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#### **DEPARTMENT OF TRANSPORT**

No.

# WHITE PAPER ON NATIONAL CIVIL AVIATION POLICY 2017

## **OFFICIAL PUBLICATION FOR GENERAL INFORMATION**

I, Joe Maswanganyi, Minister of Transport, hereby publish the White Paper on National Civil Aviation Policy 2017 for general information.

MR JOE MASWANGANYI, MP

MINISTER OF TRANSPORT DATE:  $\Im \left( O \le 2017 \right)$ 



transport

Department: Transport REPUBLIC OF SOUTH AFRICA

# WHITE PAPER

# ON

# NATIONAL CIVIL AVIATION POLICY

**FEBRUARY 2017** 

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#### **EXECUTIVE SUMMARY**

Civil aviation is vital to international trade, investment, and tourism, as well as contributing to domestic transport, sports and recreation. Therefore, an efficient, reliable and sustainable South African aviation industry should be promoted, while maintaining control over international and domestic air transport services within a well-defined regulatory framework. This framework should be flexible enough to cater for changing needs and circumstances. These changes are part of globalisation and include important matters such as the liberalisation of air transport, introduction of technologically advanced airport and air traffic management systems, greater emphasis on factors affecting the environment, protecting the interests of users of air transport services, and the increased need to regulate Remotely Piloted Aircraft Systems (RPAS).

The Convention on International Civil Aviation of 1944 (Chicago Convention) imposes responsibility for compliance with aviation safety and security standards and practices on Contracting States. Aviation safety and security are of paramount importance and should be enhanced as far as possible. In this context, national Government should retain overall regulatory accountability to ensure the unbiased regulation of aviation safety and security in accordance with international standards and recommended practices (SARPS) as defined by the International Civil Aviation Organisation (ICAO). The South African Civil Aviation Authority (SACAA) created in terms of the Civil Aviation Act, 2009, should remain the designated authority for purposes of conducting safety and security oversight of civil aviation in the Republic.

Civil aviation policy cannot be considered in isolation and should be in harmony with Government's broad policy framework. The White Paper has therefore evolved within the parameters set by the Constitution of South Africa, the National Development Plan (NDP), the White Paper on National Transport Policy and various legal instruments and international conventions relating to civil aviation. These parameters were used in defining goals, principles and objectives to guide the formulation of civil aviation policy.

The White Paper acknowledges that the present airport infrastructure, with ownership vested in all spheres of government as well as the private and non-profit sector, is an integral part of the South African transport system. This infrastructure contributes to the socio-economic development of the country in terms of direct job creation and economic activity, stimulating economic activity in the wider airport precinct (including through "airport cities" and "aerotropolises") as well as by facilitating domestic and international tourism and trade. However, these airports are currently not integrated into a meaningful airport network and an integrated system involving all spheres of government should be introduced. The Department of Transport (DOT) should therefore develop a National Airports Development Plan which will guide all present and future airport development.

In addressing the integration of an airport into its environment, the White Paper emphasises the need to maintain a balance between the airport's interests and those of stakeholders in the vicinity of the airport in terms of the following principles:

- The airport should fit into, and be in harmony with its environment and also be integrated into its surroundings; and
- The authorities responsible for land-use developments, spatial planning and local economic planning close to the airport should help to integrate the airport into its environment as well as support the airport's development and effective operation. This is a key factor highlighted through the advent of the concept of "airport cities" and "aerotropolises".

In airspace matters, the fundamental premise is that South Africa has full and sole sovereignty over the airspace above its territory, in accordance with the Chicago Convention. The system of air traffic services and air navigation services must ensure orderly, expeditious, safe and secure aircraft movements in South Africa's airspace. These services are part of the global operational concept of air traffic management aimed at creating seamless skies for the civil aviation sector.

As is the case with airports, the actual provision of air traffic and navigation services is regarded as an "economic" service. Authorised service providers should provide air traffic and navigation services on the basis of sustainability and viability as well as safety. The White Paper recommends that these service providers should, as far as possible, recover the cost of such services from the users in line with the "user-pays" principle.

Airspace, particularly the controlled airspace in the vicinity of South Africa's busiest airport, namely OR Tambo International, is becoming congested as the capacity of a designated airspace, commonly referred to as airspace slots, is affected by several operational considerations. The White Paper requires that the slot allocation system should be further developed with due regard to the national strategic importance of this function and to maximise the effective use of airports and airspace capacity.

The White Paper acknowledges that the domestic air transport policy for South Africa should continue to be based on the following principles:

- Aviation safety and security are of paramount importance;
- · Economic decisions should be resolved by the market;
- Users' interests in relation to safety and reliability should be considered; and
- All participants in the air transport market should be treated equally before the law.

In giving effect to market-related decisions within the *domestic* air transport market, the White Paper calls for the application of the following principles:

• Free and fair competition, aimed specifically at developing the air carrier industry, should be promoted in accordance with existing competition law, and air carriers

should be free to operate autonomously. Similarly, air carrier pricing should continue to be deregulated;

- Computer reservation systems should, however, be regulated to ensure transparency and to ensure that users have the widest possible choice of options;
- No limits should be placed on the number of domestic air carriers, nor on the number operating on specific routes;
- Air carrier ownership and control should remain vested in the air service licensee; and
- Airline co-operative agreements on domestic code-sharing, franchising and wetleasing should be permitted, subject to the relevant domestic law governing competition, aviation safety and aviation security.

In dealing with *international air transport*, the concept of "*National Interest*" is critical to formulating an international air transport policy that would best serve the people of South Africa. It is recognised that the National Interest of the country may not necessarily be the same, or could even be in conflict with the interests of service providers, consumers or the general public. The White Paper therefore provides for a trade-off between these various interests in the following manner:

- International air transport should facilitate and enhance the expansion of international trade, investment and tourism in general, and exports and the tourism industry in particular;
- Economic decisions should, as far as possible, be resolved by the market;
- The State's strategic objective to develop export-oriented sectors, capable of competing on international markets, should be pursued;
- An efficient, reliable and sustainable South African aviation industry should be developed and maintained; and
- Control should be maintained over international air transport services within a welldefined regulatory framework that is flexible enough to cater for changing needs and circumstances.

In addition to aviation safety and security requirements as well as the users' interests, various economic or aero-political considerations are important, such as the exchange of traffic rights within a rapidly liberalising regulatory environment. These matters are generally handled through negotiating bilateral air services agreements between countries. It is imperative for South Africa to have a well-founded strategic approach for such negotiations. Provisions for specific items are normally included in the bilateral agreements and the associated policy statements, have been formulated as follows:

• The multiple designation of licensed airlines to perform international scheduled air services on behalf of South Africa is promoted;

- air services operated in terms of the Yamoussoukro Decision (YD) will be allowed freely, subject to compliance with the conditions of the YD and applicable competition rules;
- all airports designated as international ports of entry should be promoted equally as points of entry into South Africa;
- air tariffs should be deregulated as far as possible to allow airlines the freedom to set tariffs in response to demand, subject to general control over economic activities, which applies to all industries, and the requirements of the Yamoussoukro Decision in respect of intra-African air services; and
- South African and foreign airlines would be allowed to enter into co-operative arrangements such as code-sharing, franchising and wet-lease agreements subject to the relevant Bilateral Air Services Agreements and domestic law governing competition, aviation safety and aviation security.

The term "*Remotely Piloted Aircraft Systems*" has been adopted when referring to aircraft that are piloted remotely by the Remote Pilot or autonomous from their point of departure, to their destination. Other acronyms used include UAS (Unmanned Aircraft System), Drone and UAV (Unmanned Aerial Vehicle).

South Africa has been highly successful in the development and application of RPAS for military operations, and demand for their use in civilian roles has experienced a steady increase. The White Paper addresses the need to regulate these systems to ensure the safety and security of such operations.

In addition to air transport for reward, there are a range of other aspects of aviation that form a major part of the South African civil aviation industry. These include general air services; flying schools and adventure aviation, as well as non-reward flights, including private and non-reward operations such as sport aviation, corporate aviation, recreation, and personal-use.

In addition to consideration of environmental impact management and disaster risk reduction, the White Paper specifically addresses environmental matters at source, relating to aircraft noise and engine emissions in accordance with ICAO environmental protection goals. The White Paper calls for the establishment of Airport Environmental Committees at those airports that are required to calculate aircraft noise contours and conduct monitoring of aircraft noise; and/or air quality monitoring. These Committees will form part of an airport consultation forum to provide a communication link between various interested and affected parties to discuss the environmental impact of aircraft operations.

The growing number of flights by older generation aircraft, which create unacceptable levels of noise pollution, is causing increasing resistance from the communities close to airports. ICAO has played a leading role in dealing with the problem of aircraft noise and many governments worldwide have already initiated programmes based on ICAO's balanced approach to aircraft noise management. This includes the restriction

or prohibition on the use of Chapter 2 aircraft (as defined in Annexure 2). In this regard, the White Paper recommends the implementation of ICAO's "non-addition" and "phasing-out" rules whereby South African air carriers should not be allowed to add Chapter 2 aircraft to their fleets with effect from a date to be prescribed in terms of the Civil Aviation Regulations. Likewise, foreign air carriers operating to South Africa should not be allowed to increase the number of flights operated with Chapter 2 aircraft. The remaining Chapter 2 aircraft operated to, from, and within South Africa should be phased out within a period of two (2) years from the aforementioned prescribed date.

In order to promote the future development of the civil aviation system, the White Paper also sets out principles for supporting innovation, human resource development and transformation within the context of existing frameworks.

This White Paper provides a primary framework for the future actions of the Department of Transport in the area of civil aviation. The goals, objectives and deliverables set out in this White Paper will be translated into a practical implementation plan.

In conclusion, Government has national as well as international responsibilities relating to civil aviation. The Standards and Recommended Practices of ICAO are core principles in civil aviation and are paramount with respect to aviation safety and security, environmental protection and search and rescue operations. This White Paper will position the country to benefit from the ongoing global changes in the economic and aero-political fields of civil aviation, while meeting the needs of the people of South Africa and regional and international obligations.

# PART A: CONTEXT, VISION AND OBJECTIVES

# **1. INTRODUCTION**

#### 1.1 BACKGROUND

The world's economic scene and aero-political landscape have undergone fundamental changes since the last aviation policy review in South Africa in the early 1990s. Since the mid-1990s, government has also defined new goals and priorities, which have impacted on civil aviation. These goals are geared towards a better life for all, through sustainable development, economic growth and poverty reduction. Civil Aviation policy must, *inter alia*, promote tourism, investment and trade as well as job creation. It also has to take into account the continental integration initiatives such as those embodied in the African Union (AU) and the New Partnership for Africa's Development (NEPAD). The White Paper has been developed within the parameters set by the Constitution of South Africa, the National Development Plan (NDP), and various legal instruments and international conventions relating to civil aviation.

For the first time a framework is in place for expanding international co-operation addressing African needs. The NEPAD plan *inter alia* emphasises economic good governance based on international standards as a precondition for regional and global co-operation. From an aviation perspective, the implementation of the Yamoussoukro Decision (YD) illustrates the importance given to the stimulation of trade and tourism on the African Continent by adopting a more liberal approach to regulation of air transport.

Air transport is one of the world's most important service industries. It plays a major role in world economic activity and opens up world markets to local business. Many industrial and commercial activities rely almost entirely on air transport for their existence. It is also one of the fastest growing sectors of the world economy. According to the IATA Vision 2050, over the past 40 years there has been a tenfold expansion in travel volumes and a 14 times expansion in freight, which compares to a 3 to 4 times growth of the world economy.

According to the Airports Council International (ACI) it is projected that 9 billion passengers will use air transport each year by 2025, up from 4 billion in 2007. Whilst it is acknowledged that the slow recovery from the world-wide financial crisis is still impacting on growth, it is expected that global aviation will recover and still realise the original projected growth over the medium to long term.

ACI also reports that the global air transport industry generates significant employment by providing around 32 million work opportunities directly or indirectly to the world's labour force. Similarly, travel and tourism play an important role in the economy of South Africa. A study by Oxford Economics on the *Economic Benefits from Air Transport in South Africa*, 2011, found that the aviation sector contributes R50.9 billion (2.1%) to the South African GDP. This sector also supports 227 000 direct jobs with another 116 000 people employed through catalytic (tourism) effects of aviation.

In South Africa, the airport network is estimated to carry around 40 million passengers a year as at 2015, of which an estimated 86% flows through the ACSA network with three major airports handling the majority of traffic in the ACSA network, namely O.R. Tambo, Cape Town and King Shaka International Airport. Privately owned airports are also playing a key role, e.g. Lanseria International Airport handled an estimated 25% of domestic traffic in 2015.

The integration of South Africa into the world market since 1994 resulted in vastly extending trade relations with current major trading partners as well as the entering into arrangements with new partners. Airports and air cargo facilities play a significant role in import and export activities. Information on air cargo movements in the South African network is incomplete; within the ACSA network 470,000 tonnes of air cargo were recorded in 2014, and SARS data show air freight values of R148 billion for exports and R179 billion for imports in 2014.

In terms of air traffic movements, data are not readily available on the entire network. However, within the ATNS operated network there were just under one million movements in 2014, excluding military flight movements. Given that the majority of registered aircraft in the country are used for private and recreational flights which are often operated outside of the ATNS network, the overall number of air traffic movements is likely to be significantly higher.

Irrespective of the various international opinions and definitions attached to "general aviation", it is recognised that these activities form a significant component of the South African civil aviation industry and represent a major contributor to the South African economy. It must be noted that the spread of these activities is also not homogenous at all airports. General aviation is also acknowledged as the "spawning ground" for future pilots and technical support personnel, without which the commercial air transport sector will be experiencing huge challenges in continuity of operations.

The aviation industry clearly has a vital role to play in the global and national economies. The challenge therefore is to create an air services environment which will give the suppliers and consumers of an air transport service reasonable flexibility and choice. This environment should also ensure sustainable development in the aviation and air transport industries, and also further enhance the initiatives for tourism and trade expansion. Global developments such as "open skies," low-cost no-frills carriers, e-commerce and privatisation initiatives have all had a direct impact on the South African aviation industry.

The review of the South African aviation policy should therefore be seen in the context of a global aviation industry. During the past decade the global aviation industry has changed the emphasis from a highly regulated environment to the concept of progressive liberalisation. This was achieved by incrementally removing regulatory restrictions as well as entering into new liberal trading agreements. South Africa needs a long-term policy framework that would maximise the beneficial aspects of aviation and minimise the negative aspects. The aim is to ensure that the South African air

transport industry is safe, cost-efficient, sustainable and globally competitive and environmentally friendly.

#### 1.2 CIVIL AVIATION SYSTEM

There are two distinctly different sets of regulatory functions and requirements that affect the civil aviation system, namely:

- Safety, security and environmental regulatory functions and requirements referring to policies, legislation and requirements to achieve an appropriate level of safety, security and environmental compliance in the system both on the ground and in flight. These also include accident and incident investigations and related matters specific to Remotely Piloted Aircraft Systems.
- Wider regulatory functions and requirements referring to policies, legislation and requirements such as infrastructure planning, licensing of air services, allocation of traffic rights internationally, economic considerations and monitoring of the financial practices and performance of air carriers.

The civil aviation system is also influenced by four categories of stakeholders, namely:

- Governance stakeholders responsible for policy, enabling and regulatory legal instruments and carrying out the requirements of the Chicago Convention (Convention on International Civil Aviation, 1944). These stakeholders are represented mostly by the Department of Transport as well as the South African Civil Aviation Authority. Other governance related stakeholders include the economic regulator, competition authorities, Department of Environmental Affairs, and the provincial and municipal government departments responsible for provincial and municipal airports, where appropriate;
- Commercial stakeholders normally associated with buying goods and services such as aircraft, maintenance and fuel, the provision of air transport services, general air services, aircraft and flying training and with selling goods and services for use in the civil aviation system. This group includes all air carriers, air service licensees, airports, air traffic and navigational service providers, flying training schools and aviation training academies, aircraft maintenance organisations and aircraft manufacturers; they are also represented by various industry associations and clubs;
- Support stakeholders normally facilitating the operational aspects of the civil aviation system such as travel agents, insurance companies, banks and shippers of cargo; and
- Society stakeholders comprising groups outside the civil aviation system, but with a direct interest in what goes on inside the system and what the system produces. This group is also interested in the economic, safety, security and environmental

performance of the civil aviation system. The group includes passengers, entities which use freight services, civil society, environmental groups and residents near airports, organised labour and the news media.

 Security Stakeholders - responsible for policy, enabling and regulating instruments pertaining to national security, and carrying out governmental imperatives regarding national security. These stakeholders are represented by the Department of Defence and Military Veterans, Secret Services Agencies, SA Police Services, Border Control Organisations and other security related bodies.

#### 1.3 STRUCTURE OF THE DOCUMENT

This document is structured in terms of six main parts:

- **Part A** provides the current regulatory and institutional context, as well as the vision, mission, objectives, goals and principles;
- **Part B** addresses South African international obligations in terms of civil aviation, in particular in terms of safety and security, and confirms the institutional arrangements to meet these obligations;
- **Part C** deals with aviation infrastructure, including airports, integrated planning and land use management for airports within their surrounding areas, and airspace;
- Part D covers issues relating to aviation operations, including operations for reward and those not for reward, as well as RPAS and environment considerations related to aviation operations. The term "General Aviation" (GA) means different things to different authorities; there is no universally accepted definition for GA. Therefore, all the different aspects of what people may consider part of air transport and general aviation under different definitions have been dealt with individually in this document depending on the nature of the activity, namely:
  - Activities for reward (commercial): Scheduled (international and domestic) and non-scheduled air transport operations, general air services (including all facets of aerial work), air ambulances, and adventure aviation
  - Note that safety and security regulation in terms of the Civil Aviation Act, the Air Services Licensing Act and the International Air Services Act apply equally to scheduled, non-scheduled and general air services when such air services are operated for reward.
  - Activities that are not for reward (non-commercial): Corporate Aviation, training or instruction in respect of flying an aircraft, sport and recreation, and private use.
  - **Part E** gives consideration to issues that will support the future development and growth of civil aviation in South Africa, including human resource development and innovation, research and development; and

• Part F provides an implementation framework and way forward.

# 1.4 REGULATORY FRAMEWORK OF THE CIVIL AVIATION SYSTEM

Emanating from the Chicago Convention, objectives were set for the safe, secure, efficient and orderly development of civil aviation. On the aero-political level there are still many constraints on traffic rights and market access, which are mostly handled on a bilateral basis. On the technical level, however, the Chicago Convention contains Annexes which prescribes standards and recommended practices (SARPs).

States that have ratified the Chicago Convention (and other related conventions and agreements) have to incorporate their commitments into their national legislation. Legislation takes place at two levels. Primary legislation is processed at Parliamentary level and regulations (secondary legislation) are enabled by the primary legislation and promulgated by the relevant Ministers.

Under these statutes, authorisation is delegated for the issuing of technical standards, rules and requirements to implement the objectives of the appropriate Acts and Regulations.

#### 1.5 MANDATE TO FORMULATE POLICY ON CIVIL AVIATION

In terms of the Constitution of the Republic of South Africa (the Constitution), the President assigns powers and functions to Ministers. One of the powers vested in the Minister of Transport is the function of policy formulation. The Department of Transport is responsible for civil aviation and this has enabled the Department to begin a process of reviewing and further developing the national civil aviation policy. It is foreseen that appropriate national legislation will emanate from this White Paper.

A policy on airport planning, development and operation is part of this White Paper. As the Constitution assigns airports other than international and national airports as a functional area of concurrent national and provincial legislative competence, the provincial authorities are part of this review process. On 17 March 1998, the Minister of Transport and the Ministers of the Executive Councils responsible for transport in their respective provinces published the White Paper on National Policy on Airports and Airspace Management. This document, suitably amended, has been incorporated into this White Paper.

A policy of this nature will have interfaces with other organs of state on matters over which those organs have jurisdiction. These include matters relating to the environment, tourism, spatial and land use planning, national security, military, local government and competition regulation. In formulating this White Paper, the principles of co-operative government and intergovernmental relations as contained in the Constitution have prevailed.

#### 1.6 AVIATION POLICY DEVELOPMENT SINCE 1990

Aviation policy has developed since 1990 under the guidance of the Department of Transport and the following milestone events have had a profound impact on this White Paper:

- The Domestic Air Transport Policy, resulting in the deregulation of domestic air transport in South Africa in May 1990;
- The International Aviation Policy of South Africa, enabling significant liberalisation in international air transport for South Africa effective from March 1992;
- The Policy on State Airports and Air Traffic and Navigation Services, entrusting the commercialisation of state airports and air traffic and navigation services to two government-owned commercial institutions in July 1992;
- The South African State Airports Policy review, confirming the commercialisation process for the two service functions in March 1995;
- The White Paper on National Transport Policy *inter alia* reiterating the policy positions contained in the domestic and international aviation policies, albeit with minor adjustments in 1996;
- Various studies on airline co-operation, air cargo operations and aircraft noise and engine emissions during 1998;
- The restructuring of the Civil Aviation Authority for South Africa into an independent government-owned agency responsible for the regulation of aviation safety and security in South Africa in 1998;
- The White Paper on National Policy on Airports and Airspace Management, 1998;
- Airlift Strategy, 2006; and
- Draft Air Transport Strategy 2016.

# 2 CURRENT INSTITUTIONAL ARRANGEMENTS

# 2.1 INTRODUCTION

The establishment of an effective institutional arrangement is critical to ensure that proper effect can be given to the implementation of the revised policy. Government departments as well as organs of State have assumed certain roles, requiring that the current situation be critically assessed to gain a thorough understanding of the roles and responsibilities of the respective parties. Such understanding would subsequently ensure that measures would be introduced for the continued effective functioning of the civil aviation system. Figure 1 below provides a diagrammatic perspective of the current civil aviation institutional arrangements at the national sphere:



Figure 1: Roles and responsibilities of the major role players in civil aviation regulation

# 2.2 THE MINISTER WITH OVERALL RESPONSIBILITY FOR TRANSPORT:

The Minister is responsible and accountable for all transport matters at national level. Civil aviation matters include-

- developing and steering civil aviation in line with Government's stated national objectives and strategy;
- formulating policy to guide civil aviation towards achieving objectives;
- planning the strategic development of civil aviation;
- ensuring that the enabling legal instruments are in place to give effect to policy;

- regulating aviation safety and security;
- regulating economic and social/environmental matters in relation to air transport and aircraft operations;
- shareholding of the State-owned entities, ACSA and ATNS;
- administering the civil aviation functions within DOT; and
- liaising internationally.

#### 2.3 THE MINISTER AS REGULATOR:

Government has established the following legal entities as independent regulators to assume responsibility for aviation-specific activities:

- The South African Civil Aviation Authority (SACAA), a financially self-sustaining, non-profit, government agency operating on the basis of the "user-pays" principle with responsibilities as prescribed by the Civil Aviation Act, as amended from time to time, including –
  - -aviation safety oversight and regulation this includes cooperation with- and oversight of bodies or organisations designated by the Director of Civil Aviation;
  - -aviation security oversight and regulation;
  - -aviation environmental regulation;
  - -flight inspection for air navigational aids and equipment, and
  - -promotion of aviation development.
- The International Air Services Council (IASC), an economic regulator, appointed by the Minister and financially dependent on DOT funds, with responsibilities for-
  - regulating access to the international air transport market through the issuance of air services licences within the international air services system<sup>1</sup>;
  - promoting
    - o trade with, and tourism to and from South Africa;
    - o competition between international air service operators;
    - o a high standard of safety in the operation of international air services;
    - the development and interest of the local international air services industry; and
    - o the interests and needs of users of air services in South Africa.
- The Air Services Licensing Council (ASLC), appointed by the Minister and financially dependent on DOT funds with responsibilities for
  - regulating access to the domestic air transport market based on safety and reliability criteria (i.e., no economic regulation), through the issuance of air service licences; and
  - monitoring the performance of licence holders.

<sup>&</sup>lt;sup>1</sup> Section 17(4)(b) of the International Air Services Act, 1993 (Act No. 60 of 1993)

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- The Regulating Committee, an economic regulator appointed by the Minister and financially dependent on DOT funds with responsibilities for -
  - regulating the tariffs of the State-owned entities, ATNS and ACSA;
  - monitoring the financial performance of the two State-owned entities; and
  - regulating the service standards at ACSA airports and ATNS Company operations.

The Department of Transport retains the responsibility of oversight of these entities.

#### 2.4 THE MINISTER AS SHAREHOLDER:

The Minister has a shareholding function in respect of the following entities:

- The Air Traffic and Navigation Services (ATNS) Company, a commercialised, financially autonomous State-owned enterprise with the responsibilities for providing air navigation infrastructure in South Africa; providing air traffic management and navigation services; and training staff members to provide the above services.
- The Airports Company South Africa (ACSA), a commercialised, financially autonomous and mainly State-owned enterprise with responsibility for operating the nine State airports which DOT previously managed.

# 3 POLICY VISION, MISSION, STRATEGIC OBJECTIVES AND PRINCIPLES

#### 3.1 VISION

Building on the overall vision set by the National Transport Policy of 1996, and taking into account that this Civil Aviation White Paper deals with both air transport and wider aspects of aviation, the vision is as follows:

Safe, secure, reliable, effective, efficient and fully integrated civil aviation operations and infrastructure that meet the needs of users at improving levels of service and cost in a fashion which supports government strategies for economic and social development whilst being environmentally and economically sustainable.

#### 3.2 MISSION

The mission of the Civil Aviation Policy, as stated in the White Paper on National Transport Policy of 1996, is "to maintain a competitive civil aviation environment which ensures safety in accordance with international standards and enables the provision of services in a reliable, efficient and environmentally friendly manner at improving levels of service and cost while contributing to the social and economic development of South Africa and the region".

#### 3.3 STRATEGIC OBJECTIVES

The strategic overarching objectives of the Civil Aviation Policy are the following:

- To promote and enhance civil aviation safety, security and environmental compliance in all spheres of the civil aviation industry;
- To promote the National Interest of South Africa and facilitate the expansion of trade and tourism (including sport and adventure tourism);
- To further promote the development of an efficient and productive aviation industry, which is capable of competing both domestically and internationally;
- To ensure that civil aviation contributes meaningfully to the development of human resources, meeting basic needs and broadening all South African citizens' participation in the economy;
- To maintain an appropriate and cost-effective regulatory framework, ensuring safe, secure, environmentally friendly and reliable air services, capable of responding to changing circumstances;
- To facilitate the application of free-market principles as far as possible, relevant to economic decisions in all industries, which will apply equally to aviation services with a view to maximising consumer choice and satisfying consumer's needs;
- To meet the needs of all users of aviation-related services;
- To enable preservation of aviation heritage;
- To be environmentally and economically sustainable;
- To promote sound relations with other countries, groups of countries and related regional and other international organisations;
- To transform the aviation industry by broadening economic participation in the provision of aviation-related services; and
- To provide for adequate consultative forums in well-defined communication systems.

#### 3.4 GOALS AND PRINCIPLES

Building on the broad policy goals and principles of the National Government's transport policy, contained in the White Paper on National Transport Policy, 1996, as it pertains to *civil aviation*, the goals and principles for this policy are as follows –

#### 3.4.1 Goals

- Meeting the basic needs of people, growing the economy, developing human resources and democratising decision making;
- Enabling customers requiring transport to access the transport system in ways which best satisfy their chosen criteria;

- Improving the safety, security, reliability, quality and speed of transporting goods and people;
- Improving South Africa's competitiveness and that of its infrastructure and operations through greater effectiveness and efficiency, to better meet the needs of different customer groups, both locally and globally;
- Investing in the infrastructure of transport systems in ways which will satisfy social, economic, or strategic investment criteria. Achieving the above objectives in a manner which is economically and environmentally sustainable, and minimises negative effects; and
- Acting as a responsible shareholder.

## 3.4.2 Principles

- Role of National Government focusing on policy, substantive regulation, strategic planning, and intergovernmental coordination across line functions and spheres of government. In addition, national government will act as a responsible shareholder and ensure effective oversight of its agencies;
- Institutional principles addressing arrangements for the various relationships among all spheres of government as well as the structure for non-government or statutory transport bodies;
- *Financing principles* a distinction is made between:
  - Elements of "economic" infrastructure and operations which provide a measurable economic or financial return, such as airports, where the "userpays" principle or cost recovery directly from users could be applied. This category also includes financially viable freight and passenger operations such as air transport services which should be run on commercial principles; and
  - Elements of infrastructure and operations for which the user cannot or should not pay, but which provide social benefits greater than the costs. Subject to budget availability, funding could be in the form of appropriations to achieve an equitable distribution of resources, or as an incentive to provide services that are desirable in a broader social context. It is recognised that the current funding of aviation infrastructure in terms of this principle is inadequate. In all cases of government funding, the return on investment (whether financial, economic or social) of monetary and other resources must be justifiable;
- Principles of regulation –The intention is to regulate only where it is essential. Government will apply different forms of regulation to provide for *inter alia* aviation safety, security, environment, regulation of monopolies, competing operators and the provision of services under contract.

# PART B: INTERNATIONAL OBLIGATIONS AND OVERALL INSTITUTIONAL ROLES

# 4 GIVING EFFECT TO INTERNATIONAL AVIATION SAFETY AND SECURITY OBLIGATIONS

#### 4.1 COMPLIANCE WITH CHICAGO CONVENTION

#### (a) Background

Signatories to the Chicago Convention are obliged to adhere to aviation safety and security standards and to endeavour to follow recommendations. The benefits of this system are that Member States can have mutual reliance on each other to ensure an acceptable level of safety and security in operations under their jurisdiction. If, for some reason, a State finds it impossible to comply with a standard or has a distinct way of complying with that standard, the State has to file a difference with ICAO, who will then notify all Member States accordingly. This, however, should be the exception rather than the rule.

The 32nd Session of the Assembly of the International Civil Aviation Organisation (ICAO) in Resolution A32-11 directed the Council to establish the ICAO Universal Safety Oversight Audit Programme (USOAP), providing for regular, mandatory, systematic and harmonized safety audits to be carried out by ICAO, that such universal safety oversight programme shall apply to all Contracting States, and that greater transparency and increased disclosure be implemented in the release of audit results.

In 2011, the USOAP evolved from a programme performing periodic audits to a new approach based on the concept of '*continuous monitoring*' (CMA). This systematic and more proactive risk based approach to the conduct of monitoring activities provides ICAO with the ability to continue to perform audits as well as additional activities such as ICAO Coordinated Validation Missions (ICVM). ICVMs help to validate progress made by States in resolving safety deficiencies identified during USOAP audits.

ICAO implemented the *Universal Security Audit Programme in 2002.* This programme subsequently evolved into the *Universal Security Audit Programme - Continuous Monitoring Approach* (USAP-CMA) in January 2015. The objective of the USAP-CMA is to promote global aviation security through continuous auditing and monitoring of Member States.

#### (b) Issue

Clear responsibility is needed for giving effect to the international standards and recommended practices (SARPS) applicable to aviation safety and security and be applied across industry segments.

(c) Policy Statement on Compliance with Chicago Convention:

#### **PS. 1**

Aviation safety and security are of paramount importance and should be enhanced as far as possible. In this context, national Government should retain overall regulatory accountability to ensure the unbiased regulation of aviation safety and security in accordance with international standards and recommended practices as defined by ICAO.

The Department of Transport should enhance the role and functions of the current National Aviation Security Committee to ensure effective coordination of aviation- and national security imperatives.

SACAA shall remain the designated authority for purposes of conducting safety and security oversight of civil aviation in the Republic.

#### 4.2 OVERSIGHT OF VISITING FOREIGN REGISTERED AIRCRAFT

#### (a) Background

In accordance with ICAO standards and recommended practices, States are required to perform oversight of visiting foreign registered aircraft to ensure that they comply with international safety and security standards and recommended practices and meet national requirements.

It is therefore critical that a State has the ability to oversee the safety and security of foreign registered aircraft when these aircraft fly into its airspace.

#### (b) Issue

The safety and security oversight of foreign registered aircraft is of critical importance to ensure the safety of South African and other passengers travelling on foreign registered aircraft as well as third parties on the ground within the territory of the Republic of South Africa. This is of particular importance in respect of commercial operations conducted in terms of Foreign Operator's Permits (FOPs) or Flight Clearances. South Africa currently has limited capacity to oversee the safety and security of all visiting foreign registered aircraft.

Monitoring of aircraft crossing the South African air border without a flight plan, FOP or flight clearance is also of concern.

Clear responsibility for oversight of foreign registered aircraft is needed to give effect to the international standards and recommended practices applicable to these aircraft.

(c) Policy Statement on the Oversight of Visiting Foreign Registered Aircraft:

## PS. 2

SACAA remains the designated authority for purposes of conducting civil aviation safety and security oversight of foreign registered aircraft flying to, from and within the Republic and for ensuring that these operations comply with relevant South African legislation.

In the interests of national security and sovereignty, the South African National Defence Force should continue to provide oversight in terms of aircraft crossing the air border without a flight plan, foreign operator's permit or flight clearance, and a robust system of information sharing should be created between DOT, ATNS (and other ATS service providers as may be applicable) and the SANDF.

## 4.3 REGIONAL COOPERATION WITH RESPECT TO AVIATION SAFETY AND SECURITY OVERSIGHT

#### (a) Background

As indicated above, all ICAO Member States are obliged to adhere to aviation safety and security standards and to implement recommendations as far as possible. Contracting States are, therefore, mutually reliant on each other to ensure an acceptable level of safety and security in respect of aircraft operations under their jurisdiction.

