



AIR TRAFFIC & NAVIGATION  
SERVICES SOC LIMITED  
SUSTAINABILITY  
REPORT  
**2017**



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## OUR APPROACH TO THIS YEAR'S REPORT

Our 2017 Sustainability Report aligns with our Integrated Report and offers our stakeholders a view of Air Traffic and Navigation Services SOC Limited's (ATNS's) sustainability performance for the financial year 1 April 2016 to 31 March 2017. The report describes how we deliver sustainable outcomes through our sustainability-driven strategic business model and operational structure; as well as how we build and sustain value through our organisational culture, industry partnerships and stakeholder relations. The reporting cycle aligns to the organisation's investment programmes and major infrastructural projects aimed at responding to the Shareholder mandate within the country and the expansion strategy in the continent. These investments are stipulated in the organisation's permission application for the next 5 years. The report aims to demonstrate how the organisation translates these investments and creates measurable value.

### Report scope and boundary

This report largely focuses on the ATNS regulated entity as stipulated in the ATNS Act (Act 45 of 1993) and also cuts across boundaries outside the company with a specific focus on the ATNS expansion strategy in the African continent.

This is ATNS' 4th annual sustainability report in which we unpack our material issues based on the economic, social and environmental context for the reporting year. ATNS continues to adopt the GRI G4 principles for sustainability reporting. Although our report does not meet all G4 requirements for a 'Core' report, we can report where improvements have been made to ensure that our reporting is aligned to global leading practices, addresses stakeholder expectations, outlines significant material issues and key sustainability risks. We recognise the necessity for accuracy, transparency, reliability and connectivity of information and have used our best efforts to produce a report that harnesses these guiding norms.

With this being our fourth Sustainability Report, we aim to address the following:

- To improve on the foundational sustainability reporting structure, as presented in our first stand-alone sustainability report in 2014;
- To improve on the reporting of ATNS' internal sustainability reporting framework and performance information used in this report; and
- To acknowledge the contributions of our Shareholder, the Department of Transport (DoT), as well as the contributions of our sector partners, employees and other stakeholders in collectively ensuring our long-term economic, social and environmental sustainability.

### Sustainability assurance

ATNS acknowledges that KING IV supports assurance of sustainability reports. Some of the performance information reported in the Integrated Report and referred to in this report was assured as part of our overall audit process. Details of this can be found on page 4-6 of the Financial Report.

### Supplementary information and alignment of reports

This report is available online (<https://www.atns.com/reports.php>) in order to keep the report concise and relevant. The Integrated and Financial reports are also available at the same address. The GRI content index is included at the end of this report.

The process of cross-referencing content online to curb additional print-based reporting aligns with ATNS' environmental sustainability objective of effectively utilising natural resources, which is a core sustainability principle embedded in the ATNS strategy.

Our corporate annual reporting for the current financial year ended 31 March 2017 includes the following three reports: the Integrated Report (ATNS-IR 2017), the Financial Report (ATNS-FR 2017) and the Sustainability Report (ATNS-SR 2017).

Our 2016/17 Integrated Report offers a more comprehensive account of the company's performance in terms of its ability to create value through the 'six capitals', as defined by the International Integrated Reporting Council (IIRC). In both reports, we harness the principle of 'materiality' to link disclosures on ATNS' financial, social and environmental performance to its strategic objectives and the six capitals. Performance is also linked to the company's developmental, regulatory, commercial and global business context.

All references to forward-looking information and targets in the 2017 suite of reports were extracted from the 2017/18 – 2019/20 ATNS Corporate Plan approved by the Board of Directors.

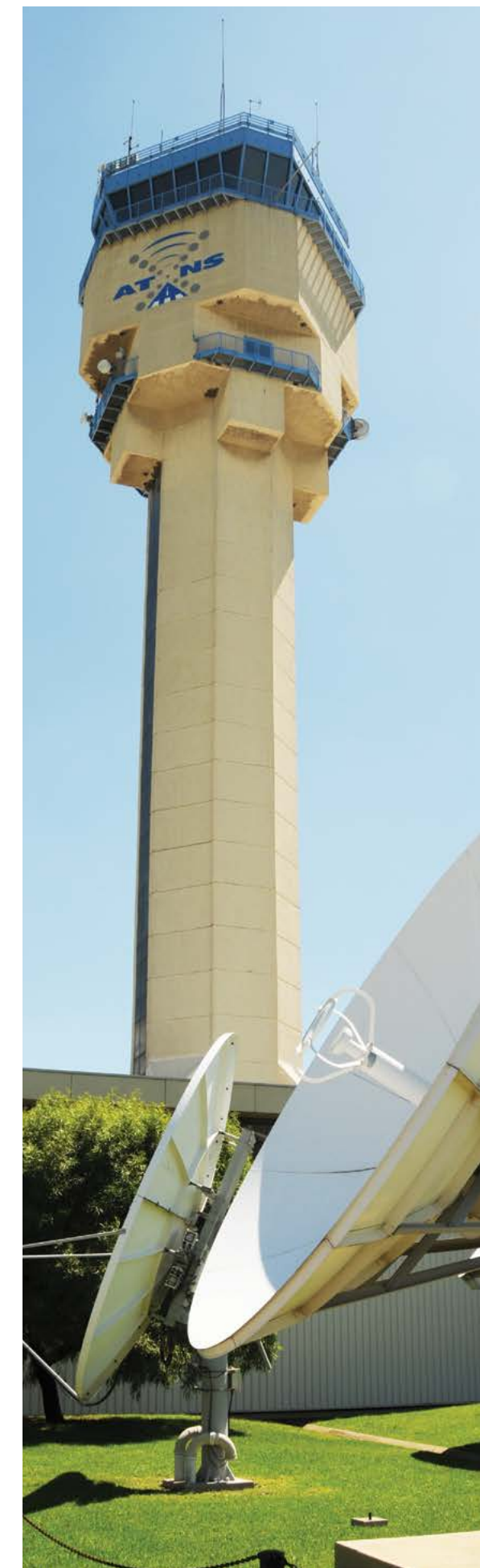
### Feedback

We welcome feedback on our sustainability report to ensure that we continue to disclose information that is material to us and our stakeholders. Should you wish to provide written feedback, kindly contact ATNS.

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## Navigating this report

Performance commentary in both the ATNS-SR and ATNS-IR pertain to material issues that specifically align with the company’s key strategic objectives. Our performance commentary is linked to our strategic objectives and is indicated throughout the report by means of the following icons:

### Icons associated with strategic objectives

Performance commentary in this report pertains to material issues that specifically align with the Company’s key strategic objectives. Accordingly, performance commentary is linked to strategic objectives throughout the report by means of the following icons:

	Ensure long-term financial sustainability
	Enhance operational efficiencies in line with global ATM standards
	Develop leadership capability in Africa ATM space
	Create a transformative organisation
	Build a culture of safety
	Build a skilled and capable employee resource base
	Manage the organisation’s contribution to Climate Change
	Manage and preserve scarce and vulnerable resources
	Develop enterprise-wide awareness for accountable environmental impact
	Maintain an impeccable governance framework
	Ensure regulatory alignment and compliance
	Ensure constructive and collaborative stakeholder relationships



## Icons associated with the six capitals

Performance commentary in this report further aligns with the Company’s perspective on value creation, and in particular, value creation through the six capitals (financial, manufactured, intellectual, human, social and relationship and natural). Accordingly, performance commentary is also linked to the six capitals throughout the report by means of the following icons:

Icons associated with the six capitals

	Financial capital		Human capital
	Manufactured capital		Social and relationship capital
	Intellectual capital		Natural capital

## Sustainability statement

The Government of the Republic of South Africa is a signatory to multiple global conventions – including the Chicago Convention, which established the International Civil Aviation Organisation (ICAO) as a specialised agency of the United Nations. As a State-Owned Company - and national provider of air traffic management (ATM) services - ATNS has a significant role to play in contributing to South Africa’s sustainability agenda. Our Shareholder mandate, represented by the Minister of Transport and the entire Department of Transport, directs us to contribute to both the Department of Transport and national government outcomes by balancing the safe development of civil aviation, with the responsible consideration of our impacts on the economy, society and the environment. Our 2016/17 sustainability reporting discloses our economic, social and environemntal impacts and how we manage these, as it relates to ATNS’ business outcomes and Standard Disclosures from the GRI Sustainability Reporting Guidelines.





## Statement of precautionary approach

The transport sector - particularly aviation - is a critical component of the economy, affecting development and the welfare of the entire population - both as an enabler of economic wellbeing and its beneficiary. When transport systems are efficient to provide the needs of society and enable sustainable opportunities, this is positive for the well-being of the country. Inefficient, dilapidated transport infrastructure results in increased costs and missed opportunities for economic development, tourism, imports and exports, and overall lack of mobility. This causes cumulative impacts on the natural surroundings such as increased waste, air contamination, lack of proactive disaster readiness, and climate change impact. With air traffic movements expected to increase, the impacts of the aviation industry are evident. As a result, more solutions and concerted effort is required from all stakeholders within the industry to address negative impacts.

South Africa is a signatory to the Chicago Convention, which established the International Civil Aviation Organisation (ICAO) as a specialised agency of the United Nations. ICAO has made commitments to curb emissions in response to the United Nations Framework Convention on Climate Change (UNFCCC). As an ICAO member state, South Africa and ATNS has an implicit role to play on the African continent on the one hand to promote maximum compatibility between the safe and orderly development of civil aviation and on the other hand to address environmental challenges. ATNS' support and active response is through proactive infrastructure and operations that are more efficient such as promotion of satellite based infrastructure and more advanced navigation procedures such as PerformanceBased Navigation Procedures. ATNS further acknowledges the need for equitable consideration of key stakeholder groups in the context of our long-term growth strategy and to continuously improve on our reporting of both financial and non- financial impacts.







# PERFORMANCE HIGHLIGHTS

Financial performance	Infrastructure development & investment	Safety performance & provision	Operational performance & efficiency	Legal compliance & governance	Environmental stewardship	Skilled and transformative organisation
<p>Turnover increased by <b>3%</b> from 2016 to <b>R1,557 billion</b></p> <p>Cash generated from operations decreased by 3% to <b>R431 million</b></p> <p>Revenue generated SADC VSAT – <b>R49.0m</b> NAFISAT <b>R42.3 million</b></p> <p>Operating costs increased by <b>4%</b> from 2016 to <b>R1,300 billion</b></p> <p>Gearing remained at Zero (<b>0%</b>)</p> <p>Capital commitments to fund infrastructure <b>R127.86 million</b></p> <p>Liquidity ratio being at <b>5:2:1 (2016: 6.3:1)</b></p>	<p>Implementation of PBN near term targets <b>3 Designs RNP APCH &amp; 10 RNAV 1 SID/STAR</b> at ACSA airports</p> <p><b>8 Design RNAV 1 SID/STAR</b> at non-ACSA airports</p> <p>CAPEX investment expenditure <b>R318 million</b></p> <p>Operation of the satellite communication networks SADC VSAT <b>R49.0</b> NAFISAT <b>R42.3</b></p>	<p>Risk Safety Index (<b>RSI</b>) – <b>47</b></p> <p><b>99.995%</b> successful safety operation (safe separation standards)</p>	<p>Average delay time per delayed flight increased from 13 (2016) to 33 seconds</p> <p>Achievement of CNS Systems Availability <b>C: 99.80%</b> <b>N: 97.98%</b> <b>S: 99.99%</b></p>	<p>Qualified audit opinion was raised for 2016/17</p> <p>Fraud and whistle-blowing: Eight (<b>8</b>) <b>whistle blowing</b> issues were reported</p>	<p>Total electricity use <b>20,515,469 kWh</b></p> <p>Carbon footprint (scope 1 - 3) <b>23 292.01 ton CO2e</b></p> <p>Employee environmental awareness training to <b>27%</b> of staff</p> <p>Electricity efficiency for 2016/17 is 38.92 Air traffic movement/Kwh</p> <p>Carbon Intensity for 2016/17 0.03 emissions/air traffic movement</p>	<p>Skills development (Bursaries &amp; Engineering learnerships) <b>ATS: 81, Eng learnerships: 6</b></p> <p>Employee training increase to <b>8.13%</b> Rand value of Cost to Company</p> <p>B-BBEE target as per charter: <b>level 2</b></p> <p>Employment equity performance: <b>AIC, 75.12%, female representation, 44.88%, PWD 3.31%</b></p>



# WHO WE ARE

- Air Traffic and Navigation Services SOC Limited (ATNS), Air Navigation Services Provider (ANSP).
- State-Owned Company (SOC), established in 1993 in terms of the ATNS Act (Act 45 of 1993).
- It comprises of a board of directors appointed by our Shareholder, the Minister of Transport, to provide oversight and guidance in implementing the ATNS Mandate.
- Our primary mandate is to provide air traffic management solutions and associated services in the airspace for the South African public on behalf of the State in a safe and efficient manner.
- Our services need to comply with International Civil Aviation Organisation (ICAO) standards and recommended practices which encompasses South African Civil Aviation Regulations and Technical Standards.
- We are responsible for 10% of the world’s airspace.
- Our B-BBEE (Broad Based Black Economic Empowerment) is level 2.
- 1 250 employees work for our us.
- We operate an Air Traffic Academy (ATA) situated in Bonaero park.
- Woman constitute 44.88% of our employees.

