates a negative NPV of \$ (40m) and an IRR of 8% below the cost of capital of 12% and a pay back of 14 years which compares unfavorably with the option to purchase and operate international aircraft that generates a NPV of \$41million and an IRR of 17%. The investment option thus does not meet the criteria for selection.

Table 30: Cash flow statement for the option to lease and operate international aircraft

CASH FLOW STATEMENTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
<b>INTERNATIONAL</b>															
EARNINGS BEFORE TAXATION	(24,822,316)	(19,368,460)	(14,441,584)	(8,226,873)	(2,709,277)	4,571,013	12,347,646	20,651,605	29,515,779	38,975,074	49,066,544	59,829,514	71,205,741	83,330,423	96,249,958
Depreciation other	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Depreciation rotablas	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Net Cash Flow from Operations	(24,022,316)	(18,568,460)	(13,641,584)	(7,426,873)	(1,909,277)	5,371,013	13,147,646	21,451,605	30,315,779	39,775,074	49,866,544	60,629,514	72,005,741	84,130,423	97,049,958
INVESTING ACTIVITIES															
Purchase of fixed assets equipment	(2,000,000)														
Purchase of fixed assets rotablas	(8,000,000)														
Net Cash Flow From Investing	(10,000,000)														
FINANCING															
Equity injection	70,000,000														
Loans received															
Loan repayments senior															
Loan repayments junior															
Net Cash Flow From Financing	70,000,000														
WORKING CAPITAL															
Changes in receivables	(20,210,189)	(1,022,636)	(1,074,381)	(1,128,745)	(1,185,859)	(1,499,468)	(1,590,786)	(1,687,665)	(1,790,443)	(1,899,481)	(2,015,160)	(2,137,883)	(2,268,080)	(2,406,206)	(2,532,744)
Changes in payables	11,089,513	40,316	104,191	106,481	108,849	114,839	117,772	120,827	124,012	127,334	130,798	134,414	146,187	150,855	155,748
Net Working Capital	(9,120,676)	(982,319)	(970,190)	(1,022,264)	(1,077,010)	(1,384,629)	(1,473,014)	(1,566,837)	(1,666,431)	(1,772,148)	(1,884,361)	(2,003,469)	(2,121,894)	(2,255,352)	(2,396,996)
Net changes in Cashflow	26,857,008	(19,550,779)	(14,611,774)	(8,449,137)	(2,986,287)	3,986,385	11,674,632	19,884,768	28,649,348	38,002,927	47,982,182	58,626,045	69,883,848	81,875,072	94,652,962
Opening bank balance	0	26,857,008	7,306,229	(7,305,545)	(15,754,682)	(18,740,969)	(14,754,385)	(3,079,953)	16,804,815	45,454,163	83,457,090	131,439,272	190,065,317	259,949,165	341,824,236
Closing Bank balance	26,857,008	7,306,229	(7,305,545)	(15,754,682)	(18,740,969)	(14,754,586)	(3,079,953)	16,804,815	45,454,163	83,457,090	131,439,272	190,065,317	259,949,165	341,824,236	436,477,198

Overall, the project starts with a positive change in cash flow mainly explained by financing activities that bring in \$70M capital injection. The negative changes in cash flow in the second, third and fourth years are explained by the operating losses registered for the first 5 years, and changes in net working capital.

**Table 31: Balance sheets for the option to lease and operate international aircraft**

	2016		2017		2018		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030			
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$		
<b>BALANCE SHEETS</b>																																
<b>INTANGIBLE ASSETS</b>																																
<b>FIXED ASSETS</b>																																
Equipment	1,600,000	1,200,000	800,000	400,000																												
Aircraft Rotables	7,600,000	7,200,000	6,800,000	6,400,000	6,000,000	5,600,000	5,200,000	4,800,000	4,400,000	4,000,000	3,600,000	3,200,000	2,800,000	2,400,000	2,000,000	1,600,000	1,200,000	800,000	400,000													
	<b>9,200,000</b>	<b>8,400,000</b>	<b>7,600,000</b>	<b>6,800,000</b>	<b>6,000,000</b>	<b>5,600,000</b>	<b>5,200,000</b>	<b>4,800,000</b>	<b>4,400,000</b>	<b>4,000,000</b>	<b>3,600,000</b>	<b>3,200,000</b>	<b>2,800,000</b>	<b>2,400,000</b>	<b>2,000,000</b>	<b>1,600,000</b>	<b>1,200,000</b>	<b>800,000</b>	<b>400,000</b>													
<b>CURRENT ASSETS</b>																																
Account receivables	20,210,189	21,232,825	22,307,206	23,435,951	24,621,810	26,121,278	27,712,064	29,398,728	31,190,172	33,089,653	35,104,813	37,242,696	39,510,777	41,916,983	44,469,727	47,177,198	50,044,789	53,074,815	56,271,163	60,638,743	65,181,473	70,000,000	75,177,198	80,712,064	86,754,585	93,228,825	100,144,789	107,512,064	115,343,951	123,651,810		
Bank Balances	26,857,008	7,306,229	(7,305,545)	(13,754,682)	(18,740,969)	(14,754,585)	(3,079,953)	16,804,815	45,454,163	83,457,090	131,439,272	190,065,317	259,949,165	341,824,236	436,477,198	540,000,000	652,500,000	775,000,000	907,500,000	1,050,000,000	1,202,500,000	1,365,000,000	1,537,500,000	1,720,000,000	1,912,500,000	2,115,000,000	2,327,500,000	2,550,000,000	2,782,500,000	3,025,000,000		
	<b>47,067,198</b>	<b>28,539,054</b>	<b>15,001,661</b>	<b>7,681,269</b>	<b>5,880,840</b>	<b>11,366,693</b>	<b>24,632,111</b>	<b>46,204,544</b>	<b>76,644,335</b>	<b>116,546,743</b>	<b>166,544,085</b>	<b>227,308,013</b>	<b>299,459,941</b>	<b>383,741,219</b>	<b>480,946,925</b>	<b>592,500,000</b>	<b>727,500,000</b>	<b>882,500,000</b>	<b>1,057,500,000</b>	<b>1,252,500,000</b>	<b>1,467,500,000</b>	<b>1,702,500,000</b>	<b>2,000,000,000</b>	<b>2,400,000,000</b>	<b>2,900,000,000</b>	<b>3,500,000,000</b>	<b>4,200,000,000</b>	<b>5,000,000,000</b>	<b>5,900,000,000</b>	<b>6,900,000,000</b>		
<b>CURRENT LIABILITIES</b>																																
Account payables	11,089,513	11,129,830	11,234,021	11,340,501	11,449,351	11,564,190	11,681,962	11,807,789	11,926,802	12,054,135	12,184,934	12,319,348	12,465,534	12,616,389	12,772,137	12,932,500	13,100,000	13,275,000	13,457,500	13,648,000	13,847,000	14,054,000	14,269,500	14,493,000	14,725,000	14,966,000	15,215,000	15,472,500	15,738,000	16,012,000		
	<b>35,977,684</b>	<b>17,409,224</b>	<b>3,767,640</b>	<b>(3,659,233)</b>	<b>(5,568,510)</b>	<b>(197,497)</b>	<b>12,950,149</b>	<b>34,401,755</b>	<b>64,717,533</b>	<b>104,492,608</b>	<b>154,359,152</b>	<b>214,988,666</b>	<b>286,994,407</b>	<b>371,124,830</b>	<b>468,174,789</b>	<b>570,000,000</b>	<b>687,500,000</b>	<b>815,000,000</b>	<b>952,500,000</b>	<b>1,100,000,000</b>	<b>1,257,500,000</b>	<b>1,425,000,000</b>	<b>1,602,500,000</b>	<b>1,790,000,000</b>	<b>1,987,500,000</b>	<b>2,195,000,000</b>	<b>2,412,500,000</b>	<b>2,640,000,000</b>	<b>2,877,500,000</b>	<b>3,125,000,000</b>	<b>3,382,500,000</b>	
<b>TOTAL ASSETS</b>	<b>45,177,684</b>	<b>25,809,224</b>	<b>11,367,640</b>	<b>3,140,767</b>	<b>431,490</b>	<b>5,402,503</b>	<b>18,150,149</b>	<b>39,201,755</b>	<b>69,117,533</b>	<b>108,492,608</b>	<b>157,959,152</b>	<b>218,188,666</b>	<b>289,794,407</b>	<b>373,524,830</b>	<b>470,174,789</b>	<b>577,500,000</b>	<b>695,000,000</b>	<b>832,500,000</b>	<b>980,000,000</b>	<b>1,137,500,000</b>	<b>1,305,000,000</b>	<b>1,482,500,000</b>	<b>1,670,000,000</b>	<b>1,867,500,000</b>	<b>2,075,000,000</b>	<b>2,292,500,000</b>	<b>2,520,000,000</b>	<b>2,757,500,000</b>	<b>3,005,000,000</b>	<b>3,262,500,000</b>		
<b>LONG TERM LIABILITIES</b>																																
Senior Loan 10 years	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Junior loan 7 years	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>CAPITAL &amp; RESERVES</b>																																
Share Capital	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000		
Opening Reserves	-	(24,822,316)	(44,190,776)	(58,632,360)	(66,859,233)	(69,568,510)	(64,997,497)	(52,649,851)	(31,998,245)	(2,482,467)	36,492,608	85,559,152	145,388,666	216,594,407	299,924,830	392,500,000	490,000,000	592,500,000	700,000,000	812,500,000	930,000,000	1,052,500,000	1,180,000,000	1,312,500,000	1,450,000,000	1,592,500,000	1,740,000,000	1,892,500,000	2,050,000,000	2,212,500,000		
Profit & Loss account For Year	(24,822,316)	(19,368,460)	(14,441,384)	(8,226,873)	(2,709,277)	4,571,013	12,347,646	20,651,603	29,515,779	38,975,074	49,066,544	59,829,514	71,205,741	83,330,423	96,249,958	110,000,000	124,750,000	140,500,000	157,250,000	175,000,000	193,750,000	213,500,000	234,250,000	256,000,000	278,750,000	302,500,000	327,250,000	353,000,000	379,750,000	407,500,000		
	<b>(24,822,316)</b>	<b>(44,190,776)</b>	<b>(58,632,360)</b>	<b>(66,859,233)</b>	<b>(69,568,510)</b>	<b>(64,997,497)</b>	<b>(52,649,851)</b>	<b>(31,998,245)</b>	<b>(2,482,467)</b>	<b>36,492,608</b>	<b>85,559,152</b>	<b>145,388,666</b>	<b>216,594,407</b>	<b>299,924,830</b>	<b>392,500,000</b>	<b>490,000,000</b>	<b>592,500,000</b>	<b>700,000,000</b>	<b>812,500,000</b>	<b>930,000,000</b>	<b>1,052,500,000</b>	<b>1,180,000,000</b>	<b>1,312,500,000</b>	<b>1,450,000,000</b>	<b>1,592,500,000</b>	<b>1,740,000,000</b>	<b>1,892,500,000</b>	<b>2,050,000,000</b>	<b>2,212,500,000</b>	<b>2,380,000,000</b>	<b>2,552,500,000</b>	
<b>TOTAL ASSETS</b>	<b>45,177,684</b>	<b>25,809,224</b>	<b>11,367,640</b>	<b>3,140,767</b>	<b>431,490</b>	<b>5,402,503</b>	<b>17,350,149</b>	<b>38,001,755</b>	<b>67,517,533</b>	<b>106,492,608</b>	<b>155,559,152</b>	<b>215,388,666</b>	<b>286,594,407</b>	<b>369,924,830</b>	<b>466,174,789</b>	<b>570,000,000</b>	<b>687,500,000</b>	<b>815,000,000</b>	<b>952,500,000</b>	<b>1,100,000,000</b>	<b>1,257,500,000</b>	<b>1,425,000,000</b>	<b>1,602,500,000</b>	<b>1,790,000,000</b>	<b>1,987,500,000</b>	<b>2,195,000,000</b>	<b>2,412,500,000</b>	<b>2,640,000,000</b>	<b>2,877,500,000</b>	<b>3,125,000,000</b>		

Overall, compared to the purchase option, the value of the investment reduces from an initial \$230 million to \$ 46 million in the initial year of operation. The reduction in the value of the investment is majorly due to the loss of asset value that is embedded in the aircraft as fixed assets. The level of the asset value determines the degree of freedom for accessing credit by the airline and therefore be able to determine its own fortunes in operation.

5.2.3 Financial Appraisal of the Option to Lease and operate both International Aircraft and regional aircraft: Combined Lease

Table 32: **Financial Profit and loss account for the option to lease and operate international and regional aircraft**

PROFIT & LOSS ACCOUNTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
REVENUES															
Pax revenue	165,244,182	195,966,508	208,654,649	240,175,159	254,235,397	273,151,126	293,553,955	315,502,137	339,183,866	364,717,920	392,254,776	411,455,839	431,720,459	453,113,429	475,703,785
Cargo revenue	1,652,442	1,959,665	2,086,546	2,401,752	2,542,354	2,731,511	2,933,340	3,155,022	3,391,839	3,647,179	3,922,548	4,114,558	4,317,205	4,531,134	4,757,038
Exchange fees & charges	3,304,884	3,919,330	4,173,093	4,803,503	5,084,708	5,463,023	5,870,679	6,310,043	6,783,677	7,294,338	7,845,096	8,229,117	8,634,409	9,062,269	9,514,076
TOTAL REVENUES	170,201,507	201,845,504	214,914,289	247,380,414	261,862,459	281,345,660	302,359,973	324,967,221	349,359,382	373,659,458	404,022,420	423,799,515	444,672,073	466,706,832	489,974,898
Commercial & Pax costs	15,710,339	18,793,984	19,665,065	22,263,096	23,547,455	25,015,844	26,582,860	28,255,547	30,041,474	31,948,779	33,986,213	35,110,553	36,386,725	37,726,651	39,133,942
Variable costs	92,791,269	101,593,262	104,335,977	114,137,447	114,865,699	117,963,788	118,855,442	119,756,012	120,665,388	121,584,239	124,727,382	125,664,519	126,611,027	127,567,000	128,532,533
Direct Costs	92,689,612	93,306,072	94,248,503	98,331,871	99,083,530	99,984,170	100,933,566	101,931,934	102,985,775	104,097,709	105,271,697	105,730,980	106,198,098	106,673,360	107,157,093
Indirect costs	12,270,741	13,980,306	14,505,996	14,161,617	14,701,792	14,975,342	15,746,235	16,571,461	17,455,236	18,402,119	19,417,040	20,058,949	20,730,157	21,432,606	22,167,946
TOTAL COSTS	213,461,961	227,673,626	232,755,540	248,894,030	252,198,496	257,939,144	262,117,103	266,514,975	271,148,073	276,033,866	283,402,333	286,564,901	289,926,007	293,399,618	296,991,514
EBT	(43,260,454)	(25,828,122)	(17,841,251)	(1,513,616)	9,663,963	23,406,517	40,222,870	58,432,247	78,211,310	99,626,592	120,620,087	137,234,613	154,746,066	173,307,214	192,983,385
Tax					2,899,189	7,021,955	12,066,861	17,535,674	23,463,393	29,887,978	36,186,026	41,170,384	46,423,820	51,992,164	57,895,015
Net cash inflows	(43,260,454)	(25,828,122)	(17,841,251)	(1,513,616)	6,764,774	16,384,562	28,156,009	40,916,573	54,747,917	69,738,614	84,434,061	96,064,229	108,322,246	121,315,050	135,088,369
PV of Net cash inflows	(38,625,406)	(20,590,021)	(12,699,050)	(961,930)	3,838,514	8,300,939	12,736,349	16,525,517	19,742,648	22,453,967	24,272,775	24,657,295	24,824,663	24,823,463	24,680,140
Equity for Investment Required	(140,000,000)														
NPV	(6,020,147)														
IRR	12%														
pay back period	11														

The project generates a negative NPV of \$ (6m) and an IRR of 12% just equal to the cost of capital of 12% and a pay back of 11 years which compares unfavorably with the option to purchase and operate both international and regional aircraft that generates a NPV of \$20million and an IRR of 28%. The investment option thus does not meet the criteria for selection.



**Table 33: Economic Abridged Profit and loss account for the option to operate a combined lease of international and regional aircraft**

PROFIT & LOSS ACCOUNTS	Comments	Conversion Factors	Multiplier	2016	2017	2018	2019	2020	2021	2022
Forex Premium on Pax Revenue	Prem 10% on 60% Zero rated	0.06 1.00	0.06 1.00	9,914,651	11,757,991	12,519,379	14,410,510	15,254,124	16,389,068	17,612,037
Passenger revenue J class	Zero rated	1.00	1.00	20,438,430	23,463,725	24,760,633	29,415,720	30,359,287	32,540,904	34,883,925
Passenger revenue YP class	Zero rated	1.00	1.00	14,833,728	15,584,315	16,372,881	17,201,349	19,172,306	20,339,899	20,339,899
Passenger revenue Y class	Zero rated	1.00	1.00	129,972,024	136,918,469	167,521,135	193,528,090	203,804,372	221,437,917	238,308,130
Cargo revenue	Zero rated	1.00	1.00	1,652,442	1,959,665	2,086,546	2,401,752	2,542,354	2,731,511	2,935,340
Exchange fees & charges	Zero rated	1.00	1.00	3,304,834	3,919,330	4,173,093	4,803,503	5,084,708	5,463,023	5,870,679
PSC & VAT	Zero rated	1.00	1.00	25,884,536	31,597,436	32,643,880	36,886,066	38,926,919	40,804,585	42,781,173
<b>TOTAL REVENUES</b>				<b>206,000,694</b>	<b>245,200,930</b>	<b>260,077,448</b>	<b>298,676,990</b>	<b>316,043,502</b>	<b>338,539,313</b>	<b>362,733,183</b>
<b>Commercial &amp; Pax costs</b>										
Agents Commission	Foreign Invoice	1.00	1.00	4,957,325	5,878,995	6,259,639	7,205,255	7,627,062	8,194,534	8,806,019
Distribution	Vat 18% (50:50)	0.82	0.91	3,007,012	3,670,681	3,808,962	4,319,668	4,575,882	4,843,579	5,127,945
Catering	Vat 18% (50:50)	0.82	0.91	5,274,724	6,246,619	6,483,494	7,223,133	7,623,232	8,042,023	8,483,009
Other Pax Costs	Vat 18%	0.82	0.82	1,354,808	1,653,823	1,716,126	1,946,224	2,061,661	2,182,272	2,310,393
<b>Variable costs</b>				<b>14,593,869</b>	<b>17,450,118</b>	<b>18,270,221</b>	<b>20,694,280</b>	<b>21,888,340</b>	<b>23,262,408</b>	<b>24,729,365</b>
Fuel	10% cas-6% Tax	0.84	0.92	49,768,448	54,825,829	56,515,814	62,531,919	62,912,673	65,335,277	65,723,685
Airframe maintenance	WHT 15%	0.85	0.85	8,228,985	9,465,990	9,839,910	11,271,578	11,324,474	11,437,719	11,552,096
Engine maintenance	WHT 15%	0.85	0.85	8,705,004	8,705,004	8,792,054	8,879,974	8,968,774	9,058,462	9,149,046
Navigation fees	Vat 18% (50:50)	0.82	0.91	7,835,451	8,456,224	8,593,559	9,103,947	9,169,170	9,260,862	9,353,471
Landing fees	Vat 18% (50:50)	0.82	0.91	4,292,574	4,688,207	4,768,723	5,086,923	5,121,340	5,172,553	5,224,279
Ground Handling fees	Vat 18% (50:50)	0.82	0.91	4,955,214	5,621,859	5,734,784	6,247,968	6,282,724	6,345,551	6,409,006
<b>Direct Costs</b>				<b>83,785,676</b>	<b>91,763,143</b>	<b>94,244,844</b>	<b>103,122,309</b>	<b>103,779,155</b>	<b>106,610,424</b>	<b>107,411,583</b>
Interest payment senior loan		1.00	1.00	-	-	-	-	-	-	-
Interest payment junior loan		1.00	1.00	-	-	-	-	-	-	-
Cockpit crew	PAYE 30%	0.70	0.70	3,878,452	4,589,684	4,696,045	5,229,308	5,465,988	5,712,853	5,975,757
Cabin crew	PAYE 30%	0.70	0.70	2,037,137	2,195,189	2,230,577	2,360,950	2,425,534	2,492,502	2,563,155
Pax handling	Vat 18% (50:50)	0.82	0.91	3,033,408	3,392,837	3,451,294	3,683,088	3,707,920	3,744,999	3,782,449
Line maintenance	WHT 15%	0.85	0.85	1,666,230	1,863,630	1,926,347	2,155,971	2,168,092	2,189,773	2,211,671
<b>Maintenance Direct</b>				<b>6,867,389</b>	<b>8,662,826</b>	<b>9,130,136</b>	<b>11,131,466</b>	<b>11,131,466</b>	<b>11,218,262</b>	<b>11,305,927</b>
Maint personnel costs	PAYE 30%	0.70	0.70	2,698,601	3,252,968	3,332,525	3,744,085	3,924,938	4,113,681	4,314,865
Insurance	WHT 15%	0.85	0.85	5,165,280	1,901,280	1,901,280	1,901,280	1,901,280	1,901,280	1,901,280
Training	Vat 18% (50:50)	0.82	0.91	1,727,151	1,727,151	1,739,872	1,752,721	1,765,698	1,783,355	1,801,189
Other Misc Op Costs	Vat 18%	0.82	0.82	819,167	819,167	824,899	830,688	836,534	844,900	853,349
<b>Total Lease costs per year</b>	Vat 18%	0.82	0.82	<b>48,584,016</b>	<b>48,584,016</b>	<b>48,584,016</b>	<b>48,584,016</b>	<b>48,584,016</b>	<b>48,584,016</b>	<b>48,584,016</b>
<b>Indirect costs</b>				<b>76,476,830</b>	<b>76,988,768</b>	<b>77,816,991</b>	<b>81,373,572</b>	<b>81,911,467</b>	<b>82,585,622</b>	<b>83,293,657</b>
Advertising	Vat 18%	0.82	0.82	2,791,305	3,310,266	3,324,594	4,057,039	4,294,544	4,614,069	4,958,376
Admin Staff costs	PAYE 30%	0.70	0.70	1,927,572	2,353,001	2,441,642	2,769,018	2,933,258	3,104,859	3,307,141
Overheads	Vat 18%	0.82	0.82	2,224,690	2,609,213	2,722,113	3,163,780	3,176,823	3,208,591	3,259,458
Management fees	WHT 15%	0.85	0.85	1,700,000	1,700,000	1,700,000	-	-	-	-
Depreciation aircraft	Foreign Invoice	1.00	1.00	-	-	-	-	-	-	-
Depreciation rotables	Foreign Invoice	1.00	1.00	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Depreciation other	Vat 18%	0.82	0.82	656,000	656,000	656,000	656,000	656,000	656,000	656,000
<b>TOTAL COSTS</b>				<b>184,755,942</b>	<b>197,430,509</b>	<b>201,976,405</b>	<b>216,435,998</b>	<b>219,239,587</b>	<b>224,313,973</b>	<b>227,887,579</b>
<b>EARNINGS BEFORE TAXATION</b>				<b>21,244,751</b>	<b>47,770,421</b>	<b>58,101,043</b>	<b>82,240,992</b>	<b>96,803,914</b>	<b>114,225,340</b>	<b>134,846,604</b>
Tax				6,373,425	14,331,126	17,430,313	24,672,297	29,041,174	34,267,602	40,433,681
Net cash inflows				14,871,326	33,439,295	40,670,730	57,568,694	67,762,740	79,957,738	94,391,923
<b>PV of Net cash inflows</b>				<b>13,277,970</b>	<b>26,657,601</b>	<b>28,948,622</b>	<b>36,585,946</b>	<b>38,450,399</b>	<b>40,509,078</b>	<b>42,698,112</b>
<b>Equity for Investment Required</b>				<b>(140,000,000)</b>						
NPV				441,935,626						
IRR				36%						
pay back period				4						

The project also has an economic **internal rate of return (IRR) of 36%**, and NPV of \$441 million. Although the project meets the thresholds for approval in NPV and IRR terms, it does not outperform a similar option of purchasing aircraft which results into an IRR of 70%, NPV of \$582 million.