Unfortunately not all Regions and States have equal access to resources required to establish effective safety oversight systems. The Comprehensive Regional Implementation Plan for Aviation Safety in Africa (AFI Plan) was developed to address the concerns expressed by the ICAO Council on the safety status of aircraft operations in the Africa-Indian Ocean (AFI) Region. The Council recognized that the problem facing the States in the AFI Region and many other States are similar in nature. In July 2012, the African Union adopted the "Plan of Action on Aviation Safety in Africa" following the African Ministerial Conference on Aviation Safety in Africa, held in Abuja, Nigeria.

South Africa has access to sufficient national resources to play a significant role in the regional cooperation programmes identified through this initiative and it is critical that South Africa participates in programmes to strengthen aviation safety and security oversight within the region.

#### (b) Issue

South Africa's role in respect of the regional cooperation programmes needs to be clearly defined to strategically enable South Africa to benefit from regional alliances

and to assist with improved aviation safety and security oversight within the AFI Region.

(c) Policy Statement on Aviation Regional cooperation with respect to Safety and Security Oversight:

#### **PS.** 3

Aviation safety and security within the Africa-Indian Ocean Region are of paramount importance and should be enhanced as far as possible. National Government should support regional programmes to improve the level of aviation safety and security oversight within the region.

Furthermore, SACAA should:

- Support regional aviation safety and security programmes and provide technical assistance to regional authorities for purposes of conducting safety and security oversight of civil aviation within the Region; and
- Assist with technical and developmental assistance, training and relevant support to regulators within the Region without compromising its oversight function in South Africa.

#### 4.4 AVIATION SECURITY AT AIRPORTS

#### (a) Background

The primary objective of civil aviation security is to ensure the protection and safeguarding of passengers, crew, ground personnel, the general public, aircraft and facilities of an airport serving civil aviation, against acts of unlawful interference. South Africa is required to give effect to Annex 17 to the Convention, which provides that each Contracting State must establish its own National Aviation Security Programme (NASP). ICAO developed the Security Manual for Safeguarding Civil Aviation against Acts of Unlawful Interference which assists States to promote safety and security in civil aviation by developing a legal framework, practices and procedures to prevent and, where necessary, respond to unlawful acts. This is carried out through a combination of measures and the marshalling of various human and material resources at the international and national airport levels. The implementation of an aviation security policy is based upon the requirements of the aviation security programmes at each of these levels, for both the administrations and operators in the area of air transport. Aviation security needs to be in conformity with the principle that the level of security measures is commensurate with the assessed risk or threat.

Civil aviation security oversight in South Africa is governed in terms of the Civil Aviation Act, 2009. This Act gives effect to the Tokyo Convention, The Hague Convention and the Montreal Convention. The above-mentioned conventions deal

with unlawful acts on international flights, unlawful seizure or "hijacking" of aircraft and measures against terrorism by dealing with sabotage committed on the ground and unlawful interference with air navigation installations, facilities and services at airports, control towers and radio installations.

There are two distinct areas of responsibility for security at all security-designated airports:

- The first area is *Civil Aviation Security*. The National Aviation Security Programme addresses the security related responsibilities of the operator of a designated airport; the Air Traffic and Navigation Services Company, any air carrier and any other aviation participant designated by the Minister from time to time. SACAA monitors, on a continuous basis, compliance with national and international civil aviation standards.
- The second area of security is National Security. Civil aviation security is a sub-set of the broader national security environment. This area involves, inter alia, the following national government departments: Transport, South African Police Service, State Security Agency, International Relations and Cooperation, Home Affairs (Immigration) and South African Revenue Service (Customs) and the South African National Defence Force. The abovementioned Departments as well as the Air Traffic Navigation Services Company and Airports Company South Africa are represented in the National Aviation Security Committee (NASC).

#### (b) Issue

The following issues have been identified:

- Need to clearly identify responsibility for the development and review of the NASP, as well as the implementation thereof;
- In respect of airports, the NASP is currently applicable to designated airports.
- Cost of compliance with security facility and staffing requirements at designated airports has been identified as a concern for airports with small volumes of scheduled traffic.

(c) Policy Statement on Aviation Security at Airports:

#### PS. 4

The Department of Transport is responsible for the development of national civil aviation security policies. This includes the compilation, revision and development of the National Aviation Security Programme (NASP) which, amongst others, addresses airport security, in compliance with Annex 17 of the Chicago Convention.

SACAA will remain responsible to oversee the implementation and compliance with the NASP.

Where the cost of security oversight is recovered from the users, this should be done in a fair and equitable manner, subject to consultation with affected parties and guided by ICAO's Policies on Charges for Airports and Air Navigation Services (Doc. 9082).

#### 4.5 CIVIL AVIATION SAFETY AND SECURITY ISSUES: AIR TRANSPORT

#### (a) Background

South Africa, as a signatory to international conventions on civil aviation pertaining to safety and security, has certain functions and obligations in terms of these conventions. These functions and obligations are mainly of a technical nature and not subject to negotiations with another country.

It should be noted that the Chicago Convention imposes the responsibility for compliance with standards and practices related to safety and security on the Contracting States. In South Africa, safety, security and environmental oversight have been delegated to SACAA, but the IASC and the ASLC also play a complementary role through the granting of air services licences.

The successful achievement of safety and security objectives depends on people, equipment, facilities and systems. The respective regulatory authorities have different roles to play, but with one common goal in their monitoring, namely, the achievement of safety and security objectives.

#### (b) Issue

The air transport market is being continually liberalised. The relationship between economic liberalisation and aviation safety and security regulation should be carefully balanced between costs and benefits to achieve an optimal level of safety and security.

The South African Government, through DOT and SACAA, has an obligation to ensure that any person providing an air transport service complies with at least the minimum

norms and standards laid down in the international conventions on civil aviation, as incorporated into South Africa's domestic law.

(c) Policy Statement on civil aviation safety and security issues: Air Transport:

#### PS. 5

Civil aviation safety and security within the air transport sector are of paramount importance, and the quality of operators regarding those factors which affect operational safety and security should be enhanced as far as possible.

Air transport services should at all times comply with the international norms and standards pertaining to aviation safety and security, as contained in the relevant international conventions to which South Africa subscribes.

In the context of a liberalising environment, the fundamental importance of operational safety and security is reiterated with the emphasis on the following:

- The aircraft to be used in providing an air service should be safe and should continuously be kept in a safe condition.
- The persons operating, i.e. flying and maintaining the equipment, should be properly trained and should operate such equipment in a safe manner.
- The air service licensee or holder of a foreign operator's permit should operate the air service in a safe and secure manner. To ensure this, an operator should be recognised as an entity and be monitored and regulated as such.
- Safety and security aspects of air services should be monitored on a continuous basis to ensure compliance with the regulatory framework and effective enforcement measures should be introduced where necessary.

# 5 OVERALL INSTITUTIONAL ARRANGEMENTS

# 5.1 DEPARTMENT OF TRANSPORT'S CAPACITY FOR ITS CIVIL AVIATION RESPONSIBILITIES

#### (a) Background

The changes in the institutional arrangements for civil aviation and the separation of service delivery and regulatory functions did not leave DOT untouched. In many instances, experienced staff in specialised disciplines left the Department to take up new positions with SACAA or with ACSA and ATNS. This left a void which the Department had to manage for quite a long time before suitable capacity could be acquired.

This situation is not uncommon in the international civil aviation community. Several countries are currently struggling with a mismatch between departmental oversight capacity and the operational strength of autonomous institutions.

#### (b) Issue

The changes in the institutional arrangements have had a negative influence on the Department's capacity. As a result DOT does not have the required capacity to fulfil its functional responsibilities for civil aviation, which include, amongst others, formulation of policy and oversight of state entities.

(c) Policy Statement on DOT's capacity for its civil aviation responsibilities:

**PS.6** 

Government is committed to ensuring that the Department of Transport is suitably equipped to fulfil its functional responsibilities for civil aviation effectively, efficiently and meaningfully.

# 5.2 INDEPENDENCE OF REGULATORS IN THE CIVIL AVIATION INDUSTRY

#### (a) Background

Regulation is a form of Government intervention with the intention to regulate only where it is essential. In utilising some form of independent regulation, Government has instituted the following arrangements with respect to civil aviation regulation:

- Regulation of the core elements of safety, security and environmental matters in the civil aviation system;
- Regulation of monopolies with respect to airports and air traffic and navigation services; and
- Regulation of competing air service providers.

#### (b) Issue

A potential conflict of interest has been identified between State ownership and State regulatory control of the aviation sector that has the potential of affecting the industry, particularly with the increasing number of private sector participants entering the market.

Each of the regulatory institutions involving civil aviation need to be reviewed to assess the extent to which it is independent and the possible influence the commercial interests of Government may have on decision-making.

A clearer definition of the accountability framework for regulators could considerably clarify their role and formalise the manner of their interaction with other facets of the State. It would also help to define the respective roles of all the parties whose operations impinge, to a greater or lesser extent, on the mandate of the various regulators.

Independent regulators need to be able to exercise their powers and authority without hindrance. For this reason DOT needs to ensure that potential areas of conflict or issues that might discredit the regulators are eliminated.

The part-time nature of the economic regulators poses a very serious challenge for both DOT and industry. The regulators are not fully resourced and this limits their level of intervention and support on regulatory matters.

The primary legislation that supports the establishment of these regulatory institutions is weak and outdated. As a result, the Department faces challenges in responding to the needs of the industry. This calls for a need to review the regulatory framework so that it responds to the needs of the industry and assist DOT to achieve its policy mandate.

The role of DOT in the economic regulation space needs to be enhanced through the establishment of a permanent regulatory institution<sup>2</sup>. The review would address the current challenges relating to regulatory independence, capacity building and the ability of the DOT to issue policy directives to the regulators in response to the dynamic nature of government priorities.

<sup>&</sup>lt;sup>2</sup> The plans for a single transport economic regulator may result in an evolution of roles.

White Paper on National Civil Aviation Policy: February 2017

(c) Policy Statement on the independence of regulators in the civil aviation industry:

#### **PS.** 7

Government recognises the independence of the economic regulators as well as that of the aviation safety and security regulator which have been established, as well as the accompanying responsibility and accountability associated with their independence, with due regard to the relevant founding legislation.

# 5.3 MANAGING THE MINISTER OF TRANSPORT'S SHAREHOLDING RESPONSIBILITIES AND POLICY, PLANNING AND REGULATORY RESPONSIBILITIES

#### (a) Background

The Airports Company Act and the Air Traffic and Navigation Services Company Act provide for the President to designate a Minister as Shareholding Minister. The Regulating Committee for ACSA and ATNS has been established through the Airports Company Act No. 44 of 1993. Its main functions include the regulation of aeronautical tariffs, the service standards of ATNS and ACSA, as well as considering complaints.

The Minister of Transport, who is currently the shareholding Minister, is also responsible for appointing the chairperson and four members of the Regulating Committee. The term of office of the Regulating Committee is prescribed by the Minister.

#### (b) Issue

Under the present arrangement, the Minister of Transport has a dual role, namely:

- Responsibility for policy development, strategic planning and regulation; and
- Exercising the rights attached to the shares in ATNS and ACSA of which the State is the holder.

The Minister of Transport's dual role holds a potential for conflict of interests, which could jeopardise the integrity of the Regulating Committee. For this reason, those roles need to be effectively managed.

(c) Policy Statement on managing the Minister of Transport's shareholding responsibilities and policy, planning and regulatory responsibilities:

#### **PS.** 8

The Minister's shareholding responsibilities and his/her policy, planning and regulatory responsibilities should be effectively managed in order to avoid any conflict of interests between vested responsibilities in ATNS and ACSA as business entities, and the responsibility for exercising regulatory control over their operations.

# 5.4 ENFORCEMENT POWERS OF THE REGULATORS

#### (a) Background

The powers to enforce the regulatory regime effectively in terms of current legislation can be subdivided into the four broad categories listed below. It must be noted that the regulator's actions would be subject to judicial review or that the regulator may institute court proceedings seeking a court order to give further effect to the exercising of such powers:

- Investigative powers give the regulator the authority to conduct investigations into and gather information about the performance or intended performance of aviationrelated activities, and to grant specific rights (licences), or order that certain actions must be undertaken as a result of such probing.
- Remedial powers provide that if a regulated person or entity is engaged in practices that contravene the regulatory rules in a manner that would adversely affect a third party and that if, owing to the urgency of the matter, the adversely affected third party regards the normal procedures of investigation and subsequent prosecution as an insufficient response, the regulator need to take appropriate action with immediate effect.
- Punitive powers allow the regulator to take immediate action if non-compliance is observed, e.g. the revocation/restriction/suspension of an acquired right, such as a licence.
- Monitoring (auditing) powers allow the regulator to find out to what extent an order given in exercising any of the above powers, has been put into effect.

#### (b) Issue

A critical review of the current situation resulted in the identification of the following issues, which may apply with varying degrees to the regulatory regime:

- The present institutional arrangement is not sufficiently robust to respond to the challenges of an increasingly complex aviation industry; and
- The present legislation provides for a judicial review of a regulatory decision, but provides for little or no enforcement.

(c) Policy Statement on the enforcement powers of the regulators:

#### PS. 9

In exercising their authority, the powers of the civil aviation regulators should be enhanced by providing appropriate enforcement instruments to give effect to the decisions taken or rulings made.

The Department of Transport should review the current regulatory framework governing the economic regulation of ACSA and ATNS pending the establishment of a permanent economic regulator.

## 5.5 AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION

#### (a) Background

The Accident and Incident Investigation Division's (AIID) activities concern the investigation of accidents and incidents with the purpose of preventing the recurrence of such accident or incident in compliance with Annex 13 of the Chicago Convention. It is not the function of this Division to assign fault or determine criminal liability. Its sole function is, therefore, to promote aviation safety.

International practice shows that accident investigation is usually part of the duties of a specialised independent aviation accident investigation body or part of an organisation to investigate transport accidents and incidents on a multi-modal basis. As the "user-pays" principle cannot cover the cost of investigations into aircraft accidents, Government needs to continue to fund the investigations and establish such an independent investigating body specific to aviation, or multimodal.

The function of investigating aircraft accidents and incidents was transferred to SACAA in 1998 as an interim measure. This function was conducted by SACAA on behalf of DOT in terms of a formal arrangement until early 2013. Section 4 of the Civil Aviation Act, 2009, has not been promulgated due to challenges relating to its implementation.

#### (b) Issue

As aviation investigations may well negatively implicate SACAA itself and create a conflict of interests, it is not appropriate for the function of aircraft accident and incident investigations to be conducted by SACAA on behalf of DOT. To eliminate the potential for such a conflict of interest, the Minister of Transport has issued an Order in

terms of the Civil Aviation Act, 2009, as an interim measure to ensure functional independence of the AIID. However, a more permanent solution is required. There is a parallel process of amending the Civil Aviation Act in order to remedy the conflict of interest situation with due regard to fiscal constraints.

#### (c) Policy Statement on Aircraft Accident and Incident Investigation

#### PS. 10

A functionally independent Aviation Safety Investigation Board should be established, housed within the DOT, for Aircraft Accident and Incident Investigation as provided by Annex 13 of the Chicago Convention and relevant Standards and Recommended Practices (SARPS).

#### 5.6 AERONAUTICAL INFORMATION SERVICES

#### (a) Background

The Report on the Restructuring of the Civil Aviation Authority (1997) identifies aeronautical information services (AIS) as a service delivery function. The functions of AIS include the following:

- The collection, verification and distribution of AIS. This can be regarded as a service delivery function.
- The authorisation of the publication of information. This is a regulatory function and includes setting standards on what information should be published and the correctness of such information, as well as authorising any changes to the information.

#### (b) Issue

As the service delivery functions of AIS are not aligned with the regulatory functions of SACAA, consideration needs to be given to transferring AIS to another organisation best equipped to perform such functions. This principle was also highlighted in the recent ICAO Coordinated Validation Mission of July 2013.

Although SACAA is currently the official supplier of AIS, it seems that ATNS would be better equipped to deliver this service cost-effectively. In the case of Australia, New Zealand and the UK, the AIS service delivery function has been separated from the regulatory function and outsourced to private suppliers.

As there may be duplication when splitting the AIS functions, all responsibilities need to be clearly defined and allocated.

(c) Policy Statement on aeronautical information services:

#### PS. 11

The service delivery aspect of aeronautical information services should be separated from SACAA and transferred to ATNS.

SACAA to retain the regulatory oversight of AIS, including the verification and sign-off on information as well as regulatory oversight of the Central Airspace Management Unit (CAMU), the ATNS Aeronautical Information Services quality system as well as data integrity.

#### 5.7 FLIGHT INSPECTION

#### (a) Background

After SACAA was established, the South African flight inspection capability was transferred from DOT to SACAA. The Flight Inspection Unit (FIU) of SACAA could be seen as a strategic resource because it provides, *inter alia*, a flight inspection service in South Africa for civil as well as military navigation equipment, and also for certain states in Africa.

The FIU performs flight inspection of the correct calibration of aviation navigation aids which is a part of its ICAO required oversight functions.

SACAA holds international as well as domestic air service licences for providing flight calibration services for reward. It operates the FIU on a cost-recovery basis.

#### (b) Issue

The FIU currently performs activities which can be classified into a regulatory category and a service provision category. The international trend as can be seen in Australia and the United Kingdom is to separate the service provision functions from the regulatory functions.

The FIU forms part of SACAA. As aviation safety regulator, SACAA also conducts safety oversight on the Part 121 operations of the FIU as well as oversee the navigation aids that are flight inspected. Extension of calibration certificates, e.g. when the Unit is not available to do flight inspection, are currently recommended from within the same entity being the SACAA that also houses the FIU. This potential conflict of interest is currently managed by suitable internal processes within SACAA.

It is difficult to separate the calibration service from regulatory oversight as both functions take place at the same time. SACAA inspectors oversee the accuracy of the calibration at the same time when the flight inspection service is provided. Splitting the safety oversight function from the calibration service provision into two independent operations would make both functions far more costly.

(c) Policy Statement on Flight Inspection:

## PS. 12

SACAA to retain the responsibility for flight inspection. There should, however, be a distinct separation of responsibilities between service provision and safety oversight in respect of flight inspection of navigation and surveillance aids and flight procedures to prevent SACAA's role as a safety regulator being compromised.
# PART C: CIVIL AVIATION INFRASTRUCTURE

This Part of the document deals with the various infrastructural aspects of the civil aviation systems, including airports, spatial and land use planning of airports within their surrounding areas, as well as airspace. It should be read in conjunction with Part D, which addresses some elements that may have implications for airport operations and communication.

# 6 AIRPORTS

The airport or airport system is one of the key elements of the transport infrastructure in South Africa. Historically, Government has invested significant funds in airport infrastructure. Despite the establishment of autonomous authorities to operate airports as business entities, all spheres of government still own, and to a lesser extent, operate the vast majority of airports.

It is estimated that, as at 2015, South Africa's airport network consists of 135 licences airports, 60 registered airports, 33 military airports and up to 1,600 unlicensed and unregistered aerodromes.

# 6.1 NATIONAL AIRPORTS DEVELOPMENT PLAN

# (a) Background

Airports that link South Africa with domestic, regional and intercontinental destinations collectively constitute the "national" (South African) airports system. The system therefore includes all airports which link one location or community with other destinations inside South Africa and abroad, regardless of the status of such airport.

An airport as a public utility in many rural areas in South Africa is still highly relevant and likely to remain so in future, but the public utility approach has given way to airports as commercial entities, albeit still under public ownership in most cases.

The national Government, through SACAA, bears responsibility for the safety and security of the entire network of airports, in terms of legislation and international conventions on safety and security. It may also determine standards and provide guidelines for the planning, development and operation of airports. The airport licensees are, however, responsible for the necessary planning, design, construction, operation and further development of airports.

# (b) Issue

In the past, airports have not always developed within socio-economic parameters and the airport system at present does not conform meaningfully to an integrated network of airports that could contribute to growing the wealth of the country and ensure that potential investments are used to best effect.

With all three spheres of Government involved in one way or another with integrated planning involving *inter alia* airport planning, operation and regulation, there is little or no proper direction or method for co-ordinating the responsibilities in this area.

Airport development should not be considered in isolation, but be integrated into all national, provincial and municipal economic and spatial development initiatives. At the same time, airport development also needs to meet the social needs and objectives of local communities. There therefore needs to be synergy between airport development and the development strategies of all spheres of government, with emphasis on the following:

- The national planning and integration of airports into the broader transport network in respect of modal integration as well as in the context of the total air transport system, need to be co-ordinated with the other spheres of government.
- Airport development and planning also need to be incorporated into the planning initiatives of the appropriate sphere of government as an airport may influence provincial and municipal socio-economic development. Aviation knows no borders. There is therefore a possibility of conflict between airport planning initiatives of two neighbouring provinces, where their planning involves two different airports close to each other and which may consequently be detrimental to the system as a whole, from a safety and operational as well as an economic point of view.
- Planning for airports furthermore needs to be included in a provincial transport plan which, in turn, would form part of the economic development plan for the province.
- The socio-economic "value" of an airport in relation to the total system as well as from a more localised point of view, is another consideration when making decisions about seamless transport systems, private investment and the designation of additional, or the reduction of the number of, international airports or the allocation of public funding.
- Airport development needs to be planned holistically in accordance with a structured National Airports Development Plan, which would support national, provincial and local community objectives. Such development needs to complement the airport system, and in some cases may even allow for competition within the system, to the benefit of the user.

Airports in South Africa arose from a widespread acceptance of airports as quasipublic utilities which the national or local government of the day financed and operated. However, the existing network of airports has evolved along uncoordinated lines and now the network has to be further developed, operated, maintained, protected and properly utilised in an integrated system.

In general, private-sector involvement in airport development is hampered by uncertainty about the relative importance of the potential investment in the airport network. The perceived success of commercialised airports has, however, motivated

private enterprise to plan and establish new airport facilities. These developments, which in some cases show limited regard for macro-economic considerations, illustrate that the uncoordinated approach of the past still dominates. Private sector investment into airport infrastructure is a function of economic regulation and it is noted that this sector will not invest, unless it has certainty that there will be a return on investment. This will require that long term operating licences are issued to ensure that any debt financing can be repaid and that there is a return on equity that is comparable to other asset classes.

# (c) Policy Statement on the National Airports Development Plan:

# PS. 13

The Department of Transport will develop a National Airports Development Plan which would guide all present and future airport development in consultation with all relevant stakeholders. Planning and integration of airports into the broader transport network should be co-ordinated through the National Airports Development Plan.

# 6.2 ENVIRONMENTAL SUSTAINABILITY OF AIRPORT DEVELOPMENT<sup>3</sup>

# (a) Background

Sustainable development in its simplest form is "development that will endure" or alternatively is "development which meets the needs of the present, without compromising the ability of future generations to meet their own needs". Viability requires that benefits should exceed costs.

To ensure the optimal use of funds for airport development, the concepts of sustainability, especially in the context of environmental considerations, are critical. Airports need to evolve on the basis of sustainability and viability in accordance with the factors presented below. The interdependence of these factors should however be clearly recognised when formulating policy.

According to Part 139 of the SA-CAR titled "Aerodromes and Heliports: Licensing and Operation", an environmental impact report, if required in terms of the Environmental Management Act, has to be submitted as part of an application for a licence or an amendment thereof.

In terms of Section 21 of the Environmental Conservation Act, the Minister of Water and Environmental Affairs has identified activities which may have a substantially detrimental effect on the environment and which will, under certain circumstances, be

<sup>&</sup>lt;sup>3</sup> Also note "AIRCRAFT OPERATIONS AND THE ENVIRONMENT"

subject to an appropriate environmental impact assessment. These activities include the construction or upgrading of airfields and associated structures outside the borders of town-planning schemes, as well as changes in land use from, for example, agriculture to any other land use, including that of airports.

# (b) Issue

Environmental sustainability emphasises the interdependence of social and economic development and environmental protection. It is therefore important for investment decisions to take environmental implications into account. However, investment decisions can only be consistent with environmental objectives if the environmental implications have been identified and assessed. These assessments need to be done at an early stage and inform the planning and design of individual projects.

The Government's policy on environmental management indicates that all development which might have an impact on the environment has to follow the Integrated Environmental Management (IEM) process, thus providing sufficient information to decision makers about the impact of the development on the environment. Different tools may be used to ensure IEM, which could range from Strategic Environmental Assessments and Plans, which take place at a more strategic level, to Environmental Impact Assessments (EIA), which are more project-specific. The EIA regulations made in terms of the National Environmental Management Act list airports as an activity for which either an EIA or a basic assessment is compulsory.

Smaller airports are not always sufficiently aware of their obligations, whether a Basic Assessment or full EIA, and the cost of completing an EIA may be prohibitive for airports with limited activity for reward.

# (c) Policy Statement on Environmental Sustainability of Airport Development:

# PS. 14

Airport development, expansion and operation should be in line with the Government's policy on environmental management.

The environmental sustainability of airports should be assessed as a prerequisite, whether at strategic planning level or for individual projects, using the appropriate tools.

# 6.3 FINANCIAL SUSTAINABILITY AND VIABILITY

#### (a) Issue

Most airports in South Africa and around the world are not financially sustainable based on aeronautical revenue alone. In particular, provincially and municipallyowned airports in South Africa are struggling with financial sustainability. Ultimately the success or failure of an airport facility, in financial terms, is demand-driven and

depends upon the willingness of direct and indirect clients to make use and contribute towards the costs of the facility, as well as the optimisation of non-aeronautical revenue and compatible development in the surrounding airport precinct (whether a small airport precinct in a small town or a large aerotropolis in a metropolitan area).

The development of new and existing airports needs to be justified by commercial sustainability socio-economic contribution, or both. A distinction has to be made between airports operated as viable commercial entities or which have the potential to become commercially attractive, and those that will remain a utility, serving only community interests such as medical rescue or firefighting.

# (b) Policy Statement on Financial Sustainability and Viability:

#### PS. 15

Existing and new airports should as far as possible be developed and operated on the basis of financial sustainability and viability, as guided by the National Airports Development Plan.

Existing publicly owned airports, excluding military airports, are encouraged to make every effort to become viable and sustainable, including through optimising non-aeronautical revenue and airport precinct development. Failing that, other justifications relating to social or economic benefits could be supported, should there be sufficient willingness for local or provincial government to cover associated costs. Where neither financial viability nor socio-economic justification can be achieved, alternative uses for such assets should be investigated, with due regard to the high cost of developing a new airport to cater for future demand.

# 6.4 FUNDING OF AIRPORTS AND PRIVATE SECTOR PARTICIPATION

# 6.4.1 "User pays" principle

# (a) Background

Due to the diversity of the sustainability and viability factors which apply to the development, ownership and control of an airport, different considerations may play a role in determining the most suitable funding model.

International experience indicates that successful providers of infrastructure services generally operate these services on commercial principles and have four basic characteristics, namely, focused goals, financial independence, management autonomy and accountability for results.

# (b) Issue

In the White Paper on National Transport Policy, airports are classified as "economic infrastructure". As such, the principle of "user-pays" or cost recovery directly from users could be applied, where possible.

Economic infrastructure is economic in the sense that there are important links between the availability of this infrastructure and the potential for economic activity and growth. Where possible and appropriate, the "user-pay" principles mean that tariffs will have to be set in accordance with the cost of providing a service. This principle need to be applied with due regard to a reasonable rate of return.

At present many South African airports do not base their charges on the cost of providing services and are not run on acceptable business principles. Sound financial management and accountability will have to be introduced at all airports to enable airports to move towards the introduction of the "user-pays" principle.

# (c) Policy Statement on "user pays" principle:

#### PS. 16

The "user-pays" principle in respect of services rendered at cost-related levels should be introduced at all airports, where feasible. When implementing this principle, the rate of return must be pre-determined based on acceptable business principles applicable to this sector to ensure that it does not yield a disincentive for efficient service provision.

# 6.4.2 Government and private participation in airport funding and operations

# (a) Background

Demands on the Government's funds are high, and current Government priorities are focused more on the need to provide for basic needs. Alternative and innovative methods of funding airport development, maintenance and operations will therefore have to be developed.

Airports differ in their suitability and economic viability for recovering costs through the "user-pays" principle, and/or directly recovering investments made by the private-sector. Accordingly, a distinction has to be made between:

- utility airports generating no revenue, and requiring government funding or a "subsidy";
- airports suitable for indirect "user-pay" arrangements, e.g. concession fees, local levies and tax; and
- airports that can be fully financed through private-sector investment.

# (b) Issue

At present there are no specific incentives for investing in airports.

The funding of provincially and locally owned airports is currently perceived as a challenge. Private financing is required to ease the burden on government financing, but it will also encourage better risk sharing, accountability, monitoring and management. However, it is important to note that financial viability is a prerequisite for private-sector involvement.

(c) Policy Statement on funding sources and private participation strategies:

# PS. 17

Local and international private sector participation in the provision and operation of airport infrastructure should be encouraged in all spheres of government.

Airports should also be permitted to operate under a range of types of management and control, allowing airports some flexibility in their business model, but without risking the core aeronautical activities of such airport.

# 6.4.3 Government funding of airports

# (a) Background

Following the establishment of ACSA, national Government's current direct financial role in airports has been limited to that of majority shareholder in ACSA and economic regulation of the charges that ACSA levies on users of its facilities.

In the broader context DOT is responsible for the development and management of the National Airports Development Plan. It will be essential for the Government to assist and appropriate funds to meet stated national strategic objectives so as to give effect to this Plan.

In addition, provinces and municipalities own an estimated 100 airports within the South African airport network, only some of which have private sector participation in their maintenance and operations.

#### (b) Issue

Due to fiscal constraints in the short to medium terms, and the "user pays" principle, national government is not in a position to fund airport operations. Provincial and municipal authorities have insufficient funds to allocate to airports they currently own, as the limited funds available are allocated to other social priorities. Many of these airports are ill-equipped to serve local communities both socially and commercially.

# (c) Policy Statement on government funding of airports:

# PS. 18

National Government should not provide any direct operational funding for any airport. National Government as responsible owner/shareholder of certain airports must, however, continue to meet its obligations in respect of large scale capital expansion of such airports or development of a new airport when further expansion is not possible to meet market demand, when required.

The provinces and the municipalities should remain responsible for prioritising their funding requirements in accordance with their established needs, including aviation infrastructure needs for the facilities these authorities plan, own and operate.

#### 6.4.4 International Donor Funding and Partnerships

#### (a) Background

The Department of International Relations and Cooperation (DIRCO) co-ordinates donor funds, grants and donations to all spheres of government. This includes funds to parastatals, which are linked to Government. DIRCO will commit these funds to the different departments as agreed. However, the establishment of direct relations would encourage the direct flow of funds to the private sector, non-governmental/community-based organisations, research institutions and research units at universities.

The encouragement of partnerships could also open avenues to obtain international funds and expertise.

#### (b) Issue

Donations from international sources and concessionaire funds are also options for the funding of infrastructure development. However, these options have to be carefully evaluated, as their use may distort priorities. There are many instances worldwide, where international funding has led to the development of inappropriate infrastructure.

#### (c) Policy Statement on international donor funding and partnerships:

# PS. 19

The use of international donor funds should be in line with national policies and priorities. In addition, partnerships at new and existing airports between the public and private sectors as well as local and international investors should be encouraged in all spheres of government.

# 6.5 AIRPORT LICENSING OR REGISTRATION

# (a) Background

Annex 14 to the Chicago Convention contains SARPs for the design and operation of airports used for international civil aviation. South Africa is obliged to conform to these standards at international airports. From a safety and security perspective it is highly desirable that such standards are applied to licensed domestic airports.

In terms of current legislation, SACAA has to ensure minimum aviation safety and security standards at licensed airports and heliports. To assist with fulfilling this obligation, a licensing system has been adopted in terms of which airports meeting certain safety and operational criteria are authorised to accommodate aircraft movements on and within a predefined airspace in the immediate vicinity of an airport.

Licensing of airports is restricted to the aviation safety and security aspects of an airport. It therefore follows that SACAA does not involve itself directly with the other elements of project development, such as land-use planning and environmental assessments, nor does it fall within the ambit of SACAA's responsibility to ensure compliance with other authorities in this regard. In terms of the Constitution of South Africa these issues are mainly to be managed by national, provincial and/or local government.

#### (b) Issue

It is recognised that the vast majority of airports in South Africa are currently unlicensed. These airports play an important role especially in respect of aircraft used for sport, recreation and private use, but in some cases also support air services for indirect reward. From a safety and security perspective, a revised airport licensing and registration system is needed to record all landing facilities, and where appropriate, to regulate the standards and operations of such facilities. Standards for the various types of facilities need to be set at an appropriate level, given the type of operations taking place at the relevant facility.

(c) Policy Statement on airport licensing and registration:

#### PS. 20

The current airport licensing system should be reviewed and aligned with the National Airports Development Plan and the National Airspace Master Plan. All airports should be required to obtain appropriate aerodrome licences or to be registered. To this end, criteria for licensing and registration would be different for different types of airports.

Unlicensed airports that accommodate air services for reward (direct and indirect) should be licensed. In addition all airports situated within a specified distance, to be prescribed in terms of the Civil Aviation Regulations, of the geographical footprint of any Terminal Area (TMA) or Control Zone (CTR) of an existing licensed airport, must be licenced after all airspace and interdependency aspects, including master planning, have been considered.

# 6.6 DESIGNATION OF AIRPORTS AS INTERNATIONAL PORTS OF ENTRY

#### (a) Background

Airports in general are classified in a number of ways, depending on their functional characteristics as referred to in the Constitution, airport licensing system and Annex 14 of the Chicago Convention.