Figure 1: ATNS structure, core and supporting functions

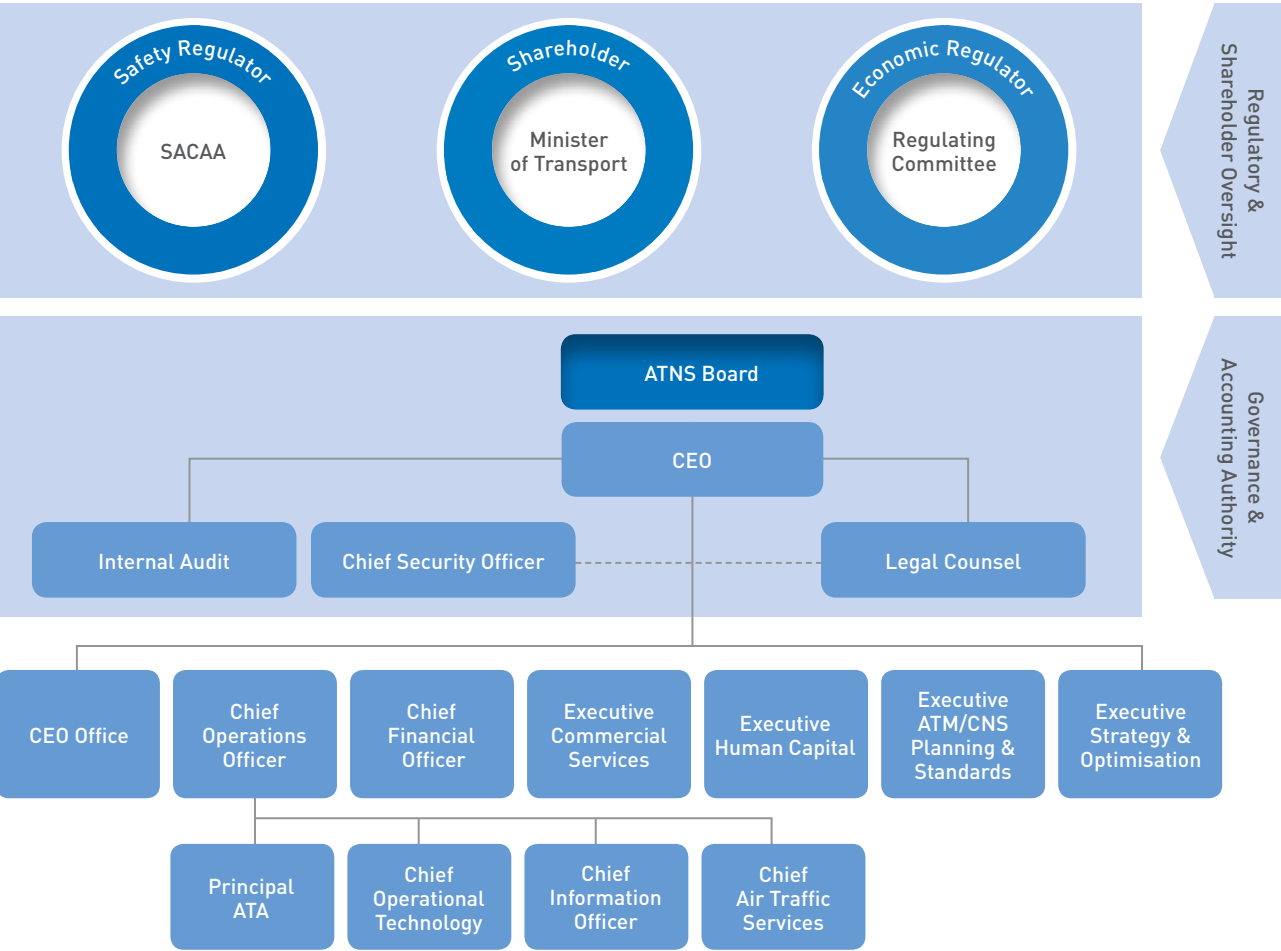
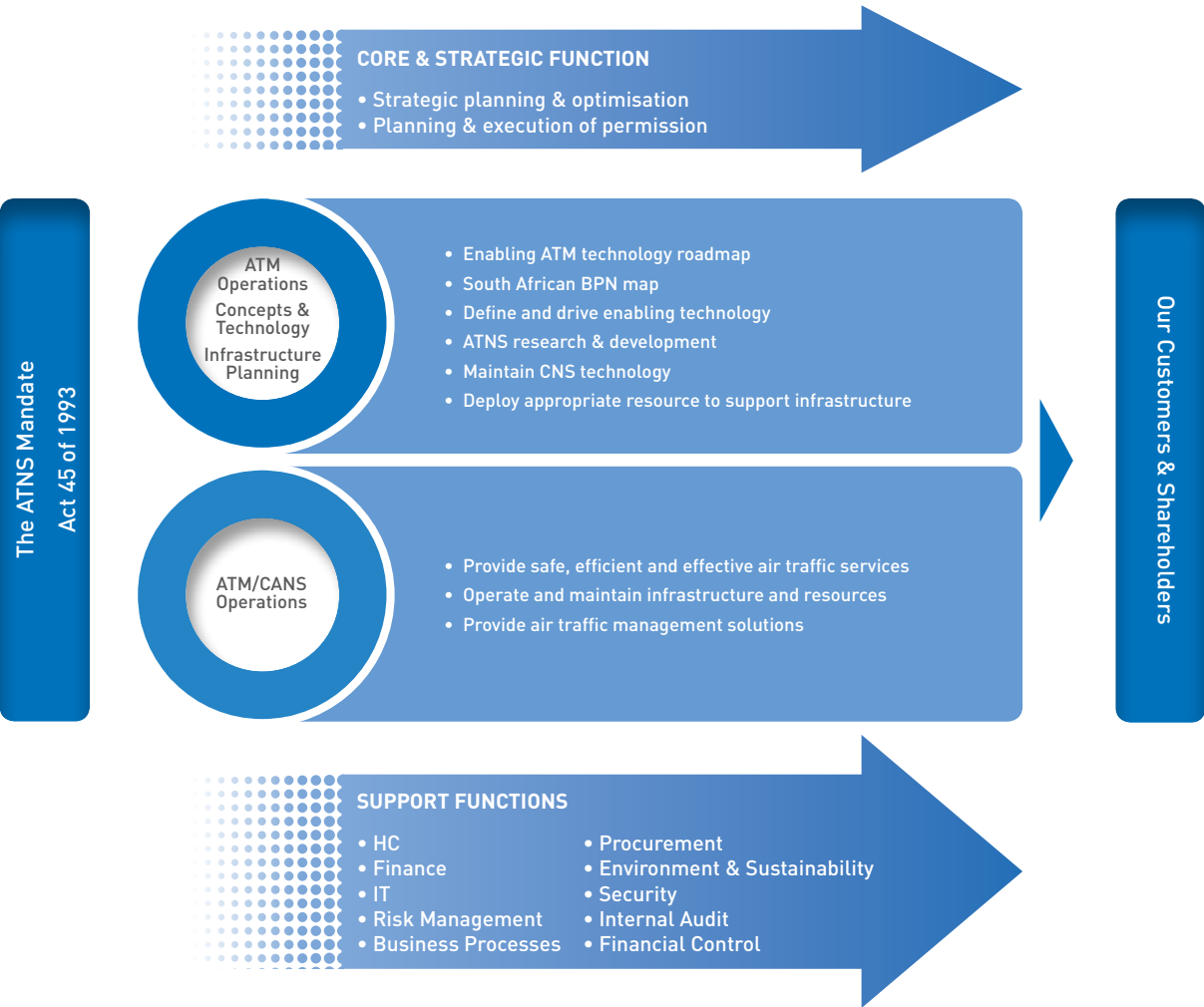


Figure 2: ATNS core and supporting functions







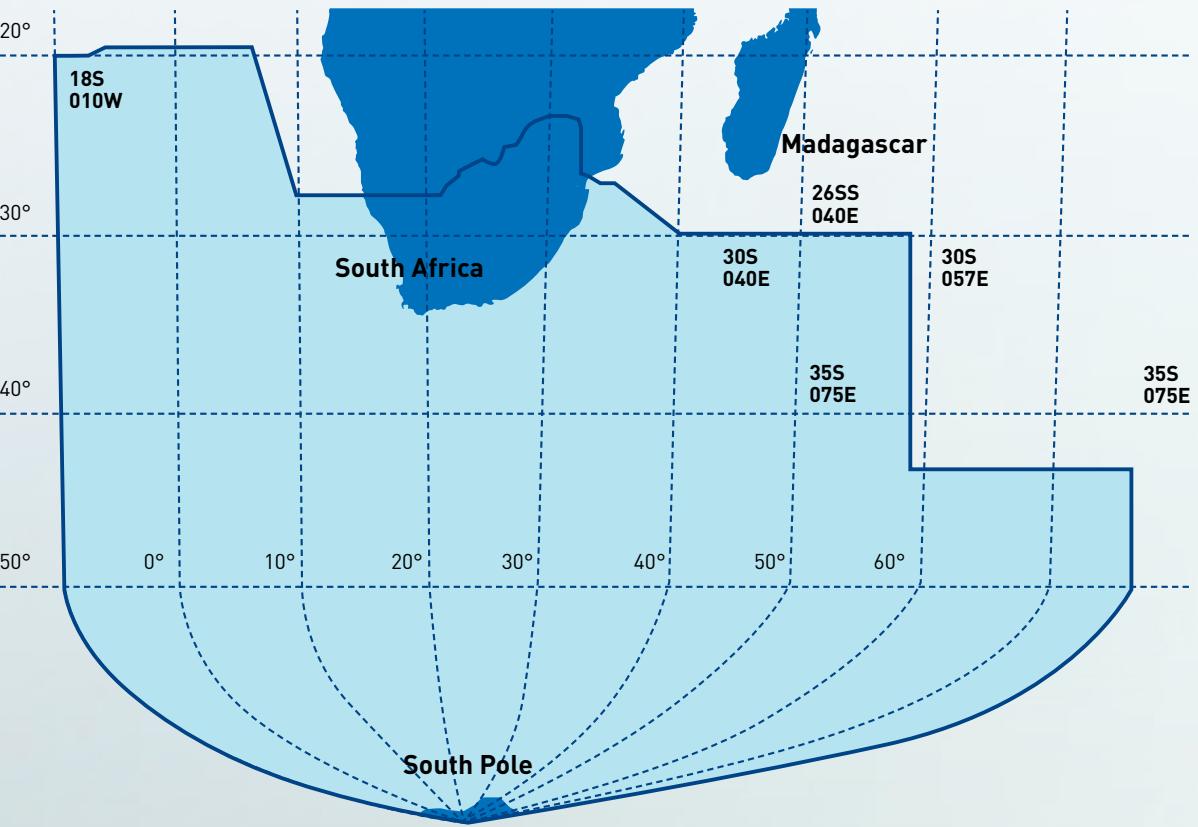
# OUR PRESENCE IN AFRICA

- Our Head Office is located in Bruma, Johannesburg.
- We provide aerodrome and approach control services at 9 ACSA airports throughout South Africa on a statutory basis. We also provide contractual services to 12 regional airports and approach procedural services to 4 regional airports.
- We provide national area control services, oceanic control services in delegated international airspace and Aeronautical Information Management services.
- We operate the Aeronautical Rescue Coordination Centre on behalf of the Department of Transport; and operate the African and Indian Ocean Area, Regional Monitoring Agency on behalf of the International Civil Aviation Organisation.

Figure 3: ATNS presence in south Africa



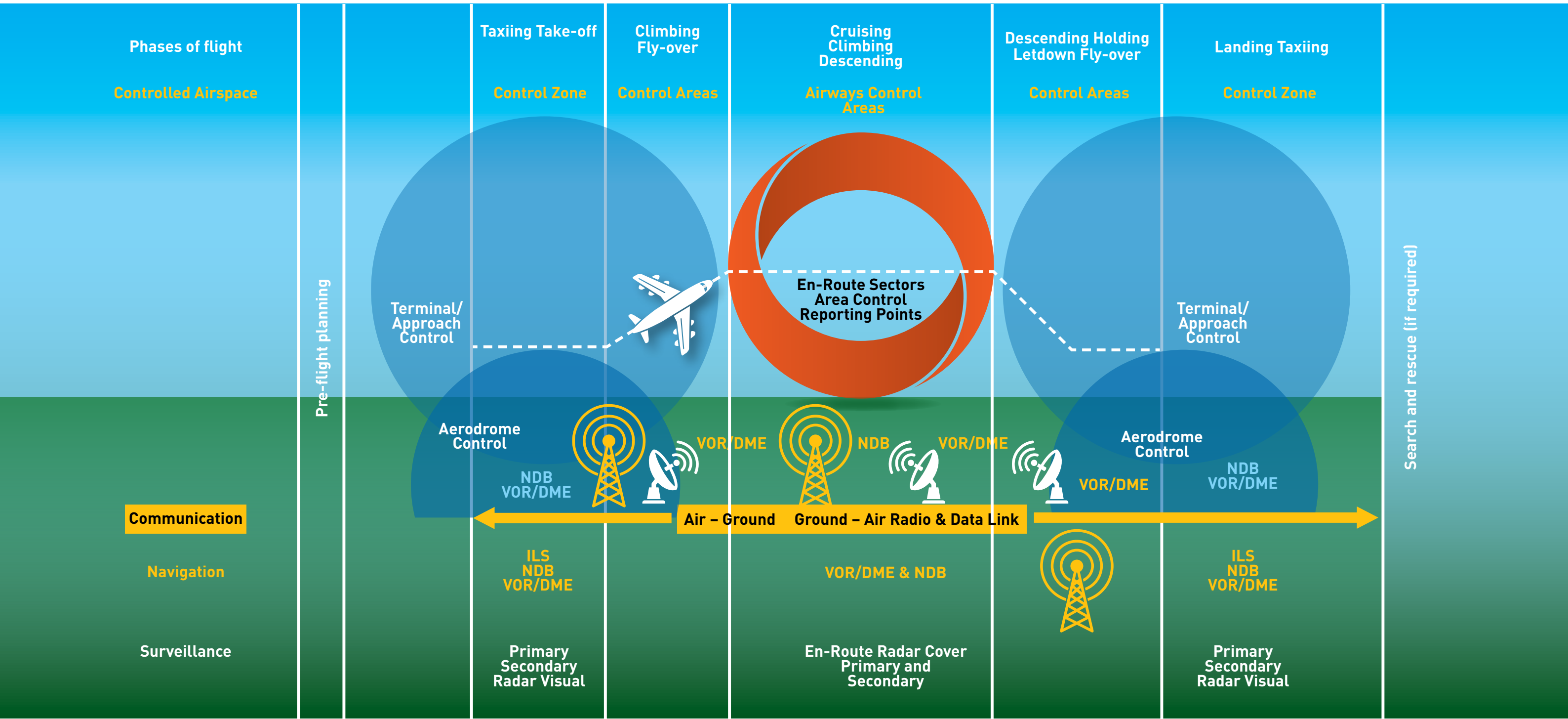
Figure 4: ATNS area of responsibility





# OUR SERVICES AND PRODUCTS

Figure 5: ATNS' extended services on the African continent and beyond





### Core function of our business

The services provided by ATNS support seamless gate-to-gate operations. This concept encompasses the taxi out and departure, climb out, cruise, descent, arrival, landing and taxi in phases of a flight. The air traffic management service delivery component is enabled by an advanced air traffic management system deployed such as communications, navigation and surveillance systems. The illustrated value chain is scalable across the total user demand in the South African airspace.

- The infrastructure consists of communications, navigation and surveillance (CNS) infrastructure.
- This infrastructure development is informed by regulatory requirements at a global level, enabling new technologies as well as addressing the needs of the air traffic management (ATM) community.
- ATNS is also a commercialised ANSP operating on the “user pays” principle that relies on tariff revenues and debt funding for its operational and capital expenditure requirements.
- Our operations are regulated as outlined by the ATNS Act and non-regulated business is guided by the 10 year bankable plan.

### Our Regulated business

(Refer to page 14 of the IR for details)

- Managed in accordance with the ATNS Act no 45 of 1993.
- Revenue is generated by charging tariffs.
- ATNS operates on an approved 5-year permission plan.
- Contributes 90% of ATNS revenue.

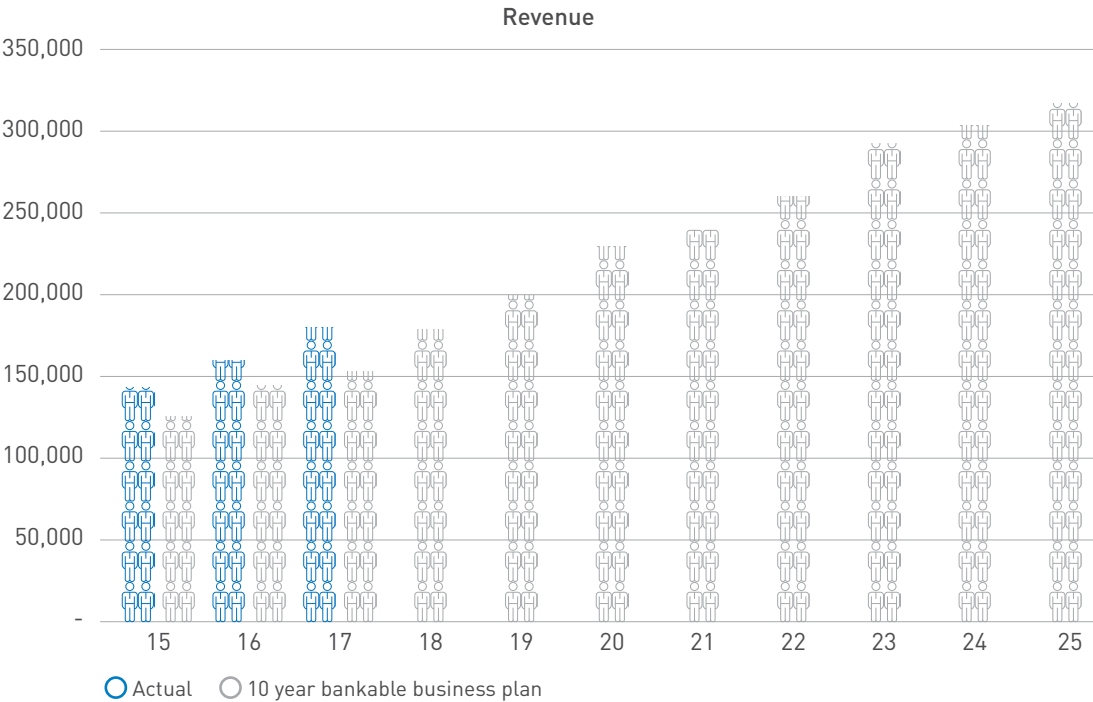
### Our Non-Regulated Business

(Refer to page 86 of the IR for details)

- 10-year bankable plan which is informed by a market-driven strategy.
- Referred to as ATNS International which focuses on ATNS Africa Regional Expansion Strategy.
- Provide services and products to African continent.
- Contributes 10% of ATNS revenue; current revenue generated for 2016/17 is approximately R186 million.



