MEMORANDUM ON ZAMBIA'S PREPAREDNESS TO RE-ESTABLISH A NATIONAL AIRLINE

SUBMITTED TO THE COMMITTEE ON TRANSPORT, WORKS AND SUPPLY

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PREAMBLE

This paper was prepared on the request by the Committee on Transport, Works and Supply to the Zambia Institute for Policy Analysis and Research (ZIPAR), to prepare a detailed memorandum that provides information to support independent analysis on the issue of "Zambia's Preparedness to Re-establish a National Airline" which the Committee on Transport, Works and Supply intends to undertake. The study building up this memorandum used desk review to gather most of the data used and PESTEL as the main method of analysis. The specific issues which ZIPAR was requested to cover in this paper include:

i. The policy and legal framework governing the aviation industry;
ii. The anticipated impact of a national airline on the national economy and the industry;
iii. The strategies in place to ensure smooth operation and sustainability of the national airline;
iv. The training and skills development programmes available to enhance the operation of the aviation industry;
v. The role of the private sector in the operation and management of the national airline;
vi. The anticipated challenges, if any, that may arise in the operation of the national airline; and
vii. Any key recommendations on the way forward.

1 INTRODUCTION

This paper is ZIPAR's analysis on the issue of "Zambia's Preparedness to Re-establish a National Airline" as requested by Parliament. Establishment of a national airline is featured as an important programme in Zambia's economic development and diversification agenda in both the National Transport Policy (2018) and Seventh National Development Plan (GRZ, 2018) (GRZ, 2017). Both documents envision the national airline to contribute to the improvement of the transportation systems, to facilitate efficient movement of both passengers and goods domestically and in the region. To that effect, the country has committed to acquire necessary aircraft to serve domestic, regional and inter-continental routes during the 7NDP period (GRZ, 2017).

The intention of the Government of Zambia to set up a national airline has been widely debated. This is mainly because of the unfortunate failure of the first national airline and the pride of the nation - Zambia Airways - in 1994 and the demise of many local private airlines created thereafter. However, in recent years, two more local airlines have stepped onto the scene to operate domestic flights and they are still going-concerns.

Some members of the public have argued that a national airline for Zambia does not matter and that what matters in travellers' decision making is the air fare and flight schedule. Yet still, others have argued that the brand matters; it is an introduction to the destination and a crucial part of the journey. This paper simply adds to that debate by taking a cursory look at political, macroeconomic, social, technological, environmental and legal context of aviation industry in Zambia. The debate is valid since not all airlines are set-up the same way and there are implications for each form of set-up. Some are set-up as public limited companies while others as private companies; some may be owned by governments – national airlines – while others by the private sector. The vast majority of the world's airlines including most former "national" airlines are nowadays privately owned.

The term 'national airline' has however, been defined differently in different legal jurisdictions. While there is no standardised definition for the term, this paper provides a synthesised definition from meanings given in various referenced regulatory documents and scholarly articles. A national airline, also called the flag carrier, is therefore defined as an airline registered under the laws of a country, either wholly, partially or not owned by the government of the same country but is given partial or total domination over international routes and may be branded in national colours. Thus, anational airline does not need to be owned by government. In spite of possible variations in general policies of countries in air transport, the approach to matters pertaining to the ownership or control of national airlines is still very similar. (Gertler, 1983) (Lijesen, Nijkamp, Pels, & Rietveld, 2005) (ICAO, 2004)

The rest of the paper is structured as follows. Section Two presents the institutional and legal framework underpinning Zambia's aviation industry. The impacts, both positive and negative, of establishing a national airline are discussed in Section Three while Section Four outlines ways and means of how the private sector can participate in the operation and management of a national airline. Anticipated challenges to the operation of the national carrier are discussed in Section Five. Viable strategies to enhance the operation and management of the airline are presented in Section Six. Section Seven summarises ZIPAR's recommendations on the way forward and the paper concludes in Section Eight.

2 THE POLICY FRAMEWORK

2.1 Institutional Framework

The Ministry of Transport and Communications (MTC) handles aviation policy and planning, implementation and monitoring and evaluation (MTC, 2018). Before the creation of the Civil Aviation Authority (CAA) in 2012, the department of Civil Aviation under the Ministry of Transport and Communications regulated the aviation sector. This meant superintending over airport operations, air traffic service provision and aviation safety regulation in Zambia (GRZ, 2002). However, this administrative arrangement was misaligned with the Standards and Recommended Practices (SARPS) for the International Civil Aviation Organisation (ICAO). According to ICAO, the regulatory and oversight functions were supposed to be performed by a separate and autonomous institution (Forbes & Wilson, 2018).

Under the above described institutional arrangements, Zambia had challenges of satisfying ICAO and European Union (EU) aviation safety standards as revealed by Universal Safety Oversight Audit Programmes (USOAP). Due to the sensitivity of the airline business to safety, there was erosion of confidence in the country's aviation industry. In July 2007 all airlines certified by the Zambian aviation authority were banned from flying to Europe (ZACL, 2018) (Forbes, Zveguintzoff, & Ramphul, 2016).

Zambia has since made good progress to turn the situation around; reforming its aviation industry, upgrading major airports, investing in air navigation systems, and meteorology infrastructure bringing all these to internationally acceptable standards. Following the 2002 USOAP audit, Zambia set up CAA through Act No. 7 of 2002, to oversee aviation safety and security. In 2016, the country was removed from the EU list of countries with unsafe flight equipment (EU, 2016). A year later, in 2017, it received a recognition certificate award for successfully reforming its aviation industry (MTC, 2017) (GRZ, 2016) (Forbes & Wilson, 2018). These actions have greatly improved the aviation safety profile of the country and as a result, global confidence in the Zambian aviation sector has rebounded and continues to increase (ZACL, 2017).