International airports are designated *ports of entry* where the necessary facilities and services are provided to accommodate international flights. The ownership of an international airport may be vested in all spheres of government as well as in the private sector.

To address border control issues effectively, the Cabinet decided in 1998 to rationalise the ports of entry. This decision restricted the number of international airports to ten. At present these airports are distributed among the nine provinces of South Africa, with two in Gauteng.

#### (b) Issue

Due to the reduction in the number of international airports, the current ten international airports are also used by aircraft operators utilising small aircraft for the sole purpose of customs and immigration clearance. Due to increased congestion at the international airports (especially in Gauteng), additional airports may need to be designated as ports of entry, and the feasibility of establishing "regional-international" airports in order to facilitate small aircraft movements to and from Southern African Development Community (SADC) need to be investigated.

(c) Policy Statement on Designation of Airports as International Ports of Entry:

#### PS. 21

The framework for the designation of international airports (ports of entry) in respect of existing domestic and planned new international (green-field) airports should form an integral part of the National Airports Development Plan and provide for the criteria and requirements for the development and designation of such airports.

The Department of Transport, in consultation with all relevant Organs of State, should investigate the feasibility of providing for "regionalinternational" airports as a sub-set of international designation in order to facilitate small aircraft movements between South Africa and Southern African Development Community States, factoring in all relevant national security implications and imperatives. As is the case with international airports, the feasibility of regional-international airports must show financial viability with sufficient demand for passenger and freight air services.

# 6.7 FACILITATION

# (a) Background

From a consumer's point of view, efficiency at an airport is measured by how well an airport operator facilitates the arrival and departure of aircraft, people, cargo and other articles at airports. Annex 9 to the Chicago Convention requires the establishment of a National Air Transport Facilitation Committee and Airport Facilitation Committees as required, for the purpose of coordinating facilitation activities between departments, agencies, and other organizations of the State concerned with, or responsible for, various aspects of international civil aviation as well as with airport and aircraft operators.

In order to give effect to this requirement, South Africa established the National Air Transport Facilitation (NATF) Committee.

#### (b) Issue

Ineffective or lack of proper facilitation at airports is one of the main causes of consumer complaints in respect of a number of activities or services ranging from passenger and baggage handling, customs and immigration services, security screening, retail business, ground transport, and ability to meet the general needs of persons with disabilities as well as accommodating well-wishers, 'meeters' and 'greeters'.

#### (c) Policy Statement on Facilitation:

#### PS. 22

The Department of Transport should enhance the role and functions of the current National Air Transport Facilitation Committee.

The airport licensees/airport operators of airports serving international air services may be required by the National Air Transport Facilitation Committee to establish Airport Facilitation Committees for the purpose of coordinating civil aviation facilitation matters at airport level. These committees, chaired by the airport licensees/airport operators, will be composed of local representatives of the major stakeholders in civil air transport facilitation at such airports.

# 6.8 AIRPORT EMERGENCY MANAGEMENT PLANS

#### (a) Background

Airport emergencies can often be exacerbated by human behaviour and operational processes, which increase risk and vulnerability. In many instances, emergencies tend to be seen as an expected result of poor risk management, instead of isolated occurrences.

Over the years, airport operators/licensees have developed a procedural approach to ensure they are prepared to deal with aircraft in distress while taking-off or landing, as aircraft are more vulnerable to distress at these times. The SARPs contained in Annex 14 to the Chicago Convention contains the standard emergency requirements, specifically at international airports, for fire-fighting and emergency medical services.

It is acknowledged that it is more effective to prevent and mitigate than to react to actual incidents. This acknowledgement has brought about a more holistic attitude to emergency risk management through multidisciplinary processes involving a wide range of stakeholders.

Airport and aircraft operations take place in a highly regulated safety environment. This alone, however, is not sufficient to deal with all the complexities of an aviation emergency. The key elements of emergency management in the context of an airport normally include the following:

- Prevention compliance with aviation safety regulations in respect of airport and aircraft operations, and factoring in disaster risk reduction and climate change in development and operations,
- Mitigation taking measures to minimise the destructive and disruptive effects of disasters, such as proper engineering, spatial planning or combating fire hazards,

- Preparedness the maintenance of inventories of resources, the training of staff, regular risk assessments and contingency planning or logistical readiness supported by an all hazard early warning system,
- Post Disaster Recovery and Rehabilitation such as search-and-rescue plans, medical care or handling the next of kin immediately after a disaster, and dealing with damage control, ensuring that systems will be operative again, and tending to the victims of the disaster.

# (b) Issue

The current airport emergency plans are mainly reactive and do not provide for the multidisciplinary and integrated processes which would ensure the co-ordination of plans, strategies and resources, and the building of capacity and knowledge to deal with emergencies. Similarly the concept of emergency management is not adequately provided for in development planning. These plans need to be integrated with the Local, Provincial and National disaster management plans. At the moment these exist in isolation from each other.

(c) Policy Statement on airport emergency management plans:

# PS. 23

All licensed airports, unless exempted by regulation, must prepare, implement and maintain an emergency management plan. Where appropriate, the plan should also incorporate and integrate the emergency management plans (or similar planning) of all air carriers providing air transport services to such airport. These plans also need to be integrated with the Local, Provincial and National disaster plans.

# 6.9 USE OF MILITARY AIRPORTS FOR PURPOSES OF CIVIL AVIATION AND FINANCIAL RESPONSIBILITY FOR EXCLUSIVE MILITARY UTILISATION OF CIVIL AIRPORT FACILITIES

#### (a) Background

The SANDF has reduced its activities and withdrawn from some airports, but in many cases civil airports are still being used for military purposes.

In terms of Part 139.01.2(1) of SA-CAR and subject to the approval of the Minister of Defence, the controlled use of military airports may be authorised for civil aviation purposes, provided certain conditions are met.

Similarly, civil airports may be used for military purposes in accordance with the rules and regulations applicable to all users. In respect of certain civil airports, however, the provision, operation and maintenance of a portion of the facilities, equipment and services are for the sole benefit of the SANDF.

#### (b) Issue

The following issues need to be addressed:

- The operational conditions under which some of the SANDF facilities could be used for the benefit of civil aviation while ensuring that the functioning of the SANDF would not be prejudiced.
- The exclusive use of certain facilities at civil airports for military purposes and the financial responsibility of the SANDF in matters related thereto.
- (c) Policy Statement on the use of military airports for purposes of civil aviation and financial responsibility for exclusive military utilisation of civil airport facilities:

#### PS. 24

Where there is a demand, the co-use of military airports for civil aviation purposes could be negotiated where practical, provided that military utilisation of the facilities would at all times have priority. However, it is not intended that the military should enter the business of providing airport facilities for the purposes of civil aviation, or that the civil use of any military facility should interfere with the constitutional responsibilities of the SANDF.

The SANDF should accept financial responsibility for the exclusive military utilisation of facilities at civilian airports.

# 6.10 COMMUNICATION AND CONSULTATION<sup>4</sup>

#### (a) Background

To enable sustainable airport development and operation, it is vital to have adequate and on-going consultation and liaison with the stakeholders concerned.

The Committee of Transport Officials (COTO), a consultative forum between the national and provincial governments, has been established with responsibilities for *inter alia* airports, airspace and civil aviation in general.

International relations are the responsibility of the national Government. These include relations with neighbouring countries, other foreign countries and international and regional aviation organisations such as ICAO, African Union (AU), the African Civil Aviation Commission (AFCAC) the Southern African Development Community (SADC)

<sup>&</sup>lt;sup>4</sup> Please also note Section 12.1 "ESTABLISHMENT OF AIRPORT ENVIRONMENTAL COMMITTEES"

and its various Committees (Civil Aviation Committee, etc.) and various other African Regional Economic Communities.

# (b) Issue

In some cases there are no fora for consultation about airport operations and in others, they do not function consistently at all airports.

At present the processes and responsibilities for communication and consultation on airport and airport operational matters are non-existent or not clearly defined or inoperative.

Due to the influence of the larger airports on their environment and the important transport and economic role they play, a number of authorities and organisations have an interest in or are affected by airports and their operations. A consultative forum for such authorities and stakeholders, where deliberations could take place and information be exchanged, would be beneficial.

# (c) Policy Statement on communication and consultation:

# PS. 25

Government should encourage the establishment of consultative fora at licensed airports to facilitate consultations between all stakeholders, including airport licensees, airport operators, aircraft operators, other service providers and the travelling public.

# 6.11 ECONOMIC REGULATION OF AIRPORTS

# (a) Background

Economic regulation, as a form of Government intervention, means the regulation of tariffs and market entry on grounds other than safety and security considerations.

The White Paper on National Transport Policy states that it is Government's intention to regulate only where it is essential. Furthermore, the benefits of regulation need to outweigh the costs. The said White Paper spells out the principles of regulation, and indicates the areas in which Government will engage in regulation. These are as follows:

- Regulation of monopolies: Government has a duty to ensure that proper tariffs are levied and to set service and safety standards; and
- Regulation of operations of competing operators: The role of Government will be to ensure level playing fields and to regulate safety and security, thereby leaving the operator as much freedom as possible to provide the customer services demanded in a competitive environment.

The Regulating Committee regulates the maximum tariffs and minimum levels of service for the core services which ACSA renders. The Competition Authorities play an overall role in the economy to address anti-competitive practices.

#### (b) Issue

The most appropriate approach to economic regulation of all South African airports needs to be determined.

(c) Policy Statement on economic regulation of airports:

#### PS. 26

The economic regulatory mechanisms applicable to ACSA airports, as reviewed from time to time, are endorsed. The conduct of airports, other than those economically regulated, may be subject to oversight or investigation by the Competition Authorities to avoid abuse of market dominance.

# 6.12 ALLOCATION OF ROLES AND RESPONSIBILITIES

#### (a) Background

In determining the relative roles and responsibilities of Government and other institutions, it is important to consider the existing legislation. Schedule 4 of the Constitution lists airports, other than international and national, as being of concurrent national and provincial legislative competence. Schedule 4 part B of the Constitution lists local government responsibilities as including municipal airports.

# (b) Summarised statement on the allocation of roles and responsibilities in respect of airports

Entity	Role / Responsibility
Department of Transport (DOT)	<ul> <li>The establishment of the National Airports Development Plan.</li> <li>The establishment and enforcement of norms and standards through SACAA in line with ICAO SARPs, covering the following:         <ul> <li>Safety regulation and aviation security, including an airport licensing and registration system;             <ul> <li>airport emergency management plans; and</li> </ul> </li> </ul> </li> </ul>
	<ul> <li>The co-ordination of relations with –</li> <li>neighbouring countries and bodies, including consultation with the provinces where appropriate;</li> </ul>

The roles and responsibilities in respect of airports are allocated as follows:

	<ul> <li>foreign countries and international bodies, such as ICAO, but has an obligation to inform and consult provincial authorities where matters are likely to have a direct impact upon provinces;</li> <li>other government departments, in particular the military (SANDF); and</li> <li>all relevant role players in respect of DOT's responsibilities and functions.</li> <li>ensuring the economic regulation of ACSA and other airports, as and when necessary, through the Regulating Committee.</li> <li>In performing its functions and responsibilities, DOT will consult with stakeholders.</li> </ul>
Provincial Governments	<ul> <li>Responsible for planning, developing and integrating new airports (regardless of ownership) into their provincial transport and economic development plans. However, where the plans of two provinces contradict each other or where one plan is likely to prejudice another, or if plans are contradictory or prejudicial to the National Interest, National Government has, in terms of the Constitution, the right to intervene and rule in the National Interest. Provincial Governments are also responsible for feedback to and co-ordination between provincial, municipal and private airports, where necessary.</li> <li>Provision and maintenance of provincial sport and recreational facilities in terms of Constitutional jurisdictions and Department of Sport &amp; Recreation's "Norms and Standards for Sport and Recreation Infrastructure Provision and Management" (however, recreational airports not currently included in the listed sports and</li> </ul>
District and local municipalities	<ul> <li>recreational codes)</li> <li>Planning for municipally-owned airports, and selection of appropriate funding, management and operational models for these airports in line with processes set out in the Municipal Systems Act</li> <li>Planning for and maintenance of municipal sports and recreational facilities in terms of Constitutional jurisdictions and the recommended local facilities strategy and quantitative assessment and comparison utilisation levels and participation patterns in the Department of Sport &amp; Recreation's "Norms and Standards for Sport and Recreation Infrastructure Provision and Management"; in the case of under-utilised facilities they may be considered for informal community open space use prior to being</li> </ul>

	released for other land uses (however, recreational airports not currently included in the listed sports and recreational codes)
Airport licensees	<ul> <li>The implementation of the relevant norms and standards set by DOT, SACAA and the Provincial and Municipal Governments. This responsibility may be delegated to the airport operator if the operator/licensee is not the owner;</li> <li>Ensuring that adequate security is in place at their airports in accordance with the SA-CARs and NASP, as applicable;</li> <li>Prepare, implement and maintain disaster management plans; and.</li> <li>Establishing consultative forums to allow for consultation and an exchange of information between stakeholders and authorities on airport development and operation.</li> </ul>

# 7 INTEGRATION OF THE AIRPORT INTO ITS SURROUNDINGS

# 7.1 INTRODUCTION

This key policy area addresses the interaction between an airport and its environment and vice versa, and attempts to deal with all the aspects of land-use, which are not *directly* related to the operation of the airport. It should, however, be borne in mind that this policy area deals with issues which are normally local in scope and specific to given circumstances. These issues are included in the national policy as a uniform approach to specific principles is required nationally and the airport has to be seen in its wider context, as an important component of the multi-modal transport system as well as a facilitator of economic development throughout South Africa.

The airport environment in broad terms refers to the vicinity or area of influence of an airport. As such, the area of influence of an airport includes the airside as well as the landside of the airport. It also includes the geographic areas surrounding the airport, which are directly or indirectly affected by the airport or airport operation and vice versa. It therefore follows that the policy under this theme includes integrated development planning, land use on and around the airport and local emergency- and bulk municipal services, and development of the airport precinct and surrounding areas.

Airport activities in general and aircraft operations in particular could have a major impact on the local environment as a whole. This subject is addressed in Chapter 12 of this White Paper.

The direct impact of the airport on its vicinity and vice versa is normally not as complex and problematic in the rural areas as in the metropolitan and urban areas. Consequently the national policy is focused more on the metropolitan and urban areas to facilitate the integration of the airport into its built environment and to ensure optimal utilisation of the development opportunities which the airport presents.

It is necessary to distinguish between different types of airports for which the vicinity issues are of prime concern, namely:

- International airports, i.e. airports serving international travellers and the economy of the country and region as a whole.
- Other airports located in an urban built environment, i.e. airports located in metropolitan or urban areas and residential areas, which have a major impact on their direct surroundings and the residents of these areas.

# 7.2 INTEGRATED DEVELOPMENT PLANNING

# 7.2.1 Integrated Metropolitan and Local Planning

#### (a) Background

An airport can be viewed as an important modal transfer facility and significant to land use. An airport, particularly an airport with high activity levels, has a significant impact on the land transport system and on the land use in its vicinity. For this reason the planning of an airport needs to form part of the overall development planning of the area. In particular, there needs to be a balance between the airport's interests and those of stakeholders in the vicinity of the airport. This balance implies the following:

- The airport needs to fit into and be in harmony with its environment.
- The authorities responsible for the area surrounding the airport needs to facilitate the integration of the airport into its environment and, in their own interest, support the development and effective operation of the airport.

This approach needs to ensure that all major role players (airport licensees and local/provincial authorities) would strive to integrate the airport into its environment. The obligation placed on the authorities in this regard arises from the benefits that local communities would gain from an airport which is well integrated into its environment. This approach ensures that the airport and the airport licensee/operator comply with the framework of existing legislation relating to matters in the vicinity of the airport.

The Spatial Planning and Land Use Management Act of 2013 (Act No. 16 of 2013) (SPLUMA) specifies the relationship between the spatial planning and the land use management system and other kinds of planning e.g. to address past spatial and regulatory imbalances; promote greater consistency and uniformity in the application procedures and decision-making by authorities responsible for land use decisions and development application. The Municipal Systems Act requires spatial development frameworks and detailed plans reflecting actual land use and provincial planning ordinances and municipal by-laws must be followed during airport development planning processes.

DOT and provincial government departments responsible for transport have joint competence for transport planning and an airport would form part of the national, provincial and local transport system. The White Paper on National Transport Policy, 1996, indicates that detailed transport planning needs to be done at the local level to complement the land-use planning and control for which municipalities are responsible.

For airport planning, a distinction is made between a master plan, a precinct plan and an airport development plan (or implementation programme):

• A master plan does not only deal with aviation matters, but more importantly, also deals with the ultimate, strategic 'end-picture' of an airport. It may therefore

include aviation and non-aviation matters. At present these Master Plans have no legal status in terms of land use planning.

- A precinct plan integrates technical and artistic aspects of the design of a specific precinct at an airport at a deeper level of detail than a master plan. It may be prepared for either an aviation related precinct or a purely commercial precinct, or a combination thereof.
- An airport development plan or implementation programme addresses all the elements contained in the master plan and also in the various precinct plans, but has a particular focus on the medium term and tactical steps around implementation towards the vision as captured in the master plan.

# (b) Issue

Problems arise, such as the sub-optimal use of scarce resources, when airports are planned in isolation from the development planning undertaken for the area in which they are established, or if an airport development is planned without due regard to municipal planning relating to where the airport will be located. Likewise, problems arise when municipal developments and transport plans do not take account of the long-term needs, growth projections and environmental impact of airport activities.

In addition, the potential of wider airport precincts to support both aeronautical activity and non-aeronautical revenue, in order to improve the sustainability of airports, is not yet being fully realised. However, in order for developments such as airport precincts, airports cities and aerotropolises to be viable, they need to take into account their local economic context and LED plans, be demand driven, and be coordinated effectively with public and private partners, and make use of joint spatial planning.

#### (c) Policy Statement on integrated metropolitan and local planning:

#### PS. 27

Provincial and municipal government should jointly incorporate airports as part of a holistic planning approach to the total transport system and the environment in which the airports are located, and ensure that airports would be included in the formulation of spatial development frameworks in terms of the Spatial Planning and Land Use Management Act, the Integrated Development Plans (IDPs) and Local Economic Development Plans. In addition, airports should be included in all transport plans prepared in terms of the National Land Transport Act (and the proposed Multi-modal Transport Planning and Co-ordination Act).

# 7.3 PROVINCIAL TRANSPORT PLANNING

#### (a) Background

In terms of the Constitution, provincial government has legal competence for, *inter alia*, provincial planning and public transport planning.

#### (b) Issue

The planning of areas in the vicinity of airports has mainly a local impact. Where municipalities have the capacity to undertake the detailed planning themselves, the province may choose devolve this function to this sphere of government. However, Provinces remain responsible for ensuring effective planning, particularly for the higher activity or more significant airports within their jurisdiction.

The transport planning functions of provinces with respect to airports have to be clarified. This applies to a wide spectrum of matters including the planning of airports as part of the provincial transport network. It must also be noted that an airport may be physically located in one geographical area and yet impact directly on another when dependencies such as airspace utilisation (flight paths) are considered.

#### (c) Policy Statement on provincial transport planning:

#### PS. 28

Provincial Governments should include airports in their provincial transport plans and also include the policies and strategies relevant to airport development for all airports in the relevant Provincial Transport Framework and in the provincial development plans. Airport development should be included in the spatial development frameworks.

Where new airport developments are scoped as national and international airports, Provinces need to seek National Government's approval for the demarcation of the particular area for the development of such aerodrome, as guided by the National Airports Development Plan.

# 7.4 LAND USE ON AIRPORTS AND LAND USE AROUND AIRPORTS

#### (a) Background

There are a growing number of commercial developments at and around airports, including offices, shops, tourism facilities, hotels, restaurants, fuel stations and warehouses. These developments are often motivated by the need to optimise utilisation of the available land, and to maximise non-aeronautical revenue.

#### (b) Issue

Land-use developments around airports often encroach upon the airport, making it difficult to extend the airport or to use it to its full potential in future. Local authorities in the past have not always been successful in controlling inappropriate land-use developments in the areas adjacent to and affected by airports. This may have related to different planning cycles for airports and local municipalities, a lack of knowledge of airport operations by some municipalities, or a lack of enforcement capacity.

Clarity is needed about the responsibilities and powers of airport licensees in connection with the development of land uses not related to aviation land-use on the airport precinct.

There is a need to control land-use development at airports and in the areas adjacent to and affected by airports, and to ensure appropriate and compatible developments, as the land-use needs of airports differ greatly from those of residential or industrial areas.

In addition, land use can be optimised to increase the economic contribution of airports, including through development of airport cities and aerotropolis urban subregions with an integrated economy, mixed use developments and integrated transport.

(c) Policy Statement on land use on airports and land use around airports:

# PS. 29

The airport licensee/operator should develop the airport development plan, airport master plan and precinct plans of the airport for any new developments in consultation with the responsible local government, as well as the SANDF, if applicable.

The Master Plan should enable long-term planning, such as 50 years. The airport licensee/operator should be responsible for informing the responsible municipality of the obstacle-free zone which is determined in accordance with the regulations under the Aviation Act.

The authorities responsible for land-use planning and control in the vicinity of an airport should ensure that the future zoning of areas close to the airports would be compatible with the airport development. This should be addressed by means of the appropriate Land Development Objectives, the Integrated Development Plans and inclusion of master plans into spatial development frameworks.

# 7.5 LOCAL EMERGENCY SERVICES AND BULK MUNICIPAL SERVICES

# (a) Background

Municipalities are responsible for determining and assessing risks and for ensuring that there are adequate emergency services in their area of jurisdiction. The relevant municipalities would have to assist with providing emergency medical and fire-fighting services in any major incident requiring emergency services at or in the vicinity of an airport.

The airport is in most instances a user of essential bulk municipal services.

# (b) Issue

The planning of emergency services at an airport is not always properly co-ordinated with the emergency services of the municipalities in the vicinity of the airport.

The functions allocated to the provincial and the local spheres of government for the rendering of emergency services are sometimes controversial, and need to receive on-going attention.

# (c) Policy Statement on local emergency services and bulk municipal services:

# PS. 30

The licensees/operators of airports should plan and monitor their emergency services, as well as the required bulk municipal services, in consultation with the relevant municipal and provincial governments which are responsible for emergency medical, fire-fighting and disaster management services. The municipalities concerned should ensure that these services are integrated into their own disaster management plans.

# 7.6 ALLOCATION OF ROLES AND RESPONSIBILITIES

# (a) Background

Policy and legislation are already in place and provide for functions in relation to transport matters to be allocated between the different spheres of government. The summarised statement below is intended to align the airport-related responsibilities emanating from the preceding policy statements with the established transport policy and legislation, and clarifies them where necessary.

# (b) Summarised statements on the allocation of roles and responsibilities for the integration of an airport into its environment

In line with the National Land Transport Act<sup>5</sup>:

Entity	Role / Responsibility
Department of Transport (DOT)	<ul> <li>DOT would have the following functions pertaining to integrated planning for airports and overarching functions pertaining to public transport:         <ul> <li>Drafting national policy and national legislation,</li> <li>Establishing norms and standards,</li> <li>Conducting transport research,</li> <li>Developing national guidelines on the provision of access to airports, and</li> <li>Developing national guidelines on the inclusion of airports in transport plans and transport frameworks.</li> </ul> </li> </ul>
Provincial Governments	<ul> <li>Drafting provincial transport/traffic policy and legislation,</li> <li>Planning the airports on a provincial macro scale (e.g. location, including the effect of adjacent airports on one another), and determining the community's needs,</li> <li>Setting provincial norms and standards for the landside of the airports,</li> <li>Ensuring that airport planning is included in Spatial Development Frameworks,</li> <li>Including airport planning and operation in the Provincial Transport Framework,</li> <li>Ensuring, where appropriate and within budgetary and priority constraints, the planning, design, construction and funding of road access to serve the airport,</li> <li>Ensuring and controlling the provision of public transport services, where warranted,</li> <li>Co-ordinating the land-use planning and transport planning in the areas adjoining the airports, and</li> <li>Legislating for the environmental impact requirements.</li> </ul>

<sup>5</sup> In future, this may be replaced by the proposed Multi-modal Transport Planning and Coordination Act

Entity	Role / Responsibility
Local Governments	<ul> <li>Ensuring compatible land-use zoning and control,</li> <li>Ensuring that airport development is included in land-use zoning schemes, and transport- and land use plans,</li> <li>Planning and controlling road and pedestrian access to new and existing airports,</li> <li>Controlling the environmental impact,</li> <li>Controlling public transport services,</li> <li>Managing and enforcing road traffic legislation in public areas,</li> <li>Planning bulk services and emergency services in accordance with disaster management plans to serve the airport, in consultation with the airport licensee,</li> <li>Managing and controlling access to public transport, and</li> <li>Planning public transport to ensure that services are provided and monitoring such transport in terms of approved Integrated Transport Plans (ITPs).</li> </ul>

# 8 AIRSPACE

# 8.1 INTRODUCTION

In terms of Article 1 of the Chicago Convention, every contracting State has complete and exclusive sovereignty over the airspace above its territory. In terms of Article 2 of the Convention, the territory of a State includes the land areas and territorial waters adjacent thereto, under the sovereignty, protection or mandate of such State. South African airspace is therefore the airspace above the land areas and the territorial waters adjoining them, comprising the Republic of South Africa.

A system of air traffic services (ATS) and air navigation services (ANS) is in place in order to ensure orderly, efficient, safe and secure aircraft movements in the South African airspace. ATS is a generic term with several meanings, such as a flight information service, an alerting service, an air traffic advisory service and/or an ATC service (area control service, approach control service or aerodrome control service). ANS is the collective term for the provision and maintenance of air navigation infrastructure and facilities, such as radar, radio navigational beacons and telecommunication infrastructure. ATS and ANS are part of the Communication, Navigation and Surveillance/Air Traffic Management (CNS/ATM) system.

In terms of ICAO resolutions and regional arrangements (agreements) in this regard, portions of airspace above the high seas, which are of undetermined sovereignty, have been delegated to the South African Government for the purposes of providing technical support, such as during Search and Rescue (SAR) operations.

Therefore the policy set out in this section applies to aviation and related activities in the airspace (South African and the area assigned by ICAO to South Africa for technical support) described above. This airspace is shown in Figure 2 below.



White Paper on National Civil Aviation Policy: February 2017

# Figure 2: South African airspace

In terms of the current institutional arrangement applicable to civilian airspace and airspace management, the Minister has, from an aviation point of view, many roles to perform, namely as a strategy planner, policy provider and regulator and in addition also to represent the State as shareholder in the Air Traffic and Navigation Services (ATNS) Company.

Figure 3 illustrates this relationship as well as the relationships of the other civilian role players. [Note that there is close collaboration between the SANDF (South African Air Force) and the DOT on all airspace related matters, including *flexible use of airspace*.]

The Regulating Committee is responsible for the economic regulation of ATNS whereas SACAA is the safety regulator for the management and provision of ATS and ANS in South Africa.



# Figure 3: Institutional arrangement for regulating civilian air traffic and navigation services

# 8.2 GLOBAL ATM OPERATIONAL CONCEPT

ICAO has adopted the operational concept of air traffic management (ATM) to guide the implementation of CNS/ATM technology and know-how further on a global scale. The concept describes the services that will be required to operate the global air traffic system, of which South Africa is a part, up to and beyond 2025. It addresses what will be required to increase user flexibility and maximise operating efficiencies so that system capacity can be increased and safety levels improved in the future air traffic management system.

The system is characterised by strategic and tactical collaboration in which the appropriate members of the ATM community will participate in defining services and service levels. This will also lead to sharing the information required for future decision-making.

The ATM system will be based on the provision of integrated services and the concept contains the following operational system components:

- Airspace organisation and management the establishment of airspace structures to accommodate the different types of air activity, volume of traffic and the various levels of service;
- Airport operations the provision of the necessary ground infrastructure, including lighting, taxiways, runways and runway exits, and precise surface guidance to improve safety and enable the efficient use of an airport's capacity;
- Demand and capacity balancing the strategic evaluation of system-wide traffic flows and airport capacities to allow airspace users to determine when, where and how they will operate, while mitigating conflicting needs for airspace and airport capacity;
- Traffic synchronisation the tactical establishment and maintenance of a safe, orderly and efficient flow of air traffic;
- Airspace user operations dealing with the ATM-related aspect of flight operations;
- Conflict management addressing strategic conflict management by means of organising and managing the airspace, balancing demand and capacity, synchronising traffic, providing for separation and avoiding collisions; and
- ATM service delivery (ATMSD) management will address the seamless operation from gate to gate for all phases of flight and across all service providers, by balancing and consolidating the decisions of the various processes/services.

Management of the above must be conducted in close coordination and cooperation with the SANDF to ensure that national security aspects and other related military initiatives are not compromised.

The 37<sup>th</sup> General Assembly of ICAO held in 2010 identified the need for global airspace interoperability while maintaining focus on aviation safety. At the 38<sup>th</sup> ICAO Assembly held in October 2013, the revised Global Air Navigation Plan (GAMP) was approved.

ICAO has subsequently initiated the Aviation System Block Upgrades (ASBU) initiative as a programmatic framework that develops a set of air traffic management solutions or upgrades, takes advantage of current equipage, establishes a transition plan and

enables interoperability. The aim is to assist Member States to follow a programme of implementation which will support harmonisation and global interoperability.

ASBU is a set of operational improvement modules that can be implemented globally according to flexible timelines to enhance the performance of the Air Traffic Management system (ATM). The high-level summary of the ASBU framework includes modules describing operational improvements over a series of blocks, supported by technology roadmaps, which serve to progressively enhance many aspects of civil aviation operations; including ICAO Standards and Recommended Practices (SARPs). To standardise future work done, the ASBU focusses on broad timescales associated with the ASBU framework (Block 0 = 2013, Block 1 = 2018, Block 2 = 2023, Block 3 = 2028). It also specifies key performance areas, which are as follows:

- Greener Airports;
- Globally interoperable systems and data through interoperable System-wide Information Management;
- Optimum Capacity and Flexible Flight through global collaborative ATM
- Efficient Flight Path through trajectory-based operations.

Figure 4 illustrates the timing of each Block relative to each other, with Blocks 1 and 2 representing the most mature of the Modules.





Performance Based Navigation (PBN) is one of several enablers of an ATM Operational concept, the others being communications, navigation, surveillance and Air Traffic Management. The concept of PBN specifies that aircraft RNAV/ RNP/ RNP AR system performance requirements be defined in terms of accuracy, integrity, availability, continuity and functionality required for the proposed operations in the context of a particular airspace concept, when supported by the appropriate navigation

infrastructure. In that context, the PBN concept represents a shift from sensor-based to performance based navigation. Performance requirements are identified in navigation specifications, which also identify the choice of navigation sensors and equipment that may be used to meet the performance requirements.

Under PBN, generic navigation requirements are defined based on operational requirements where after operators evaluate navigation solution options allowing the solution to be the most cost effective for the operator as opposed to a solution being established as part of the operational requirements. PBN offers a number of advantages over the sensor-specific method of developing airspace and obstacle clearance criteria, including a reduction in the need to maintain sensor-specific routes and procedures and their associated costs, negates the need for development of sensor-specific operations with each new navigation system and will allow for more efficient use of airspace, e.g., route placement, fuel efficiency, noise abatement, reduction of greenhouse gas emissions, etc.

The ATM Operational Concept is intended to give distinct benefits for all members of the ATM community and sets the scene for the policy formulation to follow.

# 8.3 ESTABLISHMENT OF AIRSPACE

#### (a) Background

ICAO has as its aim the development of the principles and techniques of international air navigation so as to ensure, *inter alia*, the safe and orderly growth of international civil aviation. Accordingly, ICAO provides SARPs for the operation of international air navigation. South Africa, as signatory to the Chicago Convention, and thus a member of ICAO, is obliged to comply with these SARPs. The Annexes and other documentation that are specifically relevant to airspace matters include amongst others the following:

- Annex 1 : Personnel Licensing;
- Annex 2: Rules of the Air;
- Annex 3: Meteorological Services for International Air Navigation,
- Annex 4: Aeronautical Charts;
- Annex 5: Units of Measurement to be Used in Air and Ground Operations;
- Annex 10: Aeronautical Telecommunications;
- Annex 11: Air Traffic Services;
- Annex 12: Search and Rescue;
- Annex 14: Aerodrome Design Standards and associated Airport Planning Manual;
- ICAO Doc. 4444 PANS-ATM; and
- ICAO Doc 9426 ATS Planning Manual.

The Civil Aviation Act provides that the Minister of Transport is responsible for carrying out the provisions of the Chicago Convention, which forms part of this Act. In terms of the Civil Aviation Act, the Minister appoints a functionary and delegates the function of

designating airspace for the purposes of providing ATS in such airspace, to such person in terms of the regulations made under the Civil Aviation Act. The provision of ATS needs to be supported by the appropriate CNS/ATM system elements.

Current functions delegated by the Minister of Transport to the Civil Aviation Authority include:

- The Designation of airspace and airports for the purposes of providing ATS in such airspace and at such airports. This must be done in accordance with transparent procedures and in collaboration with the affected ATM Community.
- Safety oversight of the appropriate ATS as supported by CNS.

Current functions delegated by the Minister to ATNS include the provision of the required infrastructure and ATM service delivery.

#### (b) Issue

Due to the need for harmonisation of seamless airspace and safety requirements, control of upper airspace is centralised and needs to be a national function. The sphere(s) of government which would be responsible for giving effect to the abovementioned arrangements, and the manner in which these functions have to be performed need to be clarified.