Graph 1: Year on year non-regulated revenue against plan



Revenue split – ATNS International

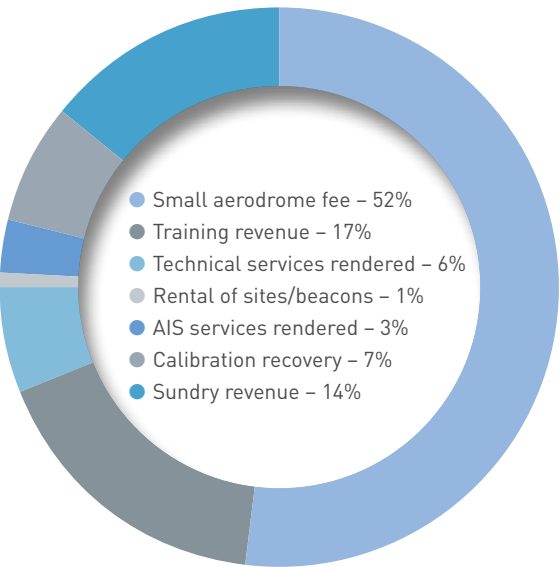


Table 1: Services and products offered by ATNS

<strong>Training</strong> <ul style="list-style-type: none"><li>• Engineering</li><li>• Air Traffic Services</li><li>• IATA</li><li>• ICAO GSI</li><li>• Management</li><li>• Aeronautical Billing and Collection Services</li><li>• Consulting (Advisory Services) in ATM</li><li>• CNS</li></ul>
<strong>Aeronautical WGS-84 Surveys</strong> <ul style="list-style-type: none"><li>• Full Survey</li><li>• Maintenance Survey</li><li>• Obstacle evaluation (Annexure 14)</li></ul>
<strong>Air Traffic Management Services</strong> <ul style="list-style-type: none"><li>• ATM Planning</li><li>• Airspace Design</li><li>• Flight Procedure Design</li><li>• Aeronautical Charting</li><li>• Airspace Management</li></ul>
<strong>AIS/AIM Service</strong> <ul style="list-style-type: none"><li>• Aeronautical Information Publication</li><li>• Central Aeronautical Database</li></ul>
<strong>Communication Navigation and Surveillance</strong> <ul style="list-style-type: none"><li>• CNS planning</li><li>• CNS Procurement</li><li>• Technical Support</li></ul>





## Training institution

- We operate a successful training institution as a division within the Company, the Aviation Training Academy (ATA).
- Main services range from air traffic services training, technical support training and related training in the disciplines of engineering and management.
- Training is provided to delegates in South Africa and the broader African continent.
- The ATA is an ISO 9001:2000 accredited institution and has international cooperation agreements in place with partners such as the Embry Riddle Aeronautical University, Ecole Nationale de l'Aviation Civile (ENAC), and the University of the Witwatersrand (WITS) and Airways International, enabling the academy to maintain mutually beneficial partnerships in the presentation and accreditation of international courses in air traffic services (ATS).
- The ATA is a world-renowned academy, and in 2012, 2013, 2014 and 2015, was formally recognised as the International Air Transport Association (IATA) Worldwide Top Regional Training Partner.
- In the current year the Aviation Training Academy strategic model was reviewed to enable the training institution to focus, grow the revenue stream and become sustainable.

### Our achievements:

- Best Service Provider Award at Jane's Annual ATC Awards Ceremony
- The ATA received the IATA Top Regional Training Partner Award
- ATNS has achieved a level 2 Broad-Based Black Economic Empowerment (B-BBEE) rating
- Top Service Provider Award – AFRAA
- Integrated Reporting Award 2015 –International Integrated Reporting Council (IIRC)



## COMMITMENTS TO EXTERNAL INITIATIVES

**ATNS aligns with several external economic, environmental, and social initiatives:**

### The ICAO Aviation System Block Upgrades (ASBU)

According to ICAO, air traffic growth expands two-fold every 15 years, if not properly supported by the necessary regulatory and infrastructure framework, this growth can lead to an increase in safety risks and negative environmental impacts. A careful balance between these factors is critical for maintaining continued air traffic growth. A key challenge for the aviation community is the achievement of safety and operational improvements on a globally harmonised basis, while remaining environmentally responsible and cost- effective.

To meet this challenge, ICAO has collaborated with member states, industry and international organisations to develop the ASBU concept, which aims to ensure the following operational imperatives:

- Maintaining and enhancing aviation safety.
- Harmonising air traffic management improvement programmes.
- Removing barriers to future aviation efficiency and environmental gains at reasonable cost.

The Block Upgrade concept is a pragmatic 'system of modules', each one comprised of technologies and procedures that are structured to achieve a specific performance capability. Each module is linked to one of four specific and interrelated performance improvement areas, namely:

- Airport operations
- Globally interoperable systems and data
- Optimum capacity and flexible flights
- Efficient flight paths.

Structuring the modules in this way, the ASBU concept allows for a flexible global systems approach, which enables all member states to advance their own air navigation capabilities based on their specific operational requirements.

By implementing many of these modules, the adverse environmental effects of civil aviation activities can be minimised. For instance, modules that allow for improved flexibility and efficiency.

Several other modules are expected to deliver benefits through fuel savings and reduced CO2 emissions. The Committee on Aviation Environmental Protection (CAEP) has undertaken an initiative to quantify these reductions, in order to provide member states and stakeholders with a better assessment of the expected environmental benefits.

ATNS fully endorses the ASBU initiative as it is essential in setting the vision and framework for the global harmonisation of air traffic management. ATNS is progressing well with its performance improvements through the implementation of all the relevant provision of ASBU 'Block 1' of the ICAO Global Air Navigation Plan (GANP) by developing South African priorities and targets according to the operational needs.

ATNS' ATM Roadmap and the Integrated Technology Plan form part of the South African National Airspace Master Plan, which in turn conforms to the GANP.



## Civil Air Navigation Organisation (CANSO)

ATNS is a founding member of the Civil Air Navigation Organisation (CANSO) in Africa and plays a leading role on the African continent by hosting the CANSO Regional Office and collaborating with other entities regionally and globally in its visibly active involvement in ICAO, IATA, and other industry networks and associations. ATNS actively participates in the different working groups to support the CANSO mandate and 2020 vision for ANSP.

## The USTDA/ATNS Space-based ADS-B Feasibility Study

As part of ATNS' effort to improve the safety and efficiency of African aviation, ATNS, in collaboration with the USTDA, contributed towards funding a grant to conduct a satellite surveillance feasibility study utilising the space-based ADS-B technology.

The study will establish a model for the deployment and operation of space-based global air traffic surveillance in the selected African countries. ATNS as the Grantee has contracted Exelis Inc., the world's largest terrestrial service provider of air traffic surveillance network as the prime contractor to provide a fundamental role in assessing the surveillance competencies and benefits space-based ADS-B can offer to the African continent. This will encompass regions that have not had any surveillance capabilities in the past. In ensuring the success delivery of the space-based ADS-B feasibility study Exelis Inc. subcontracted Aireon LLC, the developer of the space-based global air traffic surveillance system. The outcome of the study shall be recommendations on the following:

- Satellite services required,
- Equipage on the ground and in the air,
- System maintenance and training requirements, as well as
- Establishing the financial model to support the deployment and operation of the Aireon system in Africa.

The main assessment will be focused on South Africa but the study will also indicate basic equipment needs for other air navigation service providers (ANSP) to enable other AFI ANSPs to understand the requirements and costs of deploying and operating the ground systems to utilise the space-based ADS-B aircraft surveillance system.

## The Indian Ocean Strategic Partnership to Reduce Emissions (INSPIRE) initiative

As part of its on-going commitment to reducing GHG emissions, ATNS is one of the founding members of the Indian Ocean Strategic Partnership to Reduce Emissions (INSPIRE), a partnership with airlines, ANSPs and airport partners to assess ways of reducing aviation's impact on the environment. The INSPIRE partnership is intended to be a collaborative network of partners and peer organisations across the Arabian Sea and Indian Ocean region dedicated to improving the efficiency and sustainability of aviation.

## The GHG Protocol Corporate Standard

The first ATNS Carbon Emission Inventory and footprint was calculated using best practice methodology. A carbon inventory for an organisation involves accounting for all greenhouse gas (GHG) emissions released as a result of the operations of the organisation. In line with international leading practice, the calculation of a carbon inventory was done in accordance with the GHG Protocol Corporate Standard.

The results of this carbon inventory will act as a baseline against which future ATNS carbon footprints will be benchmarked. In 2016/17, ATNS continued to calculate its carbon footprint and is getting closer to setting targets that will ensure the reduction of emissions in daily operations.

## Alliance with the University of Pretoria's Department of Electrical Engineering and Computer Systems

In ensuring superior achievement of "*Absorptive Capacity*" and promotion of "*Strategic Collaboration*", ATNS has established a strong coalition with University of Pretoria's Department of Electrical Engineering and Computer Systems in the area of telecommunication.

The purpose of the alliance is to participate in forefront research activities to deliver world class research and educational output for the benefit of ATNS, UP and telecommunications industries. This initiative also aims to build capacity and create learning opportunities for both undergraduate and postgraduate engineering students who come from historically disadvantaged backgrounds. Opportunities are created through the Engineering Graduate Development Programme, such as vacation work and bursary sponsorship. The students have the opportunity to further their knowledge and studies through ATNS' contribution, and the alliance is formed on the basis that, students will conduct ATNS-identified projects that will yield commercial or operational outcomes for the benefit of the aviation industry. To this end, six projects were completed and have been identified to be commercialised and are currently under review for commercialisation.

## University of Johannesburg (Leadership)

The Aviation Training Academy (ATA), a division of ATNS SOC Ltd, is fully accredited by several Universities of Technology (including UJ, DUT, CUT) to offer experiential learning programmes in Electrical Engineering (Electronic) Level I & II, and Computer Systems Engineering Level I & II. Students who successfully completes the programme receives accreditation upon submission of a fully documented logbook and subsequently the university awards a National Diploma in that respective discipline. The accreditation is valid for two years with an option to renew once the university conducts a full audit at ATA facilities.

## AVI AFRIQUE

In order to establish leadership in the areas of innovation, ATNS founded the **AVI Afrique Aviation Innovation Summit**, which was inaugurated in November 2012. The forum is aimed at integrated research and innovation that will ensure that solutions in the continent are relevant to the African market and address the needs that may not necessarily be met by research programmes in the US (NEXTGEN) and Europe (SESAR).

In line with the vision of the South African government to move the country towards a knowledge-based economy, ATNS is shifting from merely being a user of the acquired technologies to contributing to the value chain of technology innovation and the development of domestically consumed technologies.

ATNS exhibits greater possibilities of innovation. Therefore, ATNS Technology focuses on applied research, where research activities are undertaken with the purpose to innovate, develop, enhance and/or validate technology solutions that have potential to be commercialised or operationalised for the primary use in the Air Traffic Management operational environment. The outcomes of the applied research emphasis may lead to product development, process development and or improvement.







## OUR BUSINESS MODEL & STRATEGY

ATNS' strategy to maximise current operations in South Africa whilst establishing itself in new markets is based on the understanding that the aviation industry plays a major role in driving sustainable economic and social development throughout the world. As such, ATNS' strategy aims to provide safe and reliable Air Traffic Management solutions for airspace users whilst growing the unregulated component of the business. The ATNS strategy is influenced by - and linked to - numerous industry planning initiatives, as well as the developmental prerogatives of the South African government. Strategic delivery aims to meet the increasing demands of long-term traffic growth and complexity. The strategy seeks to adopt increasingly flexible practices, more efficient operations, and more cost-sensitive business processes to counter unpredictable events.

Our strategic model demonstrates the Company's holistic approach to economic, social and environmental sustainability in that the three sustainability pillars serve as drivers of our strategic intent and operational momentum. The three strategic pillars, in turn, require that the Company ensures impeccable governance oversight, regulatory compliance, and alignment with the needs of our wider stakeholder communities. The model shows the strategic inputs into the business, including (but not limited to) the ICAO performance-based ATM Operational Framework at a global level.

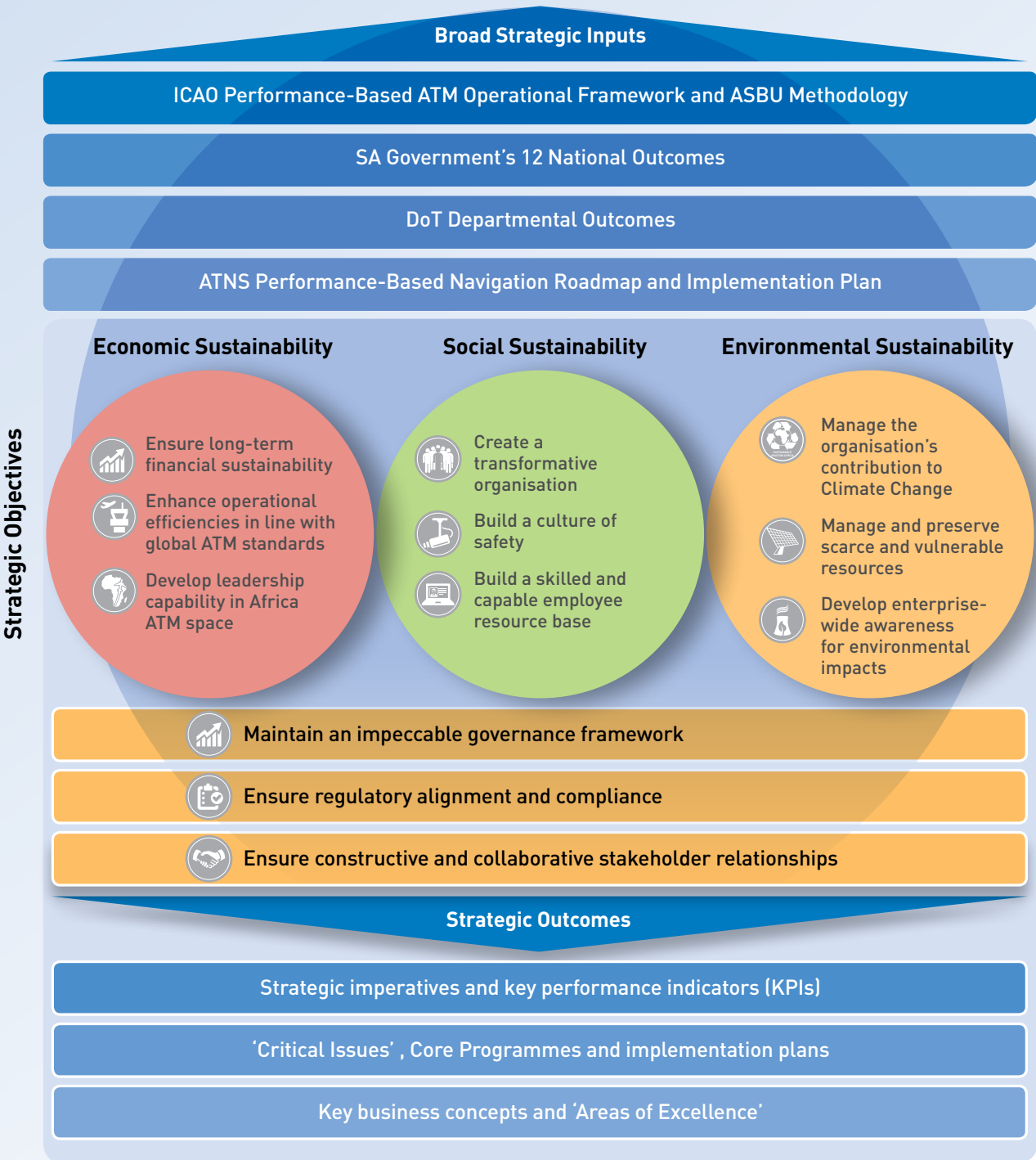
ATNS is mandated to support the creation of safe skies whilst the overarching mandate requires the company to execute activities in a manner that promotes financial, social and environmental sustainability for the organisation and broader South African economy. In this regard, the company adopted a strategy in 2014, there-in promoting commercial, non-regulated disciplines and maximise the company's contribution in social development and environmental sustainability. The Company's strategic objectives are further refined and directed into strategic imperatives, critical issues, core programmes and key performance indicators (KPIs) to set specific performance targets and guide their practical achievement to support the delivery of the strategy.