**Table 34: Abridged Cash flow statement for the option to operate a combined lease of international and regional aircraft**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
EBT	(45,260,454)	(25,828,122)	(17,841,251)	(1,513,616)	9,663,963	23,806,517	40,622,870	58,852,247	78,611,310	100,026,592	121,020,087	137,634,613	155,146,066
Depreciation aircraft	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation rotables	600,000	600,000	600,000	600,000	600,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Depreciation Furniture & Equip	800,000	800,000	800,000	800,000	800,000								
<b>Net Cash Flow from Operations</b>	<b>(41,860,454)</b>	<b>(24,428,122)</b>	<b>(16,441,251)</b>	<b>(113,616)</b>	<b>11,063,963</b>	<b>24,406,517</b>	<b>41,222,870</b>	<b>59,452,247</b>	<b>79,211,310</b>	<b>100,626,592</b>	<b>121,620,087</b>	<b>138,234,613</b>	<b>155,746,066</b>
INVESTING ACTIVITIES													
Purchase of fixed assets aircraft	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of fixed assets aircraft	(12,000,000)	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Furniture & Equip	(4,000,000)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net Cash Flow From Investing</b>	<b>(16,000,000)</b>	-	-	-	-	-	-	-	-	-	-	-	-
FINANCING													
Equity injection	140,000,000	-	-	-	-	-	-	-	-	-	-	-	-
Loans received	-	-	-	-	-	-	-	-	-	-	-	-	-
Loan repayments senior	-	-	-	-	-	-	-	-	-	-	-	-	-
Loan repayments junior	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net Cash Flow From Financing</b>	<b>140,000,000</b>	-	-	-	-	-	-	-	-	-	-	-	-
WORKING CAPITAL													
Changes in receivables	(28,423,652)	(5,284,547)	(2,182,487)	(5,421,843)	(2,418,501)	(3,233,695)	(3,506,050)	(3,778,750)	(4,073,491)	(4,392,113)	(4,736,615)	(3,302,775)	(3,483,717)
Changes in payables	16,093,298	1,000,168	364,498	1,318,650	221,143	437,368	272,565	285,812	299,946	315,033	308,364	201,661	215,184
<b>Net Working Capital</b>	<b>(12,328,354)</b>	<b>(4,284,380)</b>	<b>(1,817,989)</b>	<b>(4,103,213)</b>	<b>(2,197,358)</b>	<b>(2,816,327)</b>	<b>(3,233,485)</b>	<b>(3,492,939)</b>	<b>(3,773,545)</b>	<b>(4,077,080)</b>	<b>(4,228,251)</b>	<b>(3,101,114)</b>	<b>(3,270,533)</b>
<b>Net changes in Cashflow</b>	<b>69,811,192</b>	<b>(28,712,501)</b>	<b>(18,259,240)</b>	<b>(4,216,830)</b>	<b>8,866,604</b>	<b>21,590,190</b>	<b>37,989,385</b>	<b>55,959,308</b>	<b>75,437,765</b>	<b>96,549,512</b>	<b>117,391,836</b>	<b>135,133,499</b>	<b>152,475,532</b>
Opening bank balance	-	69,811,192	41,098,690	22,839,450	18,622,620	27,489,225	49,079,415	87,068,799	143,028,107	218,465,872	315,015,384	432,407,220	567,540,720
<b>Closing Bank balance</b>	<b>69,811,192</b>	<b>41,098,690</b>	<b>22,839,450</b>	<b>18,622,620</b>	<b>27,489,225</b>	<b>49,079,415</b>	<b>87,068,799</b>	<b>143,028,107</b>	<b>218,465,872</b>	<b>315,015,384</b>	<b>432,407,220</b>	<b>567,540,720</b>	<b>720,016,252</b>

Table 35: Balance Sheet for the option to operate a combined lease of international and regional aircraft

BALANCE SHEETS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
FINANCIAL BASIS	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
FIXED ASSETS															
Furniture & Equipment	1,600,000	1,200,000	800,000	400,000	-	-	-	-	-	-	-	-	-	-	-
Aircraft Rotables	11,400,000	10,800,000	10,200,000	9,600,000	9,000,000	8,400,000	7,800,000	7,200,000	6,600,000	6,000,000	5,400,000	4,800,000	4,200,000	3,600,000	3,000,000
Furniture & Equipment	1,600,000	1,200,000	800,000	400,000	-	-	-	-	-	-	-	-	-	-	-
	14,600,000	13,200,000	11,800,000	10,400,000	9,000,000	8,400,000	7,800,000	7,200,000	6,600,000	6,000,000	5,400,000	4,800,000	4,200,000	3,600,000	3,000,000
CURRENT ASSETS															
Account receivables	28,423,652	33,708,199	35,890,686	41,312,529	43,731,031	46,984,725	50,490,776	54,269,526	58,343,017	62,735,129	67,471,744	70,774,519	74,260,236	77,940,041	81,825,808
Bank Balances	69,811,192	41,098,690	22,839,450	18,622,620	27,489,225	49,079,415	87,068,799	143,028,107	218,465,872	315,015,384	432,407,220	567,540,720	720,016,252	890,865,354	1,081,191,496
	98,234,843	74,806,889	58,730,136	59,935,149	71,220,255	96,064,140	137,559,575	197,297,633	276,808,889	377,750,514	499,878,964	638,315,239	794,276,488	968,805,395	1,163,017,304
CURRENT LIABILITIES															
Account payables	16,095,298	17,095,466	17,459,964	18,778,593	18,999,736	19,437,104	19,709,669	19,995,481	20,295,427	20,610,460	21,118,823	21,320,484	21,535,668	21,757,361	21,985,885
NET CURRENT ASSETS	82,139,546	57,711,424	41,270,173	41,156,556	52,220,519	76,627,036	117,849,906	177,302,152	256,513,462	357,140,054	478,760,141	616,994,754	772,740,820	947,048,034	1,141,031,419
TOTAL ASSETS	96,739,546	70,911,424	53,070,173	51,556,556	61,220,519	85,027,036	125,649,906	184,502,152	263,113,462	363,140,054	484,160,141	621,794,754	776,940,820	950,648,034	1,144,031,419
LONG TERM LIABILITIES															
Senior Loan 10 years	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Junior loan 7 years	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SHARE CAPITAL															
Share Capital	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000	140,000,000
RESERVES															
Opening Reserves	-	(43,260,454)	(69,088,576)	(86,929,827)	(88,443,444)	(78,779,481)	(54,972,964)	(14,330,094)	44,502,152	123,113,462	223,140,054	344,160,141	481,794,754	636,940,820	810,648,034
Profit & Loss account For 1	(43,260,454)	(25,828,122)	(17,841,251)	(1,513,616)	9,663,963	23,806,317	40,622,870	58,832,247	78,611,310	100,026,592	121,020,087	137,634,613	155,146,066	173,707,214	193,383,385
	(43,260,454)	(69,088,576)	(86,929,827)	(88,443,444)	(78,779,481)	(54,972,964)	(14,350,094)	44,502,152	123,113,462	223,140,054	344,160,141	481,794,754	636,940,820	810,648,034	1,004,031,419
TOTAL ASSETS	96,739,546	70,911,424	53,070,173	51,556,556	61,220,519	85,027,036	125,649,906	184,502,152	263,113,462	363,140,054	484,160,141	621,794,754	776,940,820	950,648,034	1,144,031,419



## 6.0 High Level Project Risk Analysis

**Table 36: Risks and Mitigation measures**

No.	Potential Risks	Mitigation Measures
	<b>Volatility of the Uganda Shilling US Dollar exchange rate</b>	Base currency for Airline tickets to be US Dollar to mitigate the FX risk as is the practice in the industry internationally.  Rating: High
	<b>Macroeconomic stability:</b> Changes in the economy could affect project viability	Uganda's macro economy has been stable and on a growing trend for more than 20 years. Projections by the World Bank and IMF indicate continued growth for the economy of Uganda at current rates. The Government has given a firm commitment to existing macroeconomic policies.  Rating: Low
	<b>Inadequate Market base and Market Share:</b> could undermine project	Uganda's significant population (36 Million), growing middle class in Uganda and per capita income. Pax profile gives confidence  Rating: Medium
	<b>Finance &amp; Funding for the project:</b> availability of funds from Government	Only modest Equity of \$70M is required from Government. Aircraft to be purchased with Finance (\$331.4M) from Export Credit Agencies and other Financiers like PTA Bank. These have already expressed interest to finance the purchases.  Rating: Low
	<b>Political Interference in company</b>	Project concept provides for good corporate governance with an independent and empowered Board.  Rating: Medium
	<b>Limited Capacity to Manage Airline Business in the country:</b> could undermine success	Project concept provides for an Independent Management Company to do the set up and manage Uganda Airlines for up to 3 years. Concept also provides for an independent and competent Board of Directors with proper guidance on selection & qualifications of Board Directors.  Rating: Low
	<b>Lack of capacity to Implement:</b> project could fail due to lack of capacity	International expertise to be hired for the first 3 years of Project Implementation. Aircraft supplier to provide pilots, engineers and crew to train local personnel for first year of operation.  Rating: Low

No.	Potential Risks	Mitigation Measures
	<b>Lack of a Project champion:</b> at political and implementation levels.	Ministry of Works and Transport and Ministry of Finance as Project Champions to be fully empowered for project implementation to succeed.  Rating: Low
	<b>Aircraft Procurement Process:</b> could undermine project	Procurement to be handled by the implementation agency without interference and using transparent guidelines.  Rating: low
	<b>Communication and approval processes:</b> could create confusion and delay / undermine the project	Ministry of Works and Transport to ensure a proper implementation plan, timeliness and approval processes. Plan to be communicated to stakeholders.  Rating: Low
	<b>Social Issues:</b> the national carrier is an emotive subject in Uganda.	A clear communication plan for the project by Government. NPA evaluation gives credence to the project.  Rating: Low
	<b>Environmental Issues:</b> are a concern worldwide.	Use of brand new next generation aircraft mitigates environmental concerns. Full support is available with data and information from IATA if required.  Rating: Low
	<b>Entebbe Airport infrastructure lags behind</b>	CAA to continue expanding and modernizing the airport infrastructure to make it conducive to the creation of a hub and make Entebbe Airport an aero city  Rating: Medium
	<b>Civil Aviation Legislative framework does not meet ICAO standards</b>	Civil Aviation Authority to address the matters raised in the June 2014 ICAO audit to ensure effective implementation of recommended practices.

The Uganda Civil Aviation Authority Effective Implementation scores based on the June 2014 ICAO audit review are shown below, compared to 'World Average'.

**Figure 13: Uganda Civil Aviation Authority Effective Implementation scores based on the June 2014 ICAO audit review**



## 7.0 Summary of the Feasibility Evaluations

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The summary findings of the feasibility study for the National Carrier, for both the aircraft Purchase and Leasing scenarios, are presented below.

### 7.1 Aircraft Purchase Scenario

#### a) Option1: Purchase and Operate Regional Aircraft Only

- ◆ In financial terms, **Option1** generates a positive Net Present Value (NPV) of \$73.7M and an Internal Rate of Return of 22percent. The Internal Rate of Return (IRR) is above the 12percent return set internally by NPA. The payback period for the project is 7 years.

#### b) Option 2: Purchase and Operate International Aircraft Only

- ◆ This option generates a positive NPV of \$41M and has an IRR of 17%, which is above the cost of capital (12%). The payback period for this option is 10 years reflecting the loan financing on the aircraft.

#### c) Option 3: Purchase and Operate Both Regional and International Aircraft

- ◆ This option generates a positive NPV of \$201.6M and an IRR of 28percent with a payback period of 7 years.
- ◆ This option capitalizes on the strengths of both the regional and international networks to create a hub system of flights at Entebbe International Airport.
- ◆ As best option, Option3 was assessed for Economic Benefit. The results indicate a high positive NPV of \$582.6M and IRR of 70percent.

### 7.2 Aircraft Lease Scenario

#### a) Option1: Lease and Operate Regional Aircraft Only

- ◆ This option generates an **internal rate of return (IRR) of 14%**, which is just two percent above the cost of capital (12%). It also gives an **NPV of \$17.3million and a payback of 10 years.**
- ◆ Although the project meets the thresholds for approval in NPV and IRR terms, it is inferior to the purchase option which provided **an IRR of 22%, NPV of \$73 million and Payback of 7 years.**

#### b) Option 2: Lease and Operate International Aircraft Only

- ◆ This option generates a **negative NPV of \$ (40m) and an IRR of 8%** below the cost of capital of 12% and a **Payback of 14 years.**
- ◆ The results of this option are inferior to the option of purchasing and operating international aircraft whose results give **a NPV of \$41million and an IRR of 17%.**
- ◆ This investment option **does not** meet the criteria for selection

c) **Option 3: Lease and Operate Both Regional and International Aircraft**

- ◆ This option generates **a negative NPV of \$ (6m) and an IRR of 12%**, which is just equal to the cost of capital of 12% and a **Payback of 11 years**
- ◆ The results from the appraisal of this option are inferior when compared to the option of purchasing and operating both international and regional aircraft, which gives **a NPV of \$201million and an IRR of 28%**. This investment option does not meet the criteria for selection.
- ◆ When evaluated economic terms, the option gives an **internal rate of return (IRR) of 36% and NPV of \$441million**. The option is also inferior to the option of purchasing and operating aircraft for both regional and international routes where the results give a higher positive NPV **of \$582 million and IRR of 70%**.

The summary results of the investment appraisal for both the purchase and lease scenarios are presented in Table 37.

**Table 37: Summary of feasibility evaluations**

ITEM	The Purchase Option			The Lease Option		
	Regional	International	Combined	Regional	International	Combined
<b>NPV</b>	\$73M	\$41M	\$201M	\$17.3M	\$(40M)	\$(6M)
<b>IRR</b>	22%	17%	28%	14%	8%	12%
<b>Payback</b>	7years	10years	7 years	10years	14 years	11years
<b>Economic NPV (\$)</b>			582.6M			\$441.9M
<b>Economic IRR</b>			70%			36%

Option 3 under the purchase scenario (combination of regional and international aircraft) gives the greatest economic benefits to Uganda in the form of; foreign exchange savings and premiums, job creation and overall tradable benefits to the economy.

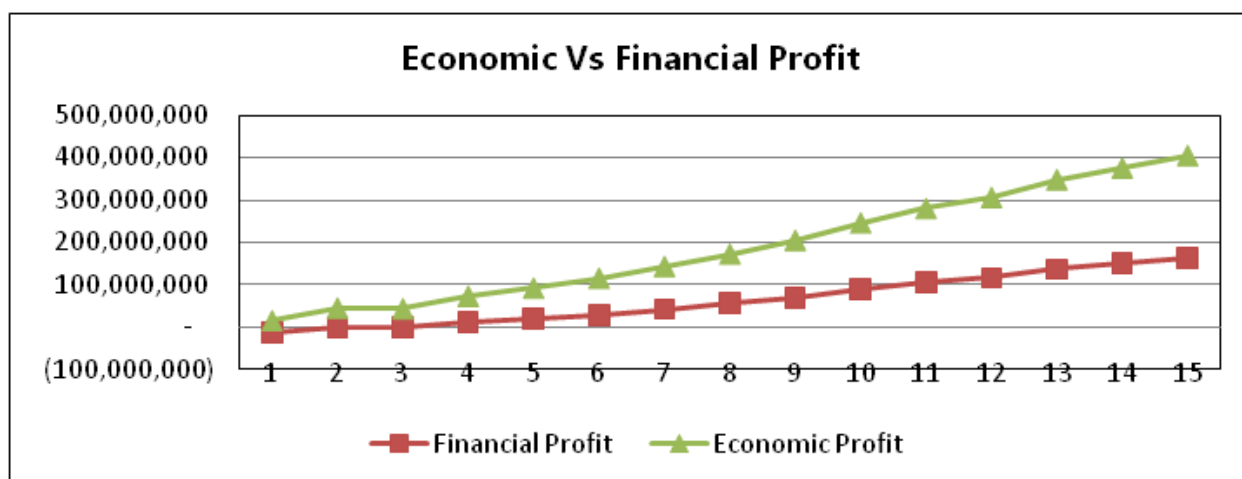
In view of the above results, the option of purchasing aircraft involving a combination of regional feeder services and transcontinental connections has the highest financial and economic benefits for Uganda's economy and is therefore recommended for implementation.

### **7.3 Further Comparative Analysis of Financial and Economic Benefits for the Preferred Option**

An analysis of the variations in passenger ticket prices with and without a National Carrier gives a passenger consumer surplus of \$360 per passenger, which translates into a net loss to the economy and a cost on the level of competitiveness of over USD 540 million per annum. This is the direct annual value of transport cost saving to passengers when the National Carrier is introduced.

A 15-year analysis of the preferred option indicates a continuous increase in both financial and economic benefits with the latter tripling the former when the annual profit values are compared. The benefits over the project life (15 years) are illustrated in Figure 14.

**Figure 14: Option3 Economic Benefit compared with financial Benefit**



Further analysis also indicates that of the total direct benefits will go to the wider economy, the CAA and newly employed Ugandans, as illustrated in Table 38.

**Table 38: The share of minimum economic benefits (in USD)**

NPV from Operations	25%	<b>146,644,513</b>	To the wider Economy
NPV from Passenger Service Charge	52%	<b>301,935,315</b>	To CAA
NPV Foreign Exchange Premium	3%	<b>18,116,119</b>	To the wider Economy
NPV Staff Wages	20%	<b>115,924,413</b>	Staff benefit from employment
<b>TOTAL NPV</b>	<b>100%</b>	<b>582,620,361</b>	

## 8.0 Conclusions and recommendations

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- 8.1 This feasibility study has presented two (2) scenarios (Purchase and Lease) with three investment options each (Regional, International and Combined). The study was based on internationally recommended methodologies that use Net Present Value (NPV) and Internal Rate of Return (IRR) techniques. The techniques involved both Financial and Economic Benefit analyses as the basis for decision making on the viability of the various investment options for the National Carrier.
- 8.2 The financial performance of the routes and the entire airline was assessed for each of the 15 years, with particular considerations on the load factors, yields, income statements, cash-flows and statements of financial position. Standard assumptions were applied as presented in chapter 2 [methodology] to guide the analysis.
- 8.3 The economic viability of the various options was undertaken through the application of conversion factors to the financial statements.
- 8.4 The project concept recommended in this feasibility study takes regard of the lessons learnt from the previous National Carrier and other international best practices.
- 8.5 The project analysis results obtained indicate that the purchase scenario (combination of regional and international aircraft) gives the greatest financial and economic benefits to Uganda. This scenario generates an economic NPV of \$582.6M and an economic IRR of 70percent.
- 8.6 The National Carrier project yields a direct annual value of transport cost saving to Passengers of USD 549 million.
- 8.7 The results from the evaluation of the different possible aircraft types based on market suitability, cost, efficiency, reliability and resilience, cargo capacity and configuration, cabin comfort, technology, among others, indicates that the CRJ 900 and the Airbus A330-200 series are the most suitable aircraft for the Uganda National Carrier's regional and international operations, respectively. The detailed assessment is attached in Annex 20.
- 8.8 An internationally recognized management team with clear performance targets is recommended by the study for successful launch and sustainability of the National Carrier.
- 8.9 The study recommends that the investment in the National Carrier should be considered as an infrastructure for enhancing the country's global connectivity and competitiveness, beyond the direct financial benefits. The carrier will play a critical catalytic role in tourism development and promotion, export growth, investment in various priority sectors and global networking.



## 9.0 Annexes

### ANNEX 1: FINANCIAL PLANNING ASSUMPTIONS- REGIONAL&INTERNATIONAL OPERATIONS

No.	Description	International Long-Haul Operations	Regional Short-Haul Operations
1	Aircraft type	Airbus A330-200 Aircraft	CRJ900 Next Gen Aircraft
2	Number of Aircraft	Two (2)	Four (4)
3	Maximum takeoff weight	230,000 kg	38,329 kg
4	Operating weight empty	124,312 kg	22,541 kg
5	Maximum payload	108,688 kg	10,591 kg
6	Fuel capacity	43,688 kg	8,823 kg (14,933 lt)
7	Engines	Two Trent 772B turbo fan	Two General Electric CF34-8C5
8	Maximum cruise speed	Mach 0.86 - 493 knots (912 km/h)	Mach 0.825 (875 km/h)
9	Normal cruise speed	Mach 0.82 - 470 knots (869 km/h)	Mach 0.78 (829 km/h)
10	Aircraft Range	5,050 nm at full load (9,304 KM)	1,777nm in 2 Class (3,274 KM)
11	Aircraft Configuration	3 Classes (J, YP, Y)	2 Classes (Business, Economy)
12	Total No. of seats	247	75
13	Business Class	20	7
14	Premium Economy Class	28	Nil
15	Economy Class	199	68
16	Cargo potential	9.4t cargo (max volumetric payload)	Mainly Pax Baggage (Min cargo)
17	Cargo Revenue	1% of Pax Rev (\$7 per kg)	1% of Pax Rev (\$7 per kg)
18	Routes	LON, DXB, AMS-BRU, LOS, JNB, DOH, BOM (7 routes)	20 Potential Routes
19	Aircraft Utilisation / BH	Max 15 Hours P/Day (day & night)	10Hrs P/Day (Mainly daylight ops)
20	Annual Block Hours	10,754	7,957 to 15,639
21	Annual Segments	1872 Two aircraft	5578 to 9989
22	Annual Seats	462,384	418,350 to 749,175
23	Load Factor J Class	40% yr1 – 69% yr 15 (15yr Avg 53%)	40% yr1 to 72 yr 15
24	Load Factor YP Class	60% yr1 – 97% yr 15 (15yr Avg 80%)	None
25	Load Factor Y Class	65% yr1 – 97% yr 15 (15yr Avg 85%)	65% Yr1 – 99% Yr 15
26	Average Yield J Class	\$1,432	\$433
27	Average Yield YP Class	\$ 582	Nil
28	Average Yield Y Class	\$ 440	\$239
29	Accounts Receivables	2 months sales (16.7%)	2 months sales (16.7%)
30	Accounts Payables	1 month of Total Op Costs (8%)	1 month of Total Op Costs (8%)
31	Capital Injection	\$10 million	\$10 million
32	Loans -Aircraft Purchase	\$ 192M two A330-200	\$111.84M four CRJ900
33	Senior Loan 5% 10 Yrs	75% or \$144M	75% or \$83.88M
34	Junior Loan 5% 7 Years	25% or \$ 48M	25% or \$27.96M

No.	Description	International Long-Haul Operations	Regional Short-Haul Operations
35	Commissions	3% of revenue	3% of revenue
36	Distribution cost per pax	\$6 Yr1	\$6 Yr1
37	Catering cost per pax	\$13 Yr1	\$8 Yr1
38	Other Pax costs per pax	\$3 Yr1	\$3 Yr1
39	Admin Costs per pax	\$5 Yr1	\$5 Yr1
40	Fuel Price \$/US Gallon	\$2 Yr1	\$2 Yr1
41	Fuel per BH	\$3,502 Yr1	\$1,700 Yr1
42	Airframe maint /BH	\$484 Yr1	\$450 (Total Variable)
43	Engine maintenance /BH	\$813 Yr1	Included in above
44	Navigation fees/ SEG	\$3,753	\$284 Yr1
45	Landing fees /SEG	\$1,981	\$181 Yr1
46	Cockpit crew /BH	\$253 Yr1	\$297 Yr1
47	Cabin crew /BH	\$189 Yr1	\$66 Yr1
48	Pax handling / Pax	\$9 Yr1	\$9 Yr1
49	Ground handling / SEG	\$2,000	\$437 Yr1
50	Line maintenance /BH	\$111 Yr1	\$101 Yr1
51	Maintenance Direct /BH	\$389 Yr1	\$555 Yr1
52	Maint personnel cost /BH	\$160 Yr1	\$231 Yr1
53	Insurance	2% of aircraft cost	2% of aircraft cost
54	Training per year /BH	\$130 (\$10/BH 13 crew) Yr1	\$63 Yr1
55	Other crew costs per /BH	\$65 (\$5/BH 13 crew) Yr1	\$38 Yr1
56	Advertising	2% of Pax Revenue	2% of Pax Revenue
57	Overheads / BH	\$145 Yr1	\$145 Yr1
58	Management fees	\$1M pa (3 years only)	\$1M pa (3 years only)
59	Depreciation Aircraft	5%	5%
60	Depreciation Rotable Spares	5%	5%
61	Depreciation other	20%	20%
62	Cost escalation	1% from year 3	1% from year 5
63	Yield escalation	3%	3%
64	Economic Cost of Capital	12%	12%
65	FX Premium (Uganda)	10%	10%
66	Non - Tradable Premium:	0%	0%
67	Real FX Rate \$/UGX	0.00033	0.00033
68	Value Added Tax	18%	18%
69	Income Tax Rate	30%	30%
70	Personal Income Tax rate	30%	30%
71	Passengers Services Charge	\$40 per pax to UCAA	\$40 per pax to UCAA
72	% Staff from other taxed jobs	0%	0%
73	WHT Rates	15% Foreign, 6% Residents	15% Foreign, 6% Residents
74	Passenger profile	60%:40% Ugandans to Foreigners	60%:40% Ugandans to Foreigners