# (c) Policy Statement on the establishment of airspace:

# PS. 31

The Minister of Transport remains responsible for giving effect to the provisions of the Chicago Convention, and for the standards and recommended practices contained in the relevant Annexes to the Convention, particularly with regard to the establishment of civilian airspace and related airspace matters. This will be executed in coordination with the Minister of Defence and Military Veterans to ensure that strategic national security needs are met.

# 8.4 COLLABORATION AND COMMUNICATION

#### (a) Background

To facilitate interaction between SACAA and the aviation industry, and between ATNS and the industry, three specialised working committees have been established:

• The Civil Aviation Regulations Committee (CARCOM) amongst others, advising the Minister on proposals with regard to the introduction of new regulations and amendment or withdrawal of regulations;

- the National Airspace Committee (NASCOM) assisting SACAA with all matters relating to airspace utilisation, including the designation of airspace in accordance with the National Airspace Master Plan; and
- the National CNS/ATM Co-ordinating Committee–responsible for structuring the National CNS/ATM Implementation Plan through ATNS, in order to facilitate the transition to CNS/ATM and ensure alignment with the regional CNS/ATM Implementation Plan.

#### (b) Issue

A proper communication system needs to be established that would ensure appropriate collaboration and participation in the planning and implementation of CNS/ATM systems.

(c) Policy Statement on collaboration and communication:

# PS. 32

The Department of Transport should ensure adequate collaboration between the members of the ATM Community concerning the harmonised planning and implementation of the key enablers of the ICAO ATM Operational Concept through the established National CNS/ATM Co-ordinating Committee in support of the National Airspace Committee and the Civil Aviation Regulations Committee respectively.

# 8.5 SUSTAINABLE PROVISION OF AIR TRAFFIC MANAGEMENT SERVICE DELIVERY (INCLUDING ATS AND ANS)<sup>6</sup>

# (a) Background

The provision of ATMSD is of national strategic importance to South Africa. International trends and technological developments, along with the strategic objectives and guiding principles noted above, dictate that national Government must ensure that ATS and ANS are provided, where required. There is also a need to ensure the most effective designation and management of airspace to ensure that the safest and most efficient service is provided to all users, in the interest of the State and the general public. This has informed the decision-making when delegating the responsibility for the provisioning of ATS and ANS.

<sup>&</sup>lt;sup>6</sup> Please also refer to Section 10.2 "AIRSPACE MATTERS FROM A NON-COMMERCIAL AVIATION PERSPECTIVE"

National strategic objectives require the optimal use of airspace and the associated infrastructure. This needs to be done in the most flexible manner with minimal constraints. This includes the promotion of seamless skies, integrated planning utilising collaborative decision-making, as well as ATMSD. Competition is also encouraged to facilitate improved service delivery, service related fees and increased efficiency.

The White Paper on National Transport Policy states that national Government will restrict its role to focus on policy and strategy formulation as well as substantive regulation (such as SACAA) while not directly involving itself in the operation and provision of these types of "economic" services and infrastructure. As is the case with airports, the principle of sustainability and viability in the provision of ATS and ANS is endorsed.

At present there are several ATS providers in South Africa. ATNS is the main provider and also the only source providing a comprehensive service involving all elements of ATMSD. In addition, certain provincial governments, the SANDF and some private organisations or persons provide ATS for the purposes of civil aviation.

ATNS was established in terms of the ATNS Company Act. The objectives of the Company are to acquire, establish, develop, provide, maintain, manage, control and/or operate ATS and ANS in addition to ATMSD. In August 1993, in terms of the said Act, the Minister of Transport formally transferred the responsibility for the maintenance and provision of ATS and ANS to ATNS.

With respect to aviation infrastructure, ATNS owns all en-route and approach control facilities whereas airport licensees/operators are responsible for the provision of landing aids.

Some of the provincial governments provide, *inter alia*, aerodrome control, aerodrome flight information and approach control services at certain airports that the relevant provincial governments own. The SANDF provides ATS primarily in military (special use) airspace and at military airports.

At any time, and in any given airspace, only one ATS unit may provide ATS services in that airspace. Monopolistic services are, however, properly and firmly regulated. For example, the Regulating Committee regulates the ATNS' service standards in terms of the ATNS Act.

#### (b) Issue

There is a need for the most effective designation and management of airspace in order to achieve a balance between safety, cost effectiveness, the environment and service efficiency, to the benefit of all users, and in the interest of the State and the general public. This requires national, regional and global integration through collaborative decision-making (CDM) and information management (IM).

The manner in which DOT ensures that the provision of ATS and ANS would be safe, sustainable and viable must be clarified.

(c) Policy Statement on the sustainable provision of air traffic management service delivery (including ATS and ANS):

PS. 33

Air traffic services and air navigation services should be provided on the basis of sustainability and viability. The cost of such services should be recovered from the users of these services in line with the "user-pays" principle where possible.

# 8.6 MILITARY PROVISION OF ATS

#### (a) Background

The SANDF is mandated and equipped chiefly to fulfil its primary mission of defence against acts of war. As such the SANDF is exempted from the provisions of the Civil Aviation Act. The SANDF provides ATS at military airports and in portions of airspace designated for military (special use) purposes. Some services have been delegated to ATNS.

Civilian aircraft making use of military airports or flying through military (special use) airspace are naturally under the control of, or receive ATS from military ATS units. In such instances the civilian aircraft also have to comply with military requirements. Likewise, military aircraft flying through civilian airspace and landing at civilian airports have to comply with civilian requirements.

Large portions of airspace previously designated as military-restricted airspace have now been designated as flexible airspace in response to the ATM Operational Concept. This is particularly relevant to the upper airspace, i.e. above flight level 200 (20 000 ft.). The SANDF also has staff, skills and resources that are used in the performance of various non-military tasks.

#### (b) Issue

Growing numbers of air traffic movements in civilian airspace can impact negatively on the provision of safe and efficient ATMSD. The implementation of flexible use of airspace below flight level 200 (lower airspace) needs to be addressed.

While the military provision of ATS should be for military purposes, it may be necessary to secure the services of military ATS for the continued safety and efficiency of civil aviation. In such instance, consideration must be given to the future integration of military and civil ATS so that available resources, namely airspace, staff

and infrastructure could be utilised optimally. Funding arrangements in this regard needs also be explored.

(c) Policy Statement on military provision of ATS:

# PS. 34

When necessary for the safety of civil aviation and on recommendation of SACAA, military ATS could be provided to civil aviation traffic. This must be done in accordance with the standards and procedures applicable to civil aviation and may include recovery of cost. Such involvement should be at the request of the Department of Transport, with the consent of the users and for a limited period only.

# 8.7 DESIGNATION OF AIRSPACE

#### (a) Background

The Minister of Transport is responsible for giving effect to the provisions of the Chicago Convention, including the establishment of airspace.

SACAA, through delegated authority of the Minister, has the power to designate controlled airspace strategically, to declare restricted, danger and prohibited areas and to determine the extent of such airspace and/or areas. SACAA also has the power to establish or permit the establishment of ATS units and/or flight information centres in an airspace and/or to provide ATS in these areas, as may be required or necessary after appropriate collaboration.

SACAA (the Director of Civil Aviation) is currently advised by the NASCOM, which is a statutory body with clearly defined terms of reference. It is also indicated that transparent procedures should be followed and set criteria be applied in this process. On the one hand there is a need to formalise the procedure for the designation of airspace and the delegation of responsibility for such airspace to ATS providers. On the other hand, ATS have to be provided to users on a cost-recovery basis. Consultation with users, so as to ensure efficient and cost-effective services, is therefore necessary.

Fundamental to the designation of airspace is the establishment of a National Airspace Master Plan, strategically harmonised with the global, regional and ATM community member individual plans (entity plans).

# (b) Issue

The nature of ATS makes it impossible to prescribe a rigid set of criteria for service provision. The introduction of the ATM Operational Concept involving *inter alia* collaborative decision-making as well as airspace organisational management necessitates a regular review of the National Airspace Master Plan as a guidance
document to allow for strategic and tactical decision-making. It is necessary to determine transparent procedures and criteria for, and the roles and responsibilities of the various stakeholders in the designation of airspace and the provision of ATS in such airspace.

Provision also needs to be made for the particular requirements of sport and recreational aviation, where appropriate.

(c) Policy Statement on the designation of airspace:

## PS. 35

The Department of Transport, through the National Airspace Committee, should ensure the periodic review and amendment of the National Airspace Master Plan to ensure strategic harmonisation with, amongst others, the ICAO ATM Operational Concept, the Global Air Navigation Plan and relevant regional plans.

Airspace management should be dynamic, flexible and based on services required.

The principles of cooperative government and intergovernmental relations should guide all activities of government departments and institutions relating to airspace matters and any restrictions on airspace utilisation should require the Minister of Transport's concurrence prior to implementation.

## 8.8 ALLOCATION OF AIRSPACE AND AIRPORT SLOTS

## (a) Background

It is foreseen that access to and departure from South Africa's airports will require proper planning in order to meet the needs of the economy and the further growth expected in air traffic. As in the case with any other transport infrastructure, civil aviation facilities may also have peak-time traffic and congestion. Traffic congestion at certain airports has already become a big problem worldwide and is one of the major operational challenges facing air transport. Causes of congestion include:

#### Congested airspace

Airspace (particularly controlled airspace) could become congested for a number of reasons. The capacity of an airspace, commonly referred to as airspace slots (i.e. the number of air traffic movements which can be accommodated in a particular portion of airspace in a specific period of time), is limited and is affected by, *inter alia*, separation criteria and the ability of air traffic controllers to handle air traffic movements. Implementation of Performance-Based Navigation (PBN) is expected to alleviate this pressure in that it aims to increase flight efficiency and

optimise available airspace while ensuring safety in meeting the growing demand. PBN includes other benefits in that it will enable harmonised, predictable flight paths resulting in the more efficient use of aircraft capabilities, improve safety, ensure greater airspace capacity and improved fuel efficiency.

The overriding concern in the case of congested airspace is safety, although commercial considerations are part of the issue.

#### Congested airport

Physical constraints such as the capacity of the runway(s) and other airport facilities (including availability of aircraft parking bays) could cause airport congestion. Traffic peaking at airports generates an overcrowded environment with severe economic repercussions, such as the under-utilisation of costly airport facilities and services, and delays to aircraft and passengers.

Economic factors are, therefore, generally the major concern in the case of a congested airport.

## • The dynamics of slot allocation

Slot allocation involves both a safety case and a business case. The allocation of airspace and airport slots suggests that there needs to be a process for the co-ordination of flight schedules. The frequent changes and the need to update the scheduling continuously are typical of the scheduling process at any particular airport. The following factors have an effect on the scheduling and illustrate its dynamics:

- The capacity of the airspace at an airport is influenced by the capacity of the airport and vice versa,
- ATM Operational Concept in relation to demand and capacity balancing and traffic synchronisation,
- Peak and off-peak periods at the airport,
- Potential for discrimination,
- Changing airline flight schedules,
- Historical precedence,
- Rule on priorities,
- New entrants,
- Possibility of exchanging slots between aircraft operators,
- The commercial value of airport slots and the possibility of auctioning or trading slots between airlines,
- The process of consultation/collaboration,
- Aircraft size in terms of passengers and/or cargo,
- Aircraft noise,
- Frequency of services,
- Under-utilisation of the allocated slots,

- Traffic mix,
- Bilateral air services agreements, and
- Curfews.

ICAO guidelines for the allocation of airspace slots and priorities for airspace use (a "first-come, first-served" basis) have in recent years been amended to take commercial realities into account. At the ICAO 5th World Wide Conference it was concluded that "any slot allocation system should be fair, non-discriminatory and transparent, and should take into account the interests of all stakeholders. It should also be globally compatible, aimed at maximizing effective use of airport capacity, simple, practicable and economically sustainable".

#### (b) Issue

As airspace and airport congestion are becoming major issues and have associated commercial implications, and although it is envisaged that the implementation of Performance-Based Navigation (PBN) will alleviate some of the congestion, the present system no longer responds adequately to the dynamics of slot allocation.

In a congested environment, a conflict may develop between the technical (safety and operational) and commercial considerations of congested airspace, and the commercial and facilitation considerations of a congested airport. Operational slots have to be prioritised in accordance with a schedule co-ordination process, to ensure orderly and safe operation in the airspace and at the airports.

A slot allocation system is currently operational in South Africa in terms of the Airport Slot Regulations, 2012, and is aligned with international best practice. This system needs to be monitored and revised, as necessary, to ensure the efficient and safe use of scarce resources as represented by airport and airspace slots.

(c) Policy Statement on the allocation of airspace and airport slots:

## PS. 36

Due to the national strategic importance of effective slot management, the slot allocation system should continue to be fair, non-discriminatory and transparent, taking into account the interests of all stakeholders. The system should also remain globally compatible, specifically aimed at maximising the effective use of airport and airspace capacity, practicable and economically sustainable.

## 8.9 SEARCH AND RESCUE

## (a) Background

Annex 12 to the Chicago Convention deals with search and rescue (SAR). This Annex requires States to arrange for SAR services within their sovereign territory and over the high seas for which they have accepted responsibility. The South African area for SAR differs from the area shown in Figure 2, in that South Africa has, to date, also accepted responsibility for providing SAR in the Windhoek, Mbabane, and Maseru flight information regions (FIRs). SAR services have to be provided in accordance with the provisions of the Annex and be co-ordinated with adjacent States. These services must be provided and must be available at all times.

Under the requirements of Annex 12 to the Chicago Convention, States are to establish rescue co-ordination centres as may be required and designate public or private service elements as rescue units, with defined functions. Each rescue co-ordination centre has to have a detailed plan for the conduct of SAR operations in its area of responsibility.

The South African Search and Rescue Organisation (SASAR) is a statutory body and currently co-ordinates SAR services in South Africa from two rescue co-ordination centres. One centre is located in Johannesburg (for the aeronautical region) and the other in Cape Town (for the maritime region). DOT heads this organisation.

## (b) Issue

Technological developments, particularly in the supporting communication infrastructure enhances the safety, effectiveness, efficiency and reliability of any SAR system as it reduces time required to locate casualties thus ensuring speedy and expedient rescue of survivors of distress situations. The Department in conjunction with the national search and rescue community would consider and endeavour implementing appropriate emerging technologies that would enhance and promote search and rescue communication and system's efficiency.

The regional approach to the provision of SAR services is advocated and encouraged by both the International Maritime Organisation (IMO) and ICAO as the means of most expeditiously achieving a global SAR system. This approach offers most benefits to both beneficiaries of SAR services and to States that provide them, for instance, duplication of efforts can be avoided.

The establishment of Joint Rescue Co-ordination Centres (JRCCs) is a recommended practice to States by both the IMO and ICAO. South Africa currently operates separate Rescue Co-ordination Centres, one dedicated and the other on a voluntary basis. It is imperative to review the current operational institutional arrangements taking into consideration what the global SAR community regards as best practice and the fact that some of the critical or core SAR operational functions cannot be continue to be rendered on an over and above basis.

It is a requirement in terms of international standards and recommended practices (SARPS) to develop and implement SAR Regulatory Oversight and Safety Management Systems to ensure the safety of SAR systems worldwide. Annex 19, dealing with the implementation of safety systems for all the domains of aviation entered into force in November 2013 and there is a need to comply with its provisions. This can be achieved by the creation of a dedicated SAR safety oversight unit within the Department as a body responsible for overseeing and regulating the safety of SAR services.

(c) Policy Statement on search and rescue:

## PS. 37

The Department of Transport (DOT) should remain responsible for ensuring the provision of aeronautical and maritime search and rescue services, including the financial responsibility for services in terms of the South African Maritime and Aeronautical Search and Rescue Act.

The South African Search and Rescue Organisation (SASAR) should retain the mandate of co-ordinating an effective and efficient provision of maritime and aeronautical SAR services within the South African Search and Rescue Regions.

DOT in conjunction with SASAR should endeavour to implement appropriate emerging technologies that would enhance and promote search and rescue communication and system's efficiency.

DOT should:

- Lead and pursue the regional integration of SAR services within the Southern Africa region in line with international and regional standards and recommended practices; and
- Pursue the establishment of a Joint Rescue Co-ordination Centre to conduct and co-ordinate both aeronautical and maritime search and rescue operations.
- Ensure the development of a SAR safety management system (SMS) and the establishment of a SAR Regulatory and Oversight capacity to carry out safety oversight tasks and regulatory functions over SASAR, as the service provider of SAR services.

## 8.10 REGIONAL INTEGRATION – AIRSPACE

#### (a) Background

The objective of the global CNS/ATM systems planning and implementation is a seamless, globally co-ordinated system of air navigation which will be able to accommodate the worldwide growth in air traffic demand. South Africa forms part of the African Indian Ocean Area (AFI). The AFI plan, which was introduced in 1995, sets out a number of planning targets. Many of these targets dealing with the ATM operational concept have been met through the regional and national harmonisation of systems.

International and regional institutional structures, of which South Africa is a part, are in place to plan the implementation of specific elements of the system. But the actual implementation of the new systems is the responsibility of individual States.

South Africa has played a major role in regional integration and has also been involved in projects towards regional integration from a regulatory perspective.

#### (b) Issue

Giving full effect to the AFI plan requires timely attention to the implementation of the various elements of the ATM operational concept to ensure appropriate and adequate CNS/ATM systems which are in harmony with those of the other members of the AFI Region.

The Air Traffic and Navigation Services Company Act currently does not expressly provide for ATNS' engagement in regional service provision outside the borders of South Africa.

(c) Policy Statement on regional integration - Airspace:

#### PS. 38

Government confirms the country's continued support for and active participation in the ICAO structures responsible for the planning, implementation, monitoring and regulation of a regionally harmonised CNS/ATM system as contemplated in the ATM Operational Concept, as well as the implementation of such systems in South Africa.

ATNS should be allowed to engage in service provision, technical and developmental assistance, training and relevant support beyond the borders of South Africa, provided that such expansion of services are catered for within the current economic regulatory regime and does not put at risk, financially or otherwise, the services currently provided in South Africa.

## 8.11 ALLOCATION OF ROLES AND RESPONSIBILITIES

## (a) Background

This section has dealt with several airspace issues, including the allocation of roles and functions to various stakeholders. These functions have been summarised and appear below as a clear guide to the designation of functions and responsibilities relating to airspace matters.

(b) Summarised	statement	on	the	allocation	of	roles	and	responsibilities	in
respect of	of airspace:								

Entity	Role / Responsibility	
Minister of Transport	<ul> <li>Giving effect to the provisions of the Chicago Convention, particularly with respect to the establishment of airspace and related airspace matters.</li> </ul>	
South African Civil Aviation Authority (SACAA)	<ul> <li>Designating portions of airspace for different uses and for determining the criteria for the provision of ATS within such portions of airspace, in accordance with transparent procedures and the set criteria, and also by involving stakeholders;</li> </ul>	
	<ul> <li>Designating ATS units to provide ATS in specified airspaces;</li> </ul>	
	<ul> <li>Identifying the airports where ATS should be provided;</li> </ul>	
	<ul> <li>Ensuring that ATS are provided at identified airports by such airport operators as required;</li> </ul>	
	• Setting safety standards pertaining to the provision of ATS and ANS. This includes setting the rules and procedures to be followed in the various types of airspace. These standards, rules and procedures have to be in accordance with those set out in the Chicago Convention and its Annexes;	
	<ul> <li>Ensuring the publication of aeronautical information and charts in accordance with the SARPs prescribed by ICAO;</li> </ul>	
	<ul> <li>Monitoring compliance with the above safety standards, rules and procedures; and</li> </ul>	
	Monitoring compliance with ICAO requirements.	

Entity	Role / Responsibility				
Department of Transport (DOT)	<ul> <li>The National Airspace Master Plan which is periodically reviewed and amended through the National Airspace Committee;</li> </ul>				
	<ul> <li>Regional liaison on the development and implementation of the ICAO AFI regional plan and AFI CNS/ATM Implementation Plan;</li> </ul>				
	<ul> <li>Maintaining legislative provision of the airport and airspace slot management system;</li> </ul>				
	<ul> <li>Ensuring the provision of SAR services in accordance with ICAO requirements;</li> </ul>				
	• Ensuring the establishment and operation of rescue co-ordination centres and rescue sub-centres; and co-ordinating SAR arrangements with adjacent States.				
South African National	The provision of ATS for military purposes;				
Defence Force (SANDF)	<ul> <li>Final authority pertaining to national security, inclusive of civil aviation security;</li> </ul>				
	<ul> <li>Provision of ATS for military purposes;</li> </ul>				
	<ul> <li>Provision of ATS for civil purposes, if required (subject to meeting civil aviation standards and procedures);</li> </ul>				
	<ul> <li>To be represented on aviation forums;</li> </ul>				
	<ul> <li>Functions and responsibilities pertaining to aviation and aviation security assigned to the SANDF through legislation and the NATJOINTS.</li> </ul>				
Air Traffic Services providers	<ul> <li>Provision of services in accordance with applicable legislation; and</li> </ul>				
	Should be represented on NASCOM.				

## PART D CIVIL AVIATION OPERATIONS

The graphic below provides an overview of the various elements of aviation operations which form the structure of this Part:



Figure 5: Overview of the structure of aviation operations and the section structure

## 9 COMMERCIAL AVIATION

This Chapter deals with policy matters in terms of air services for reward, including both scheduled and non-scheduled air transport services, general air services and activities such as adventure aviation.

## 9.1 AIR TRANSPORT

Air transport as a system has as its primary objective the safe and efficient transport of people and goods from one place to another. All the functions needed to perform this primary task together make up the air transport system. The fundamental components of this system are contained in an interactive *modus operandi* and these components can be considered as systems in their own right as follows:

- Aviation infrastructure providing the facilities for the take-off and landing of aircraft, the loading and unloading of passengers and cargo, arranging sufficient space for aircraft movement including the required navigation, air traffic services and information services needed for completing flights safely;
- Air transport services which include the system for the conveyance of people and goods in an orderly, safe and effective manner both domestically and internationally while using the aviation infrastructure and aircraft provided for that purpose; and
- Aircraft operations which include the provision and maintenance of aircraft, their operation and other support services. This will also include the emerging commercial operations of Remotely Piloted Aircraft Systems (RPAS).

Enabling and regulatory functions and requirements affect and govern all three of these components. There are two distinctly different sets of regulatory functions and requirements that affect the three subsystems referred to above, namely:

- Air transport regulatory functions and requirements referring to policies, legislation and requirements to enable air transport and to satisfy air transport needs such as infrastructure planning, licensing of air services, allocation of traffic rights internationally, economic considerations and monitoring of the financial practices and performance of air carriers; and
- Safety, security and environmental regulatory functions and requirements referring to policies, legislation and requirements to achieve an appropriate level of safety, security and environmental compliance in the air transport system both on the ground and in flight. These also include accident and incident investigations and related matters specific to unmanned aircraft systems.

Air transport can be divided into two distinct areas, namely scheduled and nonscheduled traffic. There are also variations within the regulation of domestic air transport and international air transport. In formulating aviation policy this distinction

has been adopted to emphasise the difference in the policy approach to domestic and international air services. In the case of domestic air transport, National Government has full power of decision over domestic policies, but it has to consult or negotiate with other governments on the implementation of international policies.

For this reason, scheduled and non-scheduled, and domestic and international air transport considerations are addressed separately in order to capture the essential characteristics that distinguish the one from the other. It is, however, recognised that there are similarities, especially with consumer protection issues and airline cooperative arrangements, and these are addressed together within the initial sections of this chapter.

## 9.1.1 Institutional arrangements

In terms of the institutional arrangement which applies to air transport, the Minister is responsible for policy and strategic planning, as well as safety and security regulation and, where appropriate, also the economic regulation of international air transport.

The relationship between the functional components in the institutional arrangement is shown in Figure 3 below:



#### Figure 3: Institutional arrangement: Air Transport

## 9.1.2 Scheduled Air Transport Services

## 9.1.2.1 Policy statements applicable to both domestic and international air services

#### Introduction

The Air Services Licensing Council (ASLC) and the International Air Services Council (IASC) are respectively responsible for the adjudication of applications for air service

licenses. Apart from the support the Department of Transport provides to the two Councils, DOT is also responsible for the negotiation of bilateral and multilateral air services agreements to enable international air transport services. SACAA is responsible for the regulation of aviation safety, security and environmental protection.

#### Liberalisation of Air Transport

Over the past decade the emphasis in air transport has shifted to privatisation, liberalisation and globalisation as well as developing new and innovative trading agreements. For different reasons, various approaches are being taken to economic factors, particularly in respect to market access and its regulation. These approaches vary from purely protectionist at the one extreme, with the liberal "open skies concept" at the other extreme.

International aviation relations among States have become increasingly complex due to differences in their ability to enter and participate in the air transport market. Of particular importance in the national regulation of international air services are the following underlying principles:

- "Comity" which means that one State has to give due deference to the official actions of another State; and
- "*Reciprocity*" which means one State grants a specific right or benefit to another State, provided that the recipient State grants a similar right or benefit to the State which first granted (or willing to grant) such right or benefit.

The ultimate objective would be free market access, also referred to as an "open skies regime" between States. Within agreements on bilateral air services, individual States are moving to a less regulated regime, and have an arrangement covering, amongst others, market access on the basis of progressive liberalisation, i.e. gradually stepping up the removal of regulatory restrictions. Part of this arrangement is the introduction of a safeguard mechanism for exceptional circumstances when there is a clear threat to a State's ability to maintain an adequate level of market participation.

The arrangements one State may have with another about progressive liberalisation can differ from the arrangement which the same State may have with a third State based on their bilateral relationships.

It is important to note that the international aviation community does not uniformly define the term "open skies". Reference to "open skies" may refer to the creation of a regulatory regime that allows freedom of market access, unlimited capacity and no control on pricing. Differences in opinion regarding the level of freedom allowed by air services agreements will result in different categorisations of such agreements<sup>7</sup>.

<sup>&</sup>lt;sup>7</sup> Please note "ANNEXURE 2 - DEFINITIONS" for descriptions of the various Freedoms of the Air.

Since 1990, the domestic air transport services market is economically deregulated. A moderately liberalised regime was accepted in 1992 for international air transport services. The approach taken in this White Paper on National Civil Aviation Policy is to formulate policies for the implementation of a liberal regulatory regime with African States bound by the Abuja Treaty, aligned with the principles and objectives of the Yamoussoukro Decision. In the case of other States, the concept of progressive liberalisation should be carried further and speeded up, where possible.

The following policy statements relate to both domestic and international scheduled air transport services:

## i. Product distribution

## (a) Background

The proliferation of Global Distribution Systems (GDS), the rapid expansion of codesharing arrangements between airlines and the importance of appropriate screen presence within the computer reservation systems (CRS) necessitate some practical guidelines for orderly application. In addition, ensuring level playing fields in the product distribution arena has become essential.

In the South African air transport market, the major airlines (domestic and international) are aligned to specific GDS, and consumers and travel agents need to be able to make reservations on a non-discriminatory basis.

#### (b) Issue

There is currently no code of conduct or policy for regulating the product distribution of scheduled air transport services in South Africa in respect of both domestic and international air services.

#### (c) Policy Statement on product distribution:

#### PS. 39

Computer reservation systems in respect of domestic and international scheduled air transport services should be regulated according to the ICAO principles of transparency, accessibility and non-discrimination in order to enhance fair competition among airlines and vendors of computer reservation systems, and to ensure that users of air transport services would have the widest possible choice of options.

## ii. Denied boarding

#### (a) Background

Airlines worldwide overbook flights to offset what are called "no-shows" or passengers who book but do not turn up for the flight. This practice is used as one of the means

to maximise the revenue gained from a flight. Statistical analysis is used to predict the number of no-shows and set the overbooking profiles per class to maximise passenger loads but minimise disruption to passengers. However, when more passengers arrive for the flight than there are seats available, the airline denies boarding to certain passengers.

#### (b) Issue

Denied boarding or the cancellation of a flight at short notice is extremely disruptive to passengers. There is, however, no uniform worldwide policy to deal with denied boarding.

In South Africa, Section 47 of the Consumer Protection Act deals with over-selling and overbooking, with provisions as follows:

... (3) If a supplier makes a commitment or accepts a reservation to supply goods or services on a specified date or at a specified time and, on the date and at the time contemplated in the commitment or reservation, fails because of insufficient stock or capacity to supply those goods or services, or similar or comparable goods or services of the same or better quality, class or nature, the supplier must—

(a) refund to the consumer the amount, if any, paid in respect of that commitment or reservation, together with interest at the prescribed rate from the date on which the amount was paid until the date of reimbursement; and

(b) in addition, compensate the consumer for costs directly incidental to the supplier's breach of the contract, except to the extent that subsection (5) provides otherwise [Subsection 5 deals with issues outside of the control of the service provider].

As at 2015, each airline uses its own procedures to manage denied boarding or flight cancellation. Passengers are therefore subjected to different denied-boarding procedures.

(c) Policy Statement on denied boarding:

#### PS. 40

To ensure an acceptable level of consumer protection against denied boarding or the cancellation of a specific flight, the Department of Transport should in consultation with stakeholders and in close collaboration with the Department of Trade and Industry develop guidelines on denied-boarding compensation procedures and information sharing, based on the Consumer Protection Act provisions, ICAO recommendations, and international best practice.

## iii. Disruptive behaviour of aircraft passengers

## (a) Background

The Civil Aviation Act, 2009, provides for penalties for disruptive behaviour. The intention of the Act is to deal with unlawful interference. The SA-CAR also addresses certain aspects of unruly passenger conduct which may endanger the safety of fellow passengers.

## (b) Issue

The air passenger environment has changed greatly and the current legislation must be regularly reviewed to ensure the implementation of effective and adequate measures to address unruly passenger conduct.

## (c) Policy Statement on disruptive behaviour of aircraft passengers:

## PS. 41

The safety of passengers is of prime concern and effective regulatory measures should be ensured to deal with passengers who fail to respect the rules of conduct on board aircraft or to follow the legitimate instructions of aircrew members. To this end, South Africa should sign and ratify the Protocol to Amend the Convention on Offences and Certain other Acts Committed on Board Aircraft, Montreal, 2014.

## iv. Passengers with special needs

## (a) Background

The number of passengers with special needs, such as, but not limited to, persons with reduced mobility, infants and unaccompanied minors who travel by air, is growing. The SA-CAR deals with certain aspects of passengers with special needs and the limitations on the carriage of infants from an aviation safety perspective.

The Constitution makes a general provision which recognises everyone as being equal before the law and with the right to equal protection and benefit of the law.

#### (b) Issue

Due to safety considerations and the associated requirements for resources, airlines can only accommodate a certain number of passengers with special needs on each flight. This often leads to discontent and dissatisfaction among these passengers.

(c) Policy Statement on passengers with special needs:

#### PS. 42

All airport licensees and airlines as well as other service providers rendering direct services to the travelling public should provide facilities and services to passengers with special needs. Such facilities should enable such passengers' ease of access and movement to all airline- or other infrastructure facilities in accordance with the Constitution, but with due regard to aviation safety standards and facility constraints.

Relevant information must be available so that people with special needs and others involved in providing travel services have access to information, such as information about access policies and matters concerning the specific needs of a passenger, e.g. seat dimensions, air circulation/air changes and accessible toilets.

## 9.1.2.2 Domestic Air Transport Services

#### i. Equal treatment

#### (a) Background

To achieve effective and fair competition, it is important to treat all air carriers equally. This principle applies specifically to a situation where a government enterprise competes with a private enterprise in the same market. The need for equal treatment is often referred to as the need to "level the playing field" and is generally regarded as important.

#### (b) Issue

The principle of equal treatment implies that all participants in the air transport market should be treated equally in terms of legislation, rules and opportunities. Consistent with the spirit of sound commercial operations, air carriers should have no obligation to provide services below cost to any institutions whether Government or otherwise, unless such intervention is required based on National Interest considerations and subject to appropriate financial compensation.

## (c) Policy Statement on equal treatment:

#### PS. 43

All South African air carriers should be treated equally under the rules relating to, inter alia:

- Entry into and exit from the market,
- shareholder interventions,
- capacity,
- air fares,
- routes,
- access to aviation infrastructure and services,
- safety, security and environmental requirements, and
- government contracts, reciprocal privileges, and the strategic use of aircraft.

In addition, in terms of Government's public service obligations, air transport services on routes that are not economically viable (subsidised) must be invited through a transparent public tender process.

#### ii. Competition:

## (a) Background

The air carrier industry operates in a highly competitive environment. As each air carrier strives to gain a competitive advantage, such carriers take certain initiatives to achieve their goal of expanding their market share and increasing their profitability. Air carriers may perceive actions which their competitors take as being anti-competitive. Competition legislation has been instituted in South Africa to deal with competition issues across the economy.

#### (b) Issue

The Competition Act applies inter alia to the air transport industry and complaints are submitted to the Competition Commission for a decision. Delays may occur in this process.

The inability to deal speedily with any complaints about anti-competitive behaviour and prolonged exposure to such behaviour could harm the image of the industry, and might force the complainant carrier to close down.

## (c) Policy Statement on competition:

#### PS. 44

Free and fair competition, aimed specifically at developing the air carrier industry, should be promoted. The Competition Act should be actively applied to the air transport industry to ensure that users' interests are taken into account and to prevent participants in the market from using anti-competitive practices.

#### iii. Air carrier pricing

#### (a) Background

Prior to deregulation in 1990, tariffs were regulated due to the absence of effective market forces within the domestic aviation market.