Figure 6: ATNS Strategic Model



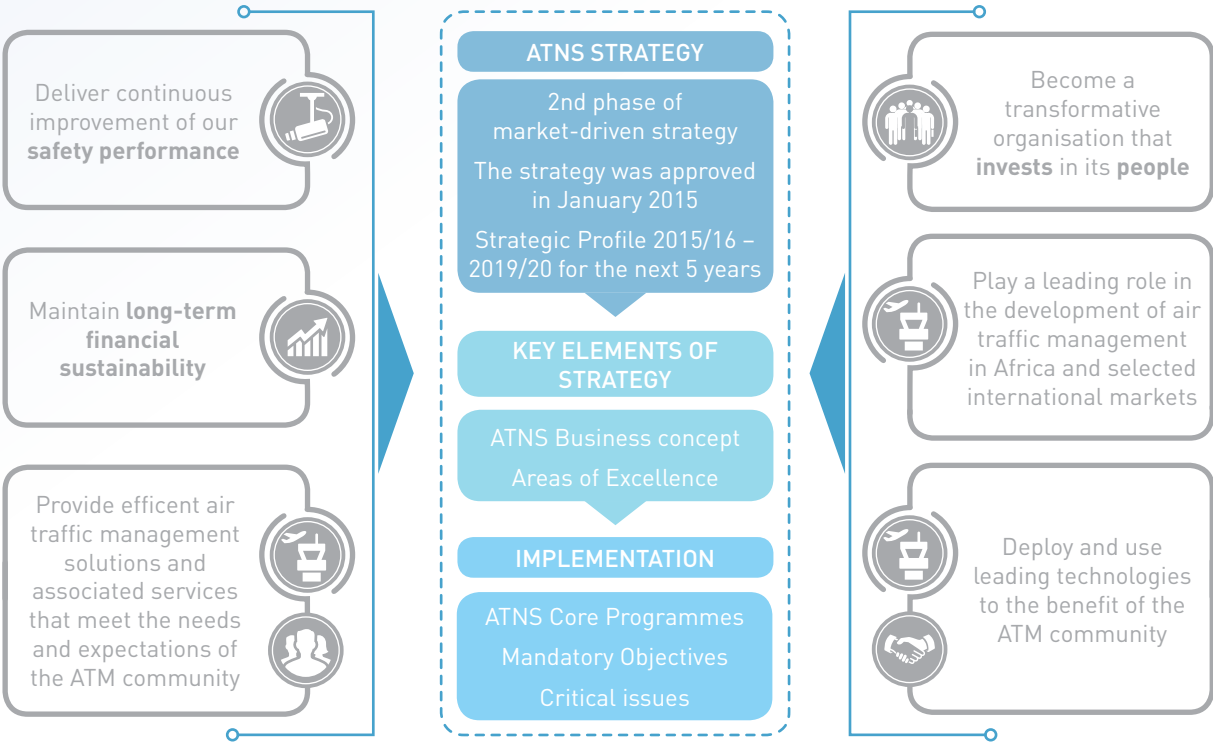
The Strategy is being implemented within the defined business concept that is intended to enhance the role of the business to facilitate the transformation of air traffic management through deployment of safe, sustainable, efficient and cost effective ATM solutions and associated services. This is also dependent on establishing and maintaining strategic partnerships within the region and the globe to position the company as a leading ATM provider in the continent.

The current Strategy has identified six strategic imperatives that will enable the business to attain the Strategic intent. These imperatives are focused on ensuring the sustainability of the business as well as contribute to the objectives of the aviation industry as a whole and these are depicted in the figure below:

As part of our strategic model, ATNS has prioritised the following strategic areas to enable medium to long-term sustainability of the business:

- Isando Spartan development project
- Implementation of the approved Permission plan
- ICT Architecture road map to enable business model
- ATNS international to drive ATNS non-regulated business
- ATA Strategy to remain self-sustaining

Figure 7: ATNS Business Strategic Imperatives and ATNS strategy







The growth of the unregulated business has emerged as a fundamental strategic imperative in the current strategy as it responds to the strengthening of the company's influence in the ATM community as well as responding to the stagnant revenue growth in the regulated business.

## Critical issues and core programmes

In the 2017/18 financial year, ATNS has identified critical issues to realise the ATNS strategic objectives for the financial year, and they are outlined below:

- Implement safety interventions to improve safety performance
- Deliver a high-performing Strategic Supply Chain in response to changing market
- IT Infrastructure

In order to the respond to the identified critical issues, core programmes have been identified for 2017/18 to facilitate effective implementation of the strategy. The programmes are as follows:

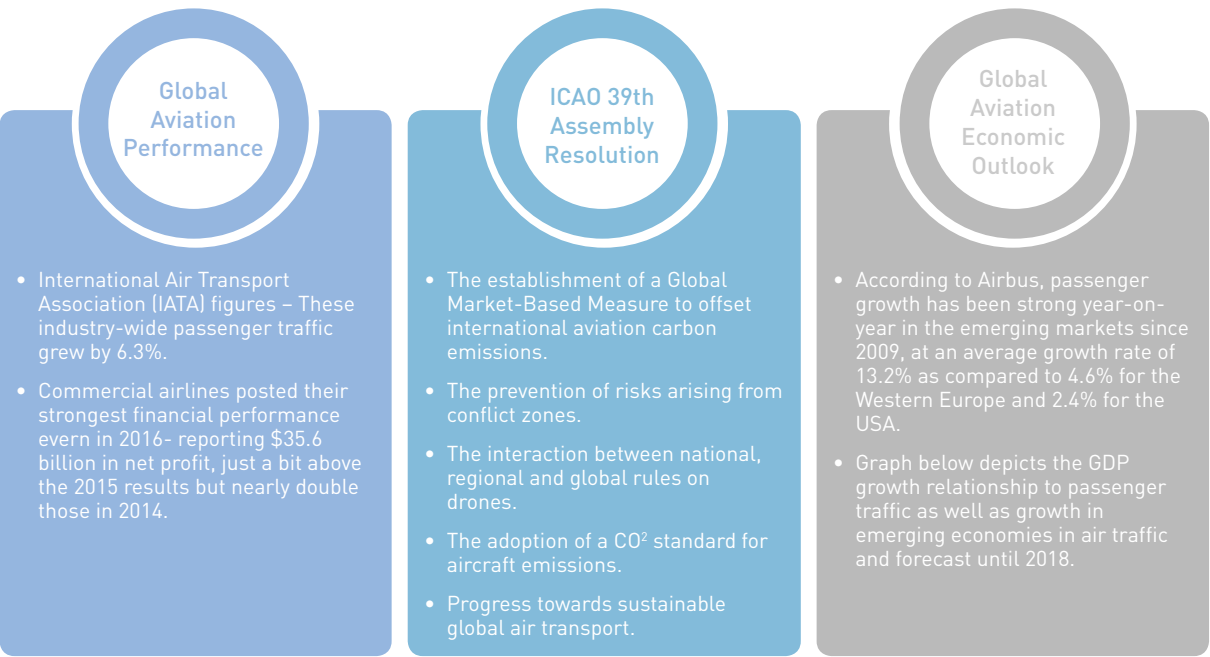
An operating/governance model to align regulated and non-regulated business (resources, tools) in order to achieve the expansion strategy	Organisational alignment between regulated and non-regulated business to achieve seamless interaction and coordination.
ISO 9001: 2008 – ISO 9001:2015 Standards Migration	Migration to latest ISO 9001: 2015 Standard with integration and alignment to other standards such as the Environmental Management System (EMS) ISO 14001: 2015 standard.
Isando/Spartan	Development of new corporate offices, ATA, ATM centre and other viable revenue generating options within the site
Remote Service feasibility study	Implementation and deployment plan for the provision of "remote radar approach service" at Northern Region (Non-Regulated) airports and Southern region (East London, George & Port Elizabeth).
Cyber & site Security	Development of an integrated cyber security plan informed by a cyber-security framework and roadmap that addresses other aspects such as site security (Refer material issues section for details)
CAPEX implementation	To ensure timeous procurement and delivery of CNS/ATM systems (Refer to material issues section for details)
Disaster recovery	To implement a disaster Recovery plan for ATNS (Refer to material issues section for details)



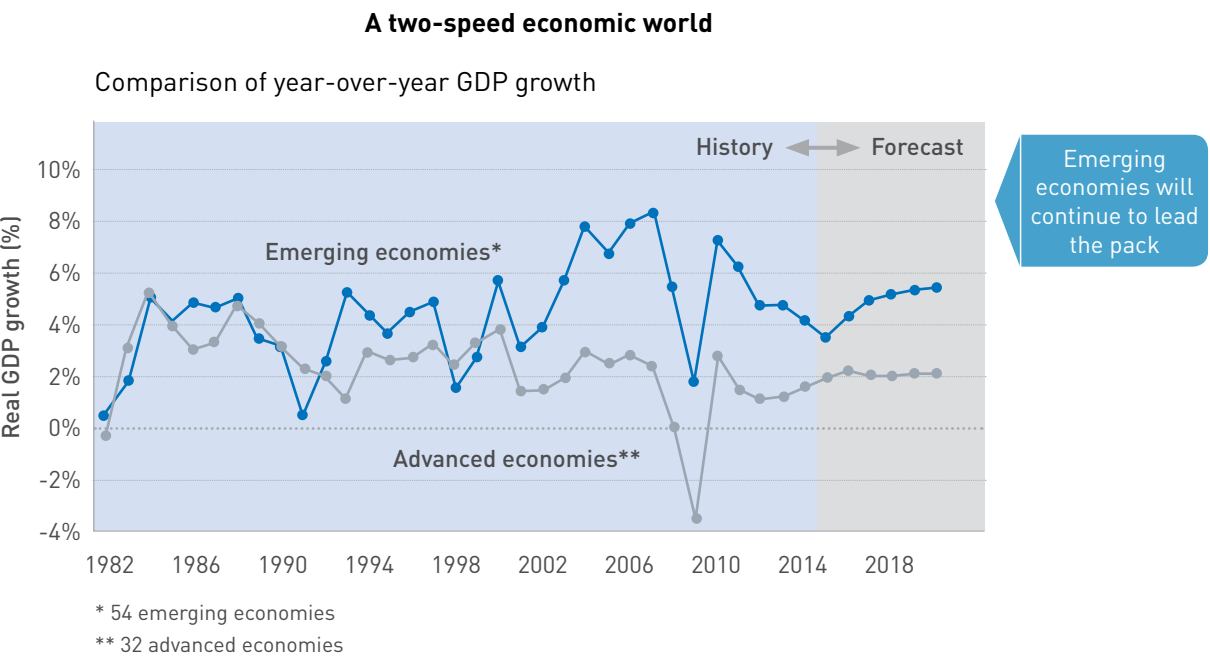
## CONTEXTUALISING OPERATING ENVIRONMENT

The global aviation regulatory environment was established through the International Civil Aviation Organisation (ICAO), a specialised body of the United Nations Organisation responsible for global civil aviation. ICAO was established through the Chicago Convention, as signed by participating states in 1944. South Africa is a signatory to the convention and has to abide by the terms and conditions of the convention.

Figure 8



Graph 2





## Regulatory framework

The regulatory framework within which ATNS operates, comprises of the Chicago Convention and its 19 annexes, which address the broad principles of civil aviation governance and the standards related to various aspects of civil aviation, including safety, personnel licensing, meteorology, air traffic services, aeronautical telecommunications and aeronautical information management, security and environmental protection. Furthermore, a comprehensive supporting documentation database comprises of recommended practices, design manuals and guidance material related to various aspects of civil aviation to meet its obligations in terms of the Chicago Convention. The South African Government has enacted primary legislation addressing various aspects of civil aviation through the Civil Aviation Authority. The Civil Aviation Act (Act 13 of 2009) as amended, supported by Civil Aviation Regulations and Technical Standards, provides the regulatory framework within which ATNS delivers air navigation services on behalf of the State.

- In terms of Article 28 of the Chicago Convention, the State is required to provide air navigation services and infrastructure in compliance with the standards and recommended practices as promulgated from time to time by ICAO. The convention makes provision for the State to delegate responsibility for the provision of services; however, the state remains accountable for ensuring compliance with the standards and recommended practices.
- The States that are members of ICAO have endorsed the ICAO Air Traffic Management Operational Concept, which defines the seamless global aviation system concept. This concept is in turn translated into the Global Air Navigation Plan (GANP), supported by the Global Aviation Safety Plan (GASP) and underpinned by the ICAO Standards and Recommended Practices (SARPs).

ATNS is the monopoly provider of the national en-route as well as approach and aerodrome services at Airport Company of South Africa (ACSA) airports. The Regulating Committee for ACSA and ATNS was established through – and empowered by – both the ACSA Act (Act 44 of 1993) and the ATNS Act (Act 45 of 1993). This was undertaken to ensure independent economic and service standard regulation and oversight of ATNS; and to prevent abuse by ATNS of its monopoly position, whilst at the same time ensuring that ATNS remains sustainable as an independent, self-funding, state-owned company.

## Economic Regulation

The Regulated business carried out by ATNS is a statutory requirement governed by the ATNS Act (Act 45 of 1993) and as a state owned entity, the Shareholder, the Department of Transport (DoT), mandates the organisation. In this regard, ATNS is a monopoly and regulated economically by the Economic Regulating Committee (RC) that is a statutory body formed and appointed by the Shareholder. The RC is empowered by the ATNS Act to issue permission to ATNS. The permission regulates the increase in specified tariffs that ATNS can issue and lays down minimum service standards requirements for the regulated business. ATNS, through the permission, is authorised to levy air traffic service charges on users (aircraft operators) for the use of air navigation infrastructure and/or the provision of an air traffic service. The permission has a five year life span. The permission application details ATNS' service provision and standards, including infrastructure and human and financial resources required to realise the plans over the five-year period. These plans are statutorily consulted on with the relevant stakeholders with a view to achieving consensus on all aspects of the permission application. The outcomes of consultations are included in the permission application as a consultation report.



## ATNS Permission 2015/16 – 2019/20

In 2014, ATNS applied for a permission in line with the ATNS Act for the 2015/16 – 2019/20 period. Due to the delays attributed to the RC administrative challenges, the RC granted ATNS Zero tariff increase starting 1 April 2015 to enable ATNS to have a valid Permission in line with the applicable Act. On 21 December 2016, the Minister of Transport approved the permission application for ATNS. This authorised ATNS to levy air traffic services charges for the 2015/16 – 2019/20 period. Subsequent to the issuance of the final Permission, ATNS published the amended charges in the Government Gazette of 30 December 2016 which were effective from 1 April 2017 to 31 March 2020. The amended changes in the Government Gazette, published on 30 December 2016 supersede the Zero Tariff Increase Permission. At the same time, the RC instructed ATNS to commence with the planning and consultation for a permission application for the financial years 2017/18 until 2022/23.

## Global business context

At a global level, civil aviation is planned to be seamlessly integrated across national boundaries, with common service standards and quality, irrespective of who provides the Air Navigation Service – be it a State, a group of States or delegated service providers. The States that are members of ICAO have endorsed the ICAO Global Air Traffic Management Operational Concept, which defines the seamless global aviation system concept. This concept is, in turn, translated into the Global Air Navigation Plan (GANP), supported by the Global Aviation Safety Plan (GASP) and underpinned by the ICAO Standards and Recommended Practices (SARPs).

The GANP is translated into a Regional Air Navigation Plan (RANP), which takes account of the regional differences in the demand placed on the air navigation system, as well as the level of development in the region. The RANP is underpinned by regional plans for air traffic management, communications, navigation and surveillance.