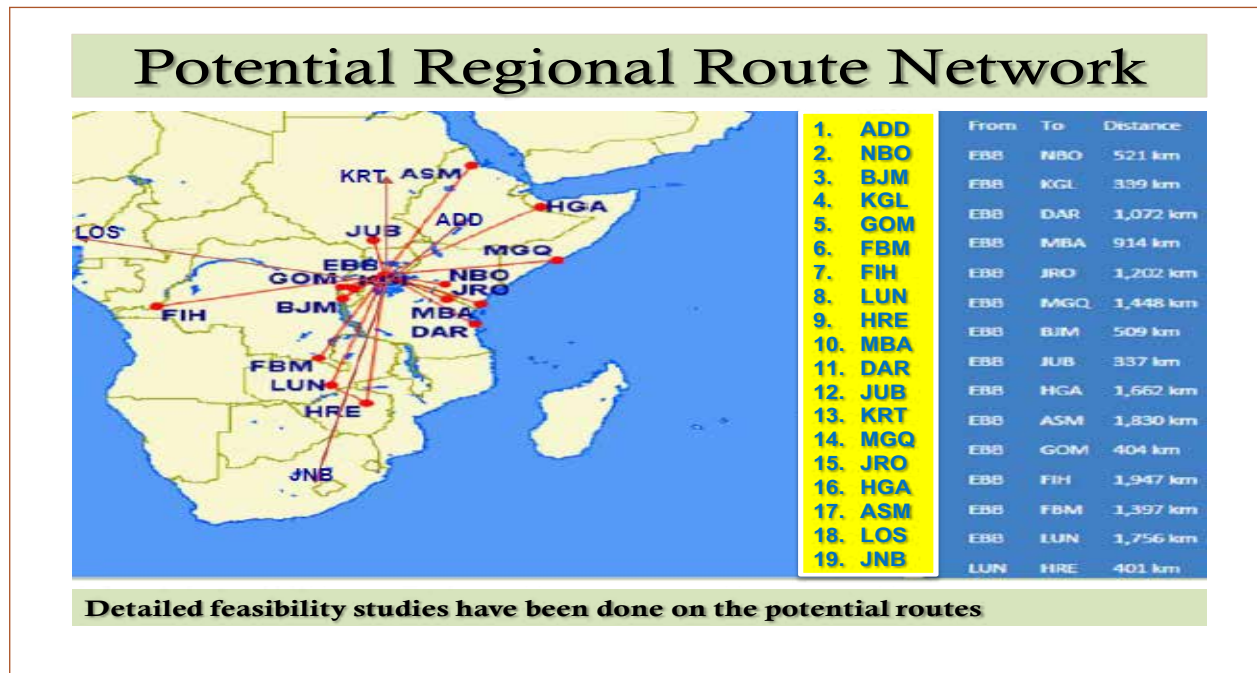
**ANNEX 2: ECONOMIC BENEFIT ASSUMPTIONS**

Item	Description	Comments	Conversion Factors
<b>1</b>	<b>REVENUES</b>		
<b>2</b>	Passenger revenue J class	Zero rated	<b>1.00</b>
<b>3</b>	Passenger revenue YP class	Zero rated	<b>1.00</b>
<b>4</b>	Passenger revenue Y class	Zero rated	<b>1.00</b>
<b>5</b>	Cargo revenue	Zero rated	<b>1.00</b>
<b>6</b>	Exchange fees & charges	Zero rated	<b>1.00</b>
<b>7</b>	<b>Commercial &amp; Pax Costs</b>		
<b>8</b>	Agents Commissions	Foreign Invoice	<b>1.00</b>
<b>9</b>	Distribution	Vat 18%	<b>0.82</b>
<b>10</b>	Catering	Vat 18%	<b>0.82</b>
<b>11</b>	Other Pax Costs	Vat 18%	<b>0.82</b>
<b>12</b>	<b>Variable Costs</b>		
<b>13</b>	Fuel	10% CAA+6% Tax	<b>0.84</b>
<b>14</b>	Airframe maintenance	WHT 15%	<b>0.85</b>
<b>15</b>	Engine maintenance	WHT 15%	<b>0.85</b>
<b>16</b>	Navigation fees	Vat 18%	<b>0.82</b>
<b>17</b>	Landing fees	Vat 18%	<b>0.82</b>
<b>18</b>	<b>Direct Costs</b>		
<b>19</b>	Interest payment senior loan		<b>1.00</b>
<b>20</b>	Interest payment junior loan		<b>1.00</b>
<b>21</b>	Cockpit crew	PAYE 30%	<b>0.70</b>
<b>22</b>	Cabin crew	PAYE 30%	<b>0.70</b>
<b>23</b>	Pax handling	Vat 18%	<b>0.82</b>
<b>24</b>	Line maintenance	WHT 15%	<b>0.85</b>
<b>25</b>	Maintenance Direct		<b>1.00</b>
<b>26</b>	Maint personnel costs	PAYE 30%	<b>0.70</b>
<b>27</b>	Insurance	WHT 15%	<b>0.85</b>
<b>28</b>	Training	Vat 18%	<b>0.82</b>
<b>29</b>	<b>Indirect Costs</b>		
<b>30</b>	Advertising	Vat 18%	<b>0.82</b>
<b>31</b>	Admin Staff costs	PAYE 30%	<b>0.70</b>
<b>32</b>	Overheads	Vat 18%	<b>0.82</b>
<b>33</b>	Management fees	WHT 15%	<b>0.85</b>
<b>34</b>	Depreciation aircraft	Foreign Invoice	<b>1.00</b>
<b>35</b>	Depreciation rotables	Foreign Invoice	<b>1.00</b>
<b>36</b>	<b>Initial Investments</b>	<b>Long-haul International Routes</b>	<b>Regional Routes</b>
<b>37</b>	Aircraft	2 x A330-200 @ \$192,000,000	4x CRJ900 @ \$111,840,000
<b>38</b>	Aircraft Rotable Spares	\$8,000,000	\$2,000,000
<b>39</b>	Furniture & Equipment	Nil	\$2,000,000
<b>40</b>	Operational Equity	\$10,000,000	\$10,000,000

### ANNEX 3: PROJECTED REGIONAL & INTERNATIONAL ROUTE NETWORKS

Regional Short Haul Route Network – 19 routes as shown below.

**OPTION: 1**



International Long Haul Route Network: 7 Routes as shown below.

**OPTION: 2**







## OPTION: 3 TOTAL AIRLINE

## ANNEX 5: DETAILED CASH FLOW STATEMENTS: 15 YEARS 2016-2030

CASH FLOW STATEMENTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
EARNINGS BEFORE TAXATION	(13,557,674)	34,658	(2,055,403)	15,148,017	27,245,718	41,954,974	59,786,969	79,083,405	99,963,547	127,237,220	149,047,273	166,519,694	195,462,866	214,024,014	233,700,185
Depreciation aircraft	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000
Depreciation robbles	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Depreciation Furniture & Equip	400,000	400,000	400,000	400,000	400,000	-	-	-	-	-	-	-	-	-	-
<b>Net Cash Flow from Operations</b>	<b>2,534,326</b>	<b>16,126,658</b>	<b>14,036,597</b>	<b>31,240,017</b>	<b>43,337,718</b>	<b>57,646,974</b>	<b>75,478,969</b>	<b>94,775,405</b>	<b>115,655,547</b>	<b>142,929,220</b>	<b>164,739,273</b>	<b>182,211,694</b>	<b>211,154,866</b>	<b>229,716,014</b>	<b>249,392,185</b>
INVESTING ACTIVITIES															
Purchase of fixed assets aircraft	(303,840,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of fixed assets aircraft robbles	(10,000,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Furniture & Equip	(2,000,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net Cash Flow From Investing</b>	<b>(315,840,000)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FINANCING															
Equity injection	70,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loans received	303,840,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loan repayments senior	-	-	(18,064,717)	(18,979,243)	(19,940,067)	(20,949,533)	(22,010,103)	(23,124,364)	(24,295,035)	(25,524,972)	(26,817,173)	(28,174,793)	-	-	-
Loan repayments junior	-	-	(9,311,668)	(9,783,071)	(10,278,339)	(10,798,680)	(11,345,363)	(11,919,722)	(12,523,158)	-	-	-	-	-	-
<b>Net Cash Flow From Financing</b>	<b>373,840,000</b>	-	<b>(27,376,384)</b>	<b>(28,762,314)</b>	<b>(30,218,406)</b>	<b>(31,748,213)</b>	<b>(33,355,466)</b>	<b>(35,044,086)</b>	<b>(36,818,193)</b>	<b>(25,524,972)</b>	<b>(26,817,173)</b>	<b>(28,174,793)</b>	-	-	-
WORKING CAPITAL															
Changes in receivables	(28,423,652)	(5,284,547)	(2,162,487)	(5,421,843)	(2,418,501)	(3,253,695)	(3,506,050)	(3,778,750)	(4,073,491)	(4,392,113)	(4,736,615)	(3,302,775)	(3,485,717)	(3,679,805)	(3,885,767)
Changes in payables	12,543,715	1,307,368	2,554,609	1,318,630	221,143	437,368	272,565	285,812	299,946	(724,544)	508,364	201,661	(2,123,672)	221,693	228,525
<b>Net Working Capital</b>	<b>(15,879,936)</b>	<b>(3,977,180)</b>	<b>372,122</b>	<b>(4,103,213)</b>	<b>(2,197,358)</b>	<b>(2,816,327)</b>	<b>(3,233,485)</b>	<b>(3,492,939)</b>	<b>(3,773,545)</b>	<b>(5,116,657)</b>	<b>(4,228,251)</b>	<b>(3,101,114)</b>	<b>(5,609,389)</b>	<b>(3,458,112)</b>	<b>(3,657,243)</b>
<b>Net changes in Cashflow</b>	<b>44,654,389</b>	<b>12,149,479</b>	<b>(12,967,665)</b>	<b>(1,625,510)</b>	<b>10,921,953</b>	<b>23,082,435</b>	<b>38,890,018</b>	<b>56,238,380</b>	<b>75,063,808</b>	<b>112,287,592</b>	<b>133,693,848</b>	<b>150,935,788</b>	<b>205,545,477</b>	<b>226,257,902</b>	<b>245,734,942</b>
Opening bank balance	-	44,654,389	56,803,868	43,836,203	42,210,693	53,132,646	76,215,081	115,105,099	171,343,479	246,407,287	358,694,879	492,388,728	643,324,515	848,869,992	1,075,127,894
<b>Closing Bank balance</b>	<b>44,654,389</b>	<b>56,803,868</b>	<b>43,836,203</b>	<b>42,210,693</b>	<b>53,132,646</b>	<b>76,215,081</b>	<b>115,105,099</b>	<b>171,343,479</b>	<b>246,407,287</b>	<b>358,694,879</b>	<b>492,388,728</b>	<b>643,324,515</b>	<b>848,869,992</b>	<b>1,075,127,894</b>	<b>1,320,862,836</b>

**ANNEX 6: DETAILED BALANCE SHEETS: 15 YEARS 2016-2030**

**OPTION:3 TOTAL AIRLINE**

BALANCE SHEETS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
<b>FINANCIAL BASIS</b>															
<b>FIXED ASSETS</b>															
Aircraft	288,648,000	273,456,000	258,264,000	243,072,000	227,880,000	212,688,000	197,496,000	182,304,000	167,112,000	151,920,000	136,728,000	121,536,000	106,344,000	91,152,000	75,960,000
Aircraft Rotables	9,500,000	9,000,000	8,500,000	8,000,000	7,500,000	7,000,000	6,500,000	6,000,000	5,500,000	5,000,000	4,500,000	4,000,000	3,500,000	3,000,000	2,500,000
Furniture & Equipment	1,600,000	1,200,000	800,000	400,000	-	-	-	-	-	-	-	-	-	-	-
<b>CURRENT ASSETS</b>	<b>299,748,000</b>	<b>283,656,000</b>	<b>267,564,000</b>	<b>251,472,000</b>	<b>235,380,000</b>	<b>219,688,000</b>	<b>203,996,000</b>	<b>188,304,000</b>	<b>172,612,000</b>	<b>156,920,000</b>	<b>141,228,000</b>	<b>125,536,000</b>	<b>109,844,000</b>	<b>94,152,000</b>	<b>78,460,000</b>
Account receivables	28,423,652	33,708,199	35,890,686	41,312,529	43,731,031	46,984,725	50,490,776	54,269,526	58,343,017	62,735,129	67,471,744	70,774,519	74,260,236	77,940,041	81,825,808
Bank Balances	44,654,389	56,803,868	43,836,203	42,210,693	53,132,646	76,215,081	115,105,099	171,343,479	246,407,287	358,694,879	492,388,728	643,324,515	848,869,992	1,075,127,894	1,320,862,836
	73,078,041	90,512,067	79,728,889	83,523,222	96,863,677	123,199,806	165,595,875	225,613,005	304,750,304	421,430,009	559,860,472	714,099,034	923,130,228	1,153,067,935	1,402,688,644
<b>CURRENT LIABILITIES</b>															
Account payables	12,543,715	13,851,083	16,405,692	17,724,321	17,945,465	18,382,832	18,655,398	18,941,209	19,241,155	18,516,611	19,024,975	19,226,636	17,102,964	17,324,657	17,553,181
<b>NET CURRENT ASSETS/(LIABILITIES)</b>	<b>60,534,326</b>	<b>76,660,984</b>	<b>63,321,197</b>	<b>65,798,901</b>	<b>78,918,212</b>	<b>104,815,974</b>	<b>146,940,477</b>	<b>206,671,795</b>	<b>285,509,149</b>	<b>402,913,398</b>	<b>540,835,497</b>	<b>694,872,399</b>	<b>906,027,264</b>	<b>1,135,743,278</b>	<b>1,385,135,463</b>
<b>TOTAL ASSETS</b>	<b>360,282,326</b>	<b>360,316,984</b>	<b>330,885,197</b>	<b>317,270,901</b>	<b>314,298,212</b>	<b>324,504,974</b>	<b>350,936,477</b>	<b>394,975,795</b>	<b>458,121,149</b>	<b>559,833,398</b>	<b>682,063,497</b>	<b>820,408,399</b>	<b>1,015,871,264</b>	<b>1,229,895,278</b>	<b>1,463,595,463</b>
<b>LONG TERM LIABILITIES</b>															
Senior Loan 10 years	227,880,000	227,880,000	209,815,283	190,836,041	170,895,974	149,946,441	127,936,338	104,811,973	80,516,938	54,991,966	28,174,793	(0)	(0)	(0)	(0)
Junior loan 7 years	75,960,000	75,960,000	66,646,332	56,865,261	46,586,923	35,786,243	24,442,880	12,523,158	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	303,840,000	303,840,000	276,463,616	247,701,302	217,482,896	185,734,683	152,379,217	117,335,131	80,516,938	54,991,966	28,174,793	(0)	(0)	(0)	(0)
<b>SHARE CAPITAL</b>															
Share Capital	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000
<b>RESERVES</b>															
Opening Reserves	-	(13,557,674)	(13,523,016)	(15,578,419)	(430,401)	26,815,316	68,770,290	128,557,260	207,640,664	307,604,211	434,841,432	583,888,704	750,408,399	945,871,264	1,159,895,278
Profit & Loss account For Year	(13,557,674)	34,638	(2,055,403)	15,148,017	27,245,718	41,954,974	59,786,969	79,083,405	99,963,547	127,237,220	149,047,273	166,519,694	195,462,866	214,024,014	233,700,185
	(13,557,674)	(13,523,016)	(15,578,419)	(430,401)	26,815,316	68,770,290	128,557,260	207,640,664	307,604,211	434,841,432	583,888,704	750,408,399	945,871,264	1,159,895,278	1,393,595,463
<b>TOTAL ASSETS</b>	<b>360,282,326</b>	<b>360,316,984</b>	<b>330,885,197</b>	<b>317,270,901</b>	<b>314,298,212</b>	<b>324,504,974</b>	<b>350,936,477</b>	<b>394,975,795</b>	<b>458,121,149</b>	<b>559,833,398</b>	<b>682,063,497</b>	<b>820,408,399</b>	<b>1,015,871,264</b>	<b>1,229,895,278</b>	<b>1,463,595,463</b>



**ANNEX 7: DETAILED INCOME STATEMENTS: 15 YEARS 2016-2030 OPTION: 2 INTERNATIONAL LONG-HAUL SERVICES**

PROFIT & LOSS ACCOUNTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>Revenues</b>															
Passenger revenue J class	16,080,896	16,884,588	17,749,450	18,647,578	19,591,145	20,784,246	22,060,007	23,382,862	24,817,477	26,328,861	27,932,289	29,633,365	31,438,037	33,352,614	35,383,788
Passenger revenue YP class	14,833,728	15,594,315	16,372,081	17,201,349	18,071,737	19,172,305	20,339,959	21,578,596	22,992,736	24,598,903	26,395,124	28,389,833	30,592,923	32,930,567	35,406,567
Passenger revenue Y class	86,679,646	90,980,677	96,585,182	100,398,879	106,478,852	111,902,514	118,717,377	126,947,266	133,817,454	141,754,757	150,387,621	159,646,227	169,262,993	179,570,885	190,508,539
<b>TOTAL PAX REVENUE</b>	117,494,270	123,439,480	129,685,518	136,247,605	143,141,734	151,859,066	161,107,893	170,918,717	181,327,690	192,370,521	204,068,886	216,514,716	229,700,463	243,889,221	258,629,894
Cargo revenue	1,174,843	1,234,395	1,296,955	1,362,476	1,431,417	1,516,591	1,611,073	1,706,187	1,813,277	1,923,705	2,040,809	2,165,147	2,297,005	2,436,962	2,586,299
Exchange fees & charges	2,249,865	2,468,760	2,593,710	2,724,952	2,862,835	3,037,181	3,222,146	3,418,374	3,626,553	3,847,410	4,081,710	4,330,294	4,594,009	4,873,784	5,178,568
<b>TOTAL REVENUES</b>	121,019,099	127,142,695	133,579,084	140,335,034	147,435,966	156,411,838	165,940,501	176,046,278	186,767,458	198,141,637	210,208,463	223,010,155	236,591,477	250,999,987	266,285,781
<b>Commercial &amp; Pax costs</b>															
Agents Commission	3,624,828	3,703,184	3,890,566	4,087,428	4,294,252	4,566,772	4,833,218	5,127,561	5,439,830	5,771,116	6,127,677	6,506,441	6,891,014	7,310,677	7,766,897
Distribution	1,731,413	1,783,365	1,865,224	1,926,960	2,007,769	2,088,682	2,172,855	2,260,422	2,351,617	2,446,293	2,544,868	2,647,426	2,751,386	2,862,124	3,009,963
Catering	3,899,072	3,963,936	4,019,653	4,181,645	4,350,165	4,526,477	4,707,854	4,897,580	5,094,653	5,300,279	5,513,880	5,736,090	5,965,336	6,231,268	6,551,631
Other Pax Costs	865,705	891,678	927,612	964,595	1,003,854	1,044,341	1,096,420	1,130,211	1,175,750	1,223,141	1,272,434	1,323,713	1,350,993	1,461,062	1,534,992
	9,821,019	10,242,163	10,803,055	11,166,088	11,696,070	12,214,271	12,800,358	13,416,374	14,062,057	14,740,819	15,463,789	16,202,670	17,089,428	18,026,131	19,012,503
<b>Variable costs</b>															
Principal loan repayments senior loan	-	-	11,415,300	11,993,202	12,600,350	13,238,251	13,908,438	14,612,563	15,352,313	16,129,524	16,946,081	17,803,976	-	-	-
Principal loan repayments junior loan	-	-	5,884,150	6,182,035	6,495,001	6,823,810	7,169,266	7,532,210	7,913,528	8,315,929	8,740,919	9,199,202	-	-	-
Interest payment senior loan	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070	7,069,070
Interest payment junior loan	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366	2,827,366
Fuel	40,570,831	40,570,831	40,570,831	41,386,305	41,800,168	42,214,169	42,640,351	43,066,765	43,493,422	43,930,366	44,371,720	44,816,437	45,263,582	45,716,228	46,173,360
Airframe maintenance	6,100,509	6,100,509	6,161,514	6,223,130	6,285,361	6,348,214	6,411,697	6,475,814	6,540,572	6,605,977	6,672,037	6,738,758	6,806,145	6,874,207	6,942,949
Engine maintenance	10,241,161	10,241,161	10,343,553	10,447,029	10,551,499	10,657,014	10,763,584	10,871,220	10,979,932	11,089,731	11,200,629	11,312,635	11,425,761	11,540,019	11,655,419
Navigation fees	7,026,234	7,026,234	7,096,496	7,167,481	7,239,136	7,311,627	7,384,842	7,458,689	7,533,173	7,608,404	7,684,388	7,761,133	7,838,646	7,917,936	7,999,009
Landing fees	3,707,496	3,707,496	3,744,671	3,782,017	3,819,637	3,858,636	3,898,016	3,937,682	3,977,738	4,018,187	4,059,034	4,099,286	4,139,944	4,177,699	4,219,476
	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677	77,032,677
<b>Direct Costs</b>															
Cockpit crew	3,181,152	3,181,152	3,212,964	3,245,093	3,277,644	3,310,300	3,343,423	3,376,887	3,410,628	3,444,732	3,479,179	3,513,971	3,549,111	3,584,602	3,620,448
Cabin crew	2,895,864	2,895,864	2,927,728	2,960,152	2,993,128	3,026,656	3,060,736	3,095,368	3,130,552	3,166,288	3,202,576	3,239,416	3,276,808	3,314,852	3,353,560
Pax handling	2,587,119	2,675,033	2,701,783	2,728,801	2,756,089	2,783,650	2,811,486	2,839,601	2,867,987	2,896,677	2,925,644	2,954,900	2,984,449	3,014,284	3,044,437
Ground handling	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000	3,744,000
Line maintenance	1,395,324	1,397,968	1,411,948	1,426,067	1,440,328	1,454,731	1,469,278	1,483,971	1,498,811	1,513,799	1,528,937	1,544,226	1,559,669	1,575,265	1,591,018
Maintenance Direct	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254	2,451,254
Maint personnel costs	2,010,362	2,021,677	2,041,894	2,062,313	2,082,936	2,103,765	2,124,803	2,146,051	2,167,511	2,189,188	2,211,078	2,233,189	2,255,521	2,278,076	2,300,867
Insurance (2% of aircraft cost)	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000	3,840,000
Training per year \$100BH 13 crew	1,397,968	1,397,968	1,411,948	1,426,067	1,440,328	1,454,731	1,469,278	1,483,971	1,498,811	1,513,799	1,528,937	1,544,226	1,559,669	1,575,265	1,591,018
Other costs per year \$5/BH 13 crew	698,984	698,984	706,974	713,034	720,164	727,366	734,639	741,986	749,406	756,900	764,469	772,113	779,834	787,633	795,509
	23,711,646	23,794,466	23,989,493	24,148,270	24,324,814	24,508,144	24,687,277	24,871,232	25,067,026	25,244,878	25,434,206	25,626,930	25,818,968	26,014,240	26,211,464
<b>Indirect costs</b>															
Advertising (2% of revenue)	2,420,382	2,542,853	2,671,622	2,806,701	2,948,720	3,128,297	3,318,610	3,520,926	3,736,350	3,962,833	4,204,169	4,460,203	4,731,830	5,019,998	5,326,716
Admin Staff costs	1,442,844	1,486,129	1,546,020	1,608,325	1,673,140	1,740,568	1,810,713	1,883,689	1,959,597	2,038,569	2,120,723	2,206,105	2,295,098	2,387,590	2,483,810
Overheads	1,869,272	1,909,272	1,974,865	1,990,613	1,806,820	1,822,585	1,838,811	1,855,199	1,871,751	1,888,468	1,706,363	1,722,408	1,739,630	1,767,027	1,774,697
Management fees	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Depreciation aircraft	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000
Depreciation royalties	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Depreciation other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16,422,498	16,588,285	16,792,407	16,808,639	16,228,260	16,491,449	16,765,333	17,060,909	17,386,658	17,689,870	18,030,245	18,388,798	18,766,668	19,164,815	19,584,123
<b>Total Costs</b>	126,987,841	127,657,552	146,463,547	147,007,798	148,591,143	150,289,704	152,038,735	153,840,562	155,697,987	149,400,916	151,376,292	153,415,017	157,145,735	159,429,474	141,795,833
EBT	(5,968,742)	(514,867)	(12,007,463)	(6,672,763)	(1,155,167)	(3,877,866)	(4,097,234)	(4,794,284)	(5,930,529)	(1,259,279)	(1,167,829)	(4,404,862)	(1,544,258)	(1,430,487)	(124,488,958)
<b>Tax</b>															
Net cash inflows	(5,968,742)	(514,867)	(12,007,463)	(6,672,763)	(1,155,167)	(4,287,594)	(4,731,237)	(5,544,088)	(21,748,929)	34,119,491	41,162,520	48,716,599	69,612,019	78,099,296	87,142,971