Pricing for all domestic air carriers is currently deregulated and they may offer whatever fares they deem necessary to attract business while maintaining a profitable operation. In a case where a carrier considers fares to be anti-competitive, the appropriate remedy would be to file a complaint with the Competition Commission.

#### (b) Issue

There is a need to balance market liberalisation and ensuring fair competition, and to prevent abuse of a dominant market position and predatory pricing practices.

## (c) Policy Statement on air carrier pricing:

#### PS. 45

Domestic air carrier pricing should remain deregulated with the primary principle being that the market should determine the price, subject to the general controls over economic activity applicable to all industries, including the Competition Act.

#### iv. Conditions of carriage by air

#### (a) Background

The development of conditions of carriage by air carriers in general, is a requirement for international air services in terms of the Montreal Convention, 1999. Reference to these conditions of carriage is made on the ticket issued to the passenger. Traditionally, travel and cargo agents fulfilled the task of selling the capacity (seats and cargo space) on the aircraft of the scheduled airlines. Currently, the air transport industry has adopted the wider use of e-commerce in which e-tickets and internet bookings directly affect passengers.

#### (b) Issue

In the absence of prescribed conditions of carriage applicable to domestic air services, domestic passengers' consumer rights may be compromised.

Though e-commerce has distinct advantages for the air carriers as well as their passengers, such arrangements should not detract from the basic requirements in respect of access to information and conditions of carriage. Air carriers need to ensure through their systems and operational procedures that passengers are fully informed, as required.

#### (c) Policy Statement on the conditions of carriage by air:

#### PS. 46

The prescribed conditions of carriage for passengers and cargo in terms of the Montreal Convention, 1999, should be introduced in the domestic air transport market.

#### v. Provision of flight information to travel agents and passengers

#### (a) Background

The provision of adequate or comparative information to customers is essential to enable them to make informed decisions about the best choice of airline or flights to meet their travel plans.

The National Consumer Protection Act already establishes various rights, including the right to disclosure and information (Chapter 2, Part D) in accessible language in order to provide for informed choices by consumers, and clear sales records including the full price and specifying the cost of applicable taxes. Provisions also include disclosure by intermediaries. It also deals with fair and responsible marketing.

#### (b) Issue

It is vital for passengers to have adequate or comparative information at the time of booking so that they can make informed choices. Sources of information are currently fragmented and in cases, difficult to find. This is becoming increasingly important with the increased complexity due to practices around code-sharing, franchising, taxes and service related charges and the rise of low cost carrier practices of itemised costs such as check-in luggage, airport check-in, seat reservations, etc.

(c) Policy Statement on the provision of flight information to travel agents and passengers:

#### PS. 47

In accordance with the requirements of the Consumer Protection Act, information, not of a confidential nature to an airline, which passengers and travel agents may request to enable them to make informed decisions about their travel choices on a specific airline, including but not limited to conditions of carriage, code-sharing operations and deniedboarding/flight cancellation compensation, must be made available to agents and to passengers on request.

## vi. Air carrier emergency management plans

#### (a) Background

The management plans and the associated operational manuals which air carriers develop also invariably deal with emergency procedures and the management of emergencies. In the overall context of disaster management, these plans or procedures have a major role to play in complementing, *inter alia*, the Airport Emergency Management Plans addressed in Section 6.8 of this White Paper.

## (b) Issue

Air carrier emergencies may occur at, or in close proximity to, the airport or in some remote and inaccessible area. In their emergency management plans, air carriers need to provide for both situations by ensuring that their plans could be co-ordinated and integrated with airport emergency management plans and/or the similar plans of organs of State.

(c) Policy Statement on air carrier emergency management plans:

#### PS. 48

Each air carrier must develop, implement and maintain an emergency management plan or similar arrangement prior to the commencement of the air service. The plan should be integrated with airport emergency management plans, the National Search and Rescue Plan and the disaster management plans of the relevant organs of State.

## vii. Market access: Licensing

#### (a) Background

As the domestic market has been deregulated since 1990, there are theoretically no limits on the number of domestic operators that may enter the market. Market forces would, however, determine the commercial opportunities and the ultimate number of air carriers that are able to operate commercially sustainable air services.

The Air Services Licensing Act requires the air service licensees to provide safe and reliable air services. By implication, the licensees must prove the safety of operations as well as reliability of services on a sustainable basis.

The ASLC is mainly concerned with financial and operational requirements whereas SACAA deals with technical matters with emphasis on safety-related issues.

#### (b) Issue

A balanced approach needs to be taken to the application of the licensing system to ensure that stability in the market place is not negatively affected, but at the same time that its application would not be construed as a material barrier to entry, especially in respect of previously disadvantaged individuals. In particular, the lengthy time required for air service licence applications to be processed is a challenge. Other processes, such as applying to SACAA for an Operating Certificate, cannot be started in parallel, resulting in a long and costly period before market entry.

(c) Policy Statement on licensing:

#### PS. 49

The Air Services Licensing Council, with the administrative support of the Department of Transport (DOT), should continue to be responsible for adjudicating applications for new licences and applications for amendments to existing licences on the basis of safety and reliability; and

The DOT, in consultation with the Air Services Licensing Council, should investigate the feasibility of introducing an "air service licence of intent" to facilitate the introduction of new entrants to the market.

## viii. Air carrier ownership and control

#### (a) Background

At present the Air Services Licensing Act regulates the acquisition of equity stakes in domestic air carriers. The Act prescribes the maximum stake which foreigners may hold in South African air carriers and requires the control of such air carriers to remain in the hands of South African residents.

#### (b) Issue

The issue of ownership and control cuts across the various segments of air transport. These issues are important because of the need to ensure that licensees remain in control of the air services provided in terms of the licences issued.

## Policy Statement on air carrier ownership and control:

## PS. 50

Ownership and control in respect of domestic air services should be regulated as follows:

- Substantial ownership of at least 75% and effective control of an air service should be vested in South African residents, unless otherwise agreed to and subject to such conditions as may be determined by the Minister of Transport.
- Commercial control (as applicable):
  - in the case of a company, as defined in the Companies Act, at least 50% plus one member of the Board should be South African residents;
  - the Chairperson of the Board or entity should be a South African resident; and
  - the headquarters and principal place of business of the air carrier should be in South Africa (i.e., registered office in South Africa).
- Regulatory control must remain the responsibility of the Department of Transport, ASLC and SACAA.

#### ix. Airline co-operative commercial arrangements

#### (a) Background

In reaction to the rapidly changing global economy, many airlines have adopted cooperative arrangements from interlining to other arrangements such as code-sharing and franchises to extend their global reach and enhance their competitive position. These include the following:

## Code-sharing

South Africa currently has an interim policy for dealing with code-sharing. In practice, provision is made for code-sharing within the bilateral framework to ensure reciprocal benefits. Airlines then negotiate the commercial arrangements among themselves. In the domestic market, code-sharing is not commonly practised between domestic airlines, other than airlines within the same 'stable' (e.g. SAA and Mango on the Cape Town – Durban; Cape Town – Bloemfontein; Cape Town – Port Elizabeth; and Johannesburg – George routes). This is probably due to the highly competitive nature of the deregulated domestic market. Code-sharing is permitted and widely practised by domestic airlines in commercial co-operation with foreign airlines. In these cases, the South African-based airline operates the service and the foreign airline shares this capacity (i.e., seats / capacity marketed under its own brand). The emerging trend of inter-modal code-sharing (e.g. between air and high-speed rail) is not yet evident in the South African market.

#### • Franchising

Franchising occurs when one airline (the franchiser) grants another airline (the franchisee) a franchise, or right, to use elements of its corporate identity, such as livery and marketing symbols. This means that in a franchise, the airline supplying aircraft and staff (the franchisee) takes the risk of selling the seats, even though they are sold under the name of another airline (the franchiser). Unlike code-sharing which involves the *rationalisation* of *equipment*, franchising involves the *use* of *intellectual property*.

## • Aircraft leasing

There has been a growing increase in the practice of aircraft leasing in air transport, where a carrier rents an aircraft from another carrier or other entities to provide commercial air transport. Leases generally take the form of a "dry" lease (lease of aircraft without crew) or "wet" lease (lease of aircraft with crew). The practice of leasing may raise potential safety and economic issues in cases where the leased aircraft is registered in a different State from that of the operator.

**Global Alliances** such as Star and OneWorld have emerged using these cooperative arrangements, and have introduced increased complexity and concerns about transparency.

#### (b) Issue

Certain co-operative arrangements involve more than simple marketing or operating issues, and therefore consumer and competition issues need to be addressed.

Currently the South African industry lease-in as well as leases-out aircraft for use by domestic carriers and foreign-based carriers respectively. In both cases, responsibility for compliance with minimum safety standards needs to be ensured.

(c) Policy Statement on airline co-operative commercial arrangements:

#### PS. 51

South African domestic and foreign designated airlines should be allowed to enter into co-operative commercial arrangements on domestic routes with airlines of their choice, subject to the domestic law governing competition, rules applicable to the type(s) of arrangements, and relevant bilateral air services agreements.

A robust regulatory framework addressing domestic code-sharing, franchising and leasing of aircraft should be developed in accordance with international best practice, aligned with South Africa's national interest and aero-political obligations.

#### 9.1.2.3 Users' interest

#### (i) Air carrier liability

#### (a) Background

Regulation 5 (1) of the Domestic Air Services Regulations requires licensees to be insured at all times. Insurance limits are set in terms of criteria based on the number of seats, weight of cargo and size of the aircraft.

Two new Conventions relating to liability and compensation were adopted at the ICAO Diplomatic Conference on Air Law on 2 May 2009. These Conventions, although primarily aimed at international air transport, may also be applied to domestic flights, subject to the filing of a declaration in this regard with the Depository (ICAO, in this instance). These Conventions are: The Convention on Compensation for Damage Caused by Aircraft to Third Parties, 2009, and the Convention on Compensation for Damage to Third Parties, Resulting from Acts of Unlawful Interference Involving Aircraft, 2009.

#### (b) Issue

Experience has shown that air carriers do not always comply with the terms and conditions of their insurance policies, with the result that insurers reject the claims of passengers.

Some domestic air carriers (notably small non-scheduled air carriers) have introduced special provisions regarding liability in their conditions of carriage. In terms of these provisions, certain air carriers effectively contract out of their liability. This is clearly unfair and harmful to the travelling public.

The need to ensure adequate and comprehensive insurance cover against all claims arising from accidents and incidents, including claims resulting from unlawful interference, requires urgent attention.

(c) Policy Statement on air carrier liability:

#### PS. 52

All persons who wish to provide domestic air services must at all times be adequately insured against claims that may arise against such person(s) as prescribed in applicable domestic law. In addition, the concept of strict liability should be introduced in the domestic air transport market based on the principles contained in the Montreal Convention of 1999.

Once identified legal concerns have been resolved, South Africa should ratify the Convention on Compensation for Damage Caused by Aircraft to Third Parties, 2009, and the Convention on Compensation for Damage to Third Parties, Resulting from Acts of Unlawful Interference Involving Aircraft, 2009. Consideration should also be given to declare, as part of the ratification process, that these Conventions will apply to domestic air transport, as applicable.

## 9.1.2.4 Bankruptcy of an airline

#### (a) Background

Due to the close relationship between some of the safety and commercial factors, a perception has developed over the years among certain members of the public that the users of air services are entitled to compensation in the event where an air carrier fails to meet the expectations of passengers. The increasing dominance of credit cards as the payment method for air tickets has in part addressed this issue due to the insurance they offer.

In general terms, however, consumer protection, insolvency and business rescue for all industries fall in the domain of the DTI. The measures for which DOT should be responsible in relation to air transport are therefore sector-related and need to be aligned with or complementary to the rules applicable to all industries.

Since deregulation in 1990, several South African airlines providing scheduled services have become insolvent or ceased to exist. Measures to provide the consumer with some protection in the event that an air service operator closes its business are contained in Regulation 6A of the Domestic Air Services Regulations.

#### (b) Issue

An airline must currently provide the ASLC with a suitable guarantee for the protection of consumers in the case of bankruptcy. However, this Regulation is difficult to enforce and there is generally limited compensation available to passengers when an air carrier closes down.

(c) Policy Statement on bankruptcy of airlines:

## PS. 53

Airlines becoming insolvent or bankrupt should be subject to the same regulations applicable to all industries

The Air Services Licensing Council should actively monitor the financial performance of licensees in order to enhance the safety and reliability of scheduled air services and to ensure the early detection of airlines in financial distress. The ASLC should advise SACAA once they detect financial distress in order to assist SACAA in monitoring safety and security that might be compromised as a result.

In addition, the Department of Transport should monitor global developments regarding bankruptcy protection and consider the possible strengthening of the rights of passengers in the event of bankruptcy of airlines in line with international best practice.

## 9.1.2.5 Domestic non-scheduled air transport services

Please note that Policy Statements 43, 44, 45, 46, 48, 49, 50, and 52 under Sections 9.1.2.2 and 9.1.2.3 also apply to non-scheduled domestic air services.

## 9.1.2.6 Allocation of roles and responsibilities

Summarised statement on the allocation of roles and responsibilities in respect of domestic air transport:

Entity	Role / Responsibility
Minister of Transport	• Responsible for giving effect to national policy and legislation relating to domestic air transport, including the appointment of the Members of the Air Services Licensing Council.
Air Services Licensing Council	<ul> <li>Considering applications for the award and/or amendment of domestic air services licences; and</li> <li>Monitoring the performance of air service licence holders in terms of the applicable legislation, including the possible institution of certain actions as a result of such monitoring.</li> </ul>
Department of Transport (DOT)	<ul> <li>Giving administrative and legal support to the Air Services Licensing Council; and</li> </ul>

Entity	Role / Responsibility
	<ul> <li>Interacting with the aviation industry and SACAA on matters relating to domestic air transport.</li> </ul>
SACAA	<ul> <li>Regulating aviation safety and security of domestic air services in general;</li> </ul>
	<ul> <li>Assessing safety-related issues in licence applications and providing input to the Air Services Licensing Council; and</li> </ul>
	<ul> <li>Issuing and renewing of the operating certificates of domestic air carriers.</li> </ul>

## 9.1.2.7 International Scheduled Air Transport Services

#### i. Introduction

The current South African international air transport policy arose from extensive investigations conducted and implemented in the early 1990s. The main thrust of the policy review at the time was the liberalisation of international air transport. The White Paper on National Transport confirms the direction taken by DOT; however, the civil aviation system is very dynamic.

Two distinctly different forms of international air transport are addressed in this section, namely scheduled international air transport services and non-scheduled international air transport services.

## ii. Regulatory framework for international air services

The current framework for regulating the provision of scheduled international air transport services consists of the Chicago Convention and the Transit Agreement (both included as Schedules to the Civil Aviation Act), several other international conventions on aviation, the International Air Services Act, regional multilateral arrangements (Yamoussoukro Decision and SADC Protocol) and various bilateral air services agreements.

The Montreal Convention of 1999 and the Cape Town Convention are important instruments incorporated into South Africa's legal framework in 2007. The main purpose of these two conventions is to lay down certain uniform rules, norms and standards in connection with air carrier liability and to facilitate the financing of mobile equipment (aircraft, engines, etc.) respectively.

The International Air Services Act regulates and controls the provision of international air services. It regulates South African air carriers that wish to provide international air services through a licensing system, and foreign airlines providing services to South Africa through a system of Foreign Operator's Permits (FOPs). The main purposes of the licensing and FOP systems are to ensure that authorised air carriers comply with at least the minimum internationally recognised technical norms and standards, and to regulate, where appropriate, entry into the market on an economic basis.

A bilateral air services agreement normally confirms the participating countries' commitment to the use of internationally accepted norms and standards. It regulates the detailed operational and economic aspects of the scheduled air transport service to be provided between two countries, including the extent and frequency of the service, tariffs, and the routes and airports to be used, and applicable freedoms of the air. The current South African bilateral air services agreements negotiated to date vary from conservative to liberal, depending on the policy positions of bilateral partners and national considerations.

## iii. Concept of "National Interest" for international air transport

## (a) Background

To ensure greater alignment with government policies and strategies, in particular with the Tourism Growth Strategy, mandates for air services negotiations must be aligned with the National Interest of South Africa. The concept of "National Interest" is a fundamental element in determining negotiating mandates.

## (b) Issue

The globalisation of international air transport is manifested in the search for a more liberalised environment, commonly referred to as "open skies", initially spearheaded by the United States of America. This approach creates potential conflict of interests. These interests may be seen as the National Interest of the country, the interests of service providers in the air transport industry and the interests of the consumers of air transport services. It is also recognised that the National Interest of the country may not necessarily be the same as the interests of the suppliers, consumers, labour or general public, respectively.

(c) Policy Statement on concept of "National Interest" for international air transport:

## PS. 54

International air transport should promote the National Interest of South Africa within a framework of the country's macro and micro economic policies, with emphasis on the following:

- Sovereignty of airspace should continue to be vested in the State;
- Facilitation and expansion of international trade, investment, tourism; and
- Promotion of the development of an efficient, productive and sustainable South African aviation industry.

## iv. Network of scheduled international air transport services

## (a) Background

By definition, a scheduled international air transport service involves at least two countries and requires authorisation from the respective governments before services may begin. The outcome of negotiations between the aeronautical authorities of the relevant countries will determine the scope of services that may be provided and will also depend on the policies of the countries involved.

#### (b) Issue

A basis for the maintenance and expansion of a network of scheduled international air transport services need to be defined.

(c) Policy Statement on a network of scheduled international air transport services:

#### PS. 55

International air transport should facilitate and enhance the expansion of international trade, investment and tourism through the development and maintenance of a network of scheduled international air transport services effectively linking South Africa with international destinations.

#### v. Regulatory framework for scheduled international air transport services

#### (a) Background

Two major components govern the regulatory regime for scheduled international air transport. The first component is the regulation of the technical aspects of the provision of safe, secure, reliable and environmentally friendly air services. The second component addresses economic matters and other aero-political considerations which normally form part of bilateral air services agreements.

#### (b) Issue

Due to the highly complex nature of safety, security and economic regulation of scheduled international air transport, a robust regulatory regime must be established and maintained. The regulatory regime requires constant attention to ensure aviation safety, security as well as the provision of reliable and environmentally friendly air services.

(c) Policy Statement on a regulatory framework for scheduled international air transport services:

#### PS. 56

Scheduled international air transport services should be controlled and regulated within a well-defined regulatory framework addressing safety, security and environmental matters as well as economic and aeropolitical considerations, in order to ensure the provision of safe, orderly and reliable scheduled air transport services to and from South Africa.

This will be achieved through the Civil Aviation Act, the International Air Services Act; the framework of bilateral or multilateral air services agreements; international conventions which South Africa has ratified or adheres to; and an implementation strategy as adopted by the DOT from time to time.

## vi. Air carrier ownership and control

#### (a) Background

At present the International Air Services Act regulates the acquisition of equity stakes in international air carriers. The Act prescribes the maximum stake which foreigners may hold in South African air carriers and requires that control of such air carriers should be vested in South African residents.

The Yamoussoukro Decision introduced the concept of "principal place of business" as an alternative to the traditional "ownership and control" criteria in an effort to encourage the development of new African-based air carriers.

#### (b) Issue

The issue of ownership and control cuts across the various segments of air transport, as well as international general air services. These issues are important because of the need to ensure that licensees remain in control of the air services provided in terms of the licences issued.

The concept of "principal place of business" in terms of the YD needs to be recognised.

(c) Policy Statement on air carrier ownership and control:

## PS. 57

Ownership and control in respect of international air services should be regulated as follows:

(a) For South African licensees: In the case of -

- a scheduled air service to countries not bound by the Yamoussoukro Decision, substantial ownership and effective control of such air service must be vested in South African residents, unless otherwise agreed to and subject to such conditions as the Minister of Transport may determine; or
- an air service to countries which are bound by the Yamoussoukro Decision, the entity providing such air service should have its headquarters, central administration and principal place of business in South Africa and be under the effective regulatory control of the relevant South African authorities.

In both cases, the South African entity to which an international air service licence is issued must at all times be actively and effectively in control of the air service.

## (b) For foreign air service providers: In the case of -

- an air service from countries not bound by the Yamoussoukro Decision, substantial ownership and effective control of such air service provider must be vested in the government or residents of the country from where it operates, unless otherwise agreed to and subject to such conditions as the Minister of Transport may determine;
- an air service from countries which are bound by the Yamoussoukro Decision, the entity providing such air service must-
  - have its headquarters, central administration and principal place of business in the country from where it operates;
  - be under the effective regulatory control of the relevant authorities of the country from where it operates, or
  - in the case of a State Party designating an airline from another State Party to operate scheduled air services on its behalf, the above requirements should be met, but with the necessary changes required by the context, in compliance with the Yamoussoukro Decision.

In both cases, the foreign airline to which a foreign operator's permit is issued must at all times be actively and effectively in control of the air service.

## vii. Bankruptcy of South African airlines

## (a) Background

Since partial liberalisation of international air services in 1993, several South African airlines providing scheduled international air services have become insolvent or ceased to exist. Research has shown that Australia and New Zealand made no provision for failed operations in their international air transport industries. The European Union (EU) currently prescribes stringent financial entry criteria for new air carriers and annual review of the financial fitness of their licensed international air carriers.

## (b) Issue

A licensee must currently provide the IASC with a suitable guarantee for the protection of consumers as part of the evaluation of an applicant's financial capability. This system is, however, difficult to enforce and there is generally limited compensation available to passengers when an airline becomes insolvent and closes down.

## (c) Policy Statement on bankruptcy of South African airlines:

## PS. 58

South African airlines becoming insolvent or bankrupt should be subject to the same regulations applicable to all industries.

In order to enhance the safety and reliability of air services and to ensure the early detection of airlines in financial distress, the International Air Services Council should actively monitor the financial performance of licensees. In addition the Department of Transport, in consultation with the Department of Trade and Industry, should monitor global developments regarding bankruptcy protection and consider the possible strengthening of the rights of passengers in the event of bankruptcy of airlines in line with international best practice.

## viii. Insurance Requirements

## (a) Background

South Africa has enacted the Montreal Convention of 1999 through the amended Carriage by Air Act on 19 June 2007. The Montreal Convention of 1999 is applicable to all international carriage by aircraft of persons, baggage or cargo for reward and specifies the liability of air carriers and extent of compensation payable in the event of death or injury of passengers and damage of baggage or cargo.

On 2 May 2009, two Conventions relating to liability and compensation were adopted at the Diplomatic Conference on Air Law held under the auspices of ICAO in 2009. These Conventions are:

- The Convention on Compensation for Damage Caused by Aircraft to Third Parties, 2009: This Convention applies to damage to 3<sup>rd</sup> parties caused by an aircraft in flight on an international flight, other than as a result of an act of unlawful interference. It will replace the *Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface, 1952* (also known as the Rome Convention) and may be extended to also include domestic flights. South Africa is not a signatory to the Rome Convention.
- The Convention on Compensation for Damage to Third Parties, Resulting from Acts of Unlawful Interference Involving Aircraft, 2009: This Convention applies to damage to 3<sup>rd</sup> parties caused by an aircraft in flight on an international flight as a result of an act of unlawful interference. It may be extended to also include domestic flights. The Convention prescribes operators' liability based on the mass of the aircraft involved as well as the requirement to maintain adequate insurance or guarantee covering such liability.

This Convention addresses the serious difficulties experienced shortly after the 11 September 2001 disaster when the international insurance market initially cancelled and then partially re-instated coverage against losses and damages arising from acts of war, hijacking and other related perils for air carriers and service providers.

In terms of the Convention, an International Civil Aviation Compensation Fund (referred to as the "International Fund") is established, funded through contributions in respect of each passenger and each tonne of cargo departing from an intentional airport in a State Party. In the event that insurance in respect of damage covered by the Convention is wholly or partially unavailable, the International Fund may, at its discretion, in respect of future events, pay damages for which air carriers would have been liable.

#### (b) Issue

The tragic attack of 11 September 2001 highlighted the vulnerability of air carriers and the risks posed to air carriers, passengers and infrastructure. The need to ensure adequate insurance cover against claims arising from accidents, incidents, war and related activities requires urgent and ongoing attention.

(c) Policy Statement on insurance requirements:

#### PS. 59

All air carriers who wish to provide international air transport services to and from South Africa must at all times be adequately insured against claims that may arise against such entity as prescribed in the applicable domestic law.

Once identified legal concerns have been resolved, South Africa should take the necessary steps to ratify the Convention on Compensation for Damage Caused by Aircraft to Third Parties, 2009, and the Convention on Compensation for Damage to Third Parties, Resulting from Acts of Unlawful Interference Involving Aircraft, 2009.

ix. Regulation of economic aspects of scheduled international air transport services

## (i) Fundamental principle

## (a) Background

The economic aspects of scheduled international air transport services are normally subject to negotiations between countries and are mostly related to the economic regulation of air services. In addition, air services operated by South African and international air carriers are subject to the conditions of valid international air services licences and foreign operator's permits respectively.

#### (b) Issue

Economic regulatory measures need to be aligned with national priorities as articulated in the applicable macro- and micro economic policies of Government. In order to serve the National Interest of South Africa, all economic regulatory measures pertaining to scheduled international air transport services need to be clearly defined.

(c) Policy Statement relating to the regulation of the economic aspects of international scheduled air transport services:

#### PS. 60

In order to serve the National Interest, all regulatory measures pertaining to the economic aspects of scheduled international air transport services should have as their purpose to:

- Encourage effective competition in the market place;
- Safeguard where necessary, the National Interest; and
- Encourage South African participation in the market.

# (ii) Designation of airlines for providing international scheduled air transport services

## (a) Background

The parties to a Bilateral Air Services Agreement normally authorise airlines in a process of formal designation to provide an international scheduled air service. A distinction can be drawn between single (one airline) and multiple (more than one airline) designation as part of economic regulation. The applicable designation regime is dependent on the policy positions of the bilateral partners.

#### (b) Issue

The traditional single designation of airlines per route has impacted negatively on air transport in general, leading to high tariffs, low frequency of flights and mediocre service levels. To encourage airlines to compete on routes, provision needs to be made for the designation of more than one airline per route.

(c) Policy Statement on the designation of airlines for providing international scheduled air transport services:

## PS. 61

The multiple designation of airlines on routes to and from South Africa and in particular, the designation of more than one South African airline on the same route and/or city pair/airport combination to provide scheduled international air transport services, should be promoted. Participating South African and foreign airlines must hold valid international air services licences and foreign operator's permits respectively.

## (iii) Granting of capacity and/or flight frequencies to airlines

#### (a) Background

The allocation of capacity (seat allocation) and flight frequencies (number of flights per week) is normally regulated through Bilateral Air Services Agreements. This is an important tool which has traditionally being used to ensure an acceptable level of reciprocity and market share.

#### (b) Issue

Air services in a free market environment are governed by supply and demand. Due to government interferences (e.g. direct/indirect subsidisation of national airlines), certain airlines may abuse access to surplus capacity through various means, including predatory pricing. The unrestricted allocation of capacity on all routes
worldwide may impact negatively on the ability of South African airlines to compete on certain routes.

(c) Policy Statement on the granting of capacity and/or flight frequencies to airlines:

#### PS. 62

Unlimited flight frequencies based on third, fourth and fifth freedom rights will be granted in terms of the Yamoussoukro Decision (YD); however, the actual granting of such rights may be subject to reciprocity due to the interim bilateral implementation of the YD principles.

With the exception of scheduled air services between South Africa and countries bound by the Yamoussoukro Decision, flight frequencies based on third and fourth freedom traffic rights should form the basis for negotiating the exchange of traffic rights, but the actual capacity provided on any route would be determined by the Department of Transport in consultation with stakeholders and with due regard to route and regionspecific requirements.

## (iv) South African airports as points of entry<sup>8</sup>

#### (a) Background

The number of international airports in South Africa was reduced from thirty eight to ten during 1998, i.e., one per province and two in Gauteng.

#### (b) Issue

Existing airports with international designation across the provinces of South Africa have shown interest in improving the level of utilisation of their international airports. In the interest of promoting economic growth in all Provinces, South African and foreign air carriers need to be allowed to utilise all the current international airports (ports of entry), based on economic viability and passenger demand.

<sup>&</sup>lt;sup>8</sup>Note Section 6.6

DESIGNATION OF AIRPORTS AS INTERNATIONAL PORTS OF ENTRY"

## (c) Policy Statement on South African airports as points of entry:

#### PS. 63

All airports designated as international airports (excluding military airports with port of entry status) with the necessary and appropriate facilities to accommodate international flights should be promoted equally as points of entry to South Africa.

## (v) Traffic Rights

#### (a) Background

The granting of traffic rights is mainly regulated through Bilateral Air Services Agreements, augmented with certain tri-lateral and Multilateral Agreements. Traffic rights are the right of an air carrier to load or unload passengers or cargo in a specific country. In terms of international conventions, various freedom rights are defined and are reflected in "ANNEXURE 2 - DEFINITIONS" to this White Paper.

#### (b) Issue

Fifth freedom traffic rights may impact on the viability of point-to-point (direct) air services operated by airlines on the same route. The granting of 5th freedom traffic rights needs to be addressed within a clear policy framework.

(c) Policy Statement on traffic rights:

#### PS. 64

Own-stopover rights in respect of passenger services should be exchanged on a reciprocal basis, subject to applicable domestic law.

*Fifth freedom traffic rights should be granted in respect of passenger/cargo combination services subject to the following:* 

- Free exchange of fifth freedom traffic rights to/from all destinations in countries bound by the Yamoussoukro Decision. The exchange of such rights may, however, be subject to restrictions based on the need for reciprocity of all participating states during the period leading up to the full implementation by all participating States of the Yamoussoukro Decision;
- Fifth freedom traffic rights with countries not bound by the Yamoussoukro Decision should be exchanged on a reciprocal or comparable benefit basis and only in circumstances where scheduled third and fourth freedom services are not available and on condition that these services should be phased out over a period of six (6) months if a third or fourth freedom service is introduced by a South African airline; or
- Only in exceptional cases after the potential consequences have been evaluated and only if reciprocal or comparable rights or benefits have been obtained for South Africa.

Fifth freedom traffic rights in respect of all-cargo services should be freely exchanged worldwide on a reciprocal or comparable benefit basis.

## (vi) Tariff Control

## (a) Background

Tariffs are normally regulated through Bilateral Air Services Agreements. The Multilateral Yamoussoukro Decision (YD) aims at regulating tariffs for intra-African air services on a Continental level.

#### (b) Issue

A balanced approach to international tariffs is needed with the necessary control mechanisms to intervene, as may be required to prevent abuse of a dominant market position and predatory pricing practices.

## (c) Policy Statement on tariff control:

#### PS. 65

Economic decisions should, as far as possible, be resolved by the market, subject to the general competitive principles applicable to all industries, with a view to maximising consumer choice.

Tariffs should generally be deregulated as far as possible to allow air carriers the freedom to set tariffs in response to demand, subject to the general controls over economic activities applicable to all industries. Tariffs of intra-African air services conducted within the framework of the Yamoussoukro Decision (YD) will be regulated in compliance with the YD.

A tariff clause should be included in bilateral air services agreements, negotiated with countries, other than countries bound by the Yamoussoukro Decision, which should provide for a flexible filing arrangement, allowing the aeronautical authorities of the participating countries to request tariff filings from the designated airlines as might be required to ensure compliance with competition legislation.

## (vii) Airline Commercial Co-Operative Arrangements<sup>9</sup>

#### (a) Background

Many airlines have adopted code-sharing and other forms of co-operative arrangements and joined Global Alliances to extend their global reach and to enhance their competitive position, including recent inter-modal agreements.

## (b) Issue

As certain co-operative arrangements involve more than simple marketing or operating techniques, concerns about consumer interests and the implications for competition must be addressed. Consumer interests (i.e., prevention of consumer deception regarding the identity of airlines actually providing air services) and the implications for effective airline competition must be addressed. Impact of Global Alliances competing for market-share and potential impact on anti-competitive / restrictive behaviour of airlines participating in such Alliances need to be monitored.

<sup>&</sup>lt;sup>9</sup> Also note Section 9.1.2.2ix) Airline co-operative commercial arrangements within the Domestic Scheduled Traffic Section.

The practice of leasing of aircraft raises potential safety and economic issues in cases where the leased aircraft is registered in a different State from that of the operator.

## (c) Policy Statement on airlines' commercial co-operative arrangements:

## PS. 66

South African and foreign-designated airlines should be allowed to enter into commercial co-operative arrangements on international routes, subject to compliance with the applicable domestic law governing competition and the provisions of the applicable Bilateral Air Services Agreements. In addition, a robust regulatory framework addressing international code-sharing, franchising and leasing of aircraft should be developed.