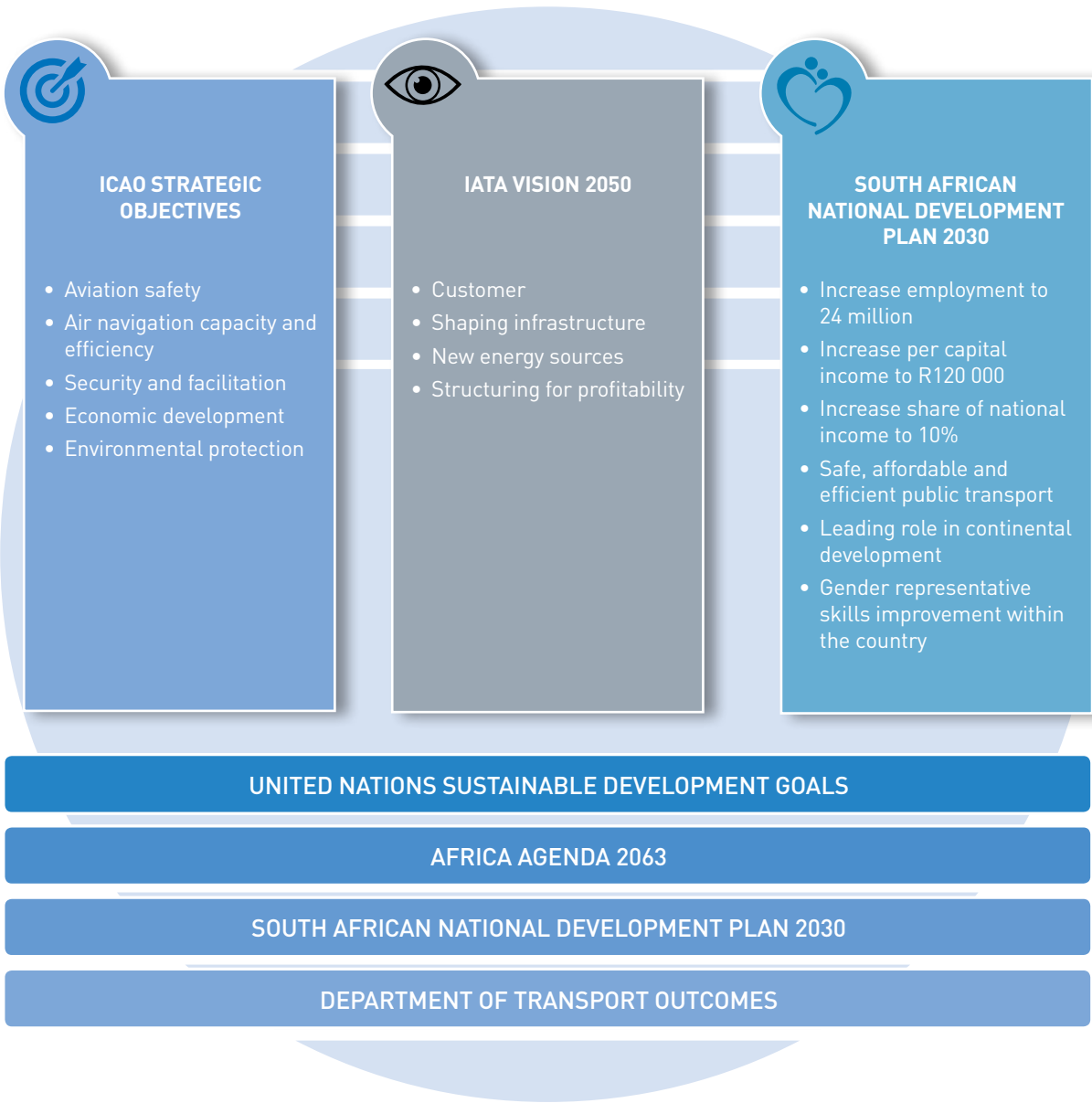
The Africa Indian Ocean (AFI) Regional Plan is encapsulated in the ICAO document 7030/4. This forms the basis of the South African National Airspace Master Plan (NAMP), which is approved by all the aviation stakeholders in South Africa. The NAMP gives rise to the ATNS Air Traffic management (ATM) and Enabling Technologies Roadmaps, which meet the requirements of the ICAO SARPs and South African Civil Aviation Regulations and Technical Standards. The ATM and Enabling Technologies Roadmaps represent ATNS' ATM service delivery plans, supported by the necessary communications, navigation and surveillance infrastructure.

The ICAO strategic vision enables a global air transport network that meets or surpasses the social and economic development and the broader connectivity needs of global businesses and passengers, and acknowledges the clear need to anticipate and manage the projected doubling of global air transport capacity by 2030 without compromising adverse impacts on system safety, efficiency, convenience or environmental performance and has established core objectives. These objectives are aligned to the United Nations Sustainable Development Goals (SDGs) and IATA Vision 2050 and supports the objectives of developing a set vision to achieve global vision 2050 which prioritises aviation economy, improve infrastructure, safety, alternative energy sources and profitability which aligns to the sustainability of the industry.





Figure 9: Global & National Governmental Outcomes - Developmental context



Alignment with the United Nations Sustainable Development Goals

- Through its alignment with ICAOs' strategic objectives ATNS supports the achievement of 14 of the 17 United Nations SDGs:

Strategic area	Linkages to the United Nations Sustainable Development Goal
Safety	3, 4, 5, 9, 10, 17
Air navigation capacity and efficiency	4, 5, 9, 10, 13, 17
Security and facilitation	3, 4, 5, 8, 10, 15, 16, 17
Economic development of air transport	1, 3, 4, 5, 8, 9, 10, 12, 13, 17
Environmental protection	3, 4, 5, 6, 7, 9, 10, 12

Goal 1	Eliminate poverty in all its forms everywhere.
Goal 3	Ensure healthy lives and promote well-being for all at all ages.
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
Goal 5	Achieve gender equality and empower all women and girls.
Goal 6	Ensure availability and sustainable management of water and sanitation for all.
Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all.
Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
Goal 9	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
Goal 10	Reduce inequality within and among countries.
Goal 12	Ensure sustainable consumption and production patterns.
Goal 13	Take urgent action to combat climate change and its impacts.
Goal 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
Goal 17	Strengthen the means of implementation and revitalise the global partnership for sustainable development.





## National Developmental Context

As a state owned entity, ATNS supports the National Governmental Outcomes, which aim to improve air space safety, eliminate poverty and reduce inequality by the year 2030. Sustainable development remains the core of moving South Africa forward. ATNS' strategy supports the following NDP 2030 outcomes:

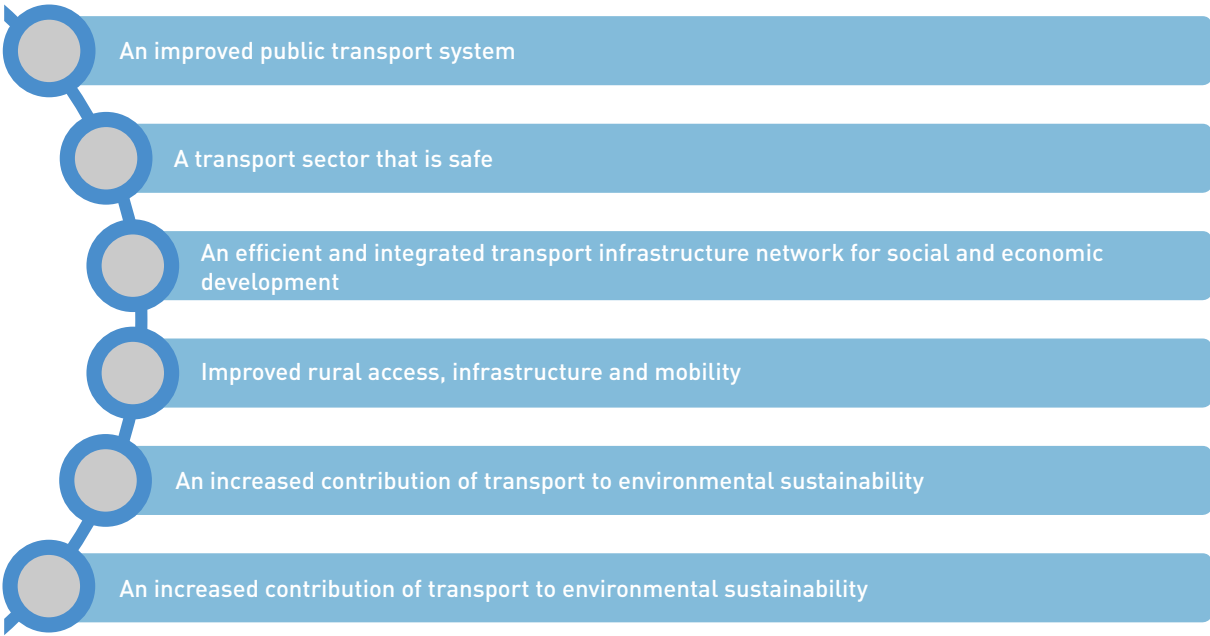
- Increase employment from 13 million in 2010 to 24 million in 2030.
- Raise per capita income from R50,000 in 2010 to R120,000 by 2030.
- Increase the share of national income of the bottom 40% from 6% to 10%.
- Establish a competitive base of infrastructure, human resources and regulatory frameworks.
- Ensure that skilled, technical, professional and managerial posts better reflect the country's racial, gender and disability makeup.
- Establish effective, safe and affordable public transport.
- Play a leading role in continental development, economic integration and human rights

ATNS further acknowledges the importance of Global Sustainable Development Goals which aim to alleviate poverty, protect the environment and ensure prosperity as the leading driver of the new sustainable development agenda. This ultimately influences our sustainability framework in achieving our developmental mandate.



## Statement of Strategic Intent and Shareholder Compact

Of the 12 departmental outcomes identified by the President and the cabinet, the below illustrates the outcomes for the transport sector:







## OUR SUSTAINABILITY FRAMEWORK

The ATNS sustainability framework outlined in figure 10, which stems from the fact that the organisation is a mandated state owned company within the Department of Transport and the operations being governed within the global and national aviation context from ICAO and South African Civil Aviation Authority (SACAA). Our Sustainability Framework is informed by our Strategic Model (see Figure 7 in the section on Our Business Model and Strategy) which outlines the various strategic inputs into our business, as well as our strategic objectives and the associated outputs that inform our business operations.

### What the framework enables us to do

- Align to Minister of Transport's Statement of Strategic Intent and the Shareholder Compact to ensure ATNS pursues sustainable economic, social and environmental outcomes.
- Build an integrated and intelligent view of the synergies and trade-offs between the various performance areas.
- Report performance progress and material issues to stakeholders.
- Demonstrate the integrated nature of our Strategic Model (Figure 7) in the context of the Sustainability Framework and on a candid analysis of our sustainability outcomes: Enable, Engage, Grow and Preserve; and by defining our material outcomes and drive and support integrated thinking.
- Building sustainability intelligence.

In order to fully align to our framework and mature in our sustainability agenda, we will enhance our sustainability assurance by introducing sustainability assurance audits. Furthermore, we will continue to engage with independent sustainability specialists and advisory firms to guide the business on future trends, risks and opportunities, particularly with regards to areas critical to Air Traffic Management (ATM), environmental stewardship, labour practices, employee and community empowerment, safety and business continuity.

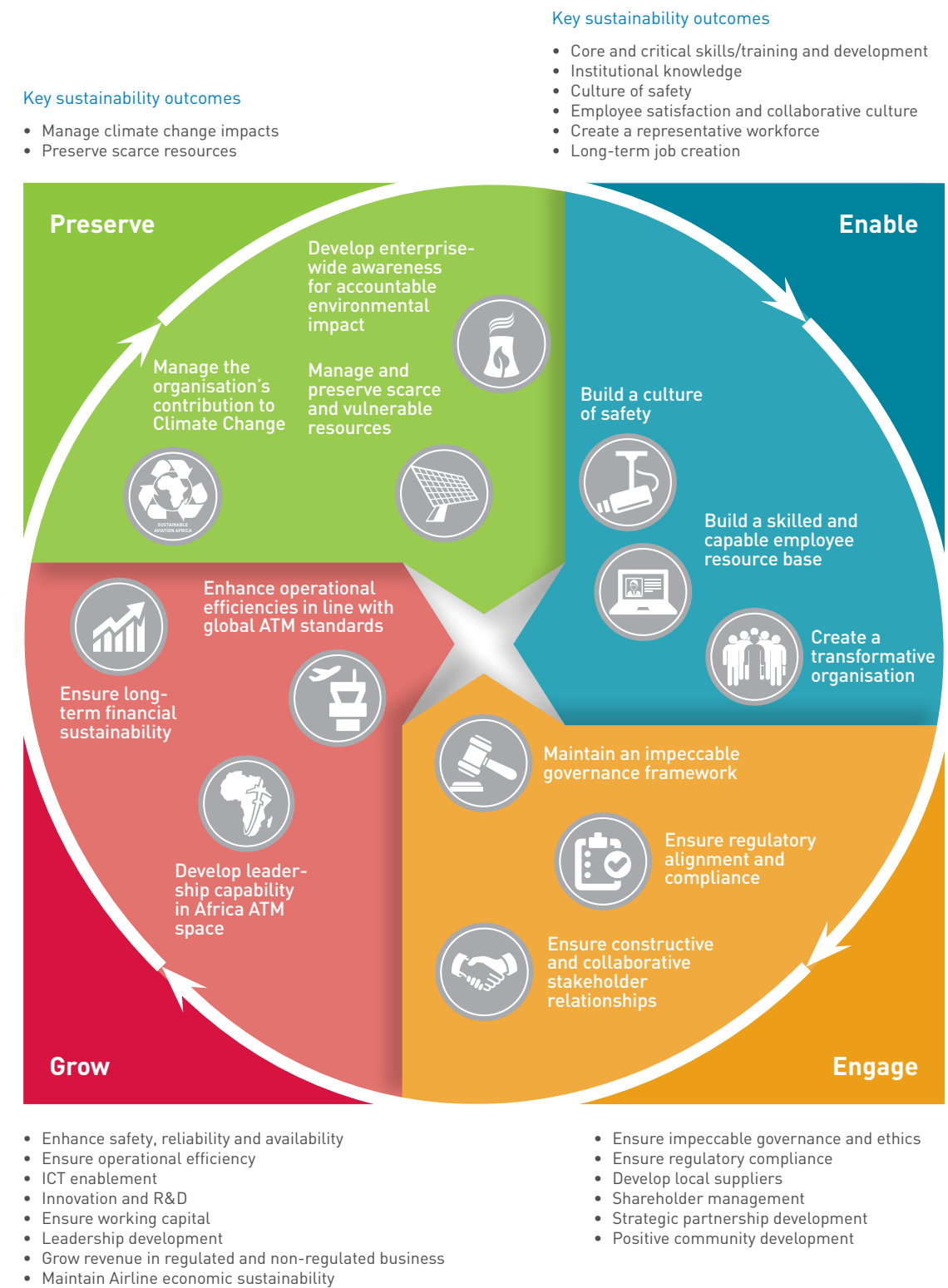
### Broader sustainability context to enable performance

ATNS values the support and direction of the Shareholder, the Minister of Transport and the entire Department of Transport. As a public entity, we deliver on our mandate with the awareness that we have a broader responsibility to the entire South African nation. Our sustainability context is fully guided by the governmental outcomes and the Shareholder's departmental outcomes. Our Strategic Model and Sustainability Framework are primarily focused on the needs and expectations of the South African ATM community; however, they also consider the rest of Africa and other selected global markets. This wider perspective enables us to monitor and measure our sustainability priorities in the context of a broader ATM environment and to respond to changes in more informed and globally relevant ways. We remain vigilant of the global challenges and inter-related risks associated with rapid economic, environmental, geo-political, social and technological shifts and turns. The previously unparalleled access to information – and the analysis of these global trends – prompts integrated and long-term consideration of the integral role played by State-Owned Companies in shaping a sustainable future for the country.

In support of our performance, economic growth is a key driver of air traffic growth and the performance of an Air Navigation Services Provider (ANSP) depends on the airlines' performance and generally the overall country's economic performance. With the recent economic outlook for South Africa with specific reference to staggering growth, this has cumulative indirect impact on the operating performance of airlines and ultimately may pose a threat to the sustainability of ATNS. Broadly speaking, world aviation faces an uncertain world and deals mainly with external risks that are uncontrollable, and with serious impacts.



Figure 10: ATNS sustainability framework



From a sustainability context, social and environmental priorities may be compromised given uncertainty and economic pressures globally. ATNS will continue to assess our sustainability performance in line with our sustainability framework and shareholder expectation and find a proactive balanced approach to meet our performance and developmental needs without compromising other elements of sustainability.



# DETERMINING MATERIALITY

The ATNS Board and Executive management through a process of extensive consultation within the organisation and with ATNS’ stakeholders have determined material issues for the organisation in the context of stakeholder inclusiveness, boundaries and alignment to organisational key risks. The process has further considered ATNS’ strategic objectives, whilst also considering the Company’s strategic opportunities and the ATNS value chain. Where appropriate in the Sustainability Report, we reference relevant sections in the 2017 Integrated Report to provide greater depth and continuation to our annual performance reporting.

ATNS defines ‘materiality’ for its reporting in terms of ‘issues’ that substantively impact the organisation’s ability to create and sustain value over the short, medium and long term.

To determine significant material issues, the following process has been considered (refer to our 2017 Integrated Report for more details on the identification process):

- Determine and review the Company’s internal and external performance.
- Consultative processes are undertaken with key stakeholders to assess critical stakeholder issues and to outline ATNS’ responses.
- ATNS key performance indicators as outlined by the shareholder compact
- List of key internal and stakeholder issues as outlined by our stakeholder relation process, broader social expectations
- The organisation’s influence on upstream entities (such as supply chain) and downstream entities (such as customers).
- ATNS top 10 high level organisational material risks
- Basic expectations expressed in the national and international standards and agreements which the organisation is expected to comply with.
- Aviation industry requirement by the broader civil aviation community.