2.2 Legal Framework

The legal framework governing the aviation industry consists of several legislations and international conventions. The Civil Aviation Act No. 5 of 2016, the Civil Aviation Authority Act No. 7 of 2012, and the Air Passenger Services Charges Act (Chapter 450 of the Laws of Zambia) are among the key legislations that govern operation of the domestic aviation industry. The Civil Aviation Act No. 7 of 2012 established CAA and spells out the Authority's mandate and powers while the Civil Aviation Act No. 5 of 2016 reforms the Zambia Airports Corporation Limited (ZACL) and prescribes its mandate and power. ZACL is a Government controlled company whose function is to provide aviation ground services.

The Air Passenger Services Charges Act regulate commercial aspects of aviation operations such as air ticket costs, fees and fines, baggage and cargo specifications. The legislations also guide on the handling of travel documents (e.g., passports), and customs inspections for air passengers.

The Patents and Companies Registration Agency Act of 2010 provides for the registration of companies to operate within the Zambian business territory. This includes companies in the aviation industry. The national airline was incorporated in Zambia in 2015 under this Act as 'Zambia Airways 2014 Limited' owned by the Government of Zambia. So, the airline is already legally established; what is remaining is its operationalization.

Zambia is a signatory to the Chicago Convention, which established ICAO and prescribes rules for international civil aviation services. Therefore, to participate in international civil aviation Zambia's aviation industry – its aviation laws, policies and practices – is expected to conform to ICAO's SARPs (Forbes & Wilson, 2018). Because of this, Zambia established a fully independent CAA and has tackled most of the weaknesses in the local aviation industry. This resulted in an improvement in Zambia's score of effective implementations of ICAO standards to 70%, which is only 2 percentage point below the global average of 72.3%. This is the reason for the lifting of the ban on Zambian-registered airlines flying in EU airspace in 2017.

However, Zambia is yet to fully liberalise its skies. Zambia has only granted fifth freedom rights on selected routes. Fifth freedom allows an airline from one country to carry passengers or cargo between two foreign states as part of services connecting that airline's country. While practical experiences have revealed an increase in passenger volumes and frequencies on liberalised routes, granting fifth freedoms could open the national airline to a lot of competition. Complete liberalisation of Zambia's skies would lead to the loss of business for local airlines as they would have to compete with firmly established foreign carriers even on local routes. Therefore, Zambia still imposes restrictions in granting fifth and higher order freedom rights.

In addition, the country has Bilateral Air Services Agreements (BASAs) with several countries. BASAs allow party countries to establish and operate international air services to specified destinations in each other's territories. These agreements are negotiated, administered and implemented through MTC (MTC, 2018). Zambia currently has 21 BASAs of which thirteen are with African countries and eight are with other countries as shown in Table 1 below (ICAO, 2017).

Further, Zambia is a signatory to the Yamoussoukro Decision (YD) of 1988 signed by 44 other African states (GRZ, 2018). Through the declaration, the African Union aspired to create "an open sky policy" throughout Africa by 2002. YD was expected to supersede all bilateral agreements between countries and create a liberalised air market in Africa.

However, the declaration has yet to be implemented by many countries including Zambia that has up-to-date not signed the 'solemn commitment' to an 'open sky policy' (Forbes & Wilson, 2018). Lack of competition rules, a dispute settlement mechanism, and an operational monitoring body to police the implementation is among the reasons for many countries not committing to YD (UNCTAD, 2017); fearing that doing so would hurt their floundering national airlines or undermine efforts of establishing one in future for those without.

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Table 1: Nations with which Zambia has bilateral air services agreements

#	With African Countries		With other Countries
1	Angola	1	China
2	Botswana	2	Cyprus
3	Congo DR	3	India
4	Ethiopia	4	Netherlands
5	Kenya	5	Russian Federation
6	Lesotho	6	United Arab Emirates
7	Malawi	7	United Kingdom
8	Mauritius	8	United States
9	Namibia		
10	Rwanda		
11	South Africa		
12	Tanzania		
13	Zimbabwe		

Source: ICAO website

3 IMPACT OF A NATIONAL AIRLINE ON THE ECONOMY AND INDUSTRY

Jobs: Establishment of a national airline can impact the economy in many ways, both positively and negatively. On the positive side, setting up a national carrier can generate economic growth, create jobs and increase revenues in various linked sectors of the economy (ATAG, 2005). It is estimated that establishment of the national airline can create up to 500 direct and indirect jobs as the airline matures, assuming a thriving economy (MTC, 2018). More indirect jobs are created through knock-on effects to other industries.

Airline withdrawal risk: In the past there has been a legitimate concern that an airline formed without patriotism leaning may suddenly withdraw its services and disrupt social and economic processes of a country. But in this globalised economy, the situation is the same for every other traded commodity. Many small economies like Zambia have lived with the risk of foreign airline withdrawal. Zambia has experienced several such withdrawals which have even adversely affected non-traditional exports of horticultural products to Europe. South Africa is holding on to its floundering national airline to prevent the risk of slipping down its tourism, trade and aviation hub strategy even though non-national airlines like Mango and Kulula carry more passengers than South African Airways (SSA). The consideration is that there is net benefit of doing so to the economy. The risk of foreign carrier withdrawal and the consequent impact on the economy in small markets cannot be underestimated.