## OPTION:2 INTERNATIONAL LONG-HAUL SERVICES

## ANNEX 8: DETAILED CASH FLOW STATEMENT: 15 YEARS 2016-2030

CASH FLOW STATEMENTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
INTERNATIONAL	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
EARNINGS BEFORE TAXATION	(5,968,742)	(514,887)	4,411,989	11,502,485	17,940,203	26,187,196	34,979,470	44,350,488	54,335,740	64,870,225	75,778,252	87,399,118	99,445,741	111,570,423	124,489,958
Depreciation aircraft	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000
Depreciation rotabales	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Net Cash Flow from Operations	4,031,258	9,485,113	14,411,989	21,502,485	27,940,203	36,187,196	44,979,470	54,350,488	64,335,740	74,870,225	85,778,252	97,399,118	109,445,741	121,570,423	134,489,958
INVESTING ACTIVITIES															
Purchase of fixed assets aircraft	(192,000,000)														
Purchase of fixed assets aircraft rotabales	(8,000,000)														
Net Cash Flow From Investing	(200,000,000)														
FINANCING															
Equity injecton	45,000,000														
Loans received	192,000,000														
Loan repayments senior	-	-	(11,415,303)	(11,993,202)	(12,600,358)	(13,238,251)	(13,908,438)	(14,612,553)	(15,352,313)	(16,129,524)	(16,946,081)	(17,803,976)	-	-	-
Loan repayments junior	-	-	(5,884,150)	(6,182,035)	(6,495,001)	(6,823,810)	(7,169,266)	(7,532,210)	(7,913,528)	-	-	-	-	-	-
Net Cash Flow From Financing	237,000,000		(17,299,453)	(18,175,238)	(19,095,359)	(20,062,062)	(21,077,704)	(22,144,762)	(23,265,841)	(24,429,524)	(25,646,081)	(26,913,976)	-	-	-
WORKING CAPITAL															
Changes in receivables	(20,210,189)	(1,022,636)	(1,074,381)	(1,128,745)	(1,185,859)	(1,499,466)	(1,590,786)	(1,687,665)	(1,790,443)	(1,899,481)	(2,015,160)	(2,137,883)	(2,268,080)	(2,406,206)	(2,552,744)
Changes in payables	8,845,227	40,316	1,488,147	106,481	108,849	114,839	117,772	120,827	124,012	(529,587)	130,798	134,414	(1,331,763)	150,855	155,748
Net Working Capital	(11,364,962)	(982,319)	413,767	(1,022,264)	(1,077,010)	(1,384,629)	(1,473,014)	(1,566,837)	(1,666,431)	(2,429,068)	(1,884,361)	(2,003,469)	(3,599,844)	(2,255,352)	(2,396,996)
Net changes in Cashflow	29,666,296	8,502,794	(2,473,697)	2,304,983	7,767,834	14,740,505	22,428,753	30,638,889	39,403,468	56,311,633	66,947,809	77,591,672	105,845,898	119,315,072	132,092,962
Opening bank balance	0	29,666,296	38,169,090	35,695,393	38,000,376	45,768,210	60,508,715	82,937,467	113,576,356	152,979,924	209,291,457	276,239,267	353,830,938	459,676,836	578,991,908
Closing Bank balance	29,666,296	38,169,090	35,695,393	38,000,376	45,768,210	60,508,715	82,937,467	113,576,356	152,979,924	209,291,457	276,239,267	353,830,938	459,676,836	578,991,908	711,084,870

**OPTION:2 INTERNATIONAL LONG-HAUL SERVICES**

**ANNEX 9: DETAILED BALANCE SHEETS: 15 YEARS 2016-2030**

BALANCE SHEETS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>INTERNATIONAL</b>															
<b>FIXED ASSETS</b>															
Aircraft	182,400,000	172,800,000	163,200,000	153,600,000	144,000,000	134,400,000	124,800,000	115,200,000	105,600,000	96,000,000	86,400,000	76,800,000	67,200,000	57,600,000	48,000,000
Aircraft Rotables	7,600,000	7,200,000	6,800,000	6,400,000	6,000,000	5,600,000	5,200,000	4,800,000	4,400,000	4,000,000	3,600,000	3,200,000	2,800,000	2,400,000	2,000,000
<b>CURRENT ASSETS</b>															
Account receivables	20,210,189	21,232,825	22,307,206	23,435,951	24,621,810	26,121,278	27,712,064	29,399,728	31,190,172	33,089,663	35,104,813	37,242,686	39,510,777	41,916,983	44,469,727
Bank Balances	29,666,296	38,169,090	35,695,393	39,000,376	45,768,210	60,508,715	82,937,467	113,576,366	152,979,824	209,291,457	276,239,267	353,830,938	459,676,836	578,991,908	711,084,870
	49,876,485	59,401,915	58,002,599	61,436,327	70,390,019	86,629,993	110,649,531	142,976,084	184,169,996	242,381,110	311,344,080	391,073,635	499,187,613	620,908,891	755,554,597
<b>CURRENT LIABILITIES</b>															
Account payables	8,845,227	8,885,544	10,373,691	10,480,172	10,589,021	10,821,632	10,942,459	11,066,472	11,066,472	10,536,885	10,667,684	10,802,098	9,470,334	9,621,169	9,776,937
<b>NET CURRENT ASSETS/(LIABILITIES)</b>	41,031,258	50,516,371	47,628,908	50,956,155	59,800,998	75,926,132	99,827,899	132,033,625	173,103,524	231,844,225	300,676,396	380,271,537	489,717,279	611,287,702	745,777,660
<b>TOTAL ASSETS</b>	231,031,258	230,516,371	217,628,908	210,956,155	209,800,998	215,926,132	229,827,899	252,033,625	283,103,524	331,844,225	390,676,396	460,271,537	559,717,279	671,287,702	795,777,660
<b>LONG TERM LIABILITIES</b>															
Senior Loan 10 years	144,000,000	144,000,000	132,584,697	120,591,495	107,991,137	94,752,885	80,844,447	66,231,895	50,879,581	34,750,058	17,803,976	(0)	(0)	(0)	(0)
Junior loan 7 years	48,000,000	48,000,000	42,115,850	35,933,814	29,438,814	22,615,003	15,445,738	7,913,528	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	192,000,000	192,000,000	174,700,547	156,525,309	137,429,950	117,367,888	96,290,185	74,145,422	50,879,581	34,750,058	17,803,976	(0)	(0)	(0)	(0)
<b>CAPITAL &amp; RESERVES</b>															
Share Capital	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000
Opening Reserves	-	(5,968,742)	(6,483,629)	(2,071,640)	9,430,846	27,371,048	53,558,244	88,537,714	132,888,202	187,223,943	252,094,168	327,872,420	415,271,537	514,717,279	626,287,702
Profit & Loss account For Year	(5,968,742)	(514,887)	4,411,989	11,502,485	17,940,203	26,187,196	34,979,470	44,350,488	54,335,740	64,870,225	75,778,252	87,399,118	99,445,741	111,570,423	124,489,958
	(5,968,742)	(6,483,629)	(2,071,640)	9,430,846	27,371,048	53,558,244	88,537,714	132,888,202	187,223,943	252,094,168	327,872,420	415,271,537	514,717,279	626,287,702	750,777,660
<b>TOTAL LIABILITIES + EQUITY</b>	231,031,258	230,516,371	217,628,908	210,956,155	209,800,998	215,926,132	229,827,899	252,033,625	283,103,524	331,844,225	390,676,396	460,271,537	559,717,279	671,287,702	795,777,660



OPTION:1 REGIONAL SHORT-HAUL SERVICES

ANNEX 10: DETAILED PROFIT & LOSS ACCOUNTS: 15 YEARS 2016-2030

PROFIT & LOSS ACCOUNTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>Revenue</b>															
Passenger revenue - Economy class	43,392,378	65,857,852	71,587,954	93,159,412	100,325,520	109,535,403	119,590,753	130,569,194	142,555,435	155,642,024	169,829,962	185,027,661	190,278,697	195,687,956	191,257,670
Passenger revenue - Business class	4,307,534	6,569,136	7,011,178	10,768,142	10,768,142	11,756,657	12,836,918	14,014,256	15,300,765	16,705,375	18,236,688	19,913,262	21,741,296	23,737,161	25,916,221
Cargo revenue	477,499	725,270	789,691	1,039,276	1,110,937	1,212,921	1,324,287	1,446,862	1,578,662	1,723,474	1,881,659	1,949,411	2,030,200	2,094,242	2,171,739
Other revenues (exchange fees miscellaneous)	954,998	1,450,541	1,673,383	2,078,551	2,221,873	2,425,841	2,649,533	2,891,669	3,157,124	3,445,948	3,753,378	3,998,822	4,040,400	4,188,684	4,343,478
<b>Total Revenue</b>	<b>49,192,409</b>	<b>74,702,839</b>	<b>81,209,265</b>	<b>107,985,380</b>	<b>114,426,472</b>	<b>124,938,822</b>	<b>136,399,472</b>	<b>146,920,943</b>	<b>162,591,895</b>	<b>177,517,821</b>	<b>193,813,957</b>	<b>209,789,357</b>	<b>208,680,596</b>	<b>215,706,935</b>	<b>223,689,167</b>
<b>Commercial &amp; Pax Costs</b>															
Commissions / 3% REV	1,432,497	2,175,811	2,369,074	3,117,827	3,332,810	3,638,762	3,972,500	4,337,503	4,736,686	5,170,422	5,645,067	6,060,600	6,090,600	6,282,726	6,616,217
Distribution / 8 p Pax	1,572,995	2,260,360	2,399,448	3,216,908	3,020,674	3,233,933	3,462,240	3,708,694	3,968,375	4,248,643	4,548,690	4,609,288	4,671,775	4,736,045	4,902,195
Catering / 6 p Pax	2,097,328	3,000,480	3,107,264	4,027,665	4,027,665	4,311,911	4,610,332	4,942,245	5,291,167	5,664,724	6,064,663	6,145,717	6,209,034	6,314,725	6,452,928
Other Pax cost / 3 p Pax	766,495	1,125,150	1,165,224	1,400,449	1,510,337	1,616,967	1,731,124	1,853,342	1,984,160	2,124,271	2,274,245	2,304,644	2,335,680	2,368,022	2,401,058
Code sharing cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Commercial &amp; Pax Costs</b>	<b>5,869,319</b>	<b>8,561,831</b>	<b>8,972,010</b>	<b>11,095,038</b>	<b>11,891,366</b>	<b>12,801,672</b>	<b>13,782,905</b>	<b>14,839,773</b>	<b>16,079,416</b>	<b>17,207,980</b>	<b>18,532,455</b>	<b>19,907,883</b>	<b>19,297,297</b>	<b>19,701,820</b>	<b>20,121,439</b>
<b>Variable costs</b>															
Fuel cost / 1700 p/BH	13,526,309	19,022,482	20,453,893	26,583,172	26,583,172	28,798,437	28,798,437	28,798,437	28,798,437	28,798,437	28,798,437	28,798,437	28,798,437	28,798,437	28,798,437
Landing fees / 181 p/SEG	1,009,616	1,444,360	1,496,784	1,938,009	1,938,009	1,938,009	1,938,009	1,938,009	1,938,009	1,938,009	1,938,009	1,938,009	1,938,009	1,938,009	1,938,009
Handling fees / 306 p/SEG	1,701,290	2,433,900	2,520,520	3,048,645	3,048,645	3,077,111	3,107,883	3,138,961	3,234,078	3,269,080	3,332,071	3,366,416	3,269,080	3,332,071	3,366,391
Air Navigation / 284 p/SEG	1,694,152	2,266,300	2,346,976	2,836,876	2,836,876	2,865,455	2,893,897	2,922,836	2,962,665	2,981,685	3,011,401	3,041,515	3,071,030	3,102,650	3,133,678
Variable Mgmt / 450 p/BH	3,690,560	5,036,950	5,414,850	7,037,590	7,037,590	7,107,265	7,176,501	7,252,206	7,323,203	7,394,536	7,470,501	7,546,206	7,622,658	7,698,866	7,773,853
<b>Total Variable costs</b>	<b>21,601,919</b>	<b>30,203,012</b>	<b>32,233,023</b>	<b>41,312,252</b>	<b>41,312,252</b>	<b>43,674,807</b>	<b>43,674,807</b>	<b>43,674,807</b>	<b>43,674,807</b>	<b>44,273,843</b>	<b>45,648,916</b>	<b>46,806,288</b>	<b>46,806,288</b>	<b>47,122,679</b>	<b>47,393,769</b>
<b>Direct operating costs</b>															
Principal Loan repayment - senior	0	0	6,649,414	6,649,414	7,239,709	7,711,281	8,101,665	8,511,812	8,942,722	9,395,448	9,871,092	10,370,816	-	-	-
Principal Loan repayment - Junior	0	0	3,427,818	3,427,818	3,783,338	3,974,899	4,176,097	4,387,612	4,609,639	4,842,889	5,096,990	5,372,706	-	-	-
Interest expense - senior	4,111,808	4,111,908	4,111,908	3,715,282	3,421,614	3,050,041	2,659,657	2,249,510	1,818,000	1,365,075	890,200	390,506	-	-	-
Interest expense - Junior	1,355,685	1,355,685	1,355,685	1,182,167	995,664	808,033	607,106	366,690	173,672	-	-	-	-	-	-
Airport direct c	730,290	1,063,300	1,099,048	1,316,548	1,316,548	1,331,733	1,346,051	1,360,501	1,372,000	1,389,007	1,399,665	1,413,662	1,427,799	1,442,077	1,458,497
Accrpt direct c	564,947	784,591	854,343	1,110,369	1,110,369	1,121,473	1,132,697	1,144,014	1,155,454	1,167,009	1,178,678	1,190,466	1,202,371	1,214,394	1,226,538
Cockpit direct c	2,369,490	3,276,540	3,496,972	4,225,347	4,831,010	4,886,800	5,193,373	5,690,025	6,372,811	6,822,726	7,007,863	7,104,087	7,007,863	7,203,294	7,309,494
Cabin fixed cost	524,332	750,120	776,816	938,965	1,006,801	1,077,078	1,154,083	1,232,752	1,322,752	1,416,191	1,515,163	1,536,429	1,557,268	1,578,692	1,600,732
Maintenance & 566 p/BH	4,416,136	6,211,006	6,676,315	8,079,645	8,079,645	8,166,441	8,264,100	8,342,647	8,402,073	8,452,364	8,513,618	8,565,764	8,598,912	8,650,300	8,681,728
Maintenance f / 231 p/BH	1,035,162	2,025,420	2,718,656	3,280,381	3,594,119	3,772,922	4,039,290	4,334,454	4,639,771	4,996,033	5,306,572	5,377,503	5,450,405	5,525,366	5,602,562
Insurance (% of aircraft price)	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800	2,236,800
Training per y	83 p/BH	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Other costs per	30 p/BH	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
<b>Total Direct Operating Costs</b>	<b>18,940,756</b>	<b>23,314,399</b>	<b>24,196,175</b>	<b>28,141,581</b>	<b>28,781,008</b>	<b>29,610,777</b>	<b>30,316,985</b>	<b>31,170,778</b>	<b>32,078,546</b>	<b>33,209,769</b>	<b>34,594,771</b>	<b>36,093,577</b>	<b>36,147,292</b>	<b>37,499,163</b>	<b>38,767,600</b>
<b>Indirect costs</b>															
Advertising (% of revenue)	983,848	1,484,087	1,626,784	2,140,908	2,288,629	2,486,618	2,727,989	2,978,419	3,251,638	3,560,388	3,879,279	4,015,787	4,161,612	4,314,139	4,473,762
Airport Staff cost / 5 p Pax	1,310,030	1,975,300	1,942,040	2,447,415	2,517,228	2,694,044	2,913,774	3,150,372	3,406,182	3,682,764	3,981,805	4,074,970	4,171,116	4,270,264	4,372,883
Overheads / 145 p/BH	1,153,795	1,622,695	1,744,795	2,267,695	2,267,695	2,330,332	2,336,138	2,392,991	2,450,518	2,475,729	2,526,711	2,679,285	2,630,871	2,683,468	2,731,159
depreciation aircraft	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000	5,692,000
depreciation rotable	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
depreciation other	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
<b>Total Indirect Costs</b>	<b>10,540,243</b>	<b>12,084,062</b>	<b>12,452,569</b>	<b>12,847,978</b>	<b>13,105,412</b>	<b>13,175,692</b>	<b>13,699,501</b>	<b>14,203,662</b>	<b>14,790,539</b>	<b>15,434,249</b>	<b>16,078,795</b>	<b>16,362,052</b>	<b>16,665,599</b>	<b>16,969,992</b>	<b>17,276,823</b>
<b>Total costs</b>	<b>56,771,341</b>	<b>74,152,264</b>	<b>87,665,997</b>	<b>103,399,848</b>	<b>105,120,957</b>	<b>109,163,944</b>	<b>111,591,973</b>	<b>114,188,927</b>	<b>119,964,000</b>	<b>115,150,026</b>	<b>120,544,921</b>	<b>121,668,780</b>	<b>112,063,472</b>	<b>113,253,344</b>	<b>114,078,861</b>
<b>EBIT</b>	<b>(7,568,932)</b>	<b>6,490,645</b>	<b>(6,457,732)</b>	<b>3,645,532</b>	<b>9,305,515</b>	<b>15,767,778</b>	<b>24,807,499</b>	<b>34,732,917</b>	<b>45,627,865</b>	<b>62,365,865</b>	<b>73,269,021</b>	<b>79,120,577</b>	<b>95,017,124</b>	<b>102,453,591</b>	<b>109,210,226</b>
Tax	-	184,863	-	1,093,690	2,791,854	4,730,334	7,442,250	10,419,875	13,098,342	16,170,099	21,960,706	23,736,173	28,095,137	30,736,079	32,763,065
<b>Net cash inflows</b>	<b>(7,568,932)</b>	<b>6,675,508</b>	<b>(6,457,732)</b>	<b>4,739,222</b>	<b>12,097,369</b>	<b>20,498,112</b>	<b>29,349,749</b>	<b>39,152,042</b>	<b>49,529,523</b>	<b>61,195,966</b>	<b>74,639,320</b>	<b>88,711,964</b>	<b>102,912,261</b>	<b>117,717,514</b>	<b>129,447,161</b>

## OPTION:1 REGIONAL SHORT-HAUL SERVICES

## ANNEX 11: DETAILED CASH FLOW STATEMENTS: 15 YEARS 2016-2030

CASHFLOW STATEMENTS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
<b>Operating Activities</b>															
Earnings Before Taxation	(7,588,932)	549,545	(6,467,392)	3,645,532	9,305,515	15,767,778	24,807,499	34,732,917	45,627,806	62,366,995	73,269,021	79,120,577	96,017,124	102,453,591	109,210,226
Depreciation Aircraft	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000	5,592,000
Depreciation Rotables	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Depreciation Furniture etc	400,000	400,000	400,000	400,000	400,000										
Net Cash Flow from Operations	(1,496,932)	6,641,545	(375,392)	9,737,532	15,397,515	21,459,778	30,499,499	40,424,917	51,319,806	68,058,995	78,961,021	84,812,577	101,709,124	108,145,591	114,902,226
<b>INVESTING ACTIVITIES</b>															
Purchase of Aircraft	(111,840,000)														
Purchase of Aircraft Rotables	(2,000,000)														
Purchase of Furniture & Equip	(2,000,000)														
Net Cash Flow from Investing	(115,840,000)														
<b>FINANCING</b>															
Equity Contribution	45,000,000														
Loans Received	111,840,000														
Repayments Senior Loan															
Repayments Junior Loan															
Net Cash Flow from Financing	156,840,000														
<b>WORKING CAPITAL</b>															
Changes in Receivables	(8,213,462)	(4,261,912)	(1,108,106)	(4,293,098)	(1,232,642)	(1,754,226)	(1,915,264)	(2,091,086)	(2,283,047)	(2,492,631)	(2,721,455)	(1,164,892)	(1,217,637)	(1,273,599)	(1,333,023)
Changes in Payables	3,698,488	1,267,052	1,066,461	1,212,149	112,294	322,529	154,794	164,984	175,933	(194,957)	377,565	67,247	(791,908)	70,838	72,776
Net Working Capital Changes	(4,514,974)	(2,994,860)	(41,645)	(3,080,949)	(1,120,348)	(1,431,698)	(1,760,471)	(1,926,101)	(2,107,114)	(2,687,588)	(2,343,890)	(1,097,645)	(2,009,545)	(1,202,760)	(1,260,246)
Net Changes in Cash Flow	34,988,094	3,646,685	(10,493,968)	(3,930,493)	3,154,120	8,341,930	16,461,266	25,599,491	35,660,340	55,975,959	66,746,039	73,344,116	99,699,579	106,942,831	113,641,980
Opening Bank Balance	0	34,988,094	38,634,778	28,140,810	24,210,317	27,364,437	35,706,366	52,167,632	77,767,123	113,427,463	169,403,422	236,149,461	309,493,577	409,193,156	516,135,987
Closing Bank Balance	34,988,094	38,634,778	28,140,810	24,210,317	27,364,437	35,706,366	52,167,632	77,767,123	113,427,463	169,403,422	236,149,461	309,493,577	409,193,156	516,135,987	629,777,966