Figure 11



Table 2 summarises the internal and external criteria used to determine the materiality of reported content and disclosures.

Table 2: Criteria for determining ‘materiality

Stakeholder Perspective	Aviation Industry Requirement
<p><b>Internal:</b> Stakeholder expectations and feedback on material considerations as captured and monitored through ATNS’ stakeholder engagement process – e.g. business community, Airport customers, ACSA, Non-Governmental Organisations (NGOs), National and Provincial Governments, regional partners, designated targeted groups, academics, investors and the media.</p> <p><b>External:</b> Regulatory trends including changes in the national, regional or global political environment and a changing regulatory landscape.</p>	<p><b>Internal:</b> ICAO Performance-Based ATM Operational Framework and ASBU Methodology; and global aviation regulatory requirements.</p> <p>ATNS ASBU road map, Performance-Based Navigation Roadmap and Implementation Plan.</p> <p><b>External:</b> Global air traffic management (ATM) requirements, trends and standards; as well as leading practice safety performance benchmarks which are articulated in the ICAO Global Air Navigation Plan and Global Aviation Safety Plan</p> <p>Socio-economic changes and challenges (e.g. barriers to market entry) in ATNS’ key market segments (local and regional).</p>
Shareholder Compact & Strategic Intent	Organisation’s risk analysis
<p><b>Internal:</b> Statement of Strategic Intent and Shareholder Compact; 14 National Outcomes of Government and departmental outcomes of the Department of Transport.</p> <p>ATNS’ mission, vision and values; and its strategic imperatives, critical issues, programmes and Key Performance Indicators (KPIs) as well as its Business Concept.</p> <p><b>External:</b> Changes in the socio-economic developmental agenda and priorities of National Government.</p> <p>Critical commercial opportunities as well as market and environmental risks ATNS is geared to respond to, locally, regionally and globally; as well as factors which may affect ATNS’ reputation, thereby influencing its ability to promote sustainable growth.</p>	<p><b>Internal:</b> ATNS’ Enterprise Risk Management (ERM) Process, including the key operational risks impacting the Company’s strategic and operational objectives and the associated mitigating activities; as well as ATNS’ governance and compliance frameworks; and the Company’s Sustainability Framework and associated policies and processes to manage financial, social and environmental sustainability outcomes.</p> <p><b>External:</b> The provisions of various frameworks including: Public Finance Management Act (PFMA); King III Code on Corporate Governance (King III); Discussion papers issued by the South African Integrated Reporting Committee and the International Integrated Reporting Council (IIRC); International Financial Reporting Standards (IFRS); GRI Guidelines and Standards for Sustainability Reporting; United Nations Global Compact; Carbon Disclosure Project; B-BBEE Code; UN Sustainable Development Goals.</p>





Table 3 provides an overview of ATNS’ material economic, social and environmental sustainability issues for the organisation. See page 78 in the Integrated Report for a more comprehensive overview of the material issues and their linkages.

Table 3: Material Issues and their alignment to the Six Capitals and the Strategic Objectives

Material Issues Cluster	Material Issues	Linkage Capitals	Linkage to Strategic Objectives
Information and communication technology	Cyber security event impacting operations		
	Disaster recovery and BCM		
	Unstable IT network		
Procurement	Supply chain management compliance		
Financial	Capital expenditure in line with the Permission Plan		
	Management of employment costs		
	Financial unsustainability		
	High operationla costs		
	Emerging risk: delayed service payments from regional airports		
Infrastructure	Physical security of infrastructure		
	Unavailability of deployed CNS technology		
Service	Reliance on 3rd party service providers		
	Major safety event		
	Responding to climate change		
Human capital	Inability to create and retain institutional knowledge		
	Ethical leadership		
	Maintaining positive employee morale		
	Employee awareness on environmental issues		
Stakeholder engagement	Poor internal communication of ATNS’ long term planning		
License to operate	Economic regulatory uncertainty impacting ATNS permission		

# ENTRENCHING OUR MISSION, VISION AND VALUES

ATNS defines values as operating philosophies or principles that guides internal conduct, relationship with its customers, partners, and shareholders and their ability to drive and support the organisation’s strategic objectives. They are aimed to drive the culture of the organisation and drive positive results or desired outcomes. ATNS sees the organisational values as key in delivering the vision and mission of the organisation which is to be a leader in air traffic management solutions on the African continent. Core values are usually summarised in the mission statement and are outlined below.

## Vision, mission and values

### Vision

To be the preferred supplier of air traffic management solutions and associated services to the African continent and selected international markets

### Mission

To provide safe, expeditious and efficient air traffic management solutions and associated services, whilst ensuring long-term sustainability.

### Values

- Accountability
- Safety and customer service
- Continuous improvement and innovation
- Employee engagement and development
- Fairness and consistency
- Open and effective communication

## Building Ethical Leadership

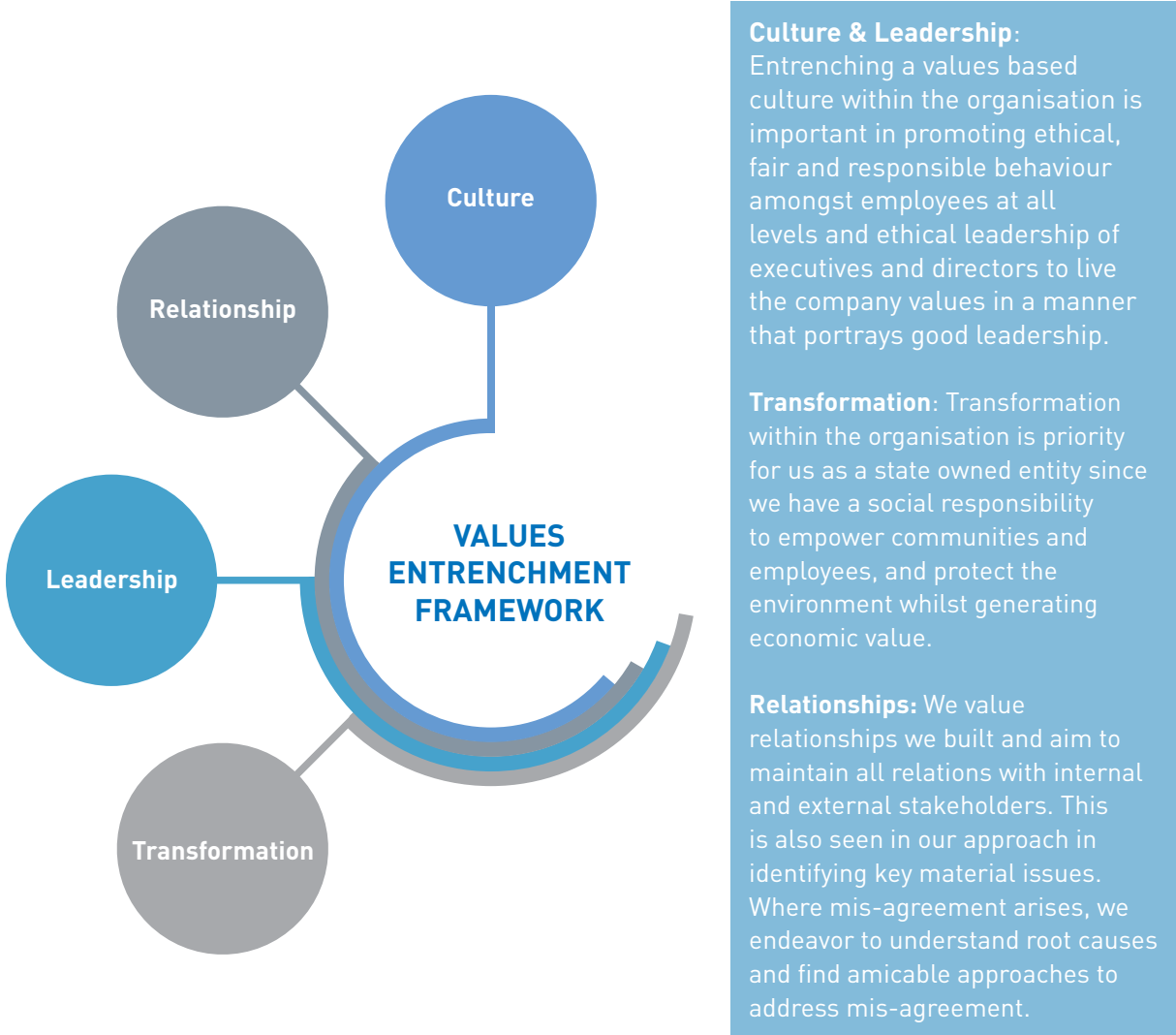
ATNS defines leadership and good governance as being about efficiency, respect, honesty and integrity, responsibility, transparency and accountability which is aligned to ATNS’ values and we see these being one of the driving forces behind successful areas in addressing our sustainability agenda. ATNS as a state entity is required to meet its mandate in accordance with good governance principles. Therefore the organisation has developed policies and procedures to enable effective execution of strategies and decisions. This is also entrenched in the organisation’s Code of Ethics.

As ATNS increases its market share in Africa to remain one of the ten global ANSPs that IATA envisions will constitute the global air traffic safety market in 2050, the driving force in future will be through the ATNS International which will enable ATNS to position itself well towards becoming one of these ten ANSPs by taking a more proactive approach to providing products and services to more countries and partnering with global suppliers. ATNS is playing a leading role on the continent by hosting the Civil Air Navigation Organisation (CANSO) regional office and collaborating with other entities regionally and globally in its visibly active involvement in ICAO, IATA, and other industry networks and associations. Furthermore, ATNS research unit proactively researches aviation solutions and innovation within operational efficiency and safety.



ATNS has embarked on a values entrenchment campaign which is aimed at enhancing and aligning personal and corporate values, to understand its impact and to support a shared drive to contribute to the organisational strategic goals.

Figure 12: Value entrenchment framework







ATNS Value statement	Key institutional committees, programmes, policies and initiatives promoting cultural entrenchment of ATNS's values (Partial list)	Desired value impacts and outcomes
<b>Accountability</b>	<ul style="list-style-type: none"><li>• Social and Ethics Committee</li><li>• Risk and Audit Committee; Internal Audit function and enterprise risk assessments</li><li>• Fraud Prevention Plan</li><li>• Fraud Management Policy</li><li>• Whistle-Blowing Policy</li><li>• Conflicts of Interest Policy</li><li>• Conflict of Interest Directive</li><li>• Environmental Policy</li><li>• Fraud hotline</li><li>• Client-Supplier Code of Conduct</li><li>• Code of Ethics</li><li>• Code of ethics referenced in employee contracts</li><li>• Safety Management Plan</li><li>• Corporate Social Investment Policy</li><li>• Stakeholder engagement policy</li><li>• Sustainability &amp; Environmental Strategy and Plan</li></ul>	<ul style="list-style-type: none"><li>• Promote responsible behaviour pertaining to relevant legislation and prevailing codes of best practice; good corporate citizenship, consumer relationships; sound labour practices.</li><li>• Encourage a culture within ATNS where all employees, the public and other stakeholders behave ethically in their dealings with, or on behalf of, ATNS.</li><li>• Improve accountability, efficiency and effective administration within ATNS.</li><li>• Improve the application of systems, policies, procedures and regulations.</li><li>• Change aspects of ATNS that could facilitate fraud and corruption and that could allow these to go unnoticed or unreported.</li><li>• Encourage all employees and other stakeholders to strive towards the prevention and detection of fraud and corruption influencing or having the potential to influence ATNS.</li><li>• Encourage ATNS' employees and trading partners to conform to an agreed set of norms and standards of good business practice.</li><li>• Reduce possible fraud or corruption by suppliers and ATNS staff, by directing that all gifts offered by suppliers to ATNS officials must be formally disclosed in the gift register as per the Conflict of Interest Directive.</li><li>• Hold employees at all levels accountable for their actions.</li><li>• Demonstrate accountability for ensuring that the ATNS values are entrenched in the work environment.</li><li>• Employees are engaged in a sustainability and climate change awareness-learning programme to entrench the global citizenship culture at ATNS and to improve understanding of sustainability and climate change in the aviation context.</li><li>• Environmental sustainability entrenched in the planning, operation, and decommissioning process of all ATNS activities, products and services</li><li>• Minimise environmental impacts and enhance environmental stewardship</li></ul>
<b>Safety and customer service</b>	<ul style="list-style-type: none"><li>• Safety Management System (SMS)</li><li>• Safety Management Plan</li><li>• Operations Safety Workshops</li><li>• Safety Culture Improvement Plan</li><li>• Safety Culture Maturity Model</li><li>• Continuation training</li><li>• Organisational Alignment Project (OAP)</li><li>• Stakeholder Engagement Plan</li><li>• Communication Plan</li><li>• Safety Awards programme</li><li>• Safety risk management</li><li>• Occupational Health and Safety procedure</li></ul>	<ul style="list-style-type: none"><li>• Safety performance is a multivariable continuous system requiring continuous improvement and involvement of all stakeholders both front line and supporting roles.</li><li>• Ensures customer needs are met through excellent service and high standards</li><li>• Ensures compliance with safety standards and promotes a safe environment for staff and customers</li><li>• Safety critical concepts and messages identified during the Safety Workshop are used as the basis for the development of safety initiatives, training and promotion.</li><li>• Continuation training provides all ATS personnel with the necessary knowledge and understanding to retain the current level of competence required by ATNS. It is intended that recurrent training will reinforce and confirm past knowledge that was gained and ensure that current competence levels are maintained.</li><li>• The desired end-state of continuation training is that tangible safety benefits can be attributed to such training.</li><li>• The OAP aims to improve existing products and services to add more value for our customers, to improve internal efficiencies and planning, and to better compete in the commercial marketplace.</li><li>• The OAP further increases internal resources and maps, improves processes, and leverages technologies to support a larger customer base and product portfolio.</li><li>• All contributions to ATM safety management are appropriately recognised through ATNS' Safety Awards programme.</li></ul>
<b>Continuous improvement and innovation</b>	<ul style="list-style-type: none"><li>• On-going training programmes through ATNS's training academy</li><li>• Technology R&amp;D initiative</li><li>• Business Process Centre of Excellence</li><li>• Establishing internal subject matter expert task forces</li><li>• Registering more internal consultants with relevant professional bodies</li><li>• Business and market intelligence</li></ul>	<ul style="list-style-type: none"><li>• Ensure that Business Processes are mapped across the organisation and can be managed, measured, and maintained.</li><li>• Improve the internal workings of ATNS beyond just the Commercial Services department, to determine the processes, systems, technology, people, structure, and operations needed for growth in the non-regulated business market.</li><li>• ATNS is shifting from merely being a user of acquired technologies to contributing to the value-chain of technology innovation and the development of domestically consumed technologies.</li><li>• Identifies and acts on opportunities to improve or extend ATNS services</li></ul>