Sustainable tourism development: A national airline can strategically contribute to increased air traffic flows within and around the country that in turn boost tourist arrivals, hotel and restaurant revenues, conference fees and overall increased business for travel agents (UNCTAD, 2017). Increased business activities in linked industries is an opportunity for increased tax and non-tax revenue for Government. Overall, it is estimated that an improved air transport sector could contribute about 2% to the country's gross domestic product (GDP) (Lufthansa Consulting, 2018).

Support holistic development approach: National airlines are also proven to complement the development in other areas of the economy. For example, the gulf airlines –Emirates, Etihad and Qatar Airways are thriving because they are set up to support holistic development of trade, tourism, infrastructure and aviation policy in their host countries. They offer seamless integration of trade, tourism, infrastructure and aviation policy and have eased on taxes and charges on air transport and tourism industries (Lyle, 2018).

National airlines are an effective tool for development of greenfield air routes to underdeveloped and yet strategic tourism resorts. Increased air traffic flows are also said to increase tourism demand which in turn contributes to improved tourism resource management. In a circular manner, improved tourism management in turn furthers air traffic flows. Because of the potential contribution in the management of tourism resources, UNCTAD (2017) postulates a national airline can contribute sustainable development.

When it comes to economic regulation, the national airlines are still pampered with a leaning towards patriotism even in this era of transnationalism. The reasons why they are pampered are found first in the national laws and secondly in the BASAs countries sign which prevent majority ownership and effective control of a carrier from one country by parties from another country. However, in this capital-intensive industry, such provisions can severely limit access to capital and market opportunities and disadvantage national airlines. Reform initiatives towards more liberalised skies have been hindered by lack of political will thus perpetuating the national airline concept which is now more of an emotional card that economic strategy (Lyle, 2018)

Freedom to fly to all but one neighbouring countries: The second reason why national airlines are protected is that, air transport regulatory process is driven by a network of BASAs based on reciprocity of operations. Reciprocity agreements are preferred to more rational assessment of air services in many developing countries. Zambia could only greatly benefit from of most the BASAs with countries from the region with a national airline in place. The BASAs can also help in the actualisation of the vision to make Zambia a regional air transportation hub. However, the rational assessment approach practiced in most of Europe goes beyond the narrow sectoral interests of an airline and gives greater overall benefits from tourism, trade and investment for the economy, protection of consumer interests and improvement of competition (Lyle, 2018).

Risk attrition of local private airlines: On the down side, establishing the national airline increases competition in domestic and regional market which if not well managed can have adverse effects on domestic private airlines (NERA Economic consulting, 2008). Private airlines operating in Zambia such as Mahogany Air and Proflight may not survive the competition from a subsidised national airline, and in the worst-case scenario these airlines may have to exit the market. So, in the same way jobs would be created through the establishment of a national airline, jobs would also be lost if existing airlines are forced to leave due to unfair competition. Government would also lose tax revenues with the exit of airlines. Thus, the net result on employment will only depend on the number and quality of the jobs the National Airline would create.

Basket case risk: Further, literature shows that most established national airlines in sub-Saharan Africa (SSA) have not performed well and have accordingly suffered substantial financial losses (Forbes & Wilson, 2018) (Molwelwa, 2011). This scenario has often resulted in unsustainable pressures on the national treasuries to bail-out national airlines with the view of saving jobs and sustaining economic activities in related industries. The Malawian national airline is a good example. The airline has been struggling to breakeven after more than four years of being in operation. This is despite the airline being a public private partnership (PPP) undertaking where the Government of Malawi holds 51% shares and Ethiopian Airlines 49% (Malawi Government, 2017).

Higher cost of aviation fuel Jet A-1: The price of fuel in Zambia is relatively higher than it is in most of the neighbouring countries as shown in Table 2 below. In the Table, the prices of gasoline were used to proxy the prices for Jet A-1 as these have largely been similar. This is no surprise because of the greater distance over which the fuel is transported from the coastline. However, of concern is that the price is significantly higher compared to other landlocked countries in the same region who depend on road and railway modes to transport the fuel while Zambia uses a pipeline which is supposedly a relatively cheaper mode.

Table 2: Prices of Petrol in selected countries in the region as at September 2014

Country	Prices (USD)	Country	Prices (USD)	Country	Prices (USD)
Angola	0.58	Tanzania	1.05	Kenya	1.16
Lesotho	0.76	Mozambique	1.17	Ethiopia	0.66
Namibia	0.83	Malawi	1.23	Rwanda	1.28

Swaziland	0.85	Zambia	1.49	South Africa	1.04

Source: MyTravelCost.com

The removal of the 5% import duty on Jet A-1 in 2015 was a positive move by the Government considering that the cost of the aviation fuel was higher in Zambia than elsewhere in the region. High Jet A-1 prices in the home country can disadvantage the national airline with higher operating costs, uncompetitive air-fares, and protracted period to breaking even compared to its competitors.

Risk of deepening the fiscal imbalances: The macroeconomic pulse of Zambia has weakened in the past few years. GDP growth has drastically slowed down to an average of around 3.7% per year between 2014 and 2017. This is against a background of relatively stronger growth averaging 6.9% between 2010 and 2013 (MoF, 2010) (MoF, 2015) (MoF, 2017). Total domestic revenue collection as a percentage of GDP has often underperformed while on the expenditure side, the nation has been consistently in an expansionary mode. The result has been widening fiscal deficits which for 2019 is targeted at 6.5% of GDP (MoF, 2018). Regular fiscal deficits have meant more borrowing for the Government, with debt increasing to levels where it has become a major fiscal health concern for Zambia. Debt servicing costs account for 27.2% of all spending and 42% of domestic revenue. For nearly five years now, Zambia has been grappling with challenges of restoring its fiscal fitness (MoF, 2018).