Entity	Role / Responsibility
Minister of Transport	<ul> <li>Giving effect to national policy and legislation on international air transport;</li> </ul>
	<ul> <li>Giving effect to the implementation of the international conventions in connection with civil aviation which the Government has acceded to or ratified; and</li> </ul>
	<ul> <li>Appointing the Members of the International Air Services Council.</li> </ul>
International Air Services Council	<ul> <li>Considering applications for the granting and/or amendment of international air services licences in line with the air services agreements entered into with other States;</li> </ul>
	<ul> <li>Chairperson to consider applications for the granting and/or amendment of foreign operator's permits; and</li> </ul>
	• Monitoring the performance of air service licence holders in terms of the relevant legislation, including the possible institution of certain actions as a result of such monitoring.
Department of	<ul> <li>Acting as Aeronautical Authority in the negotiation of bilateral air services agreements;</li> </ul>

# 9.1.2.8 Summarised statement on the allocation of roles and responsibilities in respect of international air transport

Entity	Role / Responsibility
Transport (DOT)	Liaising with ICAO and other multilateral civil aviation organisations;
	<ul> <li>Giving administrative and legal support to the International Air Services Council;</li> </ul>
	<ul> <li>Undertaking interdepartmental liaison on international civil aviation; and</li> </ul>
	<ul> <li>Interacting with the aviation industry and SACAA on matters relating to international air transport.</li> </ul>
SACAA	• Regulating aviation safety and security in general;
	<ul> <li>Assessing safety-related issues in licence and foreign operator's permit applications and providing input to the International Air Services Council;</li> </ul>
	<ul> <li>Issuing and renewing the operating certificates of South African-based air carriers once such air service licences have been granted, issued or amended; and</li> </ul>
	<ul> <li>Giving technical support to DOT and International Air Services Council.</li> </ul>

## 9.1.3 Non-scheduled international air transport services

## 9.1.3.1 Role of non-scheduled international air transport services

## (a) Background

Although various types of and variations in non-scheduled international air services can be identified, this White Paper addresses two main types of non-scheduled operations based on the purpose of the services rendered, namely:

 Ad hoc flights, where an aircraft is hired for a specific flight with a specific purpose, for instance for the conveyance of cargo only; passengers only; or a combination of passengers, cargo or mail. This can include affinity group charters, student charters, diplomatic and VIP flights, and special-event charters. This type of operation normally takes place on a once-off basis or is limited to a single-entity contract requiring a specified number of return flights to satisfy such entity's transport requirements.

• **Programmed charter flights**, consisting of a series of flights from a specific origin to a specific destination. These flights are normally sold as part of an inclusive tour, which includes land arrangements. Although the flights are normally provided on a programmed basis, the service needs to generally not be regarded as a scheduled service, since it should not be open to use by the public, as defined.

## (b) Issue

The main area of regulatory concern regarding international non-scheduled services is how to strike a balance between the commercial interests of the scheduled service operators and those of the charter operators in the same markets or routes, while taking into account the overall economic interests of the country. For this reason, certain restrictions or controls may have to be imposed to ensure that non-scheduled air services do not seriously impair the economic viability and efficiency of scheduled air services. Whilst charter flights are normally operated during peak seasons, scheduled air services are required to continue operations, even during periods of low passenger demand, potentially impacting negatively on the continued viability of scheduled air services.

(c) Policy Statement on the role of non-scheduled international air transport services:

#### PS. 67

The network of scheduled international air transport services should be complemented by non-scheduled international air transport services. These services should be allowed within the framework of formulated goals and objectives.

## 9.1.3.2 Non-scheduled international air transport services

## i. Regulation of non-scheduled international air transport services

#### (a) Background

Scheduled international air services are regulated primarily on the basis of bilateral or multilateral agreements between countries. By contrast, states generally regulate non-scheduled international air services based on their relevant national laws, in compliance with Article 5 of the Chicago Convention.

#### (b) Issue

In general, non-scheduled air services lack the formal regulatory structure of scheduled air services. It would also appear as if certain states are applying less stringent requirements on the operations of these non-scheduled operators. This has significant implications for the economic stability, safety and security of the international air transport system.

(c) Policy Statement on the regulation of non-scheduled international air transport services:

#### PS. 68

Aviation safety, security, environmental and economic considerations regarding non-scheduled international air transport services should in future continue to be controlled and regulated within a well-defined regulatory framework in order to ensure and facilitate the provision of safe and reliable non-scheduled international air transport services to and from South Africa.

#### ii. Non-scheduled international air transport services: Small Aircraft

#### (a) Background

The International Air Services Act, 1993, provides for the economic deregulation of commercial operations with small aircraft. Small aircraft has been defined as Categories A3, A4, H1 and H2 (note *ANNEXURE 2 - DEFINITIONS* of this White Paper).

#### (b) Issue

Economic regulatory requirements applicable to non-scheduled and general air service operations with large aircraft are complex and do not suit the needs of operators of small aircraft. Many South African operators of small aircraft are holders of domestic air service licences and should be allowed to operate internationally (regionally) to avoid unnecessary duplication. Likewise, due to the small impact of non-scheduled operations conducted with small aircraft, these services need to be exempted from *economic* regulation.

(c) Policy Statement on non-scheduled international air transport services with small aircraft:

#### PS. 69

South African and foreign operators of small aircraft (categories A3, A4, H1 and H2 as defined), providing non-scheduled international air transport services to and from South Africa should continue to be allowed to operate freely, subject only to safety, security and environmental regulation. In the case of foreign operators, such services will be subject to a reciprocity agreement with the relevant states.

## iii. Non-scheduled international air transport services: Large Aircraft

## (a) Background

Non-scheduled air services are regulated through the International Air Services Act of 1993 and the regulations promulgated there under.

## (b) Issue

Due to the potential negative impact that non-scheduled air services operated with large aircraft may have on the stability of the network of scheduled air services, guidance is needed in respect of the regulation of services such as:

- Non-scheduled services competing with scheduled air services on the same route / market;
- non-scheduled services competing with scheduled air services on intra-African routes in terms of the Yamoussoukro Decision;
- charter flights for the purpose of conveying tourists to South Africa as part of an inclusive tour;
- non-scheduled services on routes where no scheduled air services are operated; and
- non-scheduled cargo-only services.
- (c) Policy Statement on non-scheduled international air transport services with large aircraft:

## PS. 70

Non-scheduled international air transport services operated with large aircraft to and from South Africa should complement the network of scheduled international air transport services, especially with a view to stimulating tourism, investment and trade, and to developing new air links. To this end, the current regulatory framework addressing the various types of non-scheduled air services should be reviewed.

Non-scheduled air services for the purpose of conveying passengers, cargo or mail in combination between South Africa and countries bound by the Yamoussoukro Decision should be allowed freely, and flights should only be subject to safety, security and environmental regulation.

## 9.2 GENERAL AIR SERVICES

Please note that Policy Statements 43, 44, 49, 50 and 52 under Section 9.1.2.2 and 9.1.2.3 also apply to *domestic* general air services.

#### (a) Background

General air services in the South African context include aerial work and air ambulance operations.

CARS Part 1 defines **Aerial Work** as "an aircraft operation in which an aircraft is used for specialised services as determined by the Director such as –

- (a) agricultural spraying, seeding and dusting;
- (b) cloud spraying, seeding and dusting;
- (c) culling;
- (d) construction;
- (e) aerial harvesting;
- (f) aerial patrol, observation and survey;
- (g) aerial advertisement, including banner towing and other towing of objects;
- (h) search and rescue;
- (i) parachuting;
- (j) aerial recording by photographic or electronic means;
- (k) fire spotting, control and fighting; and
- (I) spraying, seeding or dusting other than for agricultural purposes and clouds;"

An air ambulance is defined by CARS as "an aircraft used for the purposes of transporting a patient, or a person for whom there can be reasonable expectations that they will require medical attention during the transportation, and equipped in accordance with the provisions of Part 138." An **air ambulance operation** is defined as "air transportation of a patient, or person for whom there can be a reasonable expectation that they will require medical attention during the transportation which is operated in terms of Part 138";

From a regulatory perspective, there are certain grey areas between air services operated for reward and non-revenue-generating aviation activities. For example there is confusion about the so-called "hire and fly" operations, leasing, emergency evacuation flights, ferry flights and own-use charter flights.

It is important to note that within the South African context, limited commercial use is made of aircraft defined as "Non-type Certified Aircraft" (NTCA). Although these aircraft do not subscribe to the specified ICAO standards and recommended practices (as applicable to other aircraft), these operations are governed by the individual sovereign states in which they operate. Many states simply refer to this as "Experimental Aviation". South Africa follows the international trends and subscribes to international norms in this regard, although no formal international prescription

exists. This is mainly aimed at encouraging research and development within an acceptable aviation safety environment.

It must also be noted that there is a difference between aircraft in experimental aviation and non-type certified aircraft. "Experimental aircraft" usually refers to owner designed and built or commercially designed and owner built aircraft while non-type certified aircraft, although including experimental aircraft, also includes factory built aircraft. These aircraft are mainly used in the private recreational environment, and include vintage, veteran and ex-military aircraft, but may be used for education, training and awareness programmes. Commercial operations are generally limited to areas where no suitable type certified aircraft exist in a specific application.

#### (b) Issue

Given the commercial nature of these activities, a certain level of aviation safety and security regulation is required in order to deal with issues of liability and responsibility, but in a manner that is appropriate and supports the economic sustainability of these activities.

The distinction between non-commercial activities and air services for reward needs to be clarified. There is also a lack of in-principle and regulatory guidance on the handling of specific flying operations. The specific needs regarding the commercial use of aircraft referred to as "Non-type Certified Aircraft" (NTCA) needs to be addressed.

(c) Policy Statement on General Air Services:

#### PS. 71

General air services should continue to be regulated within a well-defined regulatory framework to ensure compliance with international norms and standards pertaining to aviation safety and security, as contained in the relevant international conventions to which South Africa subscribes. This should be aimed at:

- Ensuring the provision of safe, secure, reliable, sustainable and environmentally friendly general air services and operations, with due recognition of the needs of the users of Non-type Certified Aircraft for the provision of general air services for reward; and
- Creating a clear distinction between the regulation of general air services for reward and non-reward activities.

## 9.3 FLYING TRAINING SCHOOLS AND ADVENTURE AVIATION<sup>10</sup>

## 9.3.1 Flying training schools

#### (a) Background

Flying training, whilst not involving transport of passengers, nevertheless involves an element of reward for the services offered. Flying training constitutes a significant proportion of air traffic movements in South Africa, and also represents an important economic opportunity for the country. There has been strong growth in the number of foreign students learning to fly in South Africa, which is increasingly recognised as a value for money option. Flying training is excluded from the definition of an "air service" (Air Services Licensing Act, 1990) and are regulated under Part 141 of the SA-CARs).

#### (b) Issue

Given the nature of flying training, the users of the services do accept some element of risk. However, the rapid growth of flying schools requires regulation and oversight in order to ensure safe operations and retain the reputation of South Africa as a centre of flying training.

## (c) Policy Statement on Flying Training:

#### PS. 72

Flying training schools should continue to be regulated within a welldefined regulatory framework to ensure compliance with international norms and standards pertaining to aviation safety, security and environmental protection.

## 9.3.2 Adventure aviation

#### (a) Background

Adventure aviation has significant scope as a tourism service offering within the adventure and extreme sports category, which could generate new enterprises and employment opportunities. Adventure flights provide an introduction to recreational aviation experiences through adventure flights to adventure seekers, the sport and adventure tourism industry and for social or corporate purposes. Adventure flights are conducted in two-seater aircraft which are limited by design to only carry one pilot and one passenger during any given flight, and may or may not be type certified aircraft. These aircraft are operated under the national or glider pilot's licenses, or tandem

<sup>&</sup>lt;sup>10</sup> Also note Chapter 10 on "NON-COMMERCIAL AVIATION

hang glider, para glider or parachute ratings, and in the case of non-type certified aircraft, SA-CARs, Parts 24 and 96 apply.

## (b) Issue

To date in South Africa, adventure aviation for reward has not been adequately regulated; there is therefore a need to create a suitable regulatory framework that enables safe, secure and environmentally friendly adventure aviation operations. Users need to be made fully aware of the risks, and operators need to maintain professional operations and core safety requirements. A balance is therefore required between supporting the growth of adventure aviation by avoiding unnecessary barriers to entry, and providing a minimum level of oversight, given that they are paid for services, and in order to ensure a sound reputation for these industries.

(c) Policy Statement on Adventure Aviation for reward:

#### PS. 73

Adventure flying activities for reward should be regulated within a suitable regulatory framework which provides for the clear, safe, secure and environmentally friendly regulation of this activity, and creates a legal pathway to adequately approve, control and oversee all areas of adventure flight operations, without undue and onerous barriers to entry.

## **10 NON-COMMERCIAL AVIATION**

## 10.1 APPROACH TO REGULATION OF NON-COMMERCIAL AVIATION

## (a) Background

Non-revenue generating aviation activities, including private use, sport and recreation, and corporate aviation account for the bulk of aircraft ownership and air traffic movements in South Africa. These activities represent a key segment of civil aviation.

Recreational aviation includes private, social and pleasure flights, whilst sports aviation includes competition and special air events. In order to enable these flight, additional activities and resources are required such as training, personnel, associations and clubs, equipment and facilities, design, building and restoration of non-type certified aircraft.

The smaller airports used by many non-revenue-generating activities are in most cases unmanned. Safety and security concerns are left to the operator of an aircraft, who has to ensure the security of the aircraft and the safety of the operation. As there are no passengers or revenue generation, liability issues are limited. Recreational aviation, personnel licenses, its aircraft and activities are therefore mostly not provided for, or subject to ICAO SARPS as they do not operate with licenses in terms of Annex

1 or certified aircraft in terms of Annex 8. Within this segment, pilots carry the responsibility for ensuring aircraft that they are flying are properly maintained and airworthy, and taking proper care to ensure the safety of flights, as well as checking on conditions of take-off and landing areas.

Accordingly such activities are conducted by members of various approved, recreational aviation organisations, which in turn are controlled and overseen by the Recreation Aviation Administration of South Africa (RAASA) as currently designated by the Civil Aviation Authority.

#### (b) Issue

As the liabilities and requirements for air services for reward differ from those for nonrevenue-generating activities, the measures prescribed need to differ. Any measures prescribed need to recognise the role of non-revenue-generating activities and the specific environment in which they operate.

(c) Policy Statement on non-commercial aviation:

#### PS. 74

Non-commercial aviation should continue to be regulated within a welldefined organisational and regulatory framework to ensure compliance within a uniquely South African environment and requirements and where applicable international norms and standards pertaining to aviation safety, by the SACAA or any organization designated in terms of the Civil Aviation Act. This should be aimed at:

- Promoting and encouraging continued growth and development of all its various disciplines and facets, thereby ensuring sustainable and continued industry growth, skills development, and creation of employment.
- Developing applicable regulations and standards for recreation aviation and its various areas of operation, to promote safety, industry standards and to control and oversee all areas of recreational flying activities.

## 10.2 AIRSPACE MATTERS FROM A NON-COMMERCIAL AVIATION PERSPECTIVE<sup>11</sup>

## (a) Background

As commercial and non-commercial activities can take place in the same airspace, it is important to clearly provide for the various types and classes of airspace, from formal controlled airspace to uncontrolled airspace. The class of airspace also dictates the minimum equipment required on board the aircraft in such airspace, as well as the flight information service to be rendered.

#### (b) Issue

The policy needs to foster an environment conducive to enhanced communication between air traffic control and pilots involved in non-commercial activities in the interest of aviation safety, and ensuring sufficient provision for sport and recreational airspace. Within this context, information sharing with the non-commercial aviation community is needed, and relief from normal air traffic service charges for noncommercial activities may need to be explored.

(c) Policy Statement on airspace matters from a non-commercial aviation perspective:

#### PS. 75

Non-commercial activities should continue to be regulated within a welldefined airspace structure that is conducive to development whilst ensuring compliance with the international norms and standards pertaining to aviation safety as contained in the relevant international conventions to which South Africa subscribes.

Consideration should be given to airspace provision for sport and recreational aviation based on the principle of flexible use of airspace, as applicable.

Consideration may be given to the development of a differentiated system of air traffic service charges applicable to non-commercial activities.

<sup>&</sup>lt;sup>11</sup> Also note Chapter on AIRSPACE"

## **11 REMOTELY PILOTED AIRCRAFT SYSTEMS**

## (a) Background

The SACAA adopted the term "*Remotely Piloted Aircraft Systems*" when referring to this particular sector of aviation. The acronyms UAS (Unmanned Aircraft System), UAV (Unmanned Aerial Vehicle) Drones and RPAS (Remotely Piloted Aircraft Systems) are terms often used as synonyms, describing the same sector of aviation. These acronyms refer to aircraft that are piloted remotely by the Remote Pilot or autonomous from their point of departure, to their destination.

Unmanned aircraft may be remotely piloted, fully autonomous or a combination. Current efforts of integrating UAS into civil airspace will exclude fully autonomous unmanned aircraft for the foreseeable future.

South Africa has been highly successful in the development and application of unmanned aircraft for military operations, for example, Denel Aerospace for surveillance missions and high speed target practice, and Advanced Technologies and Engineering (ATE) for artillery fire correction missions. However, in recent years, demand for their use in civilian roles has experienced a steady increase. South Africa, for example, is one of the first countries that has successfully used unmanned aircraft for civilian missions such as monitoring the 1994 Democratic Elections and carrying out crime prevention operations with the SEEKER UAS. Recently, RPAS have been used by the South African Weather Services for the rain seeding project in collaboration with ATE.

RPAS are increasingly being considered for a number of purposes, such as:

- Dull, monotonous and long endurance missions where human pilots would not want to execute such missions, such as coastal and marine protection;
- Dangerous and risky missions that would pose a threat to the life of pilots, such as during meteorological missions in thunderstorms; and for dirty and hazardous missions that would pose a health risk to pilots, such as during nuclear radiation monitoring missions;
- Photography;
- Recreational flying;
- Surveys;
- Anti-game poaching purposes; and
- Parcel, food, blood delivery

The demand for usage in other areas is also increasing, for example, fire fighting management and disaster monitoring; transportation of cargo; border patrol and law enforcement; game counting and prevention of poaching; pipeline / electrical line monitoring; re-broadcasting of radio information; remote environmental research, including pollution assessment and monitoring; as well as for oceanography and other scientific missions. A number of requests for RPAS civil applications have been

received, including the National Health Laboratory Services, the South African Weather Services ("Intsikizi Rainbird Project") and others.

The need to regulate pilotless aircraft was recognised as early as 1944 and is addressed in Article 8 of the Chicago Convention (pilotless aircraft), which states that "...No aircraft capable of being flown without a pilot shall be flown without a pilot over the territory of a contracting State without special authorization by that State and in accordance with the terms of such authorization. Each contracting State undertakes to insure that the flight of such aircraft without a pilot in regions open to civil aircraft shall be so controlled as to obviate danger to civil aircraft".

South Africa is a member of the RPAS Panel (RPASP) established by ICAO in 2014. This Panel has been tasked to coordinate and develop Standards and Recommended Practices (SARPs), with supporting Procedures for Air Navigation Services (PANS) and guidance material to facilitate the safe, secure and efficient integration of remotely piloted aircraft (RPA) into non-segregated airspace and aerodromes.

SACAA is responsible for the integration of RPAS in national airspace and safety and security regulation of their operations. The operation of RPAS in South Africa is currently governed in terms of Part 101 of the CARs, effective from 1 July 2015.

#### (b) issue

RPAS operations are expected to increase in both the public and private sectors. In particular, there is an increased demand for civilian RPAS operations in the commercial aerial work domain in the short, medium and long-term. The regulatory framework therefore needs to support the evolution of RPAS whilst ensuring a sufficient level of safety and security, including protection of lives and property on the ground as well as minimising the risk of collisions with other traffic.

Since there are fundamental differences between traditional aircraft and RPAS, integration efforts of RPAS into civil airspace should consider these differences. As an example, traditionally all civil aviation regulations have been written on the assumption that a person would be in the cockpit of an aircraft. This difference and others might require a different approach in development of regulations for RPAS. RPAS regulation should consider the uniqueness of RPAS compared to traditional aircraft.

(c) Policy Statement on Remotely Piloted Aircraft Systems:

#### PS. 76

The South African Civil Aviation Authority should remain responsible for the regulation of civilian Remotely Piloted Aircraft Systems (RPAS) within a well-defined regulatory framework to ensure compliance with international norms and standards pertaining to aviation safety, security and environmental protection, as contained in the relevant international conventions to which South Africa subscribes.

Civilian RPAS operations must at all times be conducted in compliance with the Chicago Convention, its relevant Annexes and applicable domestic law. The regulatory framework must continue to support the evolution of RPAS whilst ensuring a sufficient level of safety and security.

All civilian RPAS registered in South Africa, or operated by an entity established in South Africa, will remain subject to SACAA's aviation safety, security and environmental oversight, including their operators, pilots and maintenance personnel. Furthermore, all civilian RPAS operators established outside South Africa wishing to conduct aerial work for reward in the airspace over South African territory, must request and obtain authorisation from all relevant authorities prior to the commencement of such operations.

## 12 AIRCRAFT OPERATIONS AND THE ENVIRONMENT<sup>12</sup>

# 12.1 ESTABLISHMENT OF AIRPORT ENVIRONMENTAL COMMITTEES

#### (a) Background

In South Africa and internationally, there is a growing interest in and concern about the environmental impact of aircraft operations. This impact includes noise and air pollution as well as human-induced climate change.

One of the greatest environmental and developmental challenges in the 21<sup>st</sup> century will be that of controlling and coping with climate change. The international political response to climate change began with the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, which sets out a framework for action aimed at stabilising atmospheric concentrations of greenhouse gases to avoid anthropogenic or human interference with the climate system. In addition, the Kyoto Protocol under the UNFCCC entered into force on 16 February 2005.

South Africa is Party to both the UNFCCC and the Kyoto Protocol and hosted the 17<sup>th</sup> Conference of the Parties (COP 17) to the United Nations Framework Convention on Climate Change from 28 November to 9 December 2011 in Durban.

At the 38<sup>th</sup> Assembly held in 2013, ICAO highlighted recent developments in respect to civil aviation on climate change through state action plans and assistance to states, sustainable alternative fuels for aviation, market-based measures, and global aspirational goals.

Noise pollution from aircraft operations is inextricably linked to aviation infrastructure. The White Paper on National Transport Policy, 1996, acknowledges that the provision of transport infrastructure and the operation of the transport system have the potential for causing damage to the physical and social environment, *inter alia* through atmospheric and noise pollution. Government is cognisant of the detrimental effect this may have on local communities and the Department of Transport is therefore committed to an integrated environmental management approach in the provision of transport.

Most of the activities embracing civil aviation and affecting the environment are either airport-related or arise from, and end at airports. It would therefore be appropriate to provide for an arrangement at airports that could facilitate a consultative forum in respect of environmental matters.

#### (b) Issue

The nature and scope of aviation-related environmental matters at airports suggests that dedicated and representative workgroups or committee may need to be considered.

<sup>&</sup>lt;sup>12</sup> Please note Section 6.2 (Environmental Sustainability of Airport Development).

White Paper on National Civil Aviation Policy: February 2017

(c) Policy Statement on the establishment of Airport Environmental Committees:

PS. 77

The airport licensee of an airport that is required to calculate and predict aircraft noise contours and conduct regular monitoring of aircraft noise and/or air quality monitoring should establish a standing Airport Environmental Committee as part of an airport consultation forum to provide a communication link between various interested and affected parties to discuss the environmental impact of aircraft operations.

## 12.1.1 Environmental Management Programmes

Please also refer to Section 6.2, ENVIRONMENTAL SUSTAINABILITY OF AIRPORT DEVELOPMENT, which includes requirements for Environmental Impact Assessments for airport developments and expansions.

#### (a) Background

Under the maintenance of an aerodrome environmental management programme, the licence holder must operate the aerodrome in accordance with the provisions of the Environmental Management Act and the regulations made there under as applicable.

The environmental impact management during the construction or upgrading of airports and associated structures and changes in land use from, for example, agriculture to any other land use, including that of airports, as well as reconstruction of disaster damaged infrastructure should factor in climate change, and disaster risk reduction in accordance with the National Climate Change White Paper, Disaster Management Act, and the Hyogo Framework of Action 2005-2015, which calls for the reduction in disaster risk through building resilience to hazards.

#### (b) Issue

Ongoing operations of airports also need to comply with environmental requirements, including in some cases in terms of noise and emissions monitoring, where specified by the Director of Civil Aviation.

Environmental Management Plans, particularly in the case of smaller airports, may not always be properly carried through into practice and monitored. The mechanism is therefore not currently being fully utilised as a tool to monitor and control emissions.

(c) Policy Statement on Environmental Management Programmes:

#### PS. 78

An Environmental Management Programme should be used to monitor and control environmental impacts and emissions at licenced airports. This programme should include the current airport operations, air carriers, flight frequencies, proposed developments at the airport, local structure plan, airport controls to minimise the impact of aircraft emissions on the surrounding environment, local planning controls, measures aimed at minimising disaster risk as well as climate change considerations.

## 12.2 AIRCRAFT NOISE

#### 12.2.1 Balanced approach to aircraft noise management

#### (a) Background

The International Civil Aviation Organisation (ICAO) addresses aircraft noise through a programme which takes into account the *balance* of four elements comprising:

- The reduction of noise at source,
- land-use planning and management,
- noise abatement operational procedures and
- operating restrictions.

The 38<sup>th</sup> Session of the Assembly, urged States to adopt the balanced approach to noise management, taking full account of guidance contained in ICAO Doc 9829 Guidance on the Balanced Approach to Aircraft Noise Management, when addressing aircraft noise problems at international airports.

Annex 16 (Environmental Protection - Volume 1) to the Chicago Convention contains the international Standards and Recommended Practices (SARPs) with regard to aircraft noise. It classifies aircraft into different groups, specifically with regard to noise. Generally, noisier aircraft fall into two groups, namely the non-noise-certified jet aircraft manufactured between 1949 and 1965, and the Chapter 2 subsonic jet aircraft certified before 6 October 1977.

Subsonic jet aircraft certified after 6 October 1977 are classified as Chapter 3 aircraft, and subsonic aircraft certified after 1 January 2006 are classified as Chapter 4 aircraft. Propeller-driven aircraft, depending on their certification date and maximum take-off weight, fall under Chapters 3, 5, 6 and 10, whereas helicopters fall under Chapters 8 and 11. Supersonic aircraft are addressed in Chapter 12. Comprehensive definitions of the above aircraft classification are contained in the International Standards and Recommended Practices on Environmental Protection, Annex 16, Volume I to the Chicago Convention.

The Civil Aviation Act allows SACAA to issue technical standards for civil aviation on matters prescribed by regulation. South African noise standards are specified as those contained in Annex 16 Volume I to the Chicago Convention, Volume 1, through the South African Civil Aviation Technical Standards, SA-CATS-ENVIRO Part 36, "*Noise Certification*".

#### (b) Issue

Local authorities claim that the uncontrolled increase in noise pollution caused by aircraft is sterilising major areas of developable land, especially land close to airports. One of the major concerns is the fact that certain air service providers, especially all-cargo air carriers, are using aircraft which are unacceptable in other parts of the world from a noise pollution point of view.

Some air carriers are making use of noisy aircraft because of short-term financial considerations. These noisy aircraft plus the growing number of aircraft operations over residential areas, including flights at night, are causing growing annoyance and resistance from communities in the affected areas.

(c) Policy Statement on balanced approach to aircraft noise management:

#### PS. 79

Decisions regarding the implementation of measures for the control of aircraft noise should be taken in accordance with the International Civil Aviation Organisation's (ICAO) balanced approach to noise management.

## 12.2.2 Reduction of aircraft noise at source

## 12.2.2.1 Acceptability of certain types of aircraft

#### (a) Background

Many developed countries throughout the world have introduced measures to reduce the number of, and eventually prohibit, the use of old, noisy aircraft. As a result, the relative prices of such aircraft have become low and there has been an inflow of these aircraft to countries which have not implemented restrictions on such aircraft. Furthermore, air traffic movements at some of the major airports in South Africa have increased dramatically over the past 20 years and the number of foreign operators to and from South Africa has trebled from the mere 21 airlines in 1994.

As at 2016, the maximum age of current Chapter 2 aircraft (as defined in Annex 16 Volume 1 to the Chicago Convention) is 39 years, and it is unlikely that most of these aircraft would still be commercially operational after 40 years of service. The vast majority of flights are currently being undertaken by air carriers with the more acceptable Chapter 3 and 4 aircraft.

For South Africa, as a developing country, affordability is an important principle when considering restrictions on Chapter 2 aircraft. This relates, *inter alia*, to the cost of replacing the existing Chapter 2 aircraft.

The restriction of older-generation aircraft may impact on relations between South Africa and other African States. In this regard, ICAO urged contracting States to cooperate to ensure the greatest possible harmonisation of programmes, plans and policies. The African Civil Aviation Commission (AFCAC), of which South Africa is a member, is also addressing this issue and it is evident that other African countries (member States of AFCAC) are also considering and implementing restrictions on environmentally insensitive aircraft.

#### (b) Issue

The continued use of noisy aircraft to, from and within South Africa results in unacceptable noise and engine emission pollution at South Africa's larger airports and within its airspace.

South Africa needs to deal with restrictions on the use of the noisier types of aircraft within the South African airspace, guided by the ICAO balanced approach to dealing with aircraft noise.

(c) Policy Statement on acceptability of certain types of aircraft:

#### PS. 80

South Africa should restrict air carriers from adding Chapter 2 aircraft to their existing fleets and foreign air carriers from increasing the number of flights with Chapter 2 aircraft with effect from a date to be prescribed in terms of the Civil Aviation Regulations. In addition, all services operated with Chapter 2 aircraft to, from and within South Africa should be phased out over a period as prescribed, with due regard to preservation of heritage aircraft.

The Department of Transport should monitor developments at ICAO and international trends regarding the possible future phasing out of Chapter 3 aircraft.

## 12.2.2.2 Regulation and control of noise restrictions

## (a) Background

The current legislative framework provides a sound foundation for the implementation of an aircraft noise policy. The SA-CARs and other civil aviation regulations relating to aircraft and air services are the logical point for proceeding with an appropriate regulation and control system.

## 1) South African-registered aircraft

The applicable aviation legislation provides for the issuance of a registration certificate, certificates of airworthiness (whether standard, restricted or experimental), type certificates, operating certificates and various other permits or authorisations.

The periods of validity of these certificates or authorisations may vary from predetermined time frames to an indefinite period, provided that the circumstances at the time of certification still prevail. Aircraft owners and operators cannot be allowed to use aircraft which are no longer acceptable in terms of noise restrictions.

## 2) South African-licensed airports

The prevalent system of airport licensing is a sound basis for regulation and for implementing the noise abatement policy.

#### 3) Foreign-registered aircraft

Aircraft operated by foreign air carriers for commercial purposes are regulated though Foreign Operator's Permits. Use of unacceptable aircraft could be prevented through this system.

#### (b) Issue

An effective regulation and control system needs to be established that would enable the successful implementation of the policy on aircraft noise.

(c) Policy Statement on the regulation and control of noise restrictions:

#### PS. 81

The implementation of the policy on aircraft noise of South Africanregistered aircraft and licensed airports should be regulated and controlled through the process of registration, licensing, certification and other forms of authorisation, whereas in the case of foreign-registered aircraft, compliance would be assured by issuing the appropriate foreign operator's permits.

In addition, foreign aircraft which do not require foreign operator's permits (private or non-revenue flights) could be regulated by imposing landing restrictions on airports that would effectively prohibit Chapter 2 aircraft from using the South African airspace.

## 12.2.2.3 Modification of Aircraft Engines

## (a) Background

Technology is available for reducing noise generated by aircraft engines. Alternatively, new engines could be fitted to reduce noise, or existing aircraft could be re-certified to reduce the permissible maximum take-off mass to meet acceptable noise specifications.

## (b) Issue

A government policy is required regarding the acceptability of engine modifications, such as hush-kitting, engine replacements and the re-certification of existing aircraft.

## (c) Policy Statement on modification of aircraft engines:

## PS. 82

Modifications to aircraft and aircraft engines would be permitted if the modified aircraft complies with Annex 16 to the Chicago Convention (Volume 1) applicable to at least Chapter 3 noise certification standards as well as meeting all the aviation safety requirements.

## 12.2.2.4 Existing Undesirable Land-Uses within Various Noise Contours<sup>13</sup>

## (a) Background

Various techniques and procedures can reduce the undesirable effects of aircraft and associated noise. Land-use planning and control are deemed to be among the best countermeasures. This implies taking advantage of available land-use control techniques to ensure that land surrounding the airport and major departure routes is used in a manner compatible with and in harmony with the airport environment and activities.

The 38<sup>th</sup> Session of the Assembly encouraged States to apply land-use planning and management policies to limit the encroachment of incompatible development into noise sensitive areas.

The 38<sup>th</sup> Session of the Assembly further urged States to define zones around airports associated with different noise levels taking into account population levels and growth as well as forecasts of traffic and establish criteria for the appropriate use of such land.

Acceptable noise levels for different land use purposes is published in SANS 10103 titled "The measurement and rating of environmental noise with respect to land use, health, annoyance and speech communication", seem to be generally accepted. This

<sup>&</sup>lt;sup>13</sup> Please also note SECTION 7.4 "LAND USE ON AIRPORTS AND LAND USE AROUND AIRPORTS"

National Standard takes into account the effect of noise on the persons living, working and participating in activities in the various noise zones. It endeavours to strike a balance between the interests of the individual, the local authority, the airport and the aircraft operator. ICAO Doc 9184 Airport Planning Manual Part 2 Land Use and Environmental Control, provides guidance on land use planning in the vicinity of airports and on environmental control regarding airport development and operations.

(b) Issue

The need for balance between the interests of the airport and those of stakeholders near the airport need to be considered in the land-use development allowed in the vicinity of airports. There need to be clear guidelines on which land uses are allowed within which noise level contours.

When new airports are constructed in undeveloped semi-rural areas, it is easier to prescribe and enforce land-use control around the airport according to the predicted noise contours. However, many of the existing airports are located in urban areas where considerable development has taken place around the airports. Certain developments have not taken into account the noise contours of the airport, resulting in what can be called "undesirable" or "incompatible" land use in relation to the specific noise zone within which the development took place. Land use needs are addressed through Land Development Objectives (LDOs) and Integrated Development Plan (IDPs), but some undesirable and incompatible land-uses developed the past and are at present located within certain noise zones in the vicinity of many airports and major standard air routes.