ATNS Value statement	Key institutional committees, programmes, policies and initiatives promoting cultural entrenchment of ATNS's values (Partial list)	Desired value impacts and outcomes
<b>Employee engagement and development</b>	<ul style="list-style-type: none"><li>• The Human Capital Development Plan</li><li>• Employment Equity Plan</li><li>• Organisational Alignment Project</li><li>• Various skills development programmes, e.g., development of black people with disabilities and leadership development programmes</li><li>• Funding of employee learnerships at various tertiary institutions as well as the executive coaching process</li><li>• ATNS' social volunteerism initiative</li><li>• Women Development Programme (WDP)</li></ul>	<ul style="list-style-type: none"><li>• The five-year EE plan is intended to transform the ATNS employee profile to reflect national demographics and will be reviewed annually to adjust targets as and when necessary.</li><li>• ATNS funds the development of employees across multiple disciplines, at various tertiary institutes. A large component of this constitutes leadership development.</li><li>• Employees are encouraged to actively participate in ATNS' social investment programme by identifying deserving projects for funding within their communities.</li><li>• The Women Development Programme (WDP) is voluntarily offered to all women at ATNS who wish to further their personal or career development</li><li>• Promotes employee engagement by:<ul style="list-style-type: none"><li>• Creating an environment where staff feel motivated</li><li>• Recognising staff for their contributions</li><li>• Promoting staff learning and development</li><li>• Coaching and mentoring</li></ul></li></ul>
<b>Fairness and consistency</b>	<ul style="list-style-type: none"><li>• B-BBEE Strategy and plan</li><li>• Preferential Procurement policies</li><li>• Reward and remuneration programmes</li><li>• Various programmes to develop and enhance female competency in the ATM environment:<ul style="list-style-type: none"><li>• WITS Aviation Management Development Programme</li><li>• Coaching and mentoring programme</li><li>• New Management Coaching</li><li>• WITS Executive Development Programme</li><li>• The IATA Aviation Management Diploma</li><li>• Personal Assistant (PA) and Secretaries programme</li></ul></li></ul>	<ul style="list-style-type: none"><li>• ATNS' strategic objectives and prevailing culture support on-going equal opportunity initiatives, with specific emphasis on the African, Indian, mixed race designated group, women and people with disabilities</li><li>• Preferential procurement policies ensure that appropriate procurement and provisioning systems are fair, equitable, transparent, competitive and cost-effective; and further encourage employee end-users to be mindful of both the competencies and unique requirements of these supplier businesses (e.g. supplier development, skills transfer, job creation and fair service payment practices).</li><li>• ATNS' reward and remuneration programmes are market-related and comply with the laws and regulations to ensure fair remuneration of all levels of competencies and management cadres, including executive levels.</li><li>• Programmes provide management training from an Aviation perspective</li><li>• Dedicated coaches from different ATNS work streams enhance female trainees' ability to acclimatise and function optimally in their management role and prepare them for executive roles</li><li>• Development opportunities are provided for Personal Assistants and Secretaries to enhance their office management and personal development skills.</li></ul>
<b>Open and effective communication</b>	<ul style="list-style-type: none"><li>• Marketing and communication plans</li><li>• Commercial services cross-departmental engagements, (e.g., sales forum meetings, quarterly sales forum meetings with different departments, online sales, data and reporting templates)</li><li>• Stakeholder engagement policy and plan</li></ul>	<ul style="list-style-type: none"><li>• Marketing and communication plans promote internal brand-alignment and create focused awareness for ATNS's products and services.</li><li>• Enhances cross-departmental communications, collaboration and learning.</li><li>• Encourages two-way communication and collaboration amongst departments, employees and Senior management</li><li>• Shares relevant information timeously</li><li>• Consults people on key decisions that affect them</li><li>• Promotes a shared vision and strategy so that everyone is working towards the same goal.</li></ul>





## Code of Ethics

ATNS' Code of Ethics enables a culture of entrenched values and norms that guide the behaviour of the Company's employees. The Code aims to instil ATNS' shared value system, which includes the broad values of accountability, safety and customer service, continuous improvement and innovation, employee engagement and development, fairness and consistency, and open and effective communication.

The Code commits the Executive Directors and employees to the highest standards of ethical behaviour and all ATNS employment contracts reference the Code. The Company's service providers, suppliers and trade partners are also subject to the Code in that they are required to sign the Code of Conduct, which is based on the Company's Code of Ethics.

The Executive: Human Capital is responsible for the development, review and implementation of the Code with approval from the board committee. In the reporting year, the code was reviewed and approved by the Board.

ATNS adopts a zero tolerance policy towards fraud and corruption in respect of its employees, suppliers, customers, and other stakeholders regarding as stipulated in our code of conduct. In the reporting period, 8 whistleblowing cases were reported. The investigation into four of these reports have been completed whilst 4 are still being investigated. The policy stipulates that all cases will be investigated within 90 days once reported.

## Fraud and Corruption plan

A fraud prevention plan approved by the board is in place and monitored throughout the year. ATNS fraud and corruption methodology enables the Company to identify and mitigate the occurrence of fraud and corruption through risk assessment and compliance checks. These are performed Company-wide on an annual basis. These assessments help to identify potential high-risk areas of fraud and corruption. The top five areas perceived to be high risk areas of fraudulent activities are the following: Finance, Supply Chain Management, Human Resources, Operational Technology and Commercial Services. (i.e. the potential misuse of resources and disclosure of inside information).

Mitigation controls and action plans are in place to reduce the risk of fraud and corruption in these and other areas. ATNS fraud investigations methodology actively addresses fraud and corruption by responding to allegations in a timely manner. Investigations have various outcomes, including disciplinary action, and criminal and/or civil action.



Subsequent to an investigation, all internal control weaknesses or breakdowns in processes are rectified to prevent future recurrence or irregularity. The fraud risk management initiatives emphasise the related root causes of fraud and corruption arising from the areas of governance, people, and methods and practices. Fraud and corruption awareness education encompasses annual formal training for all employees, including bargaining and non-bargaining council employees.

The ATNS Whistle Blowing Hotline enables employees and the public to report unethical behaviour. The hotline is managed by KPMG, and all reported cases are investigated through an established forensic investigation process.

The hotline is available 24 hours a day, seven days a week and call centre agents are able to converse in all official languages. Employees are protected from victimisation by the ATNS fraud policy and whistle blowing process in so far as reporting is undertaken in line with the Protected Disclosures Act, 2000 (Act No. 26 of 2000).





# ORGANISATIONAL GOVERNANCE

ATNS’ governance structure is derived from the Shareholder’s Mandate. The Board of Directors is tasked with ensuring that the company is sustainable and capable of delivering on its objectives in line with the strategic mandate. Accordingly, financial, social and environmental sustainability governance rests with the ATNS Board, including its Board Committees as indicated below in Figure 13. In addition, there are established Executive committees aligned to the core board committees aimed at facilitating planning and overseeing issues prior to discussion by the board committee and ultimately the ATNS board.

The directors are collectively responsible for directing and managing the company’s affairs. The CEO and his executive team manage the day-to-day activities of the company to ensure delivery of the strategy and

shareholder expectations and resolutions are implemented and monitored. This governance structure enables ATNS to deliver and integrate the three sustainability pillars, namely economic, social and environmental sustainability in line with the sustainability management framework. The new Board of directors was appointed in the previous financial year and was inducted on key issues of the business.

In an effort of achieving a structured and simplistic approach to reporting and decision making, executive board committees have been formed in support of the ATNS board structures.

Figure 13: ATNS Board and Executive Structure







**Table 4: Composition, demographics of Board and Board Committees (refer to IR page 52-53 for more detail)**

Committee	Exec & Non-exec	% Male				% Female			
		African	Coloureds	Indian	White	African	Coloureds	Indian	White
ATNS Executive Committee	Exec	7			2	2			
	Non-Exec								
ATNS Board	Exec	2							
	Non-Exec	4				4			
Audit and Risk Committee	Exec	2							
	Non-Exec	3						1	
Human Resource Committee	Exec	2							
	Non-Exec	2				2			
Social and Ethics Committee	Exec	2							
	Non-Exec	1				1		1	
Procurement Committee	Exec	2							
	Non-Exec	3				1			
ATNS International Committee	Exec	2				1			
	Non-Exec	3							

## Sustainability programme governance

In addition to ATNS’ core governance activities, sustainability initiatives relating to safety management, environmental protection, corporate social investment and Broad-Based Economic Empowerment (B-BBEE) are directed through the appropriate governance committees depending on their core areas of accountability.

### Safety and Health Commitees

The Safety Committee drives safety initiatives and reports to the Audit and Risk Committee for all safety risk and compliance issues. Projects as well as the acquisition and commissioning of equipment and systems are performed in conjunction with appropriate safety assessments and the identification and mitigation of associated risks, including security implications related to ATNS staff, structural installations and facilities. The Safety Committee reports issues relating to ‘safe procurement’ to the Procurement Committee. Similarly, the Committee reports issues pertaining to ATNS’ safety culture to the Social and Ethics Committee. Safety training issues are reported to the Human Resource Committee.



### IT (Information Technology) Steering Committee

The IT Steering Committee includes representatives of all business units and focuses on the strategic aspects of information technology. This forum ensures the alignment of IT systems and ICT strategy to business strategy and approves projects based on their linkage to business strategic intent. This forum also supports projects to deliver IT solutions by making resources available.

The Architectural forum focuses on maintaining the integrity of ATNS’ enterprise architecture. This forum focuses on ensuring the architectural feasibility and impact of solutions, thus minimising unplanned events during project execution. The forum will also take into account ATM-related initiatives such as the ATM Roadmap to ensure ATNS’ enterprise architecture is sustainable in the long term.

### Sustainability and Environmental Committee

The organisation recently formed the Sustainability and Environmental committee which is an internal governance committee aimed at improving sustainability performance and integration within the business. Membership of the committee member is being reviewed to determine adequacy and delivery of key aspects within the business.

Key focus areas include management of ATNS’ Corporate Social Investment (CSI) initiatives, environmental sustainability programmes and maturity.

## ATNS remuneration philosophy

ATNS’ remuneration philosophy reflects the dynamics of the market and context in which it operates. It is our aim, to align – at all times - with the strategic direction and specific value drivers of the business within which ATNS operates, supporting the philosophy of Value Based Management. As such, remuneration plays a critical role in attracting and retaining high performing individuals. Remuneration also reinforces, encourages and promotes superior performance. ATNS considers remuneration not to be a stand-alone management process, but rather one that is fully integrated into other management processes.

ATNS performs regular remuneration benchmarks to ensure that we remain market aligned and competitive. The Company’s defined market position is the midpoint of the market. However, the pay progression for entrants to sustained superior performance will range from the minimum to the maximum of the pay scale. In line with the business strategy, employees with key skills are paid between the midpoint and the maximum of pay scale. The salary benchmark is done through the survey house for all levels in the organisation. The benchmarking of executive positions in the South African labour market faces many challenges in making logical and fair comparisons between different jobs. Executive positions are benchmarked annually, using a top executive survey administered by an external survey house. This benchmark informs projected salary movement in the external market.



Total remuneration consists of guaranteed pay, variable pay, and short-term incentives and is outlined as follows:

Guaranteed pay	Retirement benefit	Healthcare Benefit	Variable pay	Short-term performance incentive bonus
ATNS remunerates using the 'cost to company' method of payment. The cost to company includes the cash component plus employee benefits. The Company provides employees with contractually agreed basic benefits such as medical aid and retirement fund benefits, which include the pension fund and associated benefits, such as disability and life insurance. Employees, including the executive management, are afforded the opportunity to structure remuneration packages according to individual needs within prescribed legal parameters. To encourage a high-performance culture, the determination of annual salary adjustments is performance-based only. Employees are evaluated against annually set routine objectives, which encompass the scope and nature of the role and job content.	<p>The retirement fund is a fixed component of the employee's guaranteed pay. All permanent employees are members of the ATNS retirement fund. The fund is a defined contribution fund and is governed by the Pension Funds Act of 1956, which requires an actuarial valuation to be carried out every three years. The Company does not provide any post-retirement benefits to employees and has no exposure to postretirement benefit obligations.</p> <p>ATNS offers employees a flexible pensionable/non-pensionable remuneration split, including:</p> <ul style="list-style-type: none"><li>• 60% pensionable 40% non-pensionable.</li><li>• 70% pensionable 30% non-pensionable.</li><li>• 80% pensionable 20% non-pensionable.</li></ul>	Healthcare membership is a condition of service for all permanent ATNS employees. The healthcare benefit is a fixed component of the employee's guaranteed pay. ATNS currently contracts to a single healthcare service provider for all employees, which ensures favourable underwriting conditions for employees to join and remain members of the scheme.	Variable pay includes all allowances ATNS may offer to employees from time to time. For the executive management it includes any acting allowances for acting in another role as duly authorised and approved; and a principal officer allowance for occupying the role of the principal officer on the pension fund. Variable pay for mission-critical positions includes variable allowances for the attraction and retention of key skills and experience.	<p>Performance incentive bonuses are based on the following:</p> <ul style="list-style-type: none"><li>• overall performance results of ATNS for the financial year at the end of March, with a link to the key performance indicators set for the organisation at the beginning of the financial year.</li><li>• The performance of the department.</li><li>• The employee's performance against balanced scorecard objectives.</li></ul> <p>The Company applies a five-point rating scale to the measurement of the employee's performance against balanced scorecard objectives.</p>

Executive remuneration

The Human Resources Committee recommends annual remuneration for executive directors and considers associated performance measures and benefits when assessing remuneration. As a State-Owned Company, we are required to employ people with exceptional competencies and experience to provide strategic leadership; as well as provide both direct and indirect employment opportunities for thousands of people.

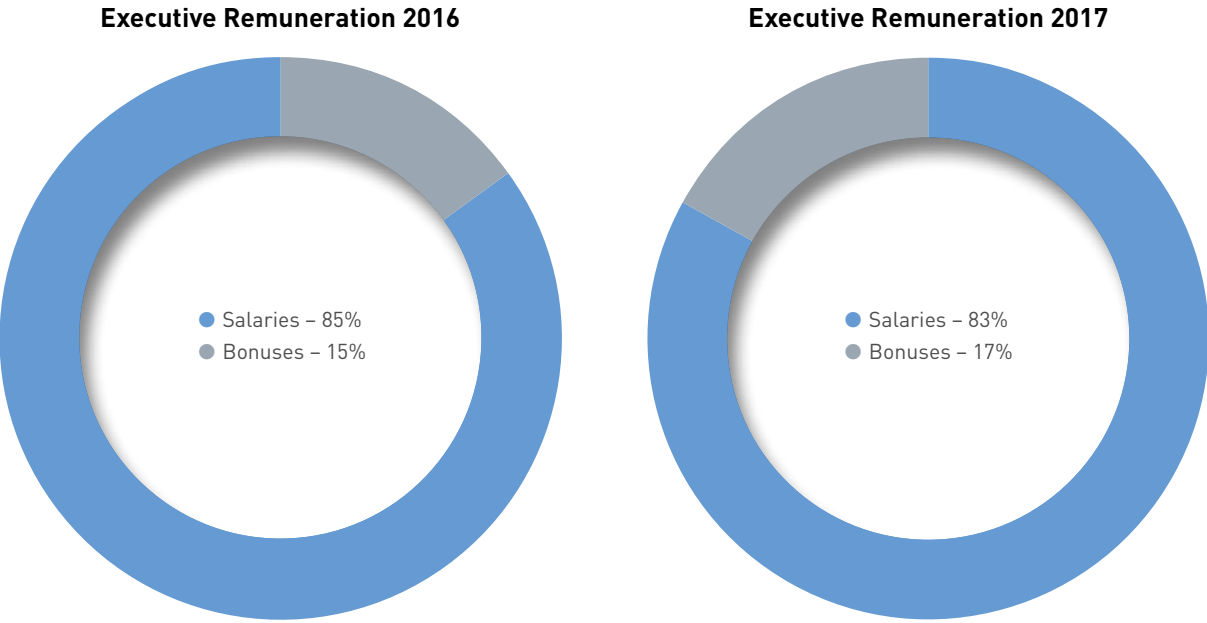
Remuneration adjustments and incentive payments are based on individual performance. Furthermore, the individual performance scorecards of the Executive Members are directly translated from the Shareholder's Compact and the strategic objectives of the Company. The measures for assessing executives are aligned with the targets in the Corporate Plan and Shareholder's Compact.

Refer to pages 64 and 65 in the ATNS-FR for full disclosure of all components of the Group Executive members' remuneration information.