Establishment of the National Airline at a time like this can risk perpetuating Zambia's fiscal challenges for the duration it may take for the Airline to operate independently (Molwelwa, 2011). Considering the fiscal challenges that the Government is currently faced with, and the huge financial outlays required to establish the airline – about USD 30 million [1]–, the decision to establish the national airline could have to wait until such a time that the nation's fiscal fitness has been sufficiently restored (MoF, 2017).

4 PRIVATE SECTOR PARTICIPATION IN THE NATIONAL AIRLINE

Aviation has a lot of potential for private sector participation. While it is likely that Zambia's airports and air traffic services will remain under the Government's control, private sector participation is conceivable especially in airline business. Zambia Airways 2014 Limited is expected to outsource most of its services for initially ground handling

[1] Based on the assumption that the airline will lease all its airplanes.

to the private sector. It will also initially outsource ticket sales and inflight catering. Although the National Airline has not gestured intention to collaborate with the private airlines operating in the domestic airspace, there is potential for a win-win situation in collaborating. This would ensure the protection of the private airlines from attrition due to competition with a subsidised entity. This is one way by which Government can save jobs, and ensure continued growth of the aviation capacity that is already installed.

5 ANTICIPATED CHALLENGES IN THE OPERATIONS OF THE NATIONAL AIRLINE

Although economic conditions as shown above are a very important part of the business environment, they are not by themselves enough to provide a comprehensive assessment of the operating environment. This paper therefore considers other factors that may have significant influence on the performance of the national airline. These can be political, social, technological, environmental and legal aspects. So, this paper uses the PESTEL analysis to establish some of the challenges that the national airline may face.

5.1 Political Stability is Essential to the Success of the National Airline

A stable political environment is essential for building confidence in the market. The operating environment of a national airline is not tightly protected from political interests. When political interest threatens national peace, it is easy for a national airline to get caught-up in the headwinds of conflict because national airlines are identified together with their host nations (Lyle, 2018). The twining of identity can be detrimental for the growth and sustainability of the airline.

The above notwithstanding, Zambia is a prominent multi-party democratic country with a long history of smooth power succession, peace and stability. This political peace and stability can be advantageous not only to the national airline but to the whole domestic aviation industry as well, even as Zambia positions itself to become a regional hub of aviation services.

Further, the same way political interests are instrumental in shaping all national policies, they shape the general transportation polices and domestic regulation that also affect aviation service provision. A clear and predictable policy environment is essential to attract cost-effective investment in any airline and it is the politics of the country that decides. The Zambian policy environment has to a certain extent showed some inconsistencies which markets read as risk factors. A few policy statements have been made and shortly afterwards reversed while the market is still reorganising itself to respond to the policy. The launch of the national airline has itself been announced and postponed several times.

Further, government policy and regulations on trade can influence the strategic decisions of the national airline. For instance, the financial distress affecting SAA partly has its source in the political interference in its route configuration, management and investment decisions. SSA's survival largely owes to the political economy decision to save jobs and support other productive industries of the economy. Zambia's experience is that political abuse contributed to the financial distress and subsequent liquidation of Zambia Airways in 1994. Research has shown that politicians flew on credit thereby compromising the airline's liquidity position (Forbes & Wilson, 2018).

Regarding Zambia Airways 2014, empirical evidence cast doubt on prospects for positive results from the shareholding structure giving the Zambian Government controlling shares[2]. This is of concern when it is clear how much political meddling there has been in all other state-owned enterprises (SOEs) resulting in operating inefficiencies. In fact, Most of Zambia's SOEs have a long history loss-making and the national airline may become the latest rendition of Zambia's loss making SOEs (MoF, 2017).

Apart from Ethiopian Airline Limited (EAL) all the other national airlines operating in SSA region are loss making and only survive on political clemencies. Consequently, most of them, like SAA have required on-going Government support (Forbes & Wilson, 2018). Political support is important for the airline once it has been established because leaving it to run without support could result in even greater socio-economic losses. IATA revealed that African national carriers made a loss of US$ 900 million and US$ 800 million in 2015 and 2016 respectively.

5.2 Slow Economic Growth is not Conducive for the National Airline

Just as with other forms of transport, the overall health of an economy has significant influence on the performance of air transport. Zambia's economic performance has until recently been reasonably sound. Economic growth has been slower – falling from a high of 7.7% in 2012 to 3.4% in 2017 – with many other macroeconomic fundamentals except inflation falling outside the target margins. One economic factor with noteworthy impact

[2] 55% Zambian Government through IDC and 45% Ethiopian Airlines

on airline operations is the exchange rate. The exchange rate has mainly remained stable although the Kwacha has had episodes of weakness which has affected several other fundamentals like interest rate on foreign denominated debt.

Air fares are conventionally quoted in dollar terms and even when they are quoted in local currency, they are based on a dollar cost standard. This is because major cost items particularly fuel, ground services, repair and maintenance, aircraft servicing and overhaul, aircraft lease payments, and to some extent crew cost are likely to be priced in dollars. Consideration of this fact against the weakening Kwacha reveals a possibility of higher air travel costs for the domestic customers. So, strategies anchored on affordable air travel based on the incomes of the domestic customers, may increase the airline's exposure to currency fluctuations.