A future approach is needed to improve this situation. When new policies are being promulgated or existing policies confirmed, the question arises what should be done about such previously misplaced development.

(c) Policy Statement on existing undesirable land-uses within various noise contours:

#### PS, 83

Once the noise contours for the airport have been established and the proposed land-uses have been accepted for the different noise zones as determined, the relevant municipality should survey all land-uses within these noise contours and compare them with acceptable land-uses to determine any existing non-compatible or undesirable land-uses.

Where buildings and other infrastructure are used for a purpose which is incompatible with certain noise zones, these buildings and infrastructure should be used for a more compatible purpose which is permissible in that particular noise zone. However, the practical implications of such a change in the use of buildings and infrastructure must be considered.

## 12.2.3 Noise Abatement

## 12.2.3.1 Aircraft Safety and Operational Noise Controls

## (a) Background

The 38<sup>th</sup> Session of the Assembly encouraged States to apply noise abatement operating procedures to the extent possible without affecting the safety of aircraft. Aircraft operation control applies to the actual operation of the aircraft on arrival and departure, and at a low altitude in the vicinity of the airport. The safe operation of an aircraft must always be the overriding consideration.

#### (b) Issue

Pilots cannot be forced to follow procedures which distract their attention from the control of their aircraft, or to use runways that are not optimised for departures and arrivals. However, pilots need to take into account the noise generated by their aircraft and, unless the safe operation of the aircraft is in jeopardy, need to take appropriate measures to reduce aircraft noise. It is anticipated that future aircraft noise and track conformance-monitoring systems will assist in ensuring that operational controls are implemented.

# (c) Policy Statement on aircraft safety and operational noise controls:

## PS. 84

Pilots should operate aircraft under their control in a way that reduces the noise impact wherever possible. However, the pilot in command remains the ultimate judge about the use of noise-related operational controls to ensure that the safety of the aircraft is not compromised.

# 12.2.3.2 Departure and arrival procedures, preferential runways, and related noise abatement measures

## (a) Background

Noise abatement procedures are applied to aircraft operations when aircraft are close to the ground during the approach and departure phases of flight.

The 38<sup>th</sup> Session of the Assembly encouraged States to apply noise abatement operating procedures to the extent possible considering interdependencies with other environmental concerns, such as aircraft emissions.

ICAO Doc 8168 provides guidance on the development and design of noise abatement departure and arrival procedures, and ICAO Circular 317 provides guidance on the effects of noise abatement procedures on aircraft noise and emissions.

#### (b) Issue

When implementing noise abatement measures, consideration of the benefits to be gained and impacts of various measures need to be taken into account which amongst others, address the following:

- Departure and arrival procedures.
- The use of preferential runways, depending on the individual layout (terminal buildings, taxiways and runway orientation), prevailing winds and the types of land use in the immediate vicinity of the airport.
- Aircraft operated in a standard circuit at airports (e.g. training flights) could have a significant noise impact on communities surrounding the airport.
- The use of reverse thrust after landing.
- Engine run-ups on aircraft to identify problems and after maintenance work has been performed. Run-ups are often carried out at night when aircraft maintenance is done, thus creating a noise disturbance for people who live near the airport.
- Noise generated by aircraft auxiliary power units (APU) can be disturbing when aircraft are parked in areas close to the airport perimeter.
- (c) Policy Statement on departure and arrival procedures, preferential runways, and related noise abatement measures

#### PS. 85

The airport licensee of an airport that is required to calculate and predict aircraft noise contours and/or conduct monitoring of aircraft noise should ensure that appropriate noise abatement procedures and measures are developed and published after approval by SACAA. Aircraft-, airport- and air traffic service unit operators must implement such noise abatement procedures and measures as applicable.

## 12.2.3.3 **Operating Restrictions**

#### (a) Background

Under the ICAO Balanced Approach, an operating restriction is defined as "any noiserelated action that limits or reduces an aircraft's access to an airport". Operating restrictions can improve the noise climate by limiting or prohibiting movements of the noisiest aircraft at an airport, enabling the airport to contain or shrink the noise contours around the airport.

Aircraft noise at night is perceived to have a greater negative influence on people in the areas surrounding the airport, *inter alia*, because of sleep disturbance. This is also the cause of most noise-related complaints.

There are several options for eliminating or reducing aircraft noise at night:

## **Option 1:** Close the airport at night

Airports may be closed at night during times when noise would be most disruptive, for example between 22:00 and 06:00. In such cases, no flights are permitted to land or depart during these times with the exception of emergency flights.

The *advantage* of airport closure at night is the elimination of the main source of noise pollution.

The *disadvantages* are that such measures severely curtail the activities of passenger and freight operations. The economic viability of air carriers and/or airports may be at risk and increased traffic peaking could also result.

During summer at high-altitude airports, some flights are delayed until temperatures have decreased so that the density altitude is suitable for a fully laden aircraft to take off safely. These flights may have to off-load cargo, passengers and fuel, or a combination of all three in order to meet a curfew. In such cases, if aircraft capacity for freight and passengers is under-utilised, more flights would have to be operated to meet demand, leading to more noise.

#### **Option 2:** Prohibit noisy aircraft from operating at night

Airports remain open on a 24-hour basis with operating restrictions on noisier aircraft types. For example, non-noise-certificated and Chapter 2 aircraft could be prohibited from operating between 22:00 and 06:00. This option may be phased in over time, for example with an initial ban between 00:00 and 06:00.

The advantage is that noise impact would be reduced substantially. At the same time, operators using non-noise-certificated and Chapter 2 aircraft would be encouraged to take action to replace their fleets with quieter aircraft.

#### **Option 3:** Limit noisy aircraft at night through penalties

Airports could continue to remain open on a 24-hour basis with no operating restrictions on noisier aircraft types. However, financial penalties would be imposed on non-noise-certificated and Chapter 2 aircraft operations to encourage operators to move towards the use of quieter aircraft.

#### **Option 4:** Limit the number of night operations

In combination with the above options, the relevant airport licensee in consultation with the Airport Environmental Committee could negotiate a daily, weekly or monthly number of night operations. The airport and aircraft operators would have to effectively manage this agreement during the applicable period to ensure that the number of night operations would not be exceeded.

#### **Option 5:** Agree on a night-time noise level which may not be exceeded

A night-time noise level could be established by means of modelling and/or monitoring. Operations may proceed, provided that the agreed night-time noise level is not exceeded.

The 38<sup>th</sup> Session of the Assembly, urged States not to apply operating restrictions as a first resort but only after consideration of the benefits to be gained from the other elements of the ICAO balanced approach, and taking into account the possible impact of such restrictions at other airports.

#### (b) Issue

The number of aircraft in operation is normally much lower late at night than during the rest of the day. Curfews will eliminate or substantially reduce aircraft noise. Curfews and operating restrictions do, however, affect the aviation industry's ability to facilitate the movement of people and goods. Consideration of all ICAO's balanced approached elements must be taken into account before considering curfews and operating restrictions to address night operations.

#### (c) Policy Statement on operating restrictions:

## PS. 86

The airport licensee of an airport that is required to calculate and predict aircraft noise contours and to conduct monitoring of aircraft noise may, if necessary propose, for consideration by SACAA, any or a combination of operating restrictions for eliminating or reducing aircraft noise.

## 12.2.3.4 Airports for which noise contours should be calculated

#### (a) Background

The generation of noise contours is essential for airport operations and in particular, for the long-term planning of land-uses around existing and future airports. The relevance of noise contours around airports is furthermore time-related which implies regular updating.

When dealing with the calculation and prediction of aircraft noise around airports, two sets of standards apply:

- SANS 10117 Calculation and Prediction of Aircraft Noise Around Airports for Land Use Planning, and
- ICAO (Doc 9911) Recommended Method for Computing Noise Contours Around Airports.

## (b) Issue

There are four key issues to consider:

- The compulsory generation of noise contours for long-term planning of land-uses around existing and future airports;
- The prediction model used for generating noise contours;
- Changes to noise contours due to changes in airport activities and development; and
- The responsibility for enforcing and regulating the calculation of noise contours around relevant airports.

## (c) Policy Statement on airports for which noise contours should be calculated:

## PS. 87

SACAA must, in terms of formulated criteria as prescribed, determine which airports are required to calculate aircraft noise contours.

The airport licensee should be responsible for calculating and predicting aircraft noise in accordance with the prediction model set in the National Code of Practice and ICAO and bear the financial responsibility;

The airport noise contours should be established in a manner that would not subject land-use development rights to frequent change.

SACAA should have overall responsibility for enforcing and regulating the calculation of aircraft noise contours at airports as determined.

## 12.2.3.5 Noise and Track Conformance Monitoring

## (i) Noise and track conformance-monitoring systems

## (a) Background

Airport operators have a major role to play in minimising the impact of noise caused by aircraft operations and in demonstrating to the public that the industry is behaving responsibly. Monitoring aircraft noise around airports is a primary instrument in minimising the impact of aircraft noise.

International noise monitoring systems are widely used as powerful tools for controlling the impact of aircraft noise around airports and for developing databases on aircraft noise. This can only be done effectively through permanently installed systems, which have been designed and dedicated to the task of monitoring aircraft noise and track conformance, further complemented by mobile/portable monitoring equipment for evaluating specific site impact.

It is international practice that the airport operator is responsible for installing and maintaining the permanent noise-monitoring system. The airport licensee could, therefore, be assigned the responsibility for this activity to ensure consistency with the assignment of responsibilities.

The requirements for permanently installed systems are set in the international standard ISO 20906: "Acoustics – Unattended Monitoring of Aircraft Sound in the Vicinity of Airports".

#### (b) Issue

There are three main issues concerning the monitoring of noise levels around airports:

- Which airports are required to implement noise and track conformance monitoring systems;
- The requirements for noise and track conformance monitoring; and
- It is essential to assign the responsibility for funding, installing and maintaining the permanent noise-monitoring system to one relevant entity to ensure integrity of the system.
- (c) Policy Statement on noise and track conformance monitoring systems:

#### PS. 88

SACAA must in terms of formulated criteria, as prescribed, determine which airports are required to conduct regular monitoring of aircraft noise.

SACAA will be responsible for the regulation of the standards and requirements for aircraft noise monitoring systems in line with international practice as well as enforcing the monitoring of aircraft noise.

The airport licensee will be responsible for funding the procurement, installation, operation and maintenance of the permanent noise monitoring equipment.

#### 12.2.3.6 Handling Complaints, Claims and Exceptions

#### (a) Background

Public participation is important to inform decision making, especially where residents on land surrounding airports, airport users and other stakeholders would be affected by the development, expansion and upgrading of the airport or adjacent land-uses. This would also be particularly relevant to the preparation of Spatial Development Frameworks (SDFs) and Integrated Development Plans (IDPs).

## (b) Issue

At present, due to the limited deployment of continuous noise measurement equipment, the frequency and nature of complaints cannot be evaluated against the actual aircraft movements at all affected airports. It is important to monitor noise levels effectively and to have the information available when handling complaints.

Attention needs to be given to consultation mechanisms between local governments, SACAA and airport licensees regarding any proposed developments in the various noise zones or noise-controlled areas around an airport. The general public need to have access to noise contours and other noise-related information.

## (c) Policy Statement on the handling of complaints, claims and exceptions:

## PS. 89

The airport licensee must address all noise-related enquiries and complaints in consultation with the Airport Environmental Committee established at such airport, and should endeavour to share information on noise issues monitoring and mitigation with the public.

## 12.2.3.7 Enforcement of Noise-related Procedures and Aircraft Flight Tracks

## (a) Background

The philosophy adopted in this White Paper largely favours self-regulation.

In accordance with the Civil Aviation Regulations, certain airport licence holders are required to address aircraft noise on and in the vicinity of their airports and to report violations to the Director of Civil Aviation.

#### (b) Issue

It may be necessary to introduce punitive measures to ensure compliance with regulatory requirements such as noise abatement procedures and aircraft flight tracks.

(c) Policy Statement on the enforcement of noise-related procedures and aircraft flight tracks:

#### PS. 90

Air traffic service units, airport licensees, airport operators and aircraft operators should ensure that all approved noise abatement procedures are adhered to, including aircraft flight track conformance.

Compliance with noise-related procedures and prescribed aircraft flight tracks should first and foremost be based on self-regulation and should be encouraged. However, if the air traffic service provider, aircraft operator or the airport licensee contravenes the approved noise-related procedures and prescribed aircraft flight track, such contravention should be punishable by means of a system of punitive measures which should be implemented by the SACAA.

12.2.3.8	Consolidated statement	on the	allocation	of roles	and	responsibilities
in r	elation to aircraft noise					

Entity	Role / Responsibility
Department of Transport (DOT)	<ul> <li>Ensuring implementing of the ICAO SARPs and guidelines on aircraft noise pollution;</li> <li>Restricting air carriers from adding Chapter 2 aircraft to their existing fleets and phasing out of such aircraft as prescribed;</li> <li>Monitor developments at ICAO and international trends regarding possible future phasing out of Chapter 3 aircraft;</li> <li>Provide recommendations to the Air Services Licensing Council and the International Air Services Council on the issuance of air services licences to South African operators and FOPs to foreign air carriers respectively, based on noise criteria.</li> </ul>
Airport licensees of airports	<ul> <li>Required to calculate noise contours and regular monitoring of aircraft noise, are responsible for the following:         <ul> <li>Establish an Airport Environmental Committee as consultation forum to discuss environmental impact of aircraft operations;</li> <li>Control the noise-related activities at the airport including the development of noise abatement procedures and measures;</li> <li>Funding the procurement, installation, operation and</li> </ul> </li> </ul>

Entity	Role / Responsibility
	<ul> <li>maintenance of the permanent noise monitoring equipment;</li> <li>Calculate and predict noise contours;</li> <li>Monitor changes to noise contours;</li> <li>Monitor noise and track conformance and report violations to SACAA;</li> <li>Propose, for consideration of the SACAA, any or a combination of operating restrictions for eliminating or reducing aircraft noise; and</li> <li>Liaise with local, provincial and national authorities</li> </ul>
Air Traffic Service Providers	Ensure that all noise abatement and other noise-related procedures are adhered to.
Aircraft Operators	<ul> <li>Ensure that all noise abatement and other noise-related procedures are adhered to.</li> </ul>
SA Civil Aviation Authority	<ul> <li>Determine which airports are required to:         <ul> <li>Conduct appropriate aircraft noise studies to determine whether a noise problem exists at the aerodrome;</li> <li>calculate and predict aircraft noise contours; and</li> <li>conduct regular monitoring of aircraft noise in terms of formulated criteria, as prescribed;</li> </ul> </li> <li>Issue certificates of aircraft registration, airworthiness and other forms of authorisation;</li> <li>Introduce punitive measures to ensure compliance with regulatory requirements such as the cancellation, restriction or suspension of an acquired authorisation and assessing violations and imposing of administrative monetary penalties;</li> <li>Responsible for enforcing and regulating the calculation of aircraft noise contours at airports as determined by the Director of Civil Aviation;</li> <li>Responsible for the regulation of the standards and requirements for aircraft noise monitoring systems;</li> <li>Approve and publish appropriate noise abatement procedures;</li> <li>Carry out reviews and updates as required by this Policy,</li> <li>Provide AIPs and AICs on noise-abatement procedures;</li> <li>Carry out reviews and updates as required by this Policy,</li> </ul>

Entity	Role / Responsibility
	<ul> <li>and</li> <li>Liaise with air traffic services providers, airport operators/owners, national government departments, local and provincial authorities.</li> </ul>
Municipalities	<ul> <li>Ensure appropriate land-use zoning around airports based on current and future noise contours, as informed by the relevant airport's master plan;</li> <li>Monitor and regulate matters on noise pollution within its area of jurisdiction;</li> <li>Gain an understanding/knowledge of other pollution sources in the area;</li> <li>Monitor noise in their area of jurisdiction; and</li> <li>Liaise with the public, airport licensees, Airport Environmental Committees, government departments, local industry and provincial government.</li> </ul>
Department of Environmental Affairs	<ul> <li>Process EIAs and Basic Assessments for airport developments and expansion, as appropriate.</li> </ul>
Airport Environmental Committee	<ul> <li>Act as a consultative forum on environmental issues at the relevant identified airports; and</li> <li>Ensure open lines of communication among all stakeholders.</li> </ul>
# 12.3 AIRCRAFT ENGINE EMISSIONS

# Introduction

Aircraft engines produce emissions that are similar to other emissions produced by fossil fuel combustion. At present, aviation is a relatively small contributor of greenhouse gases. However, the scientific findings of the Intergovernmental Panel on Climate Change (IPCC) identified a clear urgency for action from all sectors.

In 1999, the IPCC, at the request of the International Civil Aviation Organisation (ICAO), produced a special report on "Aviation and the Global Atmosphere". The report assessed the consequences of greenhouse gases from aircraft engines and the potential effects from aviation on both the stratospheric ozone depletion and global climate change. In 1999 it was estimated that the contribution made by aviation to world greenhouse gases was about 3.5%, and this percentage excluded the effects of possible changes in cirrus clouds, which was expected to grow. A more recent IPCC assessment revised aviation's estimated contribution to about 3% of the world's greenhouse gases. This reports also estimated that aviation was responsible for approximately 2% of the world's carbon dioxide emissions, from which just part is attributed to international traffic.

ICAO addresses aircraft engine emissions through local air quality and global emissions:

- Local air quality environmental concerns are created as a result of aircraft landing and take-off. These emissions typically occur up to 3 000 feet (or 915 metres) above ground level. The effects of aircraft emissions on local air quality are addressed using 3 approaches, namely, the reduction of engine emissions at source, through the use of technology and standards, operational measures, and through market based measures.
- Global emissions environmental concerns are aircraft engine gases and particles that are emitted directly into the upper troposphere and lower stratosphere where they have an impact on atmospheric composition. The effects of aircraft engine emissions on global emissions are addressed using 4 approaches, namely, the reduction of engine emissions at source, through the use of technology and standards, operational measures, through market based measures, and the use of alternative fuels.

## 12.3.1 Acceptance of certain aircraft types

## (a) Background

ICAO Annex 16, Volume II - Environmental Protection: Aircraft Engine Emissions, to the Chicago Convention establishes engine emission requirements applicable to aircraft engines.

The number of aircraft engines that produce harmful emissions need be reduced. The Policy Statement on the reduction of aircraft noise at source contained in this White Paper provides for the phasing out of Chapter 2 aircraft (as defined by ICAO Annex 16, Volume I – Environmental Protection: Aircraft Noise) that will also contribute to the reduction of engine emissions.

# (b) Issue

Older-generation aircraft engines emit more harmful greenhouse gases than modern engines. It is therefore important to formulate policy on the acceptance of older generation aircraft and restrictions to be imposed on domestic and international flights operated with such aircraft within the South African airspace.

# (c) Policy Statement on the acceptance of certain aircraft types:

# PS. 91

Government supports the phasing out of Chapter 2 aircraft as defined by ICAO Annex 16 Volume II to reduce aircraft engine emissions, with due regard to preservation of heritage aircraft.

# 12.3.2 Operational measures to reduce fuel consumption

# (a) Background

Recognising the special circumstances and respective capabilities of different countries, particular developing countries, and the commitments of developed countries under the UNFCCC and its Kyoto Protocol, the 37<sup>th</sup> Session of the ICAO Assembly, resolved to achieve a global annual average fuel efficiency improvement of 2% until 2020 and an aspirational global fuel efficiency improvement rate of 2% per annum from 2021 to 2050, calculated on the basis of volume of fuel used per revenue tonne kilometre performed.

The 38<sup>th</sup> Session of the ICAO Assembly recognised that air traffic management measures under the ICAO's Global Air Navigation Plan contribute to enhanced operational efficiency and the reduction of aircraft carbon dioxide emissions.

ICAO Circular 303: "Operational Opportunities to Minimise Fuel Use and Reduce *Emissions Manual*" provides operational guidelines for airport authorities, air traffic service providers and aircraft operators to minimise fuel use and reduce emissions.

## (b) Issue

In order to reduce aviation's negative impact on climate change, it is necessary to implement operational measures to minimise fuel use and reduce emissions, and monitor and report fuel efficiency.

(c) Policy Statement on operational measures to reduce fuel consumption:

# PS. 92

Airport authorities, air traffic service providers and aircraft operators should adopt operational measures to minimise fuel use and reduce emissions. Fuel efficiency gains, as defined by ICAO, should be reported to the Department of Transport on an annual basis.

# 12.3.3 Market based measures

# (a) Background

The 37<sup>th</sup> Session of the ICAO Assembly, recognised that an aspirational goal of 2% annual fuel efficiency improvement for international aviation is unlikely to deliver the level of reduction necessary to stabilize and then reduce international aviation's absolute emissions contribution to climate change, and that other measures, such as market based measures will need to be considered to deliver a sustainable path for aviation.

The 38<sup>th</sup> Session of the ICAO Assembly, resolved that market based measures should take into account the special circumstances and respective capabilities of States, in particular developing countries, while minimizing market distortion. It was also resolved that when States design new and implement existing aviation emissions trading schemes, States should:

- Engage in constructive bilateral and /or multilateral consultations and negotiations with other States to reach agreement, and
- Grant exemptions for application of emissions trading schemes on routes to and from developing States whose share of international civil aviation activities is below the threshold of 1% of total revenue ton kilometres of international civil aviation, until the global emissions trading scheme is implemented.

## (b) Issue

Emissions trading schemes should take into account the special circumstances and respective capabilities of States, in particular developing countries.

(c) Policy Statement on Market Based Measures to reduce emissions:

# PS. 93

Government supports the principle that Market Based Measures to reduce carbon dioxide emissions should respect the sovereignty of Contracting States, be implemented on the basis of mutual agreement and take into account the special circumstances and respective capabilities of developing countries, based on common, but differentiated responsibilities (CBDR).

The Department of Transport should monitor developments on various carbon pricing schemes that have implications on aviation sector and participate in ICAO's work towards the further development of a Global Market Based Measure such as the ICAO "Carbon Offsetting Scheme for International Aviation" (COSIA).

# 12.3.4 Voluntary Measures

# (a) Background

At the 33rd Session of the ICAO Assembly, ICAO encouraged States to take voluntary action to limit or reduce aviation emissions that impact on climate change, and to do so in a consistent manner to both domestic and international aviation emissions.

At the 38th Session of the ICAO Assembly, ICAO encouraged States to submit their voluntary actions outlining their respective policies and actions, and annual reporting on international aviation fuel consumption and carbon dioxide emissions to ICAO.

In line with this, South Africa is developing a State Action Plan for the Reduction of carbon dioxide emissions. South Africa also has obligations in terms of the UN Framework Convention on Climate Change to report progress made in reducing emissions through the National Communication (once every four years) and Biennial Report (once every two years).

## (b) Issue

There is currently a lack of reliable data on the level of emissions from aviation, as at present only the uplift of aviation fuel is being tracked, which can be a misleading measure.

South Africa also needs to reconcile differences in approach between ICAO State Action Plan and the UNFCCC obligations.

# (c) Policy Statement on voluntary measures:

#### PS. 94

Airport operators, air traffic service units and aircraft operators should report on voluntary measures implemented to limit or reduce aviation's emissions, to the Department of Transport, on an annual basis. Aircraft operators that are registered in South Africa should report on fuel consumption to the Department of Transport and the Department of Energy whilst carbon dioxide emissions should be reported to the Department of Environmental Affairs, on an annual basis

## **12.3.5 Alternative fuels**

#### (a) Background

ICAO identified the use of alternative fuels, as part of a basket of measures to reduce and limit carbon emissions from international aviation.

Progress over the last five years has demonstrated that drop-in alternative fuels (fuel that is compatible with conventional aviation jet fuel and existing fuel systems) are a technically sound solution that will not require changes to aircraft fuel delivery infrastructure. See also 14 on Technology and Innovation.

The 38<sup>th</sup> Session of the ICAO Assembly, requested States to adopt measures to ensure the sustainability of alternative fuels for aviation, building on existing approaches or combination of approaches and monitor, at a national level, the sustainability of the production of alternative fuels for aviation. The Assembly further requested that States ensure that alternative fuels:

- achieve net greenhouse gas emissions reduction on a life cycle basis,
- respect the areas of high importance for biodiversity, conservation and benefits for people from ecosystems, in accordance with international and national regulations,
- contribute to local social and economic development, and
- competition with food and water should be avoided.

## (b) Issue

There are two main issues concerning the use of alternative fuel for aviation:

- The commercial development and operational use of alternative fuels; and
- The sustainable deployment of alternative fuels.

# (c) Policy Statement on alternative fuels:

#### PS. 95

Government supports and promotes the full cycle of innovation (including research, development, demonstration, diffusion and commercialisation) of alternative fuels for use in aviation in accordance with ICAO policies and principles.

# 12.3.6 Local Air Quality Monitoring

# (a) Background

Historically, air quality was not widely monitored in South Africa. However, in order to comply with the National Environmental Management: Air Quality Act, which meets the requirements relating to greenhouse gas emissions under the United Nations Framework Convention on Climate Change, in 2008 the Department of Environmental Affairs commenced with the development and implementation of a comprehensive South African Air Quality Information System.

Air quality monitoring stations would be the ideal at airports, but the cost in comparison to the relatively low impact of aircraft engine emissions may be excessive. If, however, the proposed monitoring reveals that the negative impact on air quality due to aircraft emissions is more serious than anticipated, the frequency of monitoring would have to be increased and other mitigating steps taken.

## (b) Issue

When dealing with aircraft engine emissions, it is important to remember that aircraft are part of a complex system and attention also needs to be given to the ambient air quality. Therefore two sets of criteria are relevant:

- Ambient air quality National Environmental Management: Air Quality Act and SANS 1929 need to be recognised and enforced.
- Measurements ICAO Airport Air Quality Guidance Manual (Doc 9889).

## (c) Policy Statement on local air quality monitoring:

## PS. 96

An appropriate monitoring system should be introduced for the capturing of relevant data concerning engine emissions. Airports meeting the criteria for air-quality monitoring, as determined by the Department of Transport in consultation with the Department of Environmental Affairs, should be subject to the monitoring of ambient air quality.

# PART E: ENABLING FUTURE DEVELOPMENT AND COMPETITIVENESS OF THE AVIATION SYSTEM

This part deals with three key areas that can help to support the future growth and competitiveness of the aviation system in South Africa, namely:

- human resource development across the wide range of skills sets required in the aviation system;
- transformation of the aviation industry; and
- keeping pace with global technological developments, as well as local innovation, research and development.

# **13 AVIATION HUMAN RESOURCE DEVELOPMENT**

# 13.1 HUMAN RESOURCE DEVELOPMENT

# 13.1.1 Education and training coordination and alignment

# (a) Background

With regard to human resources, the aviation industry covers a broad spectrum of skills requirements, ranging from highly technological and aviation-specific skills to more generic skills similar to the requirements of other service industries. Careers in the sector are diverse; include the more well-known and visible professions such as pilots and flight attendants, but also many more fields in both commercial and recreational aviation sub-sectors. Some examples include:

- aircraft design
- aircraft building and restoration
- airport design
- aviation electronics engineering
- · aircraft maintenance and repair, including mechanics and technicians
- aviation systems engineering
- airport maintenance
- airport operations
- adventure flight operations
- aerodynamics
- equipment engineering
- testing and inspection
- aviation food service/catering
- instructors
- air traffic control
- general air services operators and support e.g. crop spraying, aerial photograph, flight doctor
- air cargo agents
- baggage/air cargo handling

The skills and competencies for these various fields are quite different, and paths followed to enter these careers have different prerequisites (e.g. whether or not they require maths, science, design, or engineering subjects) and take different amounts of time to qualify. Exposure to career options within aviation can begin at school level, both within the curriculum and through extramural activities such as air cadet programmes. Although the White Paper on National Transport Policy states that line departments and parastatals do not seem to be adequately engaged in training, these institutions have given indications that the status has improved substantially. Many services and training institutions have developed or are engaged in developing training courses that address or influence various occupational groups in the aviation industry, although critical shortages in certain areas remain unaddressed.

The future and full potential of the aviation sector is dependent on the full participation of all individuals, companies and training institutions. Recognising the past policies that excluded black groups from fully participating in this sector prior to 1994, amongst others, the BBBEE codes as developed and published by the Department of Trade and Industry that apply to this sector.

## (b) Issue

There is a lack of adequate co-ordination and integration in the training of personnel within the various disciplines of civil aviation. Human resources development needs to therefore be given considerably more attention to meet the needs of the industry, especially in the technical field.

(c) Policy Statement on education and training coordination and alignment:

# PS. 97

The Department of Transport, in line with the Department of Basic Education curriculum development process and the Department of Higher Education and Training's policy proposals on the Skills Development Strategy for Economic and Employment Growth in South Africa and the 2014 White Paper for Post-School Education and Training, would encourage the public and private sectors of the aviation industry to develop and improve education and training systems through participation in the appropriate education and training institutions.

# 13.1.2 Role of the Transport Education and Training Authority (TETA)

## (a) Background

Various training facilities and training institutions throughout South Africa offer learning programmes in the field of civil aviation. Though a number of South African Qualifications Authority (SAQA)-based/unit standard-based and well-defined trade training programmes are being run, there is still a huge need for specific accredited

courses currently not presented. Airport licensees, aircraft maintenance engineers, airspace management and ATS employers provide on-the-job training. A number of other training programmes are presented to the industry in accordance with SA-CAR requirements, and the TETA accepts these as accredited training.

Training in generic skills, such as management and financial management, is provided through generic accredited courses. Aviation-specific, core-function training is co-ordinated and funded through TETA structures, such as the Aerospace Chamber.

TETA also plays a role in funding aviation training through the disbursement of levy grants.

(b) Issue

At present the training of aviation staff for administration and management is not being sufficiently co-ordinated and managed, consequently certain critical needs are not being addressed. No industry standards have been developed in certain areas and there is also inadequate utilisation of certain limited training resources.

(c) Policy Statement on the role of the Transport Education and Training Authority (TETA):

# PS. 98

The Department of Transport will work with TETA and aviation industry bodies to promote the functioning of the Aerospace Chamber in order to ensure the establishment of relevant national, regional, continental and internationally comparable standards, and funding for aviation training.

# 13.2 TRANSFORMATION

## (a) Background

Whilst it is generally understood that the aviation sector has to significantly transform to prosper, the transformation agenda since the inception of democracy in 1994 has been fraught with challenges. A huge imbalance between the country's demographic structure and the structure of the aviation industry still exists. This is in contrast to the South African Constitution's imperatives to reverse injustices, heal the divisions of the past and create a society based on social justice, and the specific obligations of the Broad-Based Black Economic Empowerment Act, associated regulations and the Aviation Sub-Sector Broad-Based Black Economic Empowerment Charter. This code sets targets for the various aspects of empowerment, including equity, management control, skills development, preferential procurement, enterprise development and socio-economic development, and proposes amongst other, the development of creative financial instruments to enable greater BEE equity participation.

Government is committed to a macro-economic and social strategy, to the development of its people and the upliftment of marginalised communities. It has accepted a broad transversal policy on this matter and will implement this policy, covering also the multidisciplinary field of civil aviation.

# (b) Issue

The participation of Previously Disadvantaged Individuals (PDIs) in the aviation industry has remained limited. The collaborative efforts of the aviation industry to promote aviation as a career of choice amongst leaners prioritising peri-urban and rural areas has not yielded the desired impact. This indicates that there are a number of factors inhibiting transformation of the sector, including lack of funding, lack of complete and reliable information on aviation careers, and barriers to market entry for PDIs.

# (c) Policy statement on transformation:

## PS. 99

The Department of Transport should formulate a national civil aviation transformation strategy for implementation in the aviation industry in line with the Aviation Sub-Sector Broad-Based Black Economic Empowerment Charter, working closely with other organizations in the aviation industry.

# **14 TECHNOLOGY AND INNOVATION**

# (a) Background

The pro-competitive nature of the global economy stresses the important role of Government in the context of promoting the international competitiveness of its industries through Research and Development (R&D) activities. In this regard, the importance of R&D for stimulating growth and employment is well established in the economic literature.

Cabinet has accepted the National Research and Development Strategy in 2002, which formed the basis for the National System of Innovation. The Technology Innovation Agency has been established to help increase innovation levels in South Africa.

Aerospace transportation vehicles and infrastructure offer substantial economic opportunities in the launching market for small satellites, space tourism and space sciences such as microgravity research, earth observation, in addition to high speed point-to-point cargo and passenger transportation. Aerospace transportation enables access to space without the need for extensive and financially prohibitive launch vehicles and associated launch infrastructure. These systems can greatly enhance the implementation of a coordinated regional transportation systems. The African

Union's Agenda 2063 has five central pillars which can be effectively enhanced by the effective use of new modes of aerospace vehicles. These objectives are, inter alia, investing in human capital development, promoting science, technology and innovation, sustainable management of natural resources, and effective development of public and private sectors.

DOT's current Transport Innovation and Technology Research Strategy is an endeavour to develop innovation and technology research programmes and strategies over the medium and long term. This would provide vital transport research that could enable the transport sector to contribute to the twin objectives of economic growth and social development. The Department of Trade and Industry's Aerospace Customised Sector Programme also includes elements relating to innovation in aircraft system manufacture, which may play through into the aviation system both in South Africa an internationally. As part of the DTI's Industrial Policy Action Plan, the Joint Aerospace Steering Committee (JASC) was established as a multi-stakeholder forum to support competitiveness and export development of the aerospace sector in South Africa, in order to contribute to growth and development in South Africa. ATNS also has an R&D division relating to developments in airspace management. The field of RPAS is also demonstrating rapid innovation which presents opportunities for civil aviation development.