Table 5: Consolidated Executive Remuneration 2015/16 – 2016/17

	Executive Remuneration 2017	Executive Remuneration 2016
Salaries	27,268,265	22,456,967
Bonus	5,447,369	3,844,579

Graph 3: Consolidated Executive Remuneration 2015/16 – 2016/17







Graph 4: Staff costs distribution for 2016/17

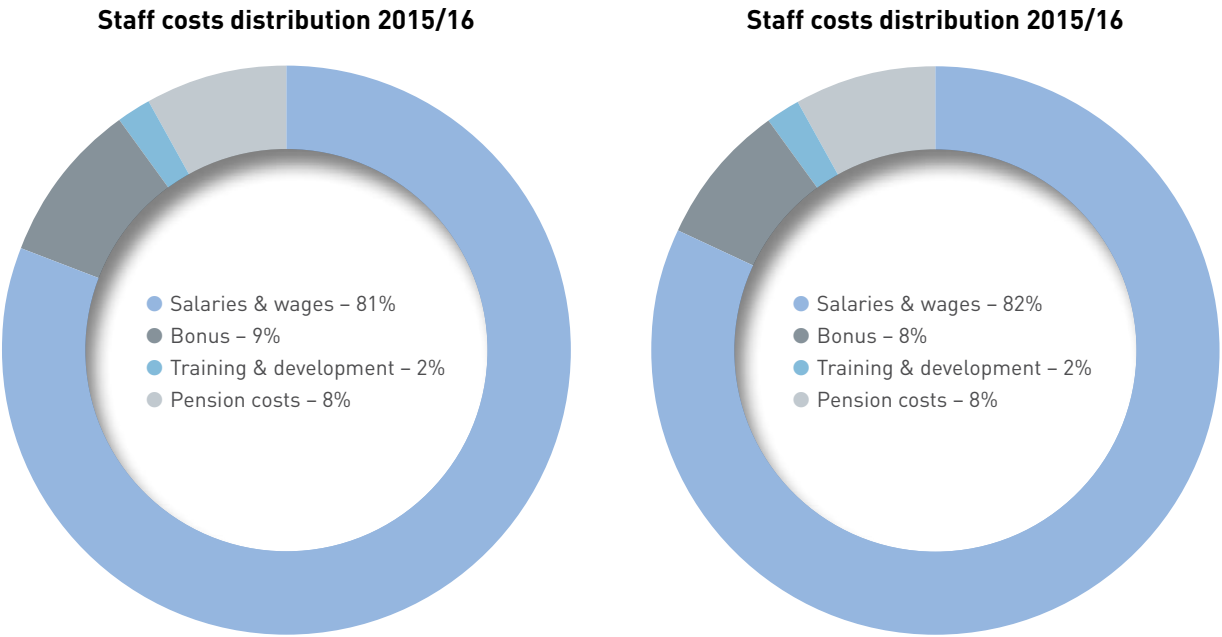


Table 6: Staff costs for 2016/17

	Staff costs			
	Salaries & Wages	Bonus incentives	Training & Development	Pension cost (defined contribution scheme)
2015/16	R600,434,082	R68,833,745	R13,961,358	R59,983,454
2016/17	R656,669,940	R68,068,238	R13,395,475	R64,853,005

### Conflict of interest resolution

The fiduciary duties of ATNS’ directors are codified in the Companies Act. The latter prohibits the use of position, privileges or confidential information for personal gain or improper personal benefit.

In instances where an independent non-executive director or a prescribed officer has any direct or indirect personal or private business interest in a matter, he or she must be recused from the proceedings when such a matter is considered, unless the Board of Directors or Executive Committee decides that the member’s interest in the matter is either immaterial or irrelevant.

In its efforts to comply with Treasury Regulations and the PFMA, ATNS has developed a Fraud Prevention Plan and a code of conduct. This should be read together with the ATNS Fraud Management Policy, Whistle-Blowing Policy and the ATNS Management Directive on Conflict of Interest.

To reduce possible fraud or corruption by ATNS staff and trading partners, all gifts offered by suppliers to ATNS officials must be formally disclosed in the gift declaration register as per the Conflict of Interest Directive. Gifts of a potentially significant monetary value should not be accepted, and any such offer must be disclosed to the employee’s line manager, from whom guidance should be sought if in any doubt as to whether or not the offer of a gift is regarded as being of significant value. A gift declaration register is maintained and updated on an on-going basis.



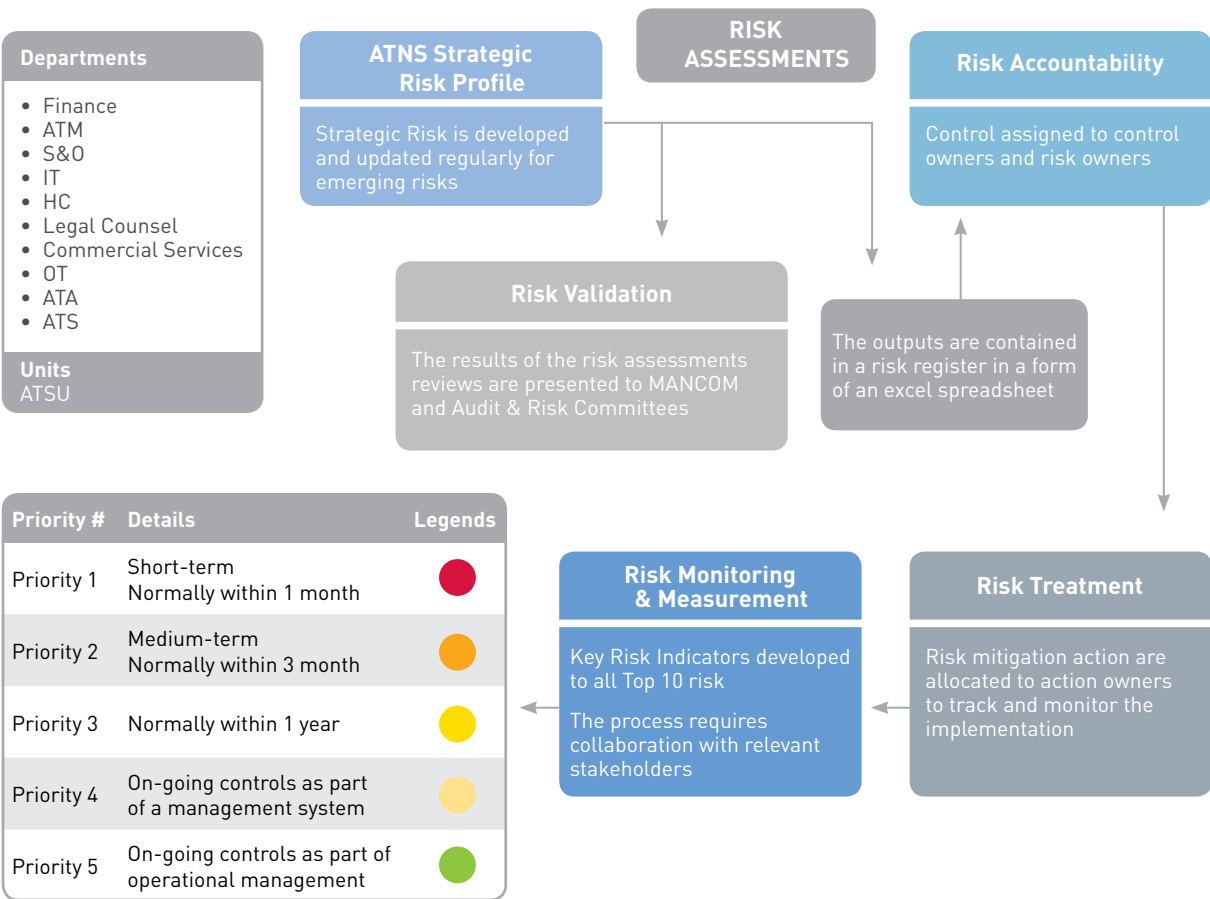
## MANAGING STRATEGIC AND OPERATIONAL RISKS

ATNS has adopted an Enterprise Risk Management framework which is based on the ISO 31000 standard which describes how the organisation will incorporate risk management processes into day-to-day activities. Enterprise risk management is a fundamental component in ensuring that ATNS fulfils its mandate, through the continuous assessment of current risks and the identification of new risks. All risks, whether strategic or operational in nature, are documented in risk registers and continually addressed through mitigation actions and treatment.

The Risk Section in the Finance Department is responsible for the coordination of risk management activities and for ensuring consistent risk monitoring and progress reporting. In terms of governance, the ATNS Board and the Audit and Risk Committee have overall responsibility for the governance oversight of the Company’s risk management process, and for ensuring that material risks that could impact the achievement of ATNS’ objectives are identified and mitigated. Risk Management is a standing agenda item of the Management and Audit and Risk committees. The strategic risks and operational risks are reviewed quarterly.

ATNS performs an annual company-wide risk assessment, which includes the identification and prioritisation of risks and the identification of mitigation controls. The risks are clustered and recorded in the Company’s risk register, which forms part of an overall Enterprise Risk Management (ERM) Framework.

Figure 14: ATNS Enterprise Risk Management Framework





# Our Enterprise Risk Management (ERM)

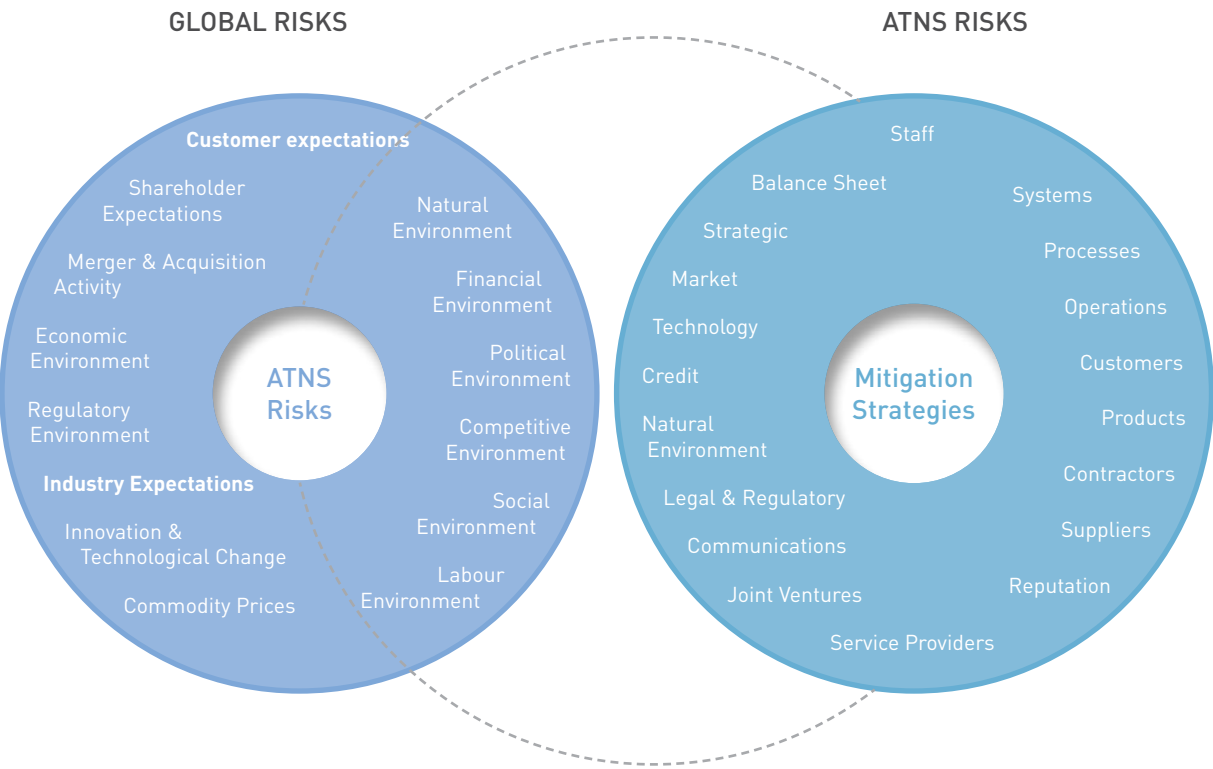
The Enterprise Risk Management (ERM) policy was approved by the Audit and Risk Committee. The Board has delegated the embedding, quality, integrity and reliability of the ATNS risk management function to the Audit and Risk Committee. The ATNS strategic risk profile is generated from the ATNS Risk Management framework, based on ISO 31000:2009. This was approved by the Board of Directors in June 2016.

The risk management methodology is continuously been updated to accommodate improvements in governance, risk ownership and measurement. During the current financial year we have improved our risk methodology by adopting ISO 31000:2015. In the current reporting year, risk ownership has also been enhanced by Executive Management by formally appointment of departmental and ATSU's risks champions to embed risk management within their area of operations. This will also increase capacity and improved visibility of risk management within the Company. The ownership has been enhanced by integrating risk management initiative into the ATNS strategic planning and Business Planning processes. A more collaborative approach was introduced by linking each cause to the controls and where there are no controls or where controls are weak ensuring that action plans are developed to mitigate the risk to an acceptable level. The risk management was subjected to a stringent audit process by the internal audit department and based on their audit results the ATNS risk maturity has improved to level five, which is at a managed level.

## Contextualising ATNS' risks

The ATNS risk universe considers the wide range of risks and opportunities that inform the decision-making across all areas of the business and contextualises the top 10 risk for the financial year.

Figure 15



While the risks originate and impact the organisation and its operation to a certain degree at various levels, we have made assumptions about where the inherent risks are likely to impact within the organisation and where the organisation is best capable of mitigating harmful impact, while harnessing the opportunities and where the residual risks are likely to impact the organisation after the controls have been put in place, mitigation measures were develop to manage the risk.

During the year our enhanced ERM methodology was applied across the organisation to the strategic risk profile derived within departments and ATSU's. Risk ownership of the top 10 risks was coordinated by the Risk function and formally evaluated on a quarterly basis by the Audit and Risk Committee. The quarterly risk committees enables management to rate and re-rate risk(s) depending on the control effectiveness and the level of the residual risk exposure. Accordingly, the top 10 inherent risks could be appropriately plotted on a residual risk heat-map to reflect a strengthened control environment.

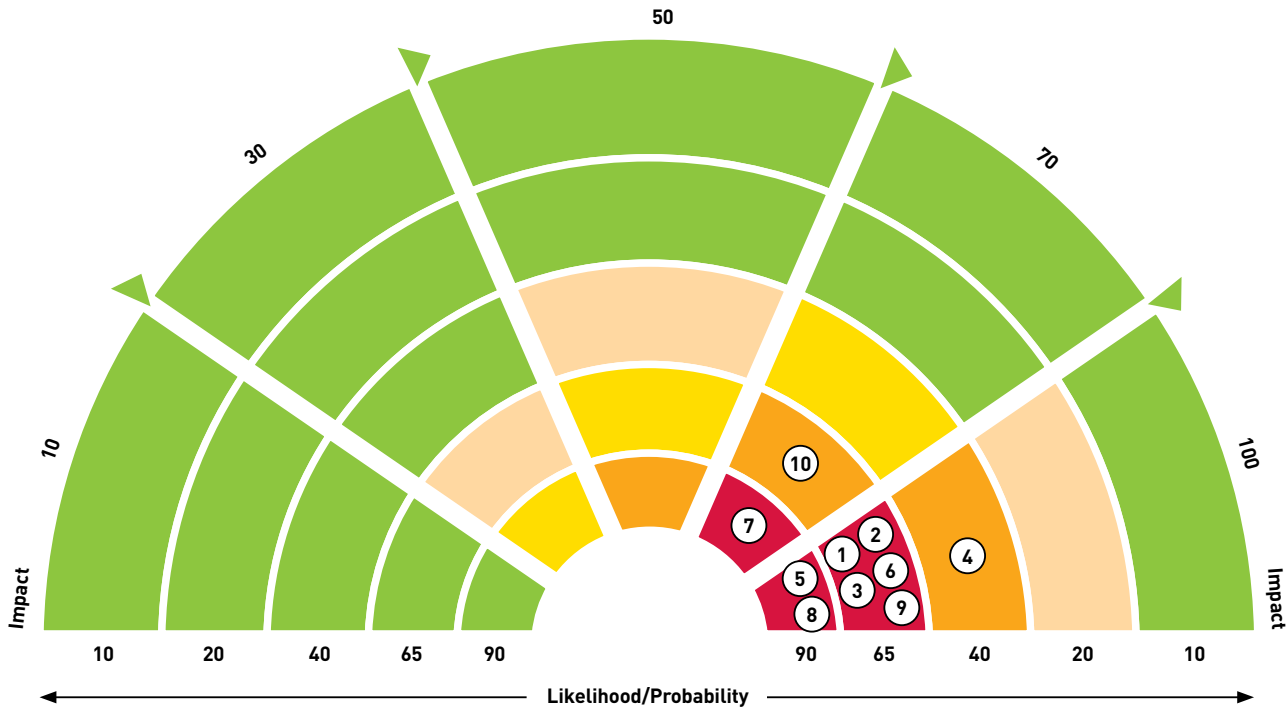
Table 7: ATNS Top 10 Strategic Risks

2016/17 No.	2016/17 priority	2016/17 Residual Risk	2015/16 priority
1	1	Inadequate business continuity plans and disaster recovery plans	1
2	1	Unstable IT network	New Risk
3	1	Physical security of infrastructure	3
4	1	Cyber security threat	1
5	2	Reliance on third party service providers	2
6	2	Major safety event e.g. mid-air collisions	1
7	2	Critical skills in global demand	3
8	2	Financial unsustainability	3
9	3	Unavailability of deployed CNS technology	2
10	3	Political instability in certain African countries	1

Risks have been plotted on a 'risk heat maps' in the form of an Inherent and residual risk exposures as shown below in Figures 16 and 17. This is shown by applying the risk management framework using likelihood/probability and impact/consequence ratings.