Given the high levels of external debt Zambia faces (US$ 9.4 billion or 34.7% of GDP), a weaker Kwacha has meant more domestic revenue required to service and pay back debt. The few episodes of a weak Kwacha have resulted in extreme draw-downs on foreign exchange reserves and growing arrears against the backdrop of underperforming domestic revenue collection. Subsequently, investor confidence in the growth prospects and the credit worthiness of the country, as reflected by the drop in both the Moody's and Standard and Poor's (S&P) country ratings, is considerably low.

Overall, weakening macroeconomic fundamentals could substantially erode business confidence in the economy as well as weaken the ability of travellers to afford air fares. If that were to happen, both the direct and indirect benefits of establishing the national airline would not be realised. Hence, this may not be the right time to re-establish the national airline.

5.3 Social Acceptability of the National Carrier may be Low

There are several social gains - including job creation - that accrue from air travel as already stated. The national airline promises to create 500 direct jobs for Zambian nationals which may improve the social image of the airline[3]. Society may also view the national airline as a carrier for the masses especially if it implements the low-cost service

[3] https://www.lusakatimes.com/2018/10/13/zambia-airways-relaunch-deferred-again-mushimba/

strategy. On the domestic front, due to the high frequency of road traffic crashes and congestion on most road transport corridors, Zambians may regard the airline as a safer and more convenient means of transportation compared to other modes.

That aside, the Government's fiscal position and ensuing slowdown in economic growth and the impact that this may have on the general welfare of the people of Zambia, may adversely affect their social acceptance of the reintroduction of a national airline. In the last few years, there has been growing concerns about the sustainability of debt facing the country and doubts about the Government having fiscal space to establish and continually finance the national airline until it can stand without support. The concerns are more intense for sections of population which are concerned about the ability of the nation to settle the Eurobond bullet repayments when they fall due in 2022 and 2024.

Moreover, a few Zambians have not forgotten the inefficiencies that resulted into the demise of Zambia Airways in 1994. Also, the overwhelming evidence showing that most national carriers in the region are actually loss making, has led to many Zambians questioning whether relaunching the national airline is a worthwhile investment.

5.4 Importance of Technological Factors cannot be ignored

The big role that technology plays in aviation is well understood. For an airline to thrive in this highly competitive information age, it must be willing and able to embrace modern technologies starting form passenger information, bookings and ticket sales, transfer flight arrangements, air navigation, fleet repair and maintenance, to on-board facilities. As a result, aviation business world over is one of the best-technology enabled businesses.

5.4.1 More Investment in Aviation Technologies Required

The National Airline will have to ensure that it incorporates modern technology in its operations to account for the changing demands of air travellers. Passengers prefer airlines that provide online ticketing and check-in services and that are accessible through their hand-held devices. Therefore, failure to remain tech-savvy may result in the loss of business to competitors. However, most airline technologies like ticketing system are very expensive and investing in such may not be prudent for the airline in the initial phases of operation. As such Zambia Airways 2014's strategy is to use the strategic partners ticketing system through a code sharing agreement with Ethiopian Airlines (EAL).

Zambia Airways tickets may be marketed and sold under the ET code of EAL. Even though code sharing agreements are associated with a few advantages such as ease of connectivity for passengers, they tend to be very expensive and have been associated with confusion among clients where tickets are sold by one airline, but flights operated by another. Moreover, the arrangement has an effect of promoting the image of the code owner such that in case of a partnership failure, Zambia airways would have to start building its own identity all-over.

5.4.2 Shortage of Aviation Skills

The shortage of qualified aviation staff that can work with modern technologies also poses a challenge for the national airline. Training of aviation personnel is a challenge due to the falling standards at the main aviation academy in the country – the Zambia Air Services Training Institute (ZASTI) established in 1969 by the Government. ZASTI was established to provide the national airline with the required skilled aviation personnel and to contribute to aviation safety and growth of the local aviation industry in general.

At the peak of its performance, ZASTI was the leading aviation academy in the region attracting learners from most countries in the region including South Africa. But after the collapse of Zambia Airways in 1994, the Institute began experiencing inadequate and irregular funding resulting in brain-drain and negligence of both training and students' facilities. Most of the personnel trained at ZASTI when it was still among the best and on-the-job in the demised Zambia Airways have left the country for more lucrative opportunities elsewhere while others are old and now retired.

Although the Institute is still operating, the quality of training offered has diminished and is much lower than that offered by its peers in the region and so the demand for its services has significantly reduced. Unless the institute is recapitalized, it may not be able to produce enough and adequately skilled flight crew and proficiency will remain a major source of concern for safety, as the lack of proper expertise creates situations for unsafe conditions that could contribute to high accident rates (Forbes & Wilson, 2018).

This situation is counterproductive to the envisioned growth in the Zambian aviation industry and the commencement of the Zambia Airways 2014 operations.

The training proficiency shortcomings coupled with the low and stagnant enrolments at ZASTI and the aviation brain-drain the country has suffered expose a huge resource gap facing the staffing plans of the National Airline. What is more, going by experience with other countries in SSA, national carriers do not pay enough to train and maintain good flight crews as funds are usually not enough to provide competitive salaries resulting in most of them leaving for better opportunities elsewhere. This means that the national airline may have to spend a lot more to secure staff from other countries. Therefore, the wage bill for expatriate staff is likely to be a significant cost for the airline's operations. Clearly, staffing is a major challenge for the National Airline to take-off.