With regard to civil aviation, promising R&D initiatives or technology innovation in the areas of safety and security, the environment, the use of e-commerce and e-technology by SMMEs, the effective utilisation of existing infrastructure and liberalisation in the field of air transport would yield considerable benefits.

With reference to Air Traffic Management and associated services, proven methodologies and technologies are considered, exploited and further developed to accelerate the Aviation Communities applied research capability, development and regional competitiveness. To this extent strategic alliance with local Universities, Research Institutes and Research Organisations are significantly alleviating some challenges that the Aviation Community is facing and will continue to advance economic performance, infrastructure development and business efficiencies.

#### (b) Issue

There are various initiatives within the Aviation Community but there is no coordinated strategic approach to technology adoption, innovation, research and development (R&D) in the area of civil aviation in South Africa (with the exception of JASC which focuses on aerospace design and manufacturing). Technology development and adoption, as well as new product, service and system innovations could generate growth and transformation opportunities for the sector in South Africa if effectively supported coordinated.

In addition, the development and introduction of new modes of aerospace transportation is has blurred the lines between aviation and space. These systems seamlessly traverse through the airspace en-route to outer space challenging the

existing policy and legal frameworks governing the two domains. Government needs to take heed of these new technological developments and create a responsive policy and legal regime to harness the benefits derived therefrom in order to achieve the vision of a prosperous and dynamic force premised on self-reliance, industrialisation and regional integration.

The cross-cutting nature of these new technologies will require an intergovernmental coordinated approach including other Government Departments with interest in space science, trade and tourism. A co-ordinated effort is therefore required to identify the current initiatives in order to prioritise, support and undertake selected R&D and innovation projects to respond to the critical challenges that the aviation sector faces, and to ensure that South African civil aviation can benefit from and grow as a result of these developments.

(c) Policy Statement on technology and innovation:

# PS. 100

The Department of Transport should co-ordinate a strategic approach to technology adoption and innovation needs of civil aviation, including emerging aerospace transportation, and promote the formation of partnerships with the private sector, innovation support agencies and academia to accelerate technology adoption and innovation, as well as undertaking priority research.

# PART F: IMPLEMENTATION FRAMEWORK

# **15 THE WAY FORWARD**

# 15.1 POLICY IMPLEMENTATION FRAMEWORK

This White Paper provides a primary framework for the future actions of the Department of Transport in the area of civil aviation.

Those elements that would require only administrative action should be implemented immediately where sufficient institutional capacity already exists. It is recognised that certain elements of the White Paper which represent a significant change from existing policy cannot be implemented immediately. In such cases, in discussion with the stakeholders affected, the implementation will be phased over a transitional period in a planned manner. In some cases, additional budget and human capacity will need to be secured to give full effect to the policy statements.

Where new policy directives require new or amended legislation, appropriate new bills, amendment bills and regulations, as required, will be drafted.

# 15.2 POLICY MONITORING, EVALUATION AND REVIEW

Policy formulation is never a static process. Internal as well as external factors influencing this process need to be assessed on an on-going basis. The Department of Transport, as the overall implementing agency, will monitor international as well as local developments and trends impacting on civil aviation.

Progress towards meeting the targets, objectives and deliverables of this White Paper will be evaluated annually in line with DOT and national government performance monitoring frameworks, followed by a comprehensive consolidated review after five years to determine the overall status of implementation and to determine whether the policy direction remains appropriate.

In addition, and due to the current lack of information on the impact of aircraft engine emissions on the environment, the monitoring process as well as other developments, both local and international (ICAO, United Nations Framework Convention on Climate Change (UNFCCC) and Intergovernmental Panel on Climate Change (IPCC)), would require constant review. The Department of Transport should adopt a research programme for reviewing and updating the part addressing aircraft operations and the environment of this Policy in a three-year cycle or as required by changes in the environmental legislation in South Africa, technological developments and international trends.

# 15.3 COMMUNICATION

This White Paper should be communicated to all participants within the aviation industry and those other industries that depend on the Aviation Industry for their operations. Communications should also be extended to the full logistics chain due to civil aviation's integral role in the high value freight movements to, from and within South Africa.

There should also be clear communications with all spheres of government (as applicable) in order to promote intergovernmental coordination of activities relating to aviation, such as international relations, environment, tourism, trade and industry, defence, communications, land use and spatial planning, and weather services.

# ANNEXURE 1 - ACKNOWLEDGEMENTS

Aeroclub of South Africa (AeCSA) Air Line Pilots' Association South Africa (ALPA-SA) Air Traffic and Navigation Services Company (ATNS) Aircraft Owners & Pilots Association (AOPA-SA) Airlines Association of Southern Africa (AASA) Airports Company South Africa (ACSA) Air Services Licencing Council (ASLC) Association of South African Travel Agents (ASATA) Comair Limited Commercial Aviation Association of Southern Africa (CAASA) **Competition Commission** Congress of South African Trade Unions (COSATU) Department of Defence (DOD) Department of Environmental Affairs (DEA) Department of Home Affairs (DHA) Department of International Relations and Cooperation (DIRCO) Department of Public Enterprises (DPE) Department of Trade and Industry (DTI) Department of Tourism Department of Transport (DOT) Interair International Air Services Council Lanseria International Airport (LIA) Kruger Mpumalanga International Airport (KMIA) Perishable Products Export Control Board (PPECB) **Polokwane International Airport** Recreation Aviation Administration South Africa (RAASA) **Ross Air Charters** SA Airlink SA Express SAFAIR South Africa Bureau of Standards (SABS) South African Airways (SAA) South African Chamber of Business (SACOB) South African Civil Aviation Authority (SACAA) South African Revenue Service (SARS) South African Transport and Allied Workers Union (SATAWU) Southern African Tourism Service Association (SATSA) State Security Agency (SSA) Tourism Business Council of South Africa (TBCSA) **Tourism South Africa Tshwane Metropolitan Municipality** Wonderboom Airport

# Particular gratitude is expressed to those who participated in the NCAP National Consultative Workshop in July 2015, as shown below.

Airports and Aerodromes Association of Southern Africa (AAA-SA) Airlines Association of Southern Africa (AASA) Airports Company South Africa (ACSA) Aeroclub of South Africa (AeCSA) Air Traffic and Navigation Services Company (ATNS) South African Civil Aviation Authority (SACAA) Commercial Aviation Association of Southern Africa (CAASA) City of Ekurhuleni City of Tshwane **Comair Limited Department of Home Affairs** Department of International Relations and Cooperation (DIRCO) Department of Public Enterprise (DPE) Department of Trade and Industry (DTI) Eastern Cape Provincial Government Exxaro Department of Environment Affairs Gauteng Provincial Government International Air Services Licensing Council (IALC) KwaZulu-Natal Provincial Government Lanseria International Airport Mango Airlines National Treasury National Disaster Management Centre (NDMC) North West Provincial Government Recreation Aviation Administration South Africa (RAASA) South African Airways (SAA) South African Revenue Services (SARS) Soaring Society of South Africa (SSSA) State Security Agency (SSA) Department of Tourism

# **ANNEXURE 2 - DEFINITIONS**

**"Abuja Treaty"** means the Treaty Establishing the African Economic Community adopted at Abuja, Nigeria on the 3rd day of June 1991 and which entered into force on 12 May 1994;

"Adventure aviation" means flights carrying passengers for hire or reward, where the purpose is for the passenger's recreational experience;

"Aeronautical Authority" means in the case of South Africa the Minister responsible for civil aviation or any person or body authorised to perform any particular function relating to civil aviation in general and the negotiation of air services agreements in particular. In the case of a foreign State it refers to an authorised institution or person entrusted with negotiating on behalf of that State with South Africa;

"Aerotropolis" means an urban sub-region whose infrastructure, land use, and economy is centred on an airport, and includes a mixed use development that provides high-value employment and economic opportunities in its hinterland;

"Aircraft" means any machine that can derive support in the atmosphere from the reactions of the air, other than the reactions of the air against the surface of the earth;

"Air carrier" means a commercial air transport operator providing either a scheduled or a non-scheduled air service;

"Aircraft owner" means the person in whose name the aircraft is registered, and includes-

- (a) any person who is or has been acting as agent in the Republic for a foreign owner, or any person by whom the aircraft is hired at the time;
- (b) a person who has the right of possession of an aircraft for 14 days or longer;
- (c) for the purposes of Part 91 and Part 93 of the Civil Aviation Regulations, 2011, an operator of an aircraft engaged in non-commercial operations;

"Airline" means a commercial air transport operator providing a scheduled air service;

"Airport"<sup>14</sup>, means any demarcated area on land or water or any building which is used or intended to be used, either wholly or in part, for the arrival or departure of an aircraft, and includes any building, installation or equipment within such area which is

<sup>&</sup>lt;sup>14</sup> The term airport is used rather than the term "aerodrome" which is used in a generic sense and also applied in legislation and ICAO documentation. The two terms are considered synonymous for the purposes of this White Paper.

used or intended to be used in connection with the arrival, departure or movement of an aircraft.;

"Airports Company Act" means the Airports Company Act, 1993 (Act No. 44 of 1993), as amended;

"Airport development plan" means the overarching development plan of an airport, that includes all aspects in the master plan and the precinct plans of the airport, including future infrastructure and operational changes;

"Airport licensee" means the person who holds an airport license issued by the appropriate authority and who is responsible to adhere to certain conditions under which the license has been issued, further operational requirements imposed by legislation as well as liabilities associated with such requirements. As the functional responsibilities of the airport owner, the airport operator or the airport licensee may vest in more than one person, the ultimate responsibility for actions of all parties vest in the licensee. Where an airport is not licensed, this responsibility vests in the owner of the land on which the airport is located;

"**Airport master plan**" presents the planner's conception of the ultimate development of a specific airport. Master plans are applied to the modernisation and expansion of existing airports and to the construction of new airports;

"Air service" means any service operated by means of an aircraft for reward, but shall not include—

- (a) the hiring out of an aircraft together with the crew to a licensee;
- (b) a service operated solely for the benefit of a company or a group of companies, or any subsidiary thereof, in its commercial activities by a person who is a member or in the employ of such company or group of companies or subsidiary, and which is not offered for reward to the public in general;
- (c) the conducting of flight testing or assessment of skills in respect of flying an aircraft;
- (d) any type of training or instruction in respect of flying an aircraft;
- (e) the participation in any air race, navigation rally or other aviation sporting event of an aircraft which is sponsored, if the sole advertisement by such aircraft consists of the display of the name or logo of, or any other reference to, the sponsor in question;

**"Air service licence"** refers to a licence issued in terms of the Air Services Licensing Act or the International Air Services Act;

"Air service licensee" is a generic term, which means a person, organisation or enterprise engaged in or offering to engage in a commercial air service operation whether domestically or internationally, who holds an appropriate licence issued by the appropriate authority and who is responsible to adhere to certain conditions under which the licence has been issued, further operational requirements imposed by legislation as well as liabilities associated with such requirements;

"Air Services Licensing Act" refers to the Air Services Licensing Act, 1990 Act No. 115 of 1990;

"Airspace" is the space above the surface of the earth up to a height where an aircraft is no longer able to derive support from the atmosphere;

"**Approach control services**" means an ATC service for arriving or departing flights in a defined airspace;

"Area control services" means an ATC service for flights in a defined controlled airspace;

"**ATM community**" means the aggregate of organisations, agencies or entities that may participate, collaborate, and co-operate in the planning, development, use, regulation, operation and maintenance of the ATM system;

"**ATNS Company Act**" means the Air Traffic and Navigation Services Company Act, 1993 (Act No. 45 of 1993);

"Aviation disaster" means an aviation-related incident affecting the civil aviation system and which causes or threatens to cause death or injury to persons, damage to property or infrastructure and is of a magnitude that exceeds the ability of those affected by the disaster to cope with its effects using only their own resources;

**"Cape Town Convention"** means the Convention on International Interests in Mobile Equipment and its Protocol on matters specific to Aircraft Equipment, 2000;

"Cargo-only service" is a dedicated service for the public transport of freight and mail only;

## CATEGORIES OF AIRCRAFT

- "Category A1" means any aircraft, excluding a helicopter, with a maximum certificated mass exceeding 20 000 kilograms;
- "Category A2" means any aircraft, excluding a helicopter, with a maximum certificated mass exceeding 5 700 kilograms but not exceeding 20 000 kilograms;
- "Category A3" means any aircraft, excluding a helicopter, with a maximum certificated mass exceeding 2 700 kilograms but not exceeding 5 700 kilograms;
- "Category A4" means any aircraft, excluding a helicopter, with a maximum certificated mass of 2 700 kilograms or less;
- "Category H1" means any multi-engine helicopter; and
- "Category H2" means any single-engine helicopter;

"Chapter 2 aircraft" refers to subsonic jet aircraft certified before 6 October 1977. For the purpose of this White Paper it will include non-noise certificated or any other aircraft emitting noise levels equal to or higher than Chapter 2 aircraft;

**"Chapter 3 aircraft"** refers to subsonic jet aircraft certified after 6 October 1977. For the purpose of this White Paper it will include any other aircraft emitting noise levels equal to or less than Chapter 3 aircraft;

"Charterer" means a person such as a tour operator or freight forwarder who:

- has concluded a contractual arrangement with a non-scheduled air carrier, at an agreed amount, for the exclusive use of an aircraft or part thereof for one or more flights;
- seats and cargo capacity are for sale to the public; and
- accepts the financial risk of utilising the capacity purchased from the nonscheduled air carrier;

"Chicago Convention" means the Convention on International Civil Aviation, 1944 as incorporated in the Civil Aviation Act;

"Civil Aviation Regulations" means the Civil Aviation Regulations, 2011, as amended;

"Civil Aviation Act" means the Civil Aviation Act, 2009 (Act No. 13 of 2009), as amended;

## "CLASSES OF DOMESTIC AIR SERVICES"

- "Class I": Scheduled domestic public air transport service;
- "Class II": Non-scheduled public air transport service;
- "Class III": General air service;

# "CLASSES OF INTERNATIONAL AIR SERVICES"

- **"Class I":** Scheduled international public air transport service operated by a South African operator;
- "Class II": Non-scheduled international public air transport service operated by a South African operator;
- "Class III": General international air service; and
- "Class IV": Non-scheduled international public air transport service operated by a foreign operator;

"Commercial aviation" means an air service as defined in Section 1 of the Air Services Licensing Act, 1990, including the classes of air services referred to in Regulation 2 of the Domestic Air Services Regulations, 1991 and the International Air Services Regulations, 1994, respectively;

"Competition Act" means the Competition Act 1998 (Act No. 89 of 1998), as amended;

"**Corporate** aviation" means a non-commercial operation or use of aircraft by a company for the carriage of passengers or goods as an aid to the conduct of company business, flown by a professional pilot(s) employed to fly the aircraft;

"Countries bound by the Yamoussoukro Decision" means:

- States signatory to the Abuja Treaty;
- any other African country which, though not party to the said Treaty, has declared in writing its intention to be bound by the Yamoussoukro Decision; and
- States referred to above who have given effect to the implementation of the Yamoussoukro Decision in terms of their respective domestic laws;

"Code-share" means the use of the flight designator code of one air carrier on a service performed by a second air carrier, which service is usually also identified as a service of and being performed by the second air carrier;

"Combination service" refers to a service that carries both passengers and cargo on board the same aircraft;

"Commercial agreements" in the context of air transport refers to any agreement between two or more commercial entities for purposes of commercial benefit to all parties concerned;

"Computer Reservation System" means a computer system that provides displays of schedules, space availability and tariffs of air carriers, and through which reservations on air transport services can be made;

**"Constitution"** means the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996), as amended;

"Contestability" means open to competition;

"Core airport functions (or relevant activities)" mean the provision at an airport of any service or facility for the purposes of:

- the landing, parking or take-off of an aircraft,
- the handling or cleaning of an aircraft, the supply of provisions to an aircraft, emergency servicing of an aircraft on the apron, including the supply of fuel, and

• the handling of passengers, their baggage or cargo at all stages while they are on the premises of such airport;

"**Designated Airport**" refers to an airport designated in terms of the Civil Aviation Act, 2009;

"Director of Civil Aviation" is as defined by the Civil Aviation Act.

"Disaster" refers to "Aviation Disaster";

"Disaster Management Act" refers to the Disaster Management Act, 2002 Act No. 57 of 2002);

"**Domestic air transport**" refers to an air service operated wholly within the territory of South Africa;

"Economic infrastructure" means transport infrastructure, such as an airport, which supports economic activity;

"Economic sustainability" means the continued existence of positive economic conditions;

"Effective control" means a relationship constituted by rights, contracts or any other means which, either separately or jointly and having regard to the considerations of fact or law involved, confers the possibility of directly or indirectly exercising a decisive influence on an undertaking, in particular by-

- the right to use all or part of the assets of an undertaking; and
- rights or contracts which confer a decisive influence on the composition, voting or decisions of the bodies of an undertaking or otherwise confer a decisive influence on the running of the business of the undertaking;

"Effective regulatory control" means control being exercised over an air carrier through the issuance of a valid operating licence or permit issued by the relevant licensing authority such as an International Air Service Licence and Operating Certificate in the case of South Africa or an Air Operator Certificate (AOC) in respect of foreign airlines, and meets the criteria of the designating Party for the operation of international air services, such as proof of financial health, ability to meet public interest requirement, obligations for assurance of service; and the designating Party has and maintains safety and security oversight programmes in compliance with ICAO standards;

"Environment" means the surroundings within which humans exist and that are made up of:

- land, water and the atmosphere of the earth;
- micro-organisms, plant and animal life;

- any part of (i) and (ii) and the interrelationship among and between them; and
- the physical, chemical, aesthetical and cultural properties and conditions of the foregoing that influence human health and well-being;

"Environmental Conservation Act" means the Environment Conservation Act, 1989 (Act No. 73 of 1989);

"Environmental Impact Assessment" means "a systematic process of identifying, assessing and reporting environmental impacts associated with an activity and includes basic assessment and S&EIR [scoping and environmental impact reporting]"; as defined by the National Environmental Management Act: Environmental Impact Assessment Regulations

"Environmental Management" is a management tool which incorporates the means of planning, monitoring, evaluation and providing feedback, and should form part of the management and reporting system for aircraft noise and engine emissions at new and existing airports;

**"Environmental sustainability"** means the continued existence of positive environmental conditions;

**"Financial sustainability"** means the continued existence of positive financial conditions;

"Foreign operator's permit" refers to a permit issued in terms of the International Air Services Act;

"Franchising arrangement" means the granting of an air carrier of a franchise or right to use various of its corporate identity elements, such as its flight designator code, livery and marketing symbols, to a franchisee, i.e. the entity granted the franchise to market or deliver its air service product, typically subject to standards and controls intended to maintain the quality desired by the franchiser;

"FREEDOMS OF THE AIR"

- **"First freedom traffic right"** means the right or privilege to fly without landing across the territory of another State;
- **"Second freedom traffic right**" means the right or privilege to land for non-traffic purposes in the territory of another State;
- **"Third freedom traffic right"** means the right **o**r privilege, in respect of scheduled international air services, granted by one State to another State to put down, in the territory of the first State, traffic coming from the home State of the carrier;
- "Fourth freedom traffic right" means the right or privilege, in respect of scheduled international air services, granted by one State to another State to take

on, in the territory of the first State, traffic destined for the home State of the carrier; and

 "Fifth freedom traffic right" means the right or privilege, in respect of scheduled international air services, granted by one State to another State to put down and to take on, in the territory of the first State, traffic coming from or destined to a third State;

**"Freely"** in the context of air traffic rights refers to the free exercising of the rights of the first, second, third, fourth and fifth freedoms of the air on scheduled and non-scheduled international air transport services;

"General air service" means an air service other than a public air transport service;

**"Hague Convention"** refers to the Convention for the Suppression of Unlawful Seizure of Aircraft, 1970;

"Inclusive Tour" means a tour which is sold as a package consisting of -

- the transport of persons by air to and from any destination in the Republic of South Africa; and
- such fixed accommodation and other land arrangements for such persons for at least seven (7) days in the Republic of South Africa;

"Integrated development plan (IDP)" means a plan prepared and managed by local government which addresses transport, land use and other aspects, as stipulated in the Spatial Planning and Land Use Management Act, 2013;

"Integrated transport plan (ITP)" means a plan prepared by a transport authority in terms of the National Land Transport Act, 2009 (Act No. 5 of 2009) or any similar provincial legislation, which covers the planning, development, regulation, provision and management of the land transport system, including transport infrastructure used for private and public transport, and public transport services;

"International airport" means an airport equipped with facilities and services needed to accommodate international flights ("port of entry");

"International Air Services Act" means the International Air Services Act, 1993 (Act No. 60 of 1993);

"International and national airports", as referred to in the Constitution, means airports owned and/or operated by ACSA as well as other airports designated in terms of the Civil Aviation Act, 2009;

"Large aircraft" refers to any aircraft of a certificated mass exceeding 5 700 kilograms;

"Local authority" refers to "Municipality";

**"Marketing carrier"** in relation to code-share arrangements means the airline whose IATA designator code is shown in the carrier code box of a passenger's flight coupon for a particular flight, but which is not the Operating Carrier;

**"Master plan"** means the plan that addresses developments to the airside of the airport, including aviation elements such as runways, taxiways and loading areas;

**"Military airport"** means an airport operated by the SANDF in terms of the SANDF Act, normally for military use and control;

**"Montreal Convention"** means the Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation, 1971;

**"Montreal Convention, 1999"** means the Convention for the Unification of Certain Rules Relating to International Carriage by Air, 1999;

"Municipal airport" means an airport owned by a municipality;

**"Municipal Systems Act"** means the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000);

**"Municipality"** means a metropolitan municipality, a local municipality or a district municipality as contemplated respectively in terms of categories A, B or C as provided for in the Constitution. "Local authority" will have a similar meaning;

"National airport" means an airport designated in terms of the Civil Aviation Act, 2009;

**"National Environmental Management Act"** means the National Environmental Management Act, 1998 (Act No. 107 of 1998);

**"National Environment Management: Air Quality Act"** means the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004);

"National Land Transport Act" means the National Land Transport Act, 2009 (Act No. 5 of 2009);

"Network of airports" means a system of effective and efficient airports;

"Non-commercial aviation" means an activity other than 'commercial aviation';

"Non-scheduled air transport service" means an air transport service other than a scheduled international air transport service in connection with which:

- a specific flight or a series of flights are undertaken;
- such flight or fights are not listed in a published timetable or computer reservation system; and
- air carriers' passenger and/or cargo capacity may be offered and sold:

- only to a charterer in respect of services on routes currently served by scheduled air services; and in addition
- directly to the public or through a 3rd party (charterer) in the case of -
  - passenger and cargo services operated between South Africa and countries bound by the Yamoussoukro Decision on routes not served by scheduled air services, and
  - development of new cargo links, i.e. all-cargo services on routes not served by scheduled air services;

"Noise or noise nuisance caused by aircraft" can be defined as unwanted sound;

"Organ of state" refers to a national (national department or national public entity), provincial (a provincial department or provincial public entity) or a municipal (a municipality, a department within municipal administration or a municipal entity) organ of state;

"**Open Skies**<sup>15</sup>" refers to the terms of an air service agreement which provides for unrestricted operation of international air services by the air carriers between the countries who are parties to the agreement;

"Operating carrier" in relation to code-share arrangements means the airline exercising control over all aspects of aircraft operations;

"**Operating certificate**" refers to an operating certificate issued in terms of the SA-CARs authorising an operator of a commercial air transport aircraft to carry out specified air transport operations;

"Performance Based Navigation (PBN)" is area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace;

"**Precinct plans**" means the plans that address land use developments on the landside of the airport, including aviation related and non-aviation related developments on the airport property;

"Principle place of business" in relation to an airline means an airline that has been established in the territory of the designating Party in accordance with relevant national laws and regulations, has a substantial amount of its operations and capital investment in physical facilities in the territory of the designating Party, pays income tax, registers and bases its aircraft there, and employs a significant number of nationals in managerial, technical and operational positions;

<sup>&</sup>lt;sup>15</sup> Note that the international aviation community does not uniformly define the term "open skies". Differences in opinion regarding the level of freedom allowed by air services agreements will result in different categorisations of such agreements.

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"**Privately owned airports**" means airports owned by private persons or companies from the private sector;

"**Private-use airports**" means airports used exclusively by private persons or companies for their own private aviation needs, or which can only be used by prior permission of the owner or licensee;

"Provincial airport" means an airport owned by a provincial government;

"Public air transport service" means an air service that has as its main purpose the transport of passengers, cargo or mail;

"Publicly owned airports" means airports owned by the national Government, provincial government or a municipality, or airports owned by parastatals, including those owned by ACSA for as long as the State has a majority share in ACSA;

"**Public-use airports**" means airports that are used by the general public and which are accessible to members of the public;

"Pollution" means any change in the environment caused by:

- substances;
- o radio-active or other waves; and
- o noise, odours, dust or heat
- emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in by any person or organ of state, where that change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed eco-systems, or on materials useful to people, or will have such an effect in the future;

**"Recreational aviation"** means non-revenue generating flying of microlight, glider, balloon, gyroplane, hang glider, paraglider, model aircraft, light sport aircraft, touring motor glider, parachute or involvement in aviation events;

"Regulating Committee" means the Regulating Committee established in terms of the Airports Company Act;

"Reliable air service" in the context of air transport services refers to a sustained air service which is trustworthy in financial, technical and operational terms;

"Remote pilot" means the person who manipulates the flight controls or manages the flight command instructions of a remotely piloted aircraft;

"Remote pilot station" means the station at which the remote pilot manages the flight of the remotely piloted aircraft;

"Remotely Piloted Aircraft Systems" means a set of configurable elements consisting of a remotely piloted aircraft, its associated remote pilot station(s), the required command and control links and any other system elements as may be required at any point during operation;

**"Remotely piloted aircraft"** means an unmanned aircraft which is piloted from a remote pilot station, excluding model aircraft and toy aircraft as defined in the Civil Aviation Regulations, 2011;

"Scheduled air transport service" means an air transport service in connection with which flights are undertaken:

- (a) (i) between the same two or more points; or
  - (ii) with such a slight variation from the same two or more points that each flight can reasonably be regarded as being between the same two or more points;
- (b) (i) according to a published timetable; or
  - (ii) with such a degree of regularity and frequency that they constitute a recognisable systematic series; and
- in such a manner that each flight is open to use by members of the public;

**"Scheduled international air transport service"** means an air transport service in connection with which flights are undertaken:

- (a) through the airspace over the territory of more than one state;
- (b) (i) between the same two or more airports; or
  - (ii) with such a slight variation from the route referred to in (i) that each flight can reasonably regarded as being between the same two or more airports;
- (c) (i) according to a published timetable; or
  - (ii) with such a degree of regularity and frequency that they constitute a recognisable systematic series of flights and in such a manner that each flight is open to use by members of the public;

**"Skills Development Act"** refers to the Skills Development Act, 1998 (Act No. 97 of 1998);

"Slot" means the permission given by the Slot Coordinator in accordance with the Airport Slot Coordination Regulations, 2012, to use the full range of airport

infrastructure necessary to operate an aircraft at a coordinated airport on a specific date and time for the purpose of landing or take-off;

**"Small aircraft"** refers to any aircraft with a certificated mass not exceeding 5 700 kilograms;

"Social sustainability" means the continued existence of positive social conditions;

"South African Maritime and Aeronautical Search and Rescue Act" means the South African Maritime and Aeronautical Search and Rescue Act, 2002 (Act No. 44 of 2002);

"Spatial Planning and Land Use Management Act" means the Spatial Planning and Land Use Management Act 2013 (Act No. 16 of 2013);

"Sports aviation" means flying for competition or event purposes;

**"State Party"** means a State signatory to the Abuja Treaty and such other African country which, though not a party to the said Treaty, has declared in writing its intention to be bound by the Yamoussoukro Decision. (Also see: "Countries bound by the Yamoussoukro Decision");

**"Subsonic aircraft"** means an aircraft incapable of sustaining level flight at speeds exceeding flight Mach number 1 (speed of sound);

**"Tax"** refers to any levy to raise revenue for national, provincial or municipal treasuries, which will be used for general or specific public (i.e. non-aviation) purposes;

**"Tokyo Convention"** means the Convention on Offences and Certain Other Acts Committed on Board Aircraft, 1963;

**"Transit Agreement"** means the International Air Services Transit Agreement, 1944, as incorporated in the Civil Aviation Act;

**"Transport authority"** means a local or provincial authority responsible for transport planning and development, which had been declared as such in terms of the National Land Transport Act, 2009, or similar provincial legislation;

"Users' interests" means the rights and obligations of persons using or intending to use air transport services;

"Vicinity" means the influence area of an airport, including the landside of the airport;

"Wet-lease" means the acquisition of an aircraft including crew, maintenance and insurance (ACMI) through a commercial agreement between the air carrier and the supplier of such aircraft;

**"White Paper on National Transport Policy"** means the White Paper on National Transport Policy, 1996; and

**"Yamoussoukro Decision"** means the "Decision Relating to the Implementation of the Yamoussoukro Declaration Concerning the Liberalisation of Access to Air Transport Markets in Africa" adopted by the Assembly of Heads of States and Government in Lome, Togo, on 12 July 2000.

# **ANNEXURE 3 - ABBREVIATIONS AND ACRONYMS**

ACSA	-	Airports Company South Africa SOC Limited
AeCSA	-	Aeroclub of South Africa
AFCAC	-	African Civil Aviation Commission
AIC	-	Aeronautical Information Circular
AIP	-	Aeronautical Information Publication
AIS	-	Aeronautical Information Services
ANS	-	Air Navigation Services
AOC	-	Air Operator's Certificate
APU	-	Auxiliary Power Unit
ASLC	-	Air Services Licensing Council
ATC	-	Air Traffic Control
ATM	-	Air Traffic Management
ATMSD	-	ATM Service Delivery
ATNS	-	Air Traffic and Navigation Services SOC Limited
ATS	-	Air Traffic Services
AU	-	African Union
BASA	-	Bilateral Air Services Agreement
BBBEE	-	Broad Based Black Economic Empowerment
CAASA	-	Commercial Aviation Association of Southern Africa
CARCOM		Civil Aviation Regulations Committee
CBAA	-	Carriage by Air Act, 1946 (Act No. 17 of 1946), as amended
СС	-	Competition Commission
CDM	-	Collaborative Decision-Making
CEO	-	Chief Executive Officer
CNS/ATM	-	Communication Navigation Surveillance/Air Traffic Management (System)

COP	-	Conference of Parties to the United Nations Framework Convention on Climate Change
СОТО	-	Committee of Transport Officials
CRS	-	Computer Reservation System
CSIR	-	Council for Scientific and Industrial Research
DIRCO	-	Department of International Relations and Cooperation
DOT	-	Department of Transport
DEA	-	Department of Environmental Affairs
EIA	-	Environmental Impact Assessment
EU	-	European Union
FAA	-	Federal Aviation Administration (USA)
FIR	-	Flight Information Region
FOP	-	Foreign Operator's Permit
GA	-	General Aviation
GDP	-	Gross Domestic Product
GDS	-	Global Distribution Systems
GNSS	-	Global Navigation Satellite System
GPU	-	Ground Power Unit
IASC	-	International Air Services Council
ΙΑΤΑ	-	International Air Transport Association
ICAO	-	International Civil Aviation Organisation
ICGs	-	Implementation Co-ordination Groups
IDP	-	Integrated Development Plan
IEM	-	Integrated Environmental Management
IM	-	Information Management
IPCC		Inter-governmental Panel on Climate Change
ISO	-	International Organisation for Standardisation
ITP	-	Integrated Transport Plan
JASC	-	Joint Aerospace Steering Committee

MINCOM		Committee of Ministers of Transport
NASC	-	National Aviation Security Committee
NASCOM	-	National Airspace Committee
NASP	-	National Aviation Safety Plan
NATJOINTS	-	National Joint Operational and Intelligence Structure
NEPAD	-	New Partnership for Africa's Development
NQF	-	National Qualifications Framework
PBN	-	Performance-based Navigation
PFMA	-	Public Finance Management Act
RAASA	-	Recreation Aviation Administration South Africa (RAASA)
RDP		Reconstruction and Development Programme
RNAV	*	Area Navigation
RNP	-	Required Navigation Performance
RNP AR	-	Required Navigation Performance, Authorisation Required
RPAS	-	Remotely Piloted Aircraft Systems
SANDF	-	South African Defence Force
SAASCO	-	South African Aviation Safety Committee
SABS	-	South African Bureau of Standards
SACAA	-	South African Civil Aviation Authority
SA-CARs	-	Civil Aviation Regulations, 2011
SADC	-	Southern Africa Development Community
SANDF	-	South African National Defence Force
SANS	-	South African National Standards
SAQA	-	South African Qualifications Authority
SAR	-	Search and Rescue
SARPs	-	Standards and Recommended Practices issued by ICAO
SASAR	-	South African Search and Rescue Organisation
SDFs	-	Spatial Development Frameworks

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SDPs	-	Spatial Development Plans
SDRs	-	Special Drawing Rights
SETA	-	Sector Education and Training Authority
SMME	-	Small, Medium and Micro Enterprises
ТЕТА	-	Transport Education and Training Authority
UAS	-	Unmanned Aircraft Systems
UAV	-	Unmanned Aerial Vehicle
UNFCCC	-	United Nations Framework Convention on Climate Change