**OPTION:1 REGIONAL SHORT-HAUL SERVICES**

**ANNEX 12: DETAILED BALANCE SHEETS: 15 YEARS 2016-2030**

BALANCE SHEETS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
<b>FIXED ASSETS</b>															
Aircraft	106,248,000	100,656,000	95,064,000	89,472,000	83,880,000	78,288,000	72,696,000	67,104,000	61,512,000	55,920,000	50,328,000	44,736,000	39,144,000	33,552,000	27,960,000
Aircraft/Robables	1,900,000	1,800,000	1,700,000	1,600,000	1,500,000	1,400,000	1,300,000	1,200,000	1,100,000	1,000,000	900,000	800,000	700,000	600,000	500,000
Furniture & Equipment	1,600,000	1,200,000	800,000	400,000	-	-	-	-	-	-	-	-	-	-	-
	<b>109,748,000</b>	<b>103,656,000</b>	<b>97,564,000</b>	<b>91,472,000</b>	<b>85,380,000</b>	<b>79,688,000</b>	<b>73,996,000</b>	<b>68,304,000</b>	<b>62,612,000</b>	<b>56,920,000</b>	<b>51,228,000</b>	<b>45,536,000</b>	<b>39,844,000</b>	<b>34,152,000</b>	<b>28,460,000</b>
<b>CURRENT ASSETS</b>															
Accountreceivables	8,213,462	12,475,374	13,583,480	17,876,579	19,109,221	20,863,447	22,778,712	24,869,798	27,152,845	29,645,476	32,366,931	33,531,823	34,749,460	36,023,066	37,356,081
Bank Balances	34,988,094	38,634,778	28,140,810	24,210,317	27,364,437	35,706,366	52,167,632	77,767,123	113,427,463	169,403,422	236,149,461	309,493,577	409,193,156	516,135,987	629,777,966
	<b>43,201,556</b>	<b>51,110,152</b>	<b>41,724,290</b>	<b>42,086,895</b>	<b>46,473,658</b>	<b>56,569,814</b>	<b>74,946,344</b>	<b>102,636,921</b>	<b>140,580,308</b>	<b>199,048,898</b>	<b>268,516,392</b>	<b>343,023,400</b>	<b>443,942,616</b>	<b>552,159,045</b>	<b>667,134,047</b>
<b>CURRENT LIABILITIES</b>															
Account payables	3,698,488	4,965,539	6,032,001	7,244,150	7,356,444	7,678,972	7,833,766	7,998,750	8,174,683	7,979,726	8,357,291	8,424,538	7,632,630	7,703,468	7,776,245
NET CURRENT ASSETS/(LIABILITIES)	39,503,068	46,144,613	35,692,290	34,842,746	39,117,214	48,890,841	67,112,578	94,638,171	132,405,625	191,069,172	260,159,101	334,600,861	436,309,986	544,455,577	659,357,803
<b>TOTAL ASSETS</b>	<b>149,251,068</b>	<b>149,800,613</b>	<b>133,256,290</b>	<b>126,314,746</b>	<b>124,497,214</b>	<b>128,578,841</b>	<b>141,108,578</b>	<b>162,942,171</b>	<b>195,017,625</b>	<b>247,989,172</b>	<b>311,387,101</b>	<b>380,136,861</b>	<b>476,153,986</b>	<b>578,607,577</b>	<b>687,817,803</b>
<b>LONG TERM LIABILITIES</b>															
Senior Loan 10 years	83,880,000	83,880,000	77,230,566	70,244,546	62,904,837	55,193,556	47,091,890	38,580,079	29,637,356	20,241,908	10,370,816	(0)	(0)	(0)	(0)
Junior loan 7 years	27,960,000	27,960,000	24,532,482	20,931,447	17,148,109	13,173,239	8,997,142	4,609,630	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	<b>111,840,000</b>	<b>111,840,000</b>	<b>101,763,069</b>	<b>91,175,993</b>	<b>80,052,946</b>	<b>68,366,795</b>	<b>56,089,033</b>	<b>43,189,709</b>	<b>29,637,356</b>	<b>20,241,908</b>	<b>10,370,816</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>
<b>SHARE CAPITAL</b>															
Share Capital	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000	45,000,000
<b>RESERVES</b>															
Opening Reserves	-	(7,588,932)	(7,039,387)	(13,506,779)	(9,861,247)	(555,732)	15,212,047	40,019,545	74,752,462	120,380,269	182,747,264	256,016,284	335,136,861	431,153,986	533,607,577
Profit & Loss Account For Year	(7,588,932)	549,545	(6,467,392)	3,645,532	9,305,515	15,767,778	24,807,499	34,732,917	45,627,806	62,366,995	73,269,021	79,120,577	96,017,124	102,463,591	109,210,226
	<b>(7,588,932)</b>	<b>(7,039,387)</b>	<b>(13,506,779)</b>	<b>(9,861,247)</b>	<b>(555,732)</b>	<b>15,212,047</b>	<b>40,019,545</b>	<b>74,752,462</b>	<b>120,380,269</b>	<b>182,747,264</b>	<b>256,016,284</b>	<b>335,136,861</b>	<b>431,153,986</b>	<b>533,607,577</b>	<b>642,817,803</b>
<b>TOTAL LIABILITIES + EQUITY</b>	<b>149,251,068</b>	<b>149,800,613</b>	<b>133,256,290</b>	<b>126,314,746</b>	<b>124,497,214</b>	<b>128,578,841</b>	<b>141,108,578</b>	<b>162,942,171</b>	<b>195,017,625</b>	<b>247,989,172</b>	<b>311,387,101</b>	<b>380,136,861</b>	<b>476,153,986</b>	<b>578,607,577</b>	<b>687,817,803</b>



**ANNEX 13: DETAILED ECONOMIC BENEFIT INCOME STATEMENTS**

PROFIT & LOSS ACCOUNTS		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Foreign Premium on Pass Revenue	0.04	9,944,651	11,757,991	12,519,279	14,410,510	15,254,124	16,389,068	18,930,129	20,351,032	20,351,032	21,833,075	23,535,287	24,687,356	25,903,228	27,186,806	28,542,227
Passenger revenue J class	1.00	20,438,430	23,463,725	24,760,633	29,415,720	30,259,327	32,540,954	34,885,925	37,407,108	40,118,242	43,034,236	46,171,217	49,546,627	53,179,337	57,099,754	61,300,009
Passenger revenue Y class	1.00	14,833,729	16,584,915	16,972,681	19,201,549	19,871,737	21,172,306	23,039,896	24,578,669	25,892,736	28,286,933	30,785,076	32,336,124	34,059,833	35,965,923	38,059,687
Passenger revenue X class	1.00	129,972,024	156,918,469	167,321,136	193,590,090	205,904,372	221,437,917	238,308,130	256,516,450	276,172,889	297,391,581	320,317,554	344,541,290	369,257,742	394,794,209	421,784,209
Cargo revenue	1.00	1,652,442	1,959,656	2,068,546	2,401,762	2,542,854	2,731,611	2,935,340	3,155,022	3,391,639	3,647,179	3,922,448	4,144,658	4,317,206	4,531,134	4,757,038
Exchange fees & charges	1.00	3,204,884	3,919,300	4,173,000	4,803,500	5,084,708	5,463,025	5,870,379	6,310,343	6,783,677	7,294,268	7,845,066	8,225,117	8,634,409	9,062,289	9,514,076
<b>PSC &amp; VAT</b>	<b>1.00</b>	<b>29,884,936</b>	<b>31,597,436</b>	<b>32,643,880</b>	<b>36,896,866</b>	<b>38,926,919</b>	<b>40,804,585</b>	<b>42,819,173</b>	<b>44,863,523</b>	<b>47,041,309</b>	<b>49,361,309</b>	<b>51,792,066</b>	<b>54,338,441</b>	<b>56,961,797</b>	<b>59,754,249</b>	<b>62,718,416</b>
<b>TOTAL REVENUES</b>		<b>298,000,094</b>	<b>345,290,930</b>	<b>360,977,448</b>	<b>426,676,998</b>	<b>438,043,939</b>	<b>468,539,313</b>	<b>502,733,183</b>	<b>538,759,555</b>	<b>576,703,938</b>	<b>616,903,842</b>	<b>660,389,895</b>	<b>706,937,662</b>	<b>755,737,913</b>	<b>807,072,879</b>	<b>864,000,341</b>
Commercial & Pass costs																
Agents Commission	1.00	4,957,326	5,878,996	6,269,639	7,205,265	7,627,062	8,194,534	8,806,019	9,465,065	10,175,916	10,941,538	11,767,643	12,643,675	13,580,614	14,582,403	15,653,114
Distribution	0.81	3,007,012	3,670,881	3,838,062	4,319,668	4,575,882	4,843,579	5,127,845	5,430,066	5,761,102	6,122,291	6,514,666	6,938,310	7,393,237	7,880,404	8,402,683
Calling	0.81	5,274,724	6,246,619	6,486,494	7,223,133	7,623,734	8,042,023	8,485,009	8,954,241	9,451,369	9,978,153	10,536,666	11,129,444	11,752,386	12,407,865	13,098,649
Other Pass Costs	0.82	1,354,608	1,603,823	1,716,125	1,946,224	2,051,691	2,182,272	2,339,393	2,448,919	2,591,166	2,748,878	2,908,271	3,068,796	3,230,844	3,394,849	3,561,294
<b>Variable costs</b>		<b>14,593,668</b>	<b>17,406,118</b>	<b>18,270,212</b>	<b>20,694,209</b>	<b>21,881,248</b>	<b>23,249,488</b>	<b>24,729,395</b>	<b>26,295,884</b>	<b>27,969,142</b>	<b>29,754,869</b>	<b>31,667,471</b>	<b>33,704,962</b>	<b>35,880,173</b>	<b>38,198,849</b>	<b>40,662,994</b>
Fuel	0.82	49,788,443	54,825,929	56,515,814	62,531,919	62,912,973	65,335,277	66,732,866	68,115,876	68,612,190	68,912,366	69,354,637	69,762,807	70,175,109	70,591,534	71,012,124
Airfare maintenance	0.85	8,228,665	9,445,990	9,839,910	11,271,578	11,324,474	11,437,719	11,562,096	11,697,617	11,784,293	11,902,136	12,021,158	12,141,369	12,262,793	12,385,411	12,509,265
Engine maintenance	0.85	8,705,004	8,705,004	8,782,054	8,879,874	8,988,774	9,098,942	9,149,948	9,240,537	9,332,942	9,428,272	9,520,534	9,615,740	9,711,897	9,809,016	9,907,106
Navigation fees	0.82	7,830,451	8,456,224	8,593,559	9,103,847	9,103,847	9,200,042	9,353,471	9,447,009	9,541,476	9,630,690	9,733,259	9,828,090	9,928,090	10,028,187	10,129,409
Landing fees	0.81	4,202,574	4,688,207	4,768,207	5,086,023	5,101,340	5,172,563	5,224,279	5,276,521	5,329,287	5,382,580	5,436,405	5,490,769	5,545,677	5,601,134	5,657,145
Ground handling fees	0.81	4,965,214	5,621,889	5,734,784	6,247,868	6,282,724	6,345,551	6,408,006	6,473,066	6,537,827	6,603,206	6,669,238	6,735,930	6,803,289	6,871,322	6,940,006
<b>Direct Costs</b>		<b>83,785,678</b>	<b>91,743,143</b>	<b>94,244,844</b>	<b>103,122,309</b>	<b>103,729,155</b>	<b>106,816,424</b>	<b>107,411,383</b>	<b>108,220,753</b>	<b>109,038,915</b>	<b>109,864,458</b>	<b>110,726,152</b>	<b>111,527,268</b>	<b>112,357,268</b>	<b>113,217,268</b>	<b>114,154,144</b>
Interest payment senior loan	1.00	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979	11,170,979
Interest payment junior loan	1.00	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041	3,643,041
Coopd crew	0.70	3,878,462	4,588,684	4,666,046	5,220,308	5,465,988	5,712,853	5,970,137	6,236,819	6,514,532	6,802,292	7,101,104	7,410,871	7,731,592	8,064,267	8,408,894
Cabin crew	0.70	2,037,137	2,196,189	2,230,577	2,390,500	2,425,534	2,492,524	2,563,168	2,637,434	2,714,532	2,794,461	2,877,233	2,962,856	3,051,324	3,142,648	3,236,827
Pay handling	0.82	3,033,409	3,392,837	3,451,294	3,693,088	3,707,020	3,744,999	3,792,449	3,820,273	3,858,476	3,897,061	3,936,031	3,975,392	4,015,146	4,055,297	4,095,850
Line maintenance	0.85	1,666,230	1,863,650	1,908,347	2,165,871	2,168,062	2,189,773	2,211,671	2,233,768	2,256,126	2,278,887	2,301,474	2,324,488	2,347,733	2,371,211	2,394,923
Maintenance Direct	1.00	6,667,369	8,662,626	9,130,136	11,131,668	11,131,668	11,216,262	11,305,927	11,394,468	11,483,694	11,574,215	11,666,439	11,757,675	11,850,633	11,944,621	12,039,549
Mynt personnel costs	0.70	2,660,071	3,252,869	3,332,525	3,744,165	3,924,168	4,113,691	4,314,865	4,529,903	4,758,099	5,002,074	5,262,365	5,537,464	5,824,148	6,122,423	6,432,293
Insurance	0.85	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200	5,165,200
Training	0.81	1,727,151	1,727,151	1,729,872	1,792,721	1,795,088	1,793,355	1,801,189	1,819,201	1,837,393	1,855,787	1,874,304	1,893,068	1,911,998	1,931,118	1,950,429
Other Misc Op Costs	0.82	819,167	824,899	824,899	830,688	836,534	844,900	853,349	861,882	870,501	879,206	887,998	896,847	905,847	914,906	924,054
<b>Indirect costs</b>		<b>42,246,834</b>	<b>46,522,772</b>	<b>47,407,926</b>	<b>50,108,723</b>	<b>50,726,342</b>	<b>51,619,948</b>	<b>52,593,342</b>	<b>53,643,654</b>	<b>54,764,995</b>	<b>55,953,553</b>	<b>57,216,519</b>	<b>58,551,751</b>	<b>59,951,751</b>	<b>61,413,917</b>	<b>62,934,346</b>
Advertising	0.82	2,791,205	3,310,266	3,524,594	4,057,039	4,294,544	4,614,059	4,968,276	5,320,462	5,729,484	6,160,815	6,625,668	7,092,822	7,582,622	8,094,588	8,638,988
Airline staff costs	0.70	1,697,972	2,263,001	2,441,642	2,769,918	2,933,298	3,104,899	3,287,141	3,523,840	3,796,048	4,004,933	4,271,770	4,598,817	4,926,360	5,264,965	5,624,695
Overheads	0.82	2,224,690	2,609,213	2,722,113	3,163,780	3,176,523	3,208,951	3,269,468	3,311,209	3,363,860	3,417,429	3,471,932	3,527,387	3,583,811	3,641,222	3,699,639
Management fees	0.85	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000
Depreciation aircraft	1.00	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000
Depreciation rotables	1.00	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Depreciation other	0.82	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000
<b>TOTAL COSTS</b>		<b>165,789,546</b>	<b>181,728,515</b>	<b>186,351,340</b>	<b>206,935,149</b>	<b>211,818,166</b>	<b>215,026,306</b>	<b>216,484,364</b>	<b>221,176,063</b>	<b>224,613,653</b>	<b>228,326,048</b>	<b>232,345,531</b>	<b>236,870,457</b>	<b>241,398,499</b>	<b>246,438,344</b>	<b>251,873,142</b>
EBIT		40,210,747	63,472,417	63,472,417	88,741,849	104,225,855	122,513,013	144,249,819	167,582,492	192,090,285	224,577,802	261,403,614	302,007,204	332,273,236	348,462,899	346,462,899
Tax		12,003,224	19,541,725	19,117,832	26,622,665	31,267,666	36,783,954	43,274,076	50,774,888	57,373,349	67,373,349	75,421,162	81,320,161	90,662,824	96,662,120	103,638,870
Net cash inflows		28,147,523	44,430,692	44,608,275	62,119,184	72,958,189	85,729,059	100,974,833	116,807,604	134,716,936	157,204,453	175,982,452	190,687,043	211,610,412	228,291,614	241,824,030



**OPTION: 3 TOTAL AIRLINE**

**ANNEX 14: DETAILED ECONOMIC BENEFIT CASH FLOWS COMPUTATIONS: 2016-2030**

CASH FLOW STATEMENTS	Conversion Factors	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
<b>EARNINGS BEFORE TAXATION</b>	1.00	40,210,747	63,472,417	63,726,108	88,741,841	104,224,885	122,613,013	144,249,919	167,582,963	192,750,285	224,571,802	251,403,874	271,067,204	302,309,414	323,273,735	345,462,899
Depreciation aircraft	1.00	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000	15,192,000
Depreciation rotables	1.00	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Depreciation Furniture & Equip	0.82	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000	328,000
<b>Net Cash Flow from Operations</b>		56,230,747	79,492,417	79,746,108	104,761,841	120,244,885	138,305,013	159,940,919	183,274,963	208,442,285	240,263,802	267,095,874	286,759,204	318,001,414	338,965,735	361,154,899
<b>INVESTING ACTIVITIES</b>																
Purchase of fixed assets aircraft	1.00	(303,840,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of fixed assets aircraft rotables	1.00	(10,000,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Furniture & Equip	1.00	(2,000,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net Cash Flow From Investing</b>		(315,840,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>FINANCING</b>																
Equity injection		70,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loans received	1.00	303,840,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loan repayments senior	1.00	-	(18,064,717)	(18,579,243)	(18,579,243)	(19,940,067)	(20,949,533)	(22,010,103)	(23,124,364)	(24,295,035)	(25,524,972)	(26,817,173)	(28,174,793)	-	-	-
Loan repayments junior	1.00	-	(9,311,668)	(9,783,071)	(9,783,071)	(10,278,339)	(10,798,680)	(11,345,363)	(11,919,722)	(12,523,158)	-	-	-	-	-	-
<b>Net Cash Flow From Financing</b>		373,840,000	(27,376,384)	(28,762,314)	(28,762,314)	(30,218,406)	(31,748,213)	(33,355,466)	(35,044,066)	(36,818,193)	(25,524,972)	(26,817,173)	(28,174,793)	-	-	-
<b>WORKING CAPITAL</b>																
Changes in receivables	1.00	(28,423,652)	(5,284,547)	(2,182,487)	(5,421,843)	(2,418,501)	(3,253,695)	(3,506,050)	(3,778,750)	(4,073,491)	(4,392,113)	(4,736,615)	(3,302,775)	(3,465,717)	(3,679,605)	(3,885,767)
Changes in payables	1.00	12,543,715	1,307,368	2,554,609	1,318,630	221,143	437,368	272,565	285,812	299,946	(724,544)	508,364	201,661	(2,123,672)	221,693	228,525
<b>Net Working Capital</b>		(15,879,937)	(3,977,180)	372,122	(4,103,213)	(2,197,358)	(2,816,327)	(3,233,485)	(3,492,939)	(3,773,545)	(5,116,657)	(4,228,251)	(3,101,114)	(5,609,389)	(3,458,112)	(3,657,243)
<b>Net changes in Cashflow</b>		98,350,811	75,515,238	52,741,845	71,896,314	87,829,121	103,740,474	123,351,968	144,737,927	167,850,546	209,628,173	236,050,449	255,483,298	312,392,025	335,507,623	357,497,657
Opening bank balance		-	98,350,811	173,866,048	226,607,893	298,504,207	386,333,328	490,073,802	613,425,771	758,163,698	926,014,244	1,135,642,418	1,371,692,867	1,627,176,165	1,939,568,190	2,275,075,813
<b>Closing Bank balance</b>		98,350,811	173,866,048	226,607,893	298,504,207	386,333,328	490,073,802	613,425,771	758,163,698	926,014,244	1,135,642,418	1,371,692,867	1,627,176,165	1,939,568,190	2,275,075,813	2,632,573,470

### ANNEX 15: ORIGIN DESTINATION STUDY RESULTS BEYOND MARKETS

Annual & Quarterly O&D Market Data		Market										SDEW '13		Operators		Demand/Supply
Alpha OD	O: Long-Haul Station	D: Existing/Potential U7 Spoke	O City	D City	O Ctry	D Ctry	Annual Avg	Q1	Q2	Q3	Q4	Annual Avg	Nbr	LMSF (%)		
DXB-KRT	DXB	KRT	DUBAI, UNITE	KHARTOUM, S	United Arab Em	Sudan	373.1	355.0	386.8	363.5	385.8	564	3	50%		
LON-NBO	LON	NBO	LONDON, ENK	NAIROBI(NT)	United Kingdom	Kenya	310.0	245.8	272.7	417.5	301.3	582	2	53%		
HRE-JNB	JNB	HRE	JOHANNESBU	HARARE, ZIM	South Africa	Zimbabwe	261.6	235.0	258.0	279.4	272.5	617	3	42%		
DXB-NBO	DXB	NBO	DUBAI, UNITE	NAIROBI(NT)	United Arab Em	Kenya	196.8	178.7	194.6	205.9	217.6	788	2	25%		
JNB-NBO	JNB	NBO	JOHANNESBU	NAIROBI(NT)	South Africa	Kenya	185.9	169.3	191.9	203.1	179.2	619	2	30%		
JNB-LUN	JNB	LUN	JOHANNESBU	LUSAKA, ZAM	South Africa	Zambia	180.0	164.5	182.1	187.0	185.9	450	2	40%		
AUH-KRT	AUH	KRT	ABU DHABI, U	KHARTOUM, S	United Arab Em	Sudan	117.7	110.8	115.3	123.3	121.3	213	2	55%		
FBI-JNB	JNB	FBI	JOHANNESBU	LUBUMBASHI	South Africa	Zaire	117.5	101.0	98.8	154.6	115.0	177	3	92%		
DAR-JNB	JNB	DAR	JOHANNESBU	DAR ES SALAA	South Africa	Tanzania	112.9	103.6	101.2	102.7	143.7	214	2	53%		
DOH-KRT	DOH	KRT	DOHA, QATAR	KHARTOUM, S	Qatar	Sudan	106.7	82.5	100.1	135.2	108.2	345	2	31%		
BRU-FIH	BRU	FIH	BRUSSELS, BE	KINSHASA, ZA	Belgium	Zaire	99.5	79.3	93.0	127.4	97.7	172	1	58%		
EBB-LON	LON	EBB	LONDON, ENK	ENTEBBE, KAN	United Kingdom	Uganda	97.2	86.7	83.7	120.5	97.7	82	1	119%		
DAR-DXB	DXB	DAR	DUBAI, UNITE	DAR ES SALAA	United Arab Em	Tanzania	88.4	84.1	88.4	93.0	88.1	333	1	27%		
AMS-NBO	AMS	NBO	AMSTERDAM, N	NAIROBI(NT)	Netherlands	Kenya	86.2	68.1	76.7	95.5	104.1	679	2	13%		
FIH-PAR	PAR	FIH	PARIS, FRANC	KINSHASA, ZA	France	Zaire	84.4	67.4	70.9	117.0	81.7	108	1	78%		
DXB-EBB	DXB	EBB	DUBAI, UNITE	ENTEBBE, KAN	United Arab Em	Uganda	83.2	78.8	83.4	79.5	90.9	258	1	32%		
HRE-LON	LON	HRE	LONDON, ENK	HARARE, ZIM	United Kingdom	Zimbabwe	82.6	77.2	72.1	97.5	83.3	0	0	no n/s svc		
DAR-LON	LON	DAR	LONDON, ENK	DAR ES SALAA	United Kingdom	Tanzania	82.1	73.7	63.0	114.7	76.5	19	1	423%		
EBB-JNB	JNB	EBB	JOHANNESBU	ENTEBBE, KAN	South Africa	Uganda	81.7	74.4	83.3	84.4	84.6	119	1	69%		
MBA-MIL	MIL	MBA	MILAN, ITALY	MOMBASA, K	Italy	Kenya	78.7	96.7	7.8	101.2	108.8	62	2	126%		
NBO-PAR	PAR	NBO	PARIS, FRANC	NAIROBI(NT)	France	Kenya	59.0	56.5	58.4	62.7	58.4	202	3	29%		
LON-LUN	LON	LUN	LONDON, ENK	LUSAKA, ZAM	United Kingdom	Zambia	51.5	43.6	45.9	66.9	49.4	66	1	78%		
JNB-LIW	JNB	LIW	JOHANNESBU	LILONGWE, M	South Africa	Malawi	51.5	48.0	51.2	56.6	50.1	122	1	42%		
KRT-LON	LON	KRT	LONDON, ENK	KHARTOUM, S	United Kingdom	Sudan	49.7	38.9	40.9	72.5	46.3	0	0	no n/s svc		