5.4.3 Air Navigation Technology Deficiency and Airline Safety

Following ZACL investment of over US$ 20 million in primary and secondary surveillance radar systems, air navigation has improved. Over three-quarters of the country's airspace are now under radar coverage (Forbes & Wilson, 2018). Other air navigation projects such as the automated weather observatory station (AWOS) are still in progress (Zambia Airports Corporation Limited, 2017). Efforts should be made to accelerate the completion of these projects to enhance safety, efficiency and reliability of air navigation services in the country's airspace. For a young airline, an accident, even if its cause is not within their purview, may be irrecoverably damaging. Therefore, it is important that the technical environment within which the national airline will operate is safety airtight to avoid any exposure to crashes no matter how small.

5.5 Effect of Environmental Factors on Airlines is high

The national airline business is very sensitive to environmental health concerns such as sanitation of host cities and risk of cholera, influenza, malaria and Ebola outbreaks. News about outbreaks of such diseases risk deterring passengers from disease conscious countries.

Zambia has consistently recorded cholera outbreaks beginning in the third quarter of every year. The outbreak in 2017 is said to be one of the most severe the country has ever experienced. Travellers particularly those coming from outside Zambia may alter travelling decisions due to concerns of such infectious diseases. Even though the outbreak of the Ebola virus has been in neighbouring Democratic Republic of Congo (DRC), it is cited as one of the reasons for the reduction of leisure visits from Europe to the region (Forbes & Wilson, 2018). The national airline will thus operate in an environment with high exposure to sudden drop in demand due to regular outbreaks of disease in the country or in the region around it.

5.6 Legal Factors Have an Important Influence on Aviation

Details on how the legal factors may help or affect national airline operation have already been presented in Section 2.2 above

In conclusion, the aviation industry is a very competitive and expensive business. It will therefore be necessary to keep monitoring the business environment even when the airline has begun its operation and to formulate new strategies in response to any changes.

6 STRATEGIES FOR SMOOTH OPERATION AND SUSTAINABILITY OF THE NATIONAL AIRLINE

The Government has formulated several strategies to protect the national airline from fierce competition and to give it competitive advantage in both the local and regional market. The strategies can be classified into industry level strategies and commercial strategies of the individual airline as follows:

6.1 Industry Strategies

6.1.1 Improvement of National Aviation Safety

The entry point of developing a sustainable national airline for Zambia is improving security and safety standards of the domestic civil aviation. In view of this, the Government embarked on programmes to increase investments in aviation safety. The programmes include investments in upgrading major aerodromes, air navigation and meteorology infrastructure to bring them to internationally acceptable standards. The purpose is to develop and mature new local and international air travel routes to facilitate tourism development in Zambia. This is in addition to establishment of CAA as discussed in Section 2.1 above

6.1.2 Improvement of Aviation Training

In view of the falling standards of aviation training, low and stagnant enrolments at ZASTI and the aviation brain-drain the country has suffered in the past, the Government of Zambia has commenced the process of revamping ZASTI to help close-up the skills gap in the future. The Institute has commenced the process of applying for recognition as a TRAINAIR PLUS Member and as an Approved Training Organisation (ATO).

The TRAINAIR PLUS Programme seeks to build a networking and exchange mechanism of ATOs. Member ATO can exchange training packages, training courses, and instructional staff with ease. An assessment of ZASTI's readiness to join the TRAINAIR PLUS Programme has already been conducted by ICAO and ZASTI has already identified the corrective actions needed. Further, ZASTI has begun the activity of developing compliance with the CAA standards and is in the process of applying for recognition as an ATO with CAA. Improved training in Zambia is expected to improve the supply of skilled aviation workforce, lessen the dependency on foreign nationals for some specialisations and subsequently reduce the labour cost of the airline.

6.2 Commercial Strategies

6.2.1 Industrial Development Corporation (IDC) Oversight

To circumvent the management and governance issues associated with Government operated businesses i.e. inadequate commercial and investment expertise, financing challenges, and the potential political patronage, the Government plans to use the Industrial Development Corporation (IDC) to hold the shares of the Airline on its behalf. The plan leverages the private sector experience of the IDC and maximizes the revenue potential while at the same time maximising the shareholder value.

However, this arrangement is not fool proof either. The architecture of the IDC fails to steer clear of some of the issues associated with state owned corporations which are under the supervision of line ministries of Government. For instance, consigning the Chairmanship of the IDC to the President coupled with the weak vetting processes for Board appointments, carries as much risk of political patronage. The IDC is also a relatively young institution – established in 2014 – with little experience at institutional level to supervise so many and complex businesses such as the national airline.

6.2.2 Joint Venture with an established Airline

The airline is currently working on transforming its legal status into a joint venture between the Zambian Government – working through IDC – and Ethiopian Airlines Limited (EAL). The proposed shareholding structure is 55% IDC and 45% EAL.

Partnering with EAL promises the following benefits among others:

i. Strong management and operations history of the partner: ET has a long history of safe, reliable and profitable air services operations which the joint venture will benefit from by association; and
ii. Global Distribution System and Internet Wholesaler facilities of the partner: The cost of acquiring a global distribution system is quite substantial and prohibitive for start-ups. Zambia Airways will fully utilise ETs Sabre GDS system but, the Airline will apply to be independently represented in at least one of the major Global Distribution Systems (GDS), e.g. Amadeus, Galileo, or Worldspan. It will also seek to be listed by the major internet wholesalers, e.g. Expedia, Lastminute.com, Opodo, and Travelocity. In both instances, the objective will be to do this in a cost-effective manner, while obtaining adequate screen position which is a proven driver of sales.

6.2.3 Leasing, Rather than Purchasing Flight Equipment

Due to the high cost and long lead times for purchasing new airplanes, Zambia Airways plans to lease its flight equipment. Leasing preserves working capital of the Airline thus releasing the cash for other business investments. Further, leasing eliminates the risk of owning outmoded equipment and offers advantages of depreciation allowance. Considering the current fiscal hardship, the nation is facing, contracting further debt to buy airplanes may not be the best option. Leasing therefore helps to slow down debt accumulation while permitting the business to proceed as planned.