MBA-ROM	ROM	MBA	ROME, ITALY	MOMBASA, KI	Italy	Kenya	47.2	46.3	10.5	65.0	66.7	36	3	131%
LOW-MBA	LOW	MBA	LONDON, ENI	MOMBASA, KI	United Kingdom	Kenya	45.8	43.6	33.3	57.3	49.0	0	0	no n/s svc
DXB-JUB	DXB	JUB	DUBAI, UNITE	JUBA, SOUTH	United Arab Emi	South Sudan	45.8	12.9	60.4	60.8	48.4	76	1	60%
FIH-JNB	JNB	FIH	JOHANNESBU	KINSHASA, ZA	South Africa	Zaire	36.3	35.0	32.4	38.0	39.9	92	1	40%
DXB-MBA	DXB	MBA	DUBAI, UNITE	MOMBASA, KI	United Arab Emi	Kenya	33.6	39.9	33.2	32.0	29.4	52	1	64%
IST-KRT	IST	KRT	ISTANBUL, TU	KHARTOUM, S	Turkey	Sudan	33.1	24.0	42.3	33.0	32.9	151	1	22%
BRU-NBO	BRU	NBO	BRUSSELS, BE	NAIROBI INT	Belgium	Kenya	30.6	23.8	26.4	39.4	32.5	56	1	54%
AMS-EBB	AMS	EBB	AMSTERDAM	ENTEBE/KAN	Netherlands	Uganda	30.2	24.1	26.2	35.1	35.2	107	1	28%
JNB-ZNZ	JNB	ZNZ	JOHANNESBU	ZANZIBAR, TA	South Africa	Tanzania	30.1	15.0	15.7	27.0	62.0	24	1	125%
JRO-LOW	LOW	JRO	LONDON, ENI	KILIMANJARO	United Kingdom	Tanzania	29.9	28.2	20.0	41.4	29.7	0	0	no n/s svc
JNB-KGL	JNB	KGL	JOHANNESBU	KIGALI, RWAN	South Africa	Rwanda	29.0	33.2	34.4	26.3	22.3	121	1	24%
PAR-ZNZ	PAR	ZNZ	PARIS, FRANC	ZANZIBAR, TA	France	Tanzania	29.0	43.8	12.4	25.9	34.1	0	0	no n/s svc
BRU-KGL	BRU	KGL	BRUSSELS, BE	KIGALI, RWAN	Belgium	Rwanda	27.9	25.9	22.9	37.6	25.1	72	1	39%
IST-NBO	IST	NBO	ISTANBUL, TU	NAIROBI INT	Turkey	Kenya	27.8	22.0	31.1	28.6	29.5	154	1	18%
LLW-LOW	LOW	LLW	LONDON, ENI	LILONGWE, M	United Kingdom	Malawi	27.5	25.6	29.7	34.7	19.9	0	0	no n/s svc
AMS-IRO	AMS	IRO	AMSTERDAM	KILIMANJARO	Netherlands	Tanzania	26.5	24.0	21.6	37.5	22.8	141	1	19%
JRO-PAR	PAR	JRO	PARIS, FRANC	KILIMANJARO	France	Tanzania	25.8	27.6	12.7	31.8	31.2	0	0	no n/s svc
DXB-HRE	DXB	HRE	DUBAI, UNITE	HARARE, ZIM	United Arab Emi	Zimbabwe	25.0	24.6	24.3	25.7	25.4	0	0	no n/s svc
LOW-ZNZ	LOW	ZNZ	LONDON, ENI	ZANZIBAR, TA	United Kingdom	Tanzania	24.6	18.3	15.6	38.4	25.8	0	0	no n/s svc
DXB-LUN	DXB	LUN	DUBAI, UNITE	LUSAKA, ZAM	United Arab Emi	Zambia	24.2	23.2	24.5	22.6	26.4	306	1	7%
AMS-DAR	AMS	DAR	AMSTERDAM	DAR ES SALAJ	Netherlands	Tanzania	22.9	19.0	18.0	34.5	20.1	127	1	18%
DOH-NBO	DOH	NBO	DOHA, QATAI	NAIROBI INT	Qatar	Kenya	22.9	16.6	21.0	24.3	29.5	315	1	7%
NBO-ROM	ROM	NBO	ROME, ITALY	NAIROBI INT	Italy	Kenya	21.3	19.3	17.2	27.3	21.2	0	0	no n/s svc
DXB-ZNZ	DXB	ZNZ	DUBAI, UNITE	ZANZIBAR, TA	United Arab Emi	Tanzania	18.9	16.4	22.3	18.0	18.8	0	0	no n/s svc
MIL-NBO	MIL	NBO	MILAN, ITALY	NAIROBI INT	Italy	Kenya	18.3	16.7	12.3	27.5	16.5	0	0	no n/s svc
BIM-BRU	BRU	BIM	BRUSSELS, BE	BUJUMBURA	Belgium	Burundi	17.7	16.3	14.7	23.7	15.9	32	1	55%
FIH-LOW	LOW	FIH	LONDON, ENI	KINSHASA, ZA	United Kingdom	Zaire	17.5	15.6	15.0	23.1	16.2	0	0	no n/s svc
DAR-PAR	PAR	DAR	PARIS, FRANC	DAR ES SALAJ	France	Tanzania	16.9	16.1	12.0	21.8	17.6	0	0	no n/s svc
BRU-EBB	BRU	EBB	BRUSSELS, BE	ENTEBE/KAN	Belgium	Uganda	16.6	16.2	13.7	18.7	17.7	49	1	34%

JRO-ROM	ROM	JRO	ROME, ITALY	KULMANIARC	Italy	Tanzania	3.5	2.6	2.1	5.7	3.7	0	0	0	no n/s vic
BRU-KRT	BRU	KRT	BRUSSELS, BE	KHARTOUM, S	Belgium	Sudan	3.4	2.7	3.8	4.1	3.0	0	0	0	no n/s vic
FBA-PAR	PAR	FBA	PARIS, FRANC	LUBUMBASHI	France	Zaire	3.3	2.9	3.9	3.6	2.9	0	0	0	no n/s vic
AMS-BIM	AMS	BIM	AMSTERDAM, N	BUJUMBURA, N	Netherlands	Burundi	3.0	2.7	3.0	2.7	3.7	0	0	0	no n/s vic
KRT-MIL	MIL	KRT	MILAN, ITALY	KHARTOUM, S	Italy	Sudan	2.9	2.9	2.8	2.7	3.3	0	0	0	no n/s vic
AMS-FH	AMS	FH	AMSTERDAM, N	KINSHASA, ZA	Netherlands	Zaire	2.8	2.7	3.1	2.7	2.7	0	0	0	no n/s vic
BIM-LON	LON	BIM	LONDON, ENGL	BUJUMBURA, N	United Kingdom	Burundi	2.8	2.3	2.6	3.7	2.5	0	0	0	no n/s vic
LUN-ROM	ROM	LUN	ROME, ITALY	LUSAKA, ZAM	Italy	Zambia	2.7	2.1	2.5	2.9	3.0	0	0	0	no n/s vic
BRU-LUN	BRU	LUN	BRUSSELS, BE	LUSAKA, ZAM	Belgium	Zambia	2.6	1.8	2.9	3.3	2.4	0	0	0	no n/s vic
IST-JUB	IST	JUB	ISTANBUL, TU	JUBA, SOUTH	Turkey	South Sudan	2.6	1.9	2.7	3.1	2.7	0	0	0	no n/s vic
JUB-PAR	PAR	JUB	PARIS, FRANC	JUBA, SOUTH	France	South Sudan	2.5	2.5	2.9	2.2	2.5	0	0	0	no n/s vic
AMS-ASM	AMS	ASM	AMSTERDAM, N	ASMARARA, ERIT	Netherlands	Eritrea	2.5	1.8	1.8	5.0	1.4	0	0	0	no n/s vic
KGL-ROM	ROM	KGL	ROME, ITALY	KIGALI, RWAN	Italy	Rwanda	2.4	2.3	1.9	3.1	2.3	0	0	0	no n/s vic
BRU-LW	BRU	LW	BRUSSELS, BE	LILONGWE, M	Belgium	Malawi	2.4	1.5	2.1	3.9	1.9	0	0	0	no n/s vic
KGL-MIL	MIL	KGL	MILAN, ITALY	KIGALI, RWAN	Italy	Rwanda	2.3	1.8	1.9	3.4	2.3	0	0	0	no n/s vic
DOH-BRO	DOH	JRO	DOHA, QATAR	KULMANIARC	Qatar	Tanzania	2.2	2.3	0.8	3.8	2.1	0	0	0	no n/s vic
HGA-LON	LON	HGA	LONDON, ENGL	HARGEISA, SO	United Kingdom	Somalia	2.2	0.0	0.0	1.8	6.9	0	0	0	no n/s vic
BRU-HRE	BRU	HRE	BRUSSELS, BE	HARARE, ZIM	Belgium	Zimbabwe	2.1	1.8	1.9	2.5	2.4	0	0	0	no n/s vic
LUN-MIL	MIL	LUN	MILAN, ITALY	LUSAKA, ZAM	Italy	Zambia	2.1	1.3	1.7	3.6	1.8	0	0	0	no n/s vic
IST-LUN	IST	LUN	ISTANBUL, TU	LUSAKA, ZAM	Turkey	Zambia	2.0	1.3	2.6	2.4	1.8	0	0	0	no n/s vic
ASM-DOH	DOH	ASM	DOHA, QATAR	ASMARARA, ERIT	Qatar	Eritrea	2.0	1.5	1.4	3.5	1.7	0	0	0	no n/s vic
BIM-MIL	MIL	BIM	MILAN, ITALY	BUJUMBURA, N	Italy	Burundi	1.9	1.1	1.6	3.5	1.5	0	0	0	no n/s vic
HRE-ROM	ROM	HRE	ROME, ITALY	HARARE, ZIM	Italy	Zimbabwe	1.9	1.4	2.2	1.8	2.1	0	0	0	no n/s vic
JUB-ROM	ROM	JUB	ROME, ITALY	JUBA, SOUTH	Italy	South Sudan	1.8	1.7	2.1	1.5	2.1	0	0	0	no n/s vic
AUH-DAR	AUH	DAR	ABU DHABI, U	DAR ES SALAA	United Arab Emi	Tanzania	1.8	1.6	1.6	1.5	2.3	0	0	0	no n/s vic
BIM-ROM	ROM	BIM	ROME, ITALY	BUJUMBURA, N	Italy	Burundi	1.7	1.6	1.6	2.0	1.8	0	0	0	no n/s vic
LW-PAR	PAR	LW	PARIS, FRANC	LILONGWE, M	France	Malawi	1.7	1.3	1.6	2.1	1.7	0	0	0	no n/s vic
HRE-IST	IST	HRE	ISTANBUL, TU	HARARE, ZIM	Turkey	Zimbabwe	1.7	0.9	2.1	1.9	1.7	0	0	0	no n/s vic
AUH-EBB	AUH	EBB	ABU DHABI, U	ENTEBBEKWA	United Arab Emi	Uganda	1.6	1.1	1.4	1.3	2.5	0	0	0	no n/s vic



ASM-JNB	JNB	ASM	JOHANNESBU	ASMARA, ERIT	South Africa	Eritrea	15	19	15	19	0.8	0	0	no n/s svc
BRU-JUB	JUB	JUB	BRUSSELS, BE	JUBA, SOUTH	Belgium	South Sudan	14	15	17	12	1.4	0	0	no n/s svc
LLW-ROM	ROM	LLW	ROME, ITALY	LILONGWE, M	Italy	Malawi	14	12	14	1.7	1.2	0	0	no n/s svc
LLW-MIL	MIL	LLW	MILAN, ITALY	LILONGWE, M	Italy	Malawi	13	10	10	2.4	0.9	0	0	no n/s svc
HRE-MIL	MIL	HRE	MILAN, ITALY	HARARE, ZIM	Italy	Zimbabwe	13	11	12	1.5	1.4	0	0	no n/s svc
DOH-HGL	DOH	KGL	DOHA, QATAI	KIGALI, RWAN	Qatar	Rwanda	13	14	11	1.3	1.3	0	0	no n/s svc
FBM-LON	LON	FBM	LONDON, ENG	LILUMBASHI	United Kingdom	Zaire	13	10	13	1.4	1.5	0	0	no n/s svc
AMS-MGO	AMS	MGO	AMSTERDAM	MOGADISHU	Netherlands	Somalia	13	0.7	1.1	2.1	1.2	0	0	no n/s svc
DOH-MBA	DOH	MBA	DOHA, QATAI	MOMBASA, K	Qatar	Kenya	13	2.0	1.1	1.0	1.0	0	0	no n/s svc
JUB-MIL	MIL	JUB	MILAN, ITALY	JUBA, SOUTH	Italy	South Sudan	11	1.1	1.0	1.3	1.0	0	0	no n/s svc
DXB-MGQ	DXB	MGQ	DUBAI, UNITE	MOGADISHU	United Arab Em	Somalia	11	0.6	0.8	1.6	1.2	0	0	no n/s svc
DOH-ZNZ	DOH	ZNZ	DOHA, QATAI	ZANZBAR, TA	Qatar	Tanzania	0.8	0.8	0.5	1.0	1.0	0	0	no n/s svc
MGO-MIL	MIL	MGO	MILAN, ITALY	MOGADISHU	Italy	Somalia	0.8	0.5	0.8	0.9	0.8	0	0	no n/s svc
AUH-MBA	AUH	MBA	ABU DHABI, U	MOMBASA, K	United Arab Em	Kenya	0.7	0.3	0.3	1.2	1.0	0	0	no n/s svc
ASM-PAR	PAR	ASM	PARIS, FRAN	ASMARA, ERIT	France	Eritrea	0.7	0.6	1.0	0.6	0.6	0	0	no n/s svc
AUH-ZNZ	AUH	ZNZ	ABU DHABI, U	ZANZBAR, TA	United Arab Em	Tanzania	0.7	0.6	0.7	0.6	0.8	0	0	no n/s svc
FBM-MIL	MIL	FBM	MILAN, ITALY	LILUMBASHI	Italy	Zaire	0.6	0.2	0.5	1.3	0.6	0	0	no n/s svc
FBM-ROM	ROM	FBM	ROME, ITALY	LILUMBASHI	Italy	Zaire	0.6	0.3	0.6	0.9	0.5	0	0	no n/s svc
DXB-HGA	DXB	HGA	DUBAI, UNITE	HARGEISA, SC	United Arab Em	Somalia	0.5	0.1	0.0	0.1	1.9	2	1	34%
DOH-LUN	DOH	LUN	DOHA, QATAI	LUSAKA, ZAM	Qatar	Zambia	0.5	0.1	0.3	0.2	1.4	0	0	no n/s svc
BRU-MGQ	BRU	MGQ	BRUSSELS, BE	MOGADISHU	Belgium	Somalia	0.5	0.2	0.4	0.8	0.6	0	0	no n/s svc
DOH-JUB	DOH	JUB	DOHA, QATAI	JUBA, SOUTH	Qatar	South Sudan	0.5	0.5	0.6	0.3	0.6	0	0	no n/s svc
AMS-FBM	AMS	FBM	AMSTERDAM	LILUMBASHI	Netherlands	Zaire	0.5	0.4	0.4	0.4	0.7	0	0	no n/s svc
BIM-ST	ST	BIM	ISTANBUL, TU	BUUMBURA	Turkey	Burundi	0.5	0.3	0.7	0.7	0.3	0	0	no n/s svc
DOH-HRE	DOH	HRE	DOHA, QATAI	HARARE, ZIM	Qatar	Zimbabwe	0.5	0.4	0.4	0.6	0.4	0	0	no n/s svc
ST-LIW	ST	LLW	ISTANBUL, TU	LILONGWE, M	Turkey	Malawi	0.5	0.3	0.7	0.4	0.4	0	0	no n/s svc
MGO-ROM	ROM	MGO	ROME, ITALY	MOGADISHU	Italy	Somalia	0.4	0.3	0.3	0.5	0.5	0	0	no n/s svc
ST-ZNZ	ST	ZNZ	ISTANBUL, TU	ZANZBAR, TA	Turkey	Tanzania	0.4	0.7	0.1	0.5	0.3	0	0	no n/s svc
AUH-RO	AUH	JRO	ABU DHABI, U	KILIMANJARO	United Arab Em	Tanzania	0.4	0.4	0.4	0.3	0.3	0	0	no n/s svc
MGO-PAR	PAR	MGO	PARIS, FRAN	MOGADISHU	France	Somalia	0.3	0.2	0.2	0.2	0.7	0	0	no n/s svc
ASM-BRU	BRU	ASM	BRUSSELS, BE	ASMARA, ERIT	Belgium	Eritrea	0.3	0.2	0.2	0.6	0.2	0	0	no n/s svc
AUH-JUB	AUH	JUB	ABU DHABI, U	JUBA, SOUTH	United Arab Em	South Sudan	0.3	0.4	0.3	0.2	0.2	0	0	no n/s svc
AUH-HRE	AUH	HRE	ABU DHABI, U	HARARE, ZIM	United Arab Em	Zimbabwe	0.2	0.1	0.2	0.3	0.4	0	0	no n/s svc
ASM-ST	ST	ASM	ISTANBUL, TU	ASMARA, ERIT	Turkey	Eritrea	0.2	0.3	0.1	0.3	0.2	0	0	no n/s svc
DOH-MGO	DOH	MGO	DOHA, QATAI	MOGADISHU	Qatar	Somalia	0.2	0.2	0.4	0.3	0.1	0	0	no n/s svc
DOH-FH	DOH	FH	DOHA, QATAI	KINSHASA, ZA	Qatar	Zaire	0.2	0.2	0.1	0.1	0.3	0	0	no n/s svc
DOH-LIW	DOH	LLW	DOHA, QATAI	LILONGWE, M	Qatar	Malawi	0.2	0.1	0.1	0.1	0.4	0	0	no n/s svc
JNB-MGQ	JNB	MGQ	JOHANNESBU	MOGADISHU	South Africa	Somalia	0.2	0.1	0.3	0.2	0.2	0	0	no n/s svc
AUH-BIM	AUH	BIM	ABU DHABI, U	BUUMBURA	United Arab Em	Burundi	0.2	0.1	0.1	0.2	0.2	0	0	no n/s svc

FBM-IST	IST	FBM	ISTANBUL, TU	LUBUMBASHI	Turkey	Zaire	0.1	0.1	0.1	0.1	0.2	0.2	0	0	no n/svc
BIM-DOH	DOH	BIM	DOHA, QATAF	BUJUMBURA	Qatar	Burundi	0.1	0.1	0.1	0.1	0.2	0.2	0	0	no n/svc
HGA-JNB	JNB	HGA	JOHANNESBU	HARGEESA, SC	South Africa	Somalia	0.1	0.0	0.0	0.0	0.3	0	0	0	no n/svc
AUH-FIH	AUH	FIH	ABU DHABI, U	KINSHASA, ZA	United Arab Em	Zaire	0.1	0.1	0.1	0.0	0.1	0	0	0	no n/svc
AUH-KGL	AUH	KGL	ABU DHABI, U	KIGALI, RWAN	United Arab Em	Rwanda	0.1	0.1	0.1	0.0	0.1	0	0	0	no n/svc
HGA-MIL	MIL	HGA	MILAN, ITALY	HARGEESA, SC	Italy	Somalia	0.1	0.0	0.0	0.1	0.2	0	0	0	no n/svc
ASM-AUH	AUH	ASM	ABU DHABI, U	ASMARA, ERI	United Arab Em	Eritrea	0.1	0.0	0.0	0.1	0.1	0	0	0	no n/svc
AUH-LWV	AUH	LWV	ABU DHABI, U	LLONGWE, M	United Arab Em	Malawi	0.1	0.0	0.1	0.0	0.1	0	0	0	no n/svc
HGA-PAR	PAR	HGA	PARIS, FRANC	HARGEESA, SC	France	Somalia	0.1	0.0	0.0	0.0	0.2	0	0	0	no n/svc
AUH-MGQ	AUH	MGQ	ABU DHABI, U	MOGADISHU,	United Arab Em	Somalia	0.0	0.1	0.0	0.0	0.1	0	0	0	no n/svc
AUH-LUN	AUH	LUN	ABU DHABI, U	LUSAKA, ZAM	United Arab Em	Zambia	0.0	0.0	0.0	0.0	0.1	0	0	0	no n/svc
BRU-HGA	BRU	HGA	BRUSSELS, BE	HARGEESA, SC	Belgium	Somalia	0.0	0.0	0.0	0.0	0.1	0	0	0	no n/svc
HGA-IST	IST	HGA	ISTANBUL, TU	HARGEESA, SC	Turkey	Somalia	0.0	0.0	0.0	0.0	0.1	0	0	0	no n/svc
HGA-ROM	ROM	HGA	ROME, ITALY	HARGEESA, SC	Italy	Somalia	0.0	0.0	0.0	0.0	0.1	0	0	0	no n/svc
DOH-FBM	DOH	FBM	DOHA, QATAF	LUBUMBASHI	Qatar	Zaire	0.0	0.0	0.0	0.0	0.0	0	0	0	no n/svc
DOH-HGA	DOH	HGA	DOHA, QATAF	HARGEESA, SC	Qatar	Somalia	0.0	0.0	0.0	0.0	0.0	0	0	0	no n/svc
AMS-HGA	AMS	HGA	AMSTERDAM,	HARGEESA, SC	Netherlands	Somalia	0.0	0.0	0.0	0.0	0.0	0	0	0	no n/svc
AUH-FBM	AUH	FBM	ABU DHABI, U	LUBUMBASHI	United Arab Em	Zaire	0.0	0.0	0.0	0.0	0.0	0	0	0	no n/svc

DIB-FIH	DIB	FIH	DUBAI, UNITED ARAB EMIRATES	KINSHASA, ZAMBIA	United Arab Emirates	Zaire	16.0	16.0	15.1	16.3	16.5	0	0	no/issvc
DAR-ST	IST	DAR	ISTANBUL, TURKEY	DAR ES SALAJ, TANZANIA	Turkey	Tanzania	15.9	15.5	13.8	16.1	18.2	125	1	13%
DIB-KGL	DIB	KGL	DUBAI, UNITED ARAB EMIRATES	KIGALI, RWANDA	United Arab Emirates	Rwanda	15.7	13.5	16.6	15.4	17.1	84	1	19%
KGL-LON	LON	KGL	LONDON, ENGLAND	KIGALI, RWANDA	United Kingdom	Rwanda	14.9	12.6	16.1	16.6	14.2	0	0	no/issvc
MIL-ZNZ	MIL	ZNZ	MILAN, ITALY	ZANZIBAR, TANZANIA	Italy	Tanzania	13.3	6.1	2.4	20.5	23.8	26	1	51%
EBB-IST	IST	EBB	ISTANBUL, TURKEY	ENTEBEPE, KENYA	Turkey	Uganda	12.9	10.8	12.3	13.0	15.5	58	1	22%
JNB-JRO	JNB	JRO	JOHANNESBURG, SOUTH AFRICA	KULMANJARO, TANZANIA	South Africa	Tanzania	12.4	13.8	14.0	11.4	10.5	0	0	no/issvc
JNB-MBA	JNB	MBA	JOHANNESBURG, SOUTH AFRICA	MOMBASA, KENYA	South Africa	Kenya	11.8	11.6	10.7	12.3	12.6	0	0	no/issvc
EBB-PAR	PAR	EBB	PARIS, FRANCE	ENTEBEPE, KENYA	France	Uganda	11.8	11.2	11.4	11.6	12.9	0	0	no/issvc
ROM-ZNZ	ROM	ZNZ	ROME, ITALY	ZANZIBAR, TANZANIA	Italy	Tanzania	11.6	12.3	2.4	17.7	14.1	10	2	114%
FIH-IST	IST	FIH	ISTANBUL, TURKEY	KINSHASA, ZAMBIA	Turkey	Zaire	11.6	9.1	13.3	11.3	12.7	106	1	11%
IST-KGL	IST	KGL	ISTANBUL, TURKEY	KIGALI, RWANDA	Turkey	Rwanda	11.5	2.4	4.6	35.3	3.4	68	2	17%
IST-MBA	IST	MBA	ISTANBUL, TURKEY	MOMBASA, KENYA	Turkey	Kenya	11.4	11.6	10.4	13.7	10.0	58	1	20%
AUH-NBO	AUH	NBO	ABU DHABI, UNITED ARAB EMIRATES	NAIROBI, KENYA	United Arab Emirates	Kenya	10.9	9.6	8.9	14.6	10.2	166	2	7%
AMS-KRT	AMS	KRT	AMSTERDAM, NETHERLANDS	KHARTOUM, SUDAN	Netherlands	Sudan	10.7	9.3	8.8	13.8	10.8	24	1	44%
KRT-PAR	PAR	KRT	PARIS, FRANCE	KHARTOUM, SUDAN	France	Sudan	10.5	9.3	11.1	11.8	9.7	0	0	no/issvc
DAR-MIL	MIL	DAR	MILAN, ITALY	DAR ES SALAJ, TANZANIA	Italy	Tanzania	10.4	11.8	6.5	14.1	9.3	0	0	no/issvc
BRU-FBI	BRU	FBI	BRUSSELS, BELGIUM	LUBUMBASHI, ZAIRE	Belgium	Zaire	10.3	9.4	10.2	12.8	9.0	0	0	no/issvc
BRU-DAR	BRU	DAR	BRUSSELS, BELGIUM	DAR ES SALAJ, TANZANIA	Belgium	Tanzania	10.1	8.2	7.6	14.6	9.8	0	0	no/issvc
BUM-DIB	DIB	BUM	DUBAI, UNITED ARAB EMIRATES	BUJUMBURA, BURUNDI	United Arab Emirates	Burundi	9.7	8.6	9.8	10.4	9.9	0	0	no/issvc
AMS-KGL	AMS	KGL	AMSTERDAM, NETHERLANDS	KIGALI, RWANDA	Netherlands	Rwanda	9.3	8.4	9.1	10.2	9.4	107	1	9%
DIB-LIW	DIB	LIW	DUBAI, UNITED ARAB EMIRATES	LILONGWE, MALAWI	United Arab Emirates	Malawi	9.2	17.5	8.8	5.7	5.0	0	0	no/issvc
AMS-LUN	AMS	LUN	AMSTERDAM, NETHERLANDS	LUSAKA, ZAMBIA	Netherlands	Zambia	9.1	6.3	8.2	12.9	8.8	50	1	18%
KGL-PAR	PAR	KGL	PARIS, FRANCE	KIGALI, RWANDA	France	Rwanda	8.9	7.6	8.0	11.8	8.1	0	0	no/issvc
DAR-ROM	ROM	DAR	ROME, ITALY	DAR ES SALAJ, TANZANIA	Italy	Tanzania	8.5	8.0	6.4	11.4	8.1	0	0	no/issvc
ASM-DIB	DIB	ASM	DUBAI, UNITED ARAB EMIRATES	ASMAHA, ERITREA	United Arab Emirates	Eritrea	8.4	7.5	7.6	11.6	7.0	0	0	no/issvc
FIH-ROM	ROM	FIH	ROME, ITALY	KINSHASA, ZAMBIA	Italy	Zaire	8.1	7.3	7.4	9.2	8.6	0	0	no/issvc
JNB-JUB	JNB	JUB	JOHANNESBURG, SOUTH AFRICA	JUBA, SOUTH SUDAN	South Africa	South Sudan	7.9	5.9	7.6	7.9	10.3	0	0	no/issvc
AMS-MBA	AMS	MBA	AMSTERDAM, NETHERLANDS	MOMBASA, KENYA	Netherlands	Kenya	7.8	7.2	5.4	10.4	8.3	0	0	no/issvc



DAR-DOH	DOH	DAR	DOHA, QATAR	DAR ES SALAJ	Qatar	Tanzania	7.7	6.7	7.1	7.1	10.0	288	1	3%
BRU-IRO	BRU	JRO	BRUSSELS, BE	KILIMANJARO	Belgium	Tanzania	7.7	6.1	5.1	11.8	7.8	0	0	no n/s svc
ASH-LON	LON	ASM	LONDON, ENI	ASMARA, ERI	United Kingdom	Eritrea	7.6	5.5	4.6	15.0	5.4	0	0	no n/s svc
JUB-LON	LON	JUB	LONDON, ENI	JUBA, SOUTH	United Kingdom	South Sudan	7.5	7.0	7.6	7.1	8.3	0	0	no n/s svc
JNB-KRT	JNB	KRT	JOHANNESBU	KHARTOUM, S	South Africa	Sudan	7.5	6.6	7.1	8.3	8.0	0	0	no n/s svc
MBA-PAR	PAR	MBA	PARIS, FRANC	MOMBASA, K	France	Kenya	7.3	11.4	3.8	7.2	6.7	0	0	no n/s svc
LON-MGQ	LON	MGQ	LONDON, ENI	MOGADISHU,	United Kingdom	Somalia	7.2	5.2	5.5	11.2	6.7	0	0	no n/s svc
BRU-MBA	BRU	MBA	BRUSSELS, BE	MOMBASA, K	Belgium	Kenya	7.1	6.0	3.9	12.4	6.2	9	1	79%
EBB-ROM	ROM	EBB	ROME, ITALY	ENTEBBE/KAI	Italy	Uganda	7.1	5.9	6.8	7.9	7.6	0	0	no n/s svc
IST-MGQ	IST	MGQ	ISTANBUL, TU	MOGADISHU,	Turkey	Somalia	6.9	9.3	7.0	6.9	4.4	0	0	no n/s svc
EBB-MIL	MIL	EBB	MILAN, ITALY	ENTEBBE/KAI	Italy	Uganda	6.7	7.0	4.6	8.8	6.4	0	0	no n/s svc
BIM-PAR	PAR	BIM	PARIS, FRANC	BUJUMBURA,	France	Burundi	6.2	5.3	5.9	7.9	5.8	0	0	no n/s svc
AMS-HRE	AMS	HRE	AMSTERDAM	HARARE, ZIM	Netherlands	Zimbabwe	6.2	5.6	6.0	6.8	6.4	49	1	13%
DXB-FBM	DXB	FBM	DUBAI, UNITE	LUBUMBASHI	United Arab Em	Zaire	6.2	6.7	5.9	6.6	5.5	0	0	no n/s svc
BRU-ZNZ	BRU	ZNZ	BRUSSELS, BE	ZANZIBAR, TA	Belgium	Tanzania	6.1	5.9	3.0	8.6	6.7	9	1	67%
IST-IRO	IST	JRO	ISTANBUL, TU	KILIMANJARO	Turkey	Tanzania	6.0	6.0	5.3	7.7	4.9	58	1	10%
FH-MIL	MIL	FH	MILAN, ITALY	KINSHASA, ZA	Italy	Zaire	5.8	4.9	5.4	6.9	6.0	0	0	no n/s svc
KRT-ROM	ROM	KRT	ROME, ITALY	KHARTOUM, S	Italy	Sudan	5.6	4.8	5.3	5.3	7.0	0	0	no n/s svc
BIM-JNB	JNB	BIM	JOHANNESBU	BUJUMBURA,	South Africa	Burundi	5.5	4.5	5.1	5.8	6.8	48	1	12%
ASM-MIL	MIL	ASM	MILAN, ITALY	ASMARA, ERI	Italy	Eritrea	5.3	4.2	4.0	9.4	3.5	0	0	no n/s svc
AMS-ZNZ	AMS	ZNZ	AMSTERDAM	ZANZIBAR, TA	Netherlands	Tanzania	5.1	4.1	2.5	10.1	3.7	0	0	no n/s svc
DXB-IRO	DXB	JRO	DUBAI, UNITE	KILIMANJARO	United Arab Em	Tanzania	4.8	5.1	3.8	4.9	5.4	0	0	no n/s svc
JRO-MIL	MIL	JRO	MILAN, ITALY	KILIMANJARO	Italy	Tanzania	4.5	3.7	1.8	8.3	4.3	0	0	no n/s svc
AMS-LLW	AMS	LLW	AMSTERDAM	LLONGWE, M	Netherlands	Malawi	4.4	3.2	5.3	4.2	4.8	0	0	no n/s svc
DOH-EBB	DOH	EBB	DOHA, QATAR	ENTEBBE/KAI	Qatar	Uganda	4.3	3.9	4.2	4.0	5.0	144	1	3%
LUN-PAR	PAR	LUN	PARIS, FRANC	LUSAKA, ZAM	France	Zambia	4.1	2.7	3.9	4.6	5.3	0	0	no n/s svc
HRE-PAR	PAR	HRE	PARIS, FRANC	HARARE, ZIM	France	Zimbabwe	3.8	2.3	3.4	4.5	5.0	0	0	no n/s svc
AMS-JUB	AMS	JUB	AMSTERDAM	JUBA, SOUTH	Netherlands	South Sudan	3.8	4.0	3.8	3.6	3.6	0	0	no n/s svc
ASM-ROM	ROM	ASM	ROME, ITALY	ASMARA, ERI	Italy	Eritrea	3.6	3.5	2.7	5.0	3.1	0	0	no n/s svc

ANNEX 16: CURRENT LONG HAUL SERVICES FROM ENTEBBE INTERNATIONAL AIRPORT

**EBB's Current Long-Haul Service**

AL	FLT	ORG	DST	DEPT	ARRT	EQP	DAYS	STOPS	VIA
EK	730	EBB	DXB	1535	2155	345	MTWTFSS	0	
EK	729	DXB	EBB	0850	1300	345	MTWTFSS	0	
TK	569	EBB	IST	0350	1010	739	M-----	0	
TK	606	EBB	IST	0350	1010	739	-T-T-S-	0	
TK	612	EBB	IST	0350	1010	739	--W-F-S	0	
TK	569	IST	EBB	1820	0250	739	-----S	1	KGL
TK	606	IST	EBB	1820	0250	739	M-W-F--	1	KGL
TK	612	IST	EBB	1820	0250	739	-T-T-S-	1	KGL
QR	1388	EBB	DOH	1750	2315	320	MTWTFSS	0	
QR	1387	DOH	EBB	0740	1305	320	MTWTFSS	0	
KL	535	EBB	AMS	2340	0655	330	--W-F-S	0	
KL	537	EBB	AMS	2340	0655	330	M----S-	0	
KL	539	EBB	AMS	2340	0655	330	-T-T---	0	
KL	535	AMS	EBB	1100	2225	330	--W-F-S	1	KGL
KL	537	AMS	EBB	1100	2225	330	M----S-	1	KGL
KL	539	AMS	EBB	1100	2225	330	-T-T---	1	KGL
SN	465	EBB	BRU	2250	0555	332	M-W--S-	0	
SN	465	BRU	EBB	1025	2145	332	M-W--S-	1	KGL
BA	62	EBB	LHR	0045	0730	767	--W----	0	
BA	62	EBB	LHR	0110	0755	767	M---FS-	0	
BA	63	LHR	EBB	1230	2250	767	-T-TF-S	0	
SA	161	EBB	JNB	0725	1040	319	MTWTFSS	0	
SA	160	JNB	EBB	1400	1905	319	MTWTFSS	0	

**ANNEX 17: SUMMARY OF SOME STAFF PROFESSIONAL REQUIREMENTS**

Chief Executive Officer	Human Resources Director	Airframe
E.A. to the Chief Executive Officer	Secretary to the Director Human Resources	Avionics
Drivers	Salary Manager	Powerplant
Chief Financial Officer	Salary Clerk	Line Maintenance Manager
Secretary to the Chief Financial Officer	Administration Manager	Route Station Engineers
Revenue Accountant	Administration Clerk	Procurement Manager
Revenue Accounting Clerk	Recruitment Manager	Records Clerk
Bureau Accountant	Recruitment Clerk	Stores Clerk
Bureau Accounting Clerk	Stations Director	Chief Pilot
Treasury Accountant	Secretary to the Director Outstations	Secretary to the Chief Pilot
Treasury Accounting Clerk	Stations Managers	Deputy Chief Pilot
Financial Accountant	Ticketing Clerks	Chief Training Pilot
Financial Accounting Clerk	Sales Executive	Fleet Captain CRJ900
Director Marketing & Sales	Director Operations	Captains
Secretary to the Director Marketing & Sales	Secretary to the Director Operations	First Officers
Information Technology Manager	Flight Dispatch Supervisor	Cockpit Crew Roster Clerk
Advertising Manager	Flight Planner	Cabin Services Director
Sales Executive	Timetable Planner	Secretary to the Director Cabin Services
Customer Services Manager	Ramp Supervisor	Cabin Crew Manager
E-Commerce Strategist	Director Maintenance & Technical	Catering Manager
Safety & Security Director	Secretary to the Director Maintenance	Crew Training Manager
Secretary to the Director Safety & Security	Technical / Engineering Manager CRJ900	Crew Roster Manager
Flight Safety Manager	Team Supervisor	In-Flight Entertainment Manager
Security Manager	Airframe	Crew Roster Clerk
Loss Control	Avionics	Cabin Crew
Station Security	Powerplant	Roster Clerk Cabin Services
Cargo Director	Quality Control Manager	General staff Clerical supervisory
Secretary to the Director Cargo	Team Supervisor	

**ANNEX 18: UGANDA TRAFFIC ANALYSIS: FUNDS LOST TO OTHER AIRLINES BY CARRIER**

<b>Airline</b>	<b>Airport</b>	<b>Passengers</b>	<b>Reallocated</b>	<b>Reallocated</b>	<b>Reallocated</b>	<b>Total Passengers</b>	<b>Average Fare</b>	<b>Money Lost UG</b>
								<b>USD</b>
Kenya Airways	NBO	246,577	15,151	33,626		295,354	400	<b>118,141,600</b>
Ethiopian	ADD	165,116	15,151		23,641	203,908	400	<b>81,563,200</b>
KLM	AMS	125,426	15,151			140,577	400	<b>56,230,800</b>
Emirates	DXB	101,170	15,151			116,321	400	<b>46,528,400</b>
Qatar	DOH	100,732	15,151			115,883	400	<b>46,353,200</b>
British	LHR	75,755				reallocated	400	-
Rwandair	KGL	72,597		33,627	35,463	141,687	400	<b>56,674,800</b>
Air Uganda	NBO	67,253				reallocated	400	-
SAA	JNB	63,477				63,477	400	<b>25,390,800</b>
Air Uganda	JUB	59,104				reallocated	400	-
		<b>1,077,207</b>				<b>1,077,207</b>	<b>400</b>	<b>430,882,800</b>

## ANNEX19: AIRCRAFT FLEET EVALUATION AND SELECTION

# Aircraft Fleet & Evaluation

## Regional Aircraft Comparison CRJ vs ERJ Aircraft

### CRJ Series Offer Full Commonality Advantage

CRJ Family		ERJ Family
	<p>3 days</p> <p>half day</p> <p>8 Hours</p>	
		
		
		

- 1 Pilot pool
- 1 Simulator for training
- Reduced initial investment
- Smaller training facility / lower overhead

- 2 Pilot pools
- 2 Simulators for training
- Higher initial investment
- Larger training facility / higher overhead

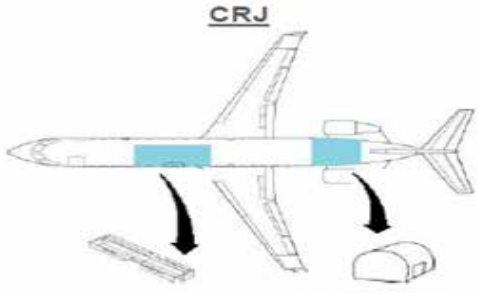

\* Estimated

Both offer Flexibility but CRJ has better Economics


## CRJ Cargo Hold design is better than ERJ

### The CRJ900's cargo compartments have a distinctive advantage over the EJets

**CRJ**

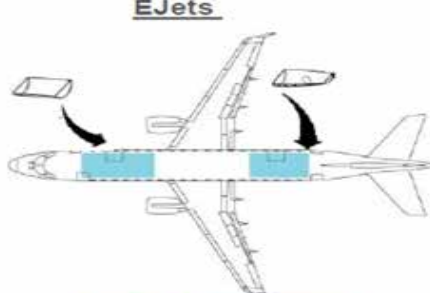




Sky-Check: Non-Powered System Facilitates Loading



Full Standing-Head Room : Fast & Efficient baggage load

**EJets**

Long, low height cargo bay makes difficult, slow, inefficient loading

CRJ900 cargo hold offers better packing for Baggage



## ERJ Cargo holds have loading problems

**EJets cargo bay design results in loading problems and reduced packing efficiency**

Minimal flat floor space

- Sloped sidewalls are difficult to load
- Very low bay height

**DUE TO SPACE CONSTRAINTS THE EJET CARGO BAY HAS ONLY A 71% LOAD EFFICIENCY**

**CRJ Aircraft are more efficient to load & off-load**

## CRJ Airstair: Productivity & Remote Airport Advantage

**The CRJ offers more productivity due to its integrated airstair**



**CRJ Standard** Integral airstair door  
Easily operated from ground level



**EJet Optional** Folding "ladder type" airstair door  
Additional GSE required to operate door externally

**CRJ HAS SUPERIOR ACCESSIBILITY FOR INDEPENDENT OPERATION WITH NO LOSS OF SPACE DUE TO AIRSTAIR**

**Airstair enables CRJ operation in remote airports & gives quicker turn-around times**



## Risk of FOD Damage: CRJ vs ERJ



The engine location has a significant impact on FOD ingestion



WATER TESTS SHOW HOW PARTICLES WILL BE PROJECTED ACROSS AN AIRCRAFT

- Aircraft are designed to reduce the quantity of FOD projected towards the engine
- Despite of this design a low engine will always be subject to more FOD

→ THE ONLY REAL SOLUTION IS TO PLACE THE ENGINE OUT OF HARM'S WAY

**BOMBARDIER**  
the evolution of mobility

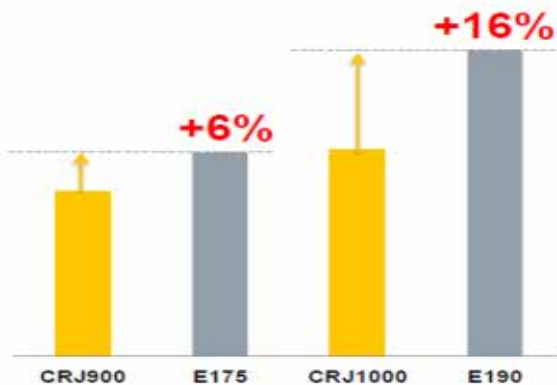
CRJ Engine position (3.76m vs 0.47m) reduces risk of FOD damage

## Lower Fuel Burn



Lowest fuel burn = large savings

FUEL BURN ON 500nm sector



600k\$

YEARLY SAVINGS FOR CRJ900s vs. E175s

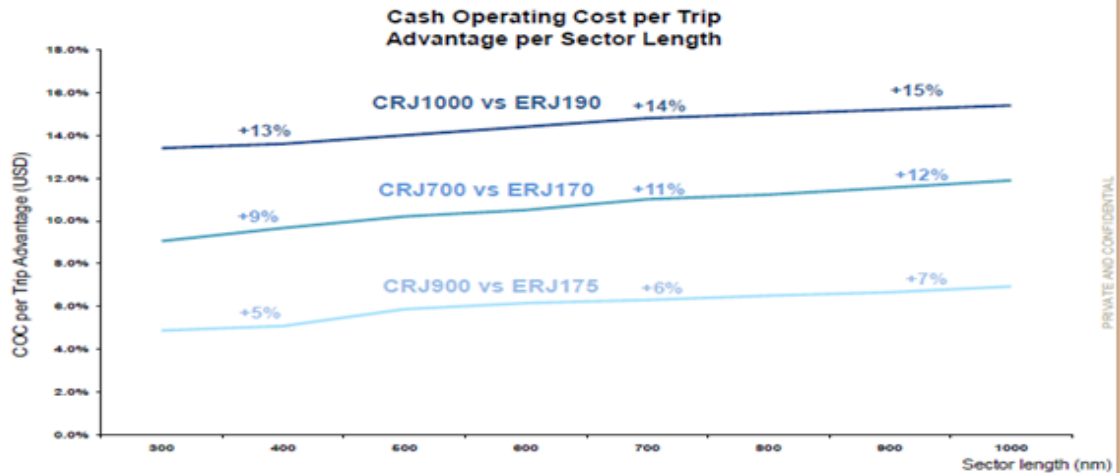
1.4M\$

YEARLY SAVINGS FOR CRJ1000s vs. E190s

# Cash Operating Cost advantage



The CRJ offers the lowest cash operating cost at all sector lengths

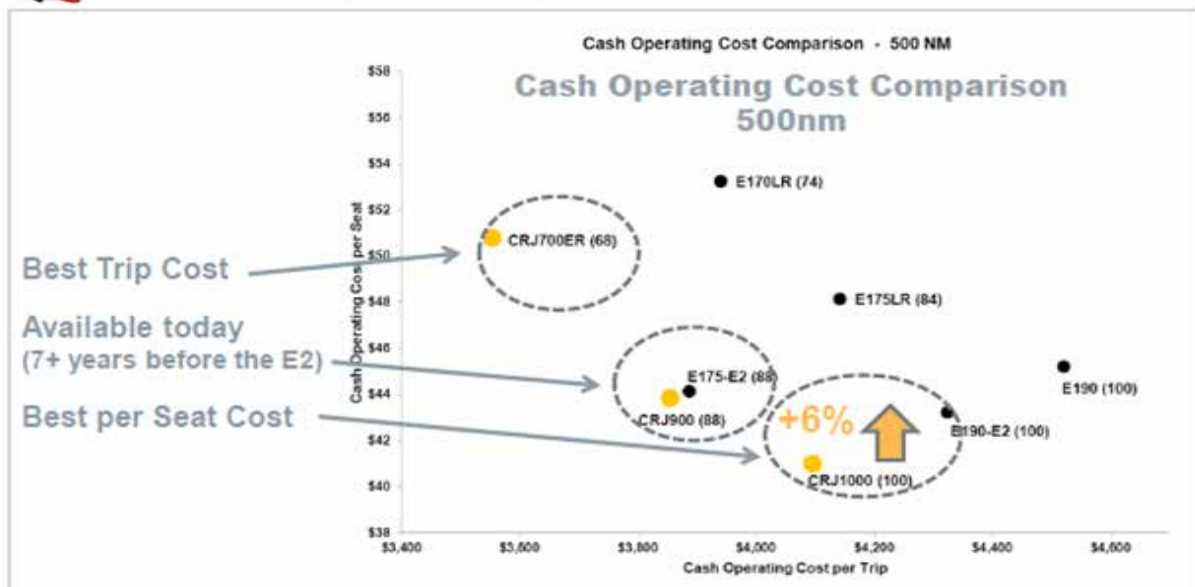


PRIVATE AND CONFIDENTIAL

**CRJ OFFERS THE LOWEST TRIP FUEL BURN AT ALL STAGE LENGTHS**

**CRJ Family offers lower cash operating costs vs ERJ family**

## 500nm Trip Comparison CRJ vs ERJ



**NextGen CRJ aircraft have lower Operating costs vs ERJs**

## 500nm Route Cost Savings CRJ vs ERJ



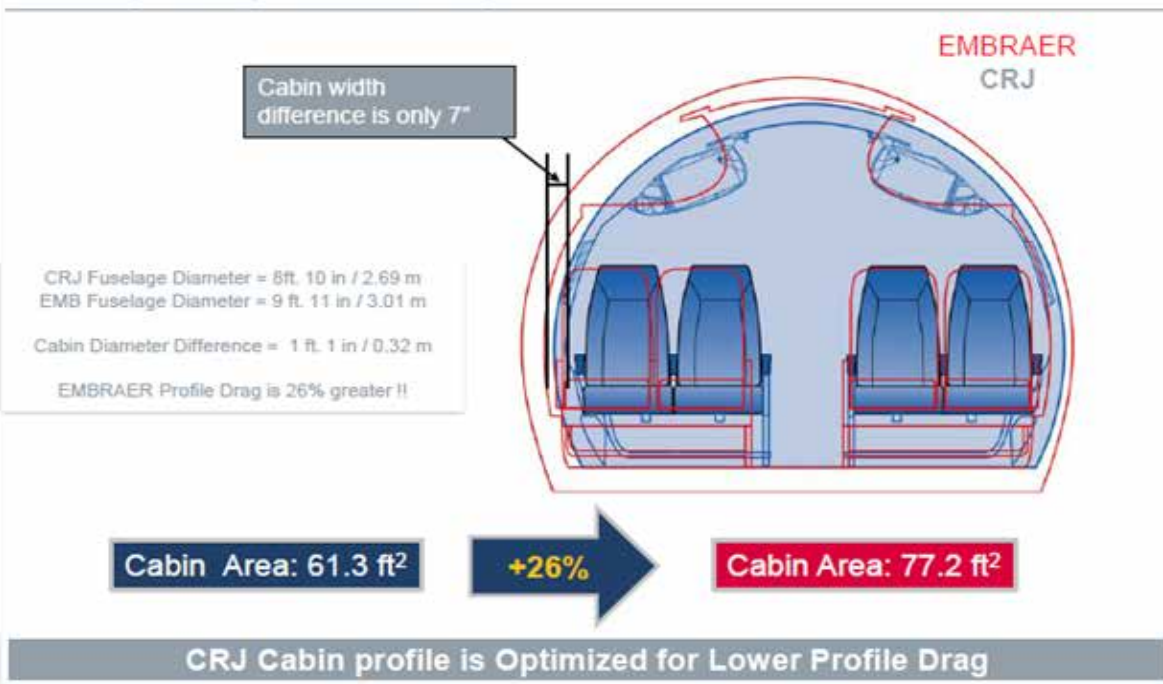
### Operating cost savings per year per aircraft