6.2.4 Lease Equipment and Repair Maintenance Operations through the Strategic Partner

Owing to the high cost facing start-ups when leasing equipment, Zambia Airways purposes to take advantage of the extensive aviation business experience and a more favourable risk profile of the strategic partner, EAL to access lower cost leases. This strategy, if well implemented, will save the airline a lot of cash.

In addition to leasing, the Airline will also take advantage of the large spares back-up of the strategic partner built out of the necessity to maintain their large airplane fleet and take advantage of economies of scale. Use of the strategic partners spares back-up will minimize the down-time for the airline’s airplanes and associated business loss.

6.2.5 Staffing

The Airline will employ a lean team of high calibre and driven staff. Recruitments will depend on the availability of required qualifications in the local market and where possible critical skilled manpower such as pilots and technicians will be recruited locally. The strategic partner will thus offer management backstopping where skills gaps may prove difficult to close from the local market. The long-run plan is for the strategic partner to provide training of Zambian nationals in the critical skills areas of airline operations for sustainability.

EAL owns an ATO called Ethiopian Aviation Academy, which is a centre of excellence in developing skilled workforce for operational divisions of not only EAL but also the wider African aviation industry.

6.2.6 Focus on Domestic and Regional Markets

The commercial strategy for the new National Airline is to initially focus on domestic and reginal market feeding into KKIA and other regional aviation hubs. Start-up airlines always need time to consolidate in the business and to demonstrate their relevance and ability to offer reliable, quality, competitive, safe and secure services.

This is an important strategy for Zambia's suggested national airline considering the performance weaknesses of most of the closed Zambian airlines where flight delays, rescheduling and booking cancellations were very common. The Airline will require enough time to demonstrate that its operations will be different before it can subject itself to more vicious competition on the international routes. Thereafter, it can begin to gradually expand its operations to include intercontinental routes. This will be based on its performance, the market demand and the capacity built to withstand stiff competition from well-established carriers.

According to the draft National Transport Master Plan (2017), while all regions in Zambia require improvements in transportation services, demand for the services differs from region to region, based on the population sizes, level of economic activities in the respective regions. Caution should however be exercised in the development of domestic routes to ensure that the routes have potential to contribute to the growth of national airline. Research has proven that for every 1% change in economic growth of a region, air passenger flows increase by 2% on average (Brons, Pels, Nijkamp, & Rietveld, 2001)

(Martín & Voltes-Dorta, 2008). Therefore, while some regions may make a good business case for domestic route development, many others may not.

6.2.7 Contingency Reserves Assumptions

Considering that the national airline is a start-up, financiers will most certainly be high-handed in their risk profiling of the business because of their dependence on industrial analysis which mostly emphasise the great challenges for new airlines to survive the first few years of operation especially in SSA. Such low perception of start-ups can adversely bias the ability of the Airline to access affordable credit facilities and at the time it is required. This can in turn momentously stifle its operations and eventually lead to failure. To survive the early years of operation, the Airline must be fully funded by way of financial operating reserves. Governments have the ability to source such funds through sovereign guaranteed loans.

6.2.8 Share Benefits and Pool Risks

The Zambian Government is hopeful that the airline will turn out profitable in about six years after commencement of operations. To pool the risk of the investment and to share the benefits of the investment with the general public, the Government plans to float around 20% of its shares on the stock market. Offloading the shares to the public will help the airline to raise additional funds for expansion activities and to reward the founding shareholders of the airline for the initial risks that they have taken.

6.2.9 Service/Product Configuration

The National Airline plan is to offer differentiated passenger services including business and economy classes for its regional market in varying configurations and depending on competitive forces. In addition, the Airline plans to compliment in-flight catering customized to regional tastes but in conformity to international standards. Further, the Airline will configure its operations and equipment selection taking into account the great opportunity for accompanied baggage both domestically and regionally. The airline will also promote excess baggage as a competitive strategy.

6.2.10 Sales and Distribution

As a start-up, the airline does not have enough infrastructure and office space to have physical presence in all its planned destinations. The airline will thus leverage on existing retail agents and general sales agencies to maximise its product availability until it is established enough to have its own offices. Ticket offices may be established in town centres and at airports wherever there is business merit to do so. As such, both direct and indirect distribution channels are envisaged. Other direct channels envisaged include airline website and telephone sales. The airline will conform to the IATA resolution on e-ticketing by being an exclusively e-ticketing airline to enhance the image that the airline wishes to portray as being a modern, cost effective and technologically innovative carrier.

In view of the foregoing, the Airline will initially recruit a small sales team in each destination country to service and motivate the agents, and to ensure that management is constantly informed about developments in the airline's network and product features. Where feasible the airline will leverage on the direct presence of the strategic partner, appointing them as its General Sales Agent in all the markets where the partner has direct presence. In due course and as the Airline matures in business it may establish its own agencies, targeting the Zambian community living in the diaspora.

6.2.11 Advertising and Promotion

The Airline's advertising and promotion strategy will be developed to create an image that portrays the warmth and hospitality of the Zambian people first and then Africa as a whole. Various advertising media including television, press, radio, outdoor (including branding of planes), internet etc., are envisioned to optimise the publicity. The Airline will therefore embark on vigorous image building activities to position itself firmly in the domestic and regional air transport market.