Cash Operating Costs savings per year  
500nm route

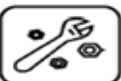


## CRJ Cabin Design lowers Drag

### CRJ's Drag Reducing Cabin Profile Design



## Regional Aircraft Comparison CRJ Family vs Embraer Aircraft





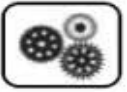

**Main drivers behind cost savings against the competition**

CRJ NextGen		EJets
Longer Structural Check Interval (30,000 FC)	(1)	Shorter Structural Check Interval (20,000 FC)
No Emergency Slides	(2)	4 Emergency Slides
Lighter Aircraft	(3)	2-3 Tons Heavier Than the CRJ (Higher Landing Gear DMC)
Lower Thrust	(4)	Higher Thrust (Lower TBO and Higher Cost)


**NextGen CRJ Aircraft offer Cost Advantages vs ERJets**

## Results Speak: CRJ vs ERJ

**The CRJ Nextgen performance in numbers**

- 
UP TO 16% LESS FUEL BURN VS. E-JETS
- 
UP TO 20% DIRECT MAINTENANCE COST ADVANTAGE
- 
HIGHEST FLEET COMMONALITY
- 
UP TO 15% NET CARGO CAPACITY ADVANTAGE

---



UP TO 14%

LOWER CASH OPERATING COSTS

The CRJs are the most cost-effective solution



## Regional aircraft Comparisons

Parameters	CRJ900	ERJ170	ERJ190
Price USD Million	39	27-28	32-40
Maximum range nautical miles	1,048	2,100	2,400
Altitude	41,000	41,000	41,000
Cruise Speed Knots	476	481	444
Thrust per engine lbf	13,360	14,200	20,000
Maximum take off weight lbs	80,500	79,344	105,359
Maximum payload lbs	21,840	20,062	28,836
Baggage capacity cubic feet	594	324	747
Fuel capacity gals	2,897	3,072	4,268
Passenger Capacity	88	70	98
Maximum Seating	90	80	114
Cabin width ft	69	64	85
Length in ft	119	98	119
Wingspan	82	85	94
<b>STANDARD FEATURES</b>	<b>Comments</b>	<b>Comments</b>	<b>Comments</b>
Phone System	No	Yes	Yes
Soundproof Cabin	Yes	No	No
iPod Connection	Yes	Yes	Yes
Lavatory	Yes	Yes	Yes

## Wide Body Aircraft: A330 vs B787 vs B777

	A330-200	B787-800	B777-300ER	Comments
Price USD Million	216	225	250	A330 has cost advantage US \$34M and US \$9M difference
Fuel cost per nautical mile	30	27	45.18	A330 has comparable cost to B787
Maximum range nautical miles	7,250	7,355	6005	Similar aircraft ranges
Altitude	42,651	43,000	43100	Similar cruising altitudes
Cruise Speed Knots	493	515	510	A330 is slower
Thrust per engine lbf	72,000	64,000	3 variants	Lower thrust for 787
Maximum take off weight lbs	529,100	502,500	660,000	Lower take off weight for 787
Maximum Payload lbs	80,200	147,500	147,200	787 has higher payload
Baggage Capacity cu ft	486	4,826	7,120	Payload advantage to 787
Take off field length	9,090	10,300	10600	A330 has advantage
Landing field length	5,741	8,100	8100	A330 has advantage
Fuel capacity gals	36,757	33,528	45,220	Reflects engine ops para
Passenger Capacity	247	210	368	A330 offers more flexibility to 787
Maximum Seating	406	250	550	A330 offers more flexibility to 787
Cabin width ft	17	18	19	No real advantage
Length in ft	193	197	243	No real advantage
Wingspan	198	186	200	No real advantage

**A330 price advantage (\$9M-34M) plus other advantages**

15

## Wide Body Aircraft: A330 vs B787 vs B777

STANDARD FEATURES:	Offered in Aircraft Price but are Options where there is a No.			Comments
	A330-200	B787-800	B777-300ER	
Bar	Yes	No	No	A330 has advantage over both 787 & 777
Cabin Lighting	Yes	No	No	A330 has advantage over both 787 & 777
Chairs: Moveable	Yes	No	No	A330 has advantage over both 787 & 777
Crew Rest Area	Yes	No	No	A330 has advantage over both 787 & 777
Cupholders	Yes	No	No	A330 has advantage over both 787 & 777
Galley	Yes	No	No	A330 has advantage over both 787 & 777
Internet Connection	Yes	No	No	A330 has advantage over both 787 & 777
iPod Connection	Yes	No	No	A330 has advantage over both 787 & 777
Monitor(s)	Yes	No	No	A330 has advantage over both 787 & 777
Reading Light(s)	Yes	No	Yes	A330 has advantage over 787
Security Camera	Yes	No	No	A330 has advantage over both 787 & 777
Soundproof Cabin	Yes	No	No	A330 has advantage over both 787 & 777
Stowable Work Table	No	Yes	Yes	787 & 777 have advantage
Window Darkeners	Yes	No	No	A330 has advantage over both 787 & 777
Lavatory	Yes	Yes	Yes	Nil
Phone System	Yes	Yes	Yes	Nil

**A330 more Standard Features than 787 or 777 as are Options  
Therefore significant cost savings**

16

## Selected 4 x Regional Aircraft CRJ900



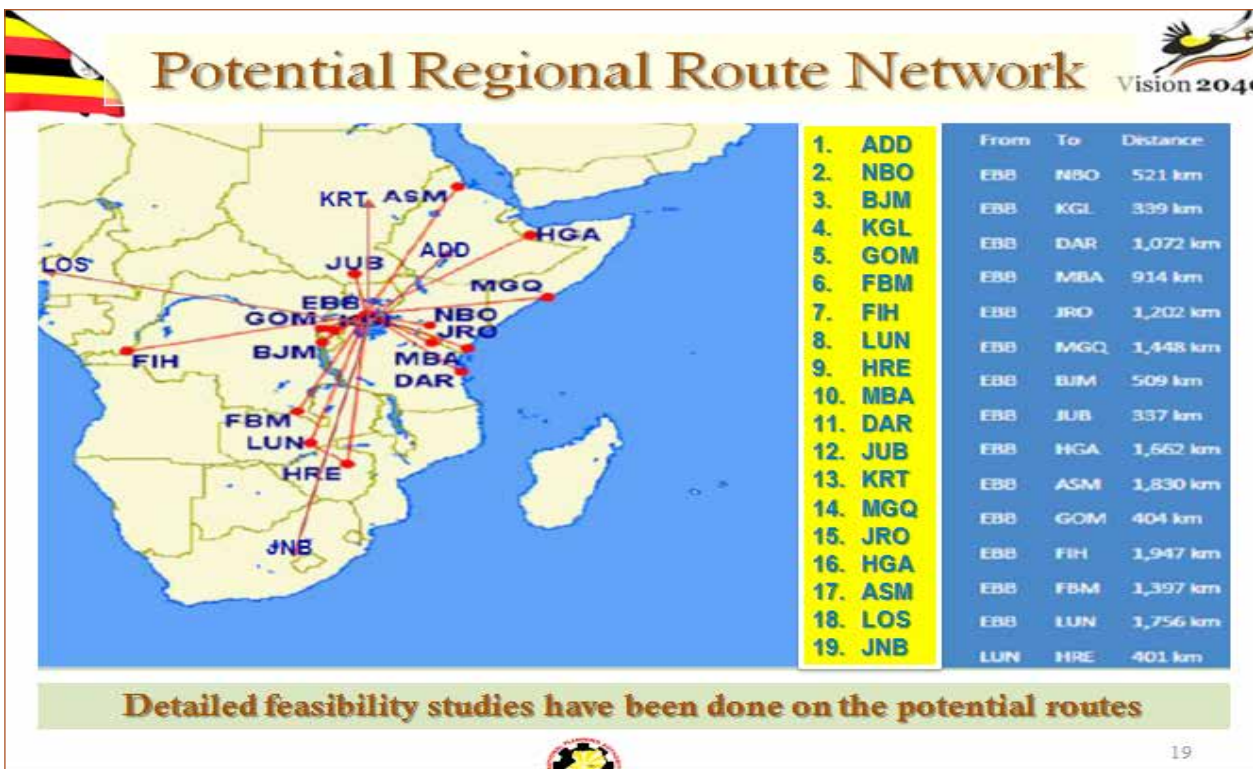
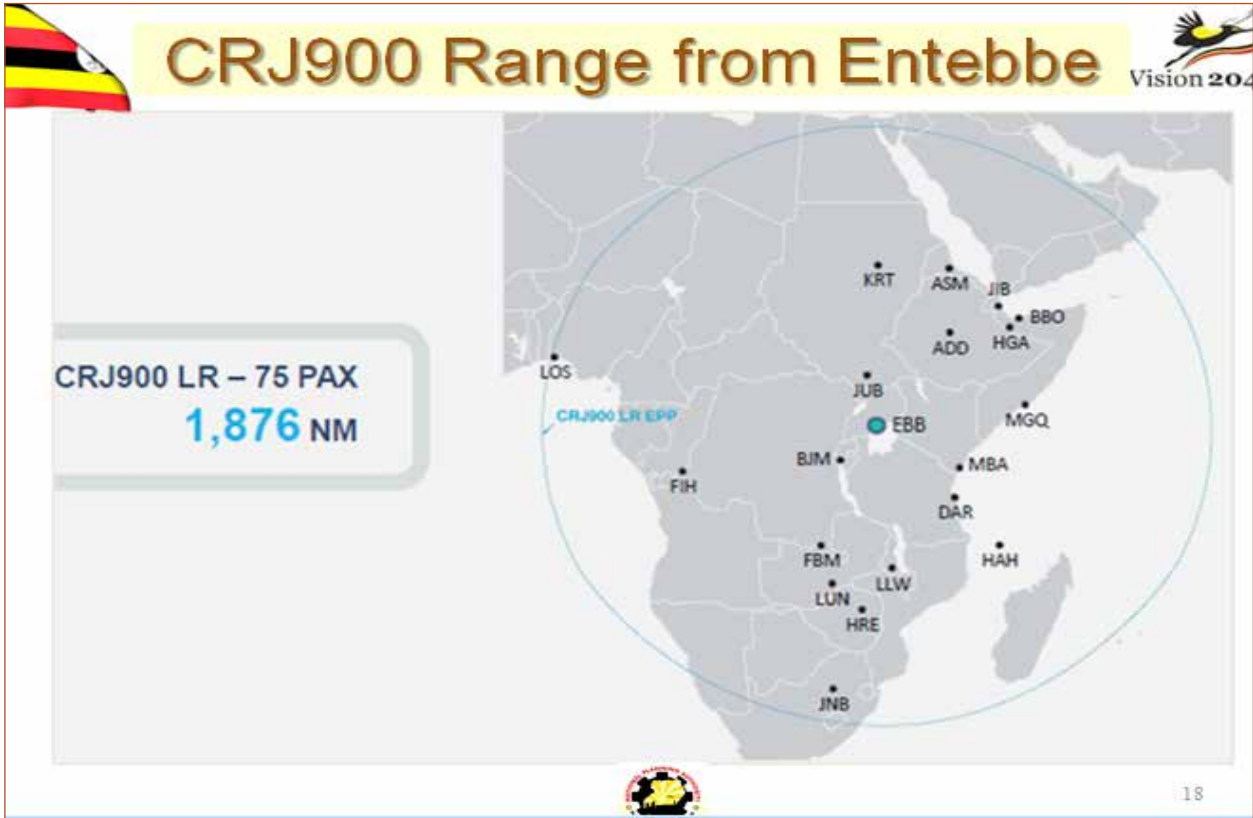
**Proposed Pricing US\$ 27.96 Million each**

**75 Seats in Two Class Lay out with 7 Business Class, 68 Economy Class Seats**



17







**Selected 2 x A330-200 Long-Haul Aircraft** Vision 2040

**Proposed Pricing US\$95.63 Million**

**247 SEATS IN THREE CLASS LAYOUT: 20 BUSINESS, 28 PREMIUM ECONOMY, 199 ECONOMY**

**9.4 tonnes cargo capacity**

20



## Why the A330-200

A330-200 range around Entebbe

**A330-200**  
From Entebbe to key destinations around the World

**A330-200 233t MTOW**  
5,950nm with 247 passengers

5,050nm with 247 passengers and 9.4t cargo (max. volumetric)

JAR 5%, ISA+10, 200nm alternate  
85% annual headwinds (most adverse)  
105 kg per passenger (including baggage)  
3% airways allowance  
3% fuel burn mark-up  
Take-off at 24°C at Entebbe

21



## Single Isle Aircraft do not have the Range



### A320 range around Entebbe





**A320ceo**  
—

From Entebbe covers most of Africa and key destinations in the Middle East

JAR 5%, ISA+10, 200nm alternate  
85% annual headwinds (most adverse)  
105 kg per passenger (including baggage)  
3% always allowance  
3% fuel burn mark-up  
Take-off at 24°C at Entebbe

**A320 78t MTOW**  
2,650nm with 150 passengers

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**A320 78t MTOW**  
2,350nm with 150 passengers and 2000kg cargo

22

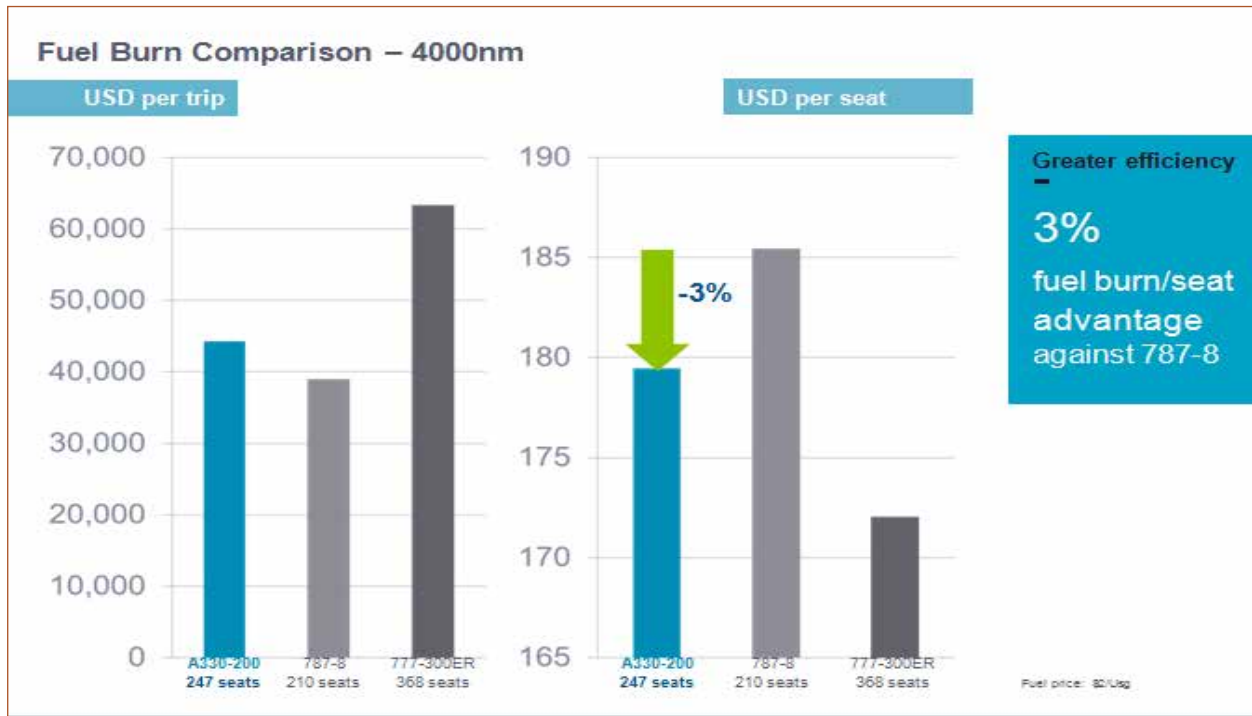
## A330-200 vs. 787-8 / 777-300ER

- Up to 3% less fuel burn per seat
- Up to 37% direct maintenance cost advantage
- Up to 11% lower cash operating cost

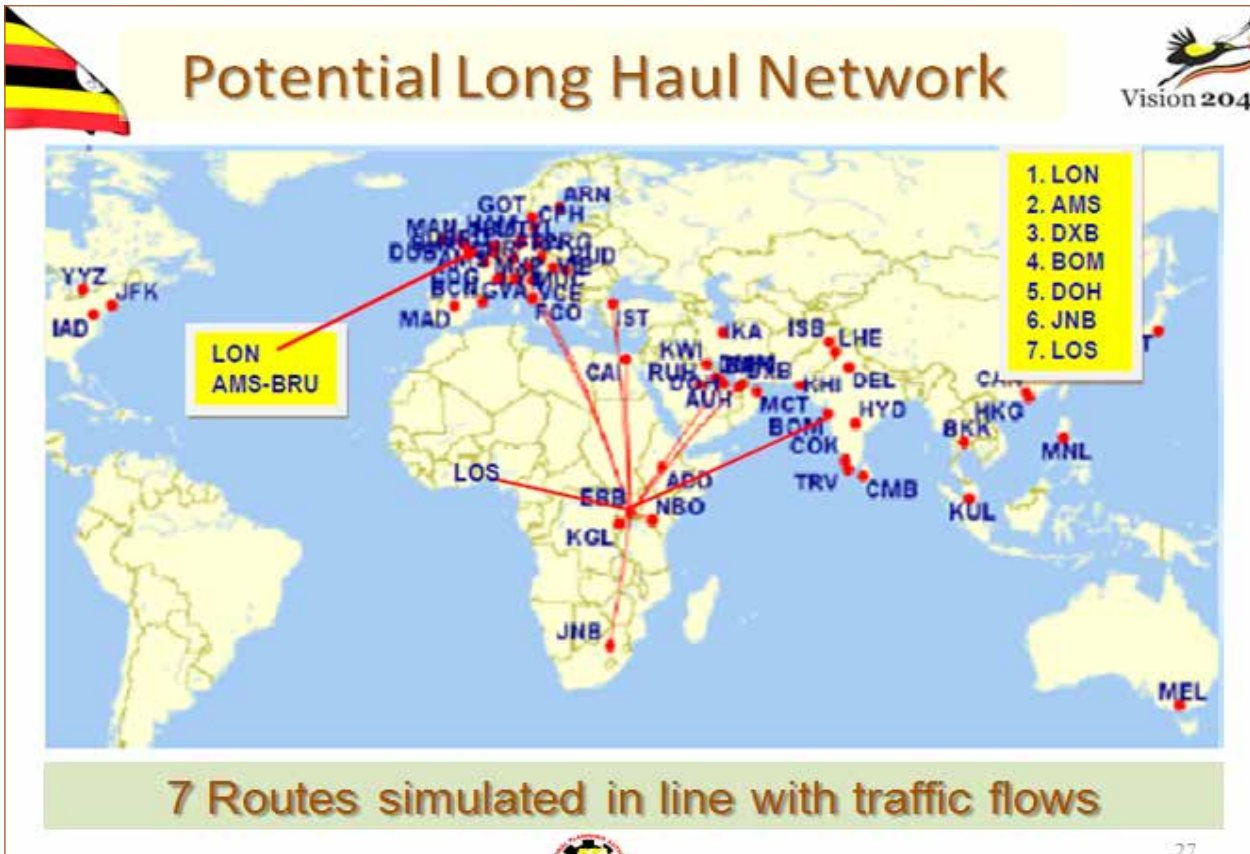
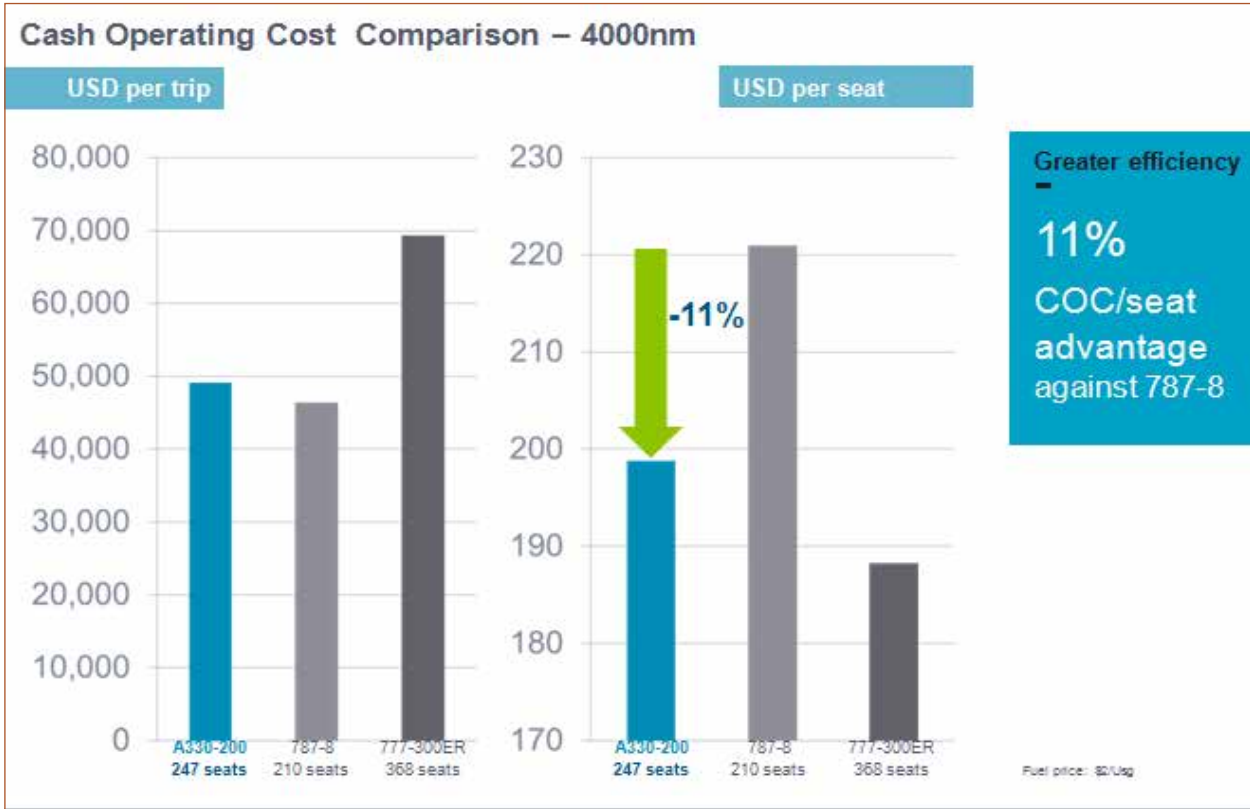
## Efficiency

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**The A330-200 is the most cost-effective solution**









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