Caution should however be exercised about the information being released about commencement dates that keep shifting. Such information sends adverse market signals that the Zambia Airways business plan is shrouded in an uncertainty and that we are not ready to fly. That negative perception may be difficult to undo when the Airline is finally ready to take to the skies.

6.2.12 Ground Handling and Catering Activities

During the initial period, the Airline will outsource its ground handling and catering activities. However, in the future, when the Airline has reached maturity, it may explore the possibility of having its own ground handling and catering services to diversify its revenue base.

7 CONCLUSIONS AND RECOMMENDATIONS

This paper was developed in response to a request from National Assembly to provide a detailed memorandum on Zambia's preparedness to re-establish a national airline. The paper assessed the policy and legal framework governing aviation in Zambia to ascertain the regulatory environment in which the national airline will operate. The paper also provides an overview of the anticipated impact the national airline would have on the national economy and aviation in Zambia. The paper employs the PESTEL analysis to identify possible challenges the national airline may face in its operations. It also attempts to identify the role that the private sector can play in the operation and management of the national airline. Lastly, the paper examines the strategies in place to ensure smooth operation of the national airline and comments on their adequacy.

The policy and legal environment is broadly in line with international requirements. Zambia established CAA in compliance with ICAO's SARPs requirement that regulatory and oversight functions are to be performed by a separate and autonomous institution. This move has helped restore confidence in the country's aviation industry and seen from actions by EU to remove from the EU list of countries with unsafe flight equipment and ICAO awarding Zambia for successfully reforming its aviation industry. However, Zambia is yet to implement the provisions of the YD to completely liberalise its skies.

Re-establishing the national airline has both positive and negative implications for the economy and aviation. On one hand, the establishment of the national airline can drive economic growth and employment through backward and forward linkages with businesses operating in hospitality and tourism, for example. The national airline promises to create up to 500 direct jobs. Increased economic activity increases the potential for government revenue through tax collection. On the other hand, the introduction of a low-cost national carrier can push out airlines operating in the domestic economy, resulting in losses in jobs and revenue for the Government. Further, the national airline could potentially be a drain on the national treasury which is already constrained, especially in its initial years where no profits will be made.

The current economic environment suggests that now may not be the right time to re-establish the national airline. The PESTEL analysis reveals that the national airline may face significant challenges if it were established in the current political and economic environment. For four years in a row, government policy has focused on fiscal consolidation to limit debt accumulation and restore budget credibility. The rapid debt accumulation and public expenditure of the last few years has eroded confidence in the Zambian economy. The result has been subdued growth. The current future economic outlook suggests some instability in the Kwacha as Eurobond payments fall due. Several major cost items including fuel, ground handling services, repair and maintenance, aircraft servicing and overhaul as well as aircraft lease payments are priced in dollar. A weaker Kwacha may mean higher costs in local currency terms. Moreover, subdued growth naturally reduces the demand for travel including air travel.

Zambia needs to invest more in aviation technologies and in aviation staff to work with modern technology. The national airline will have to stay abreast of modern technologies to account for the changing demands of air travellers. Of particular importance is the ticketing system which the country may not have the resources to invest in. Indeed, the national airline will sell its tickets via a code sharing agreement with Ethiopian Airline. Zambia has also suffered a huge aviation brain drain as trained personnel leave the country for better prospects. The standards at the country's only aviation training institute ZASTI have gone down considerably resulting in a loss of confidence in the staff graduating at the institute. The national airline may therefore have to spend more resources in acquiring aviation staff from other countries.

The Government has put in place a few strategies to protect the national airline from fierce competition and to give it competitive advantage in both local and regional markets. For example, Zambia is in the process of revamping ZASTI to address the shortage of qualified aviation staff in Zambia. ZASTI has begun the process of applying for recognition as TRAINAIR PLUS member and as an ATO. The Government has plans of using the IDC to hold shares in the national airline to reduce management and governance issues associated with other state-owned enterprises, however there are doubts on whether this will help. Also, the national airline will be re-established under a joint venture between the Zambian Government (55%) and EAL (45%). EAL is certainly a strategic partner and may allow the national airline to lease aircraft equipment at a lower cost. The strategy to first focus on local and regional markets is commendable to allow the national airline to demonstrate that its operations are efficient unlike its predecessor, before it can enter the international market. All in all, the strategies in place are enough to ensure the smooth operation of the airline.

Given the foregoing, the paper makes the following four recommendations:

1. The Government should put in place measures to ensure a sound macroeconomic environment as well as debt sustainability before re-establishing the national airline;
2. When the Government is finally in a favourable position to launch the airline, it should not leave the local airlines out of the partnership deal with EAL or whichever foreign airline it may choose to ally with in establishing the national airline. This could be a better option than to compete against them, in which case they may fail to stay afloat for long and eventually demise. The local airlines can bring to the partnership some equipment, qualified airline and ground handling personnel, local market experience and intelligence of the individual firms, and goodwill built over time. Further, the move would save jobs and avoid instances where the national airline would have to look beyond Zambian nationals to fill some critical positions considering constrained supply of competent aviation personnel in the local labour market.
3. The strategy of including combinations of business class and provision of frills are contradictory to the low-cost carrier concept and it should be reviewed. Most of the struggling national airlines and those that have closed were pushed into those situations by low cost carriers operating cheaper planes and selling nothing more than a cheaper seat.
4. Once the National Airline is in operation, the Government should list it on the stock market to offload its shares to its citizens as quickly as the law permits to allow for greater distribution of benefits and pooling of risk to the private sector and disentangle the airline from the risk of political patronage which has characterized many publicly owned corporations.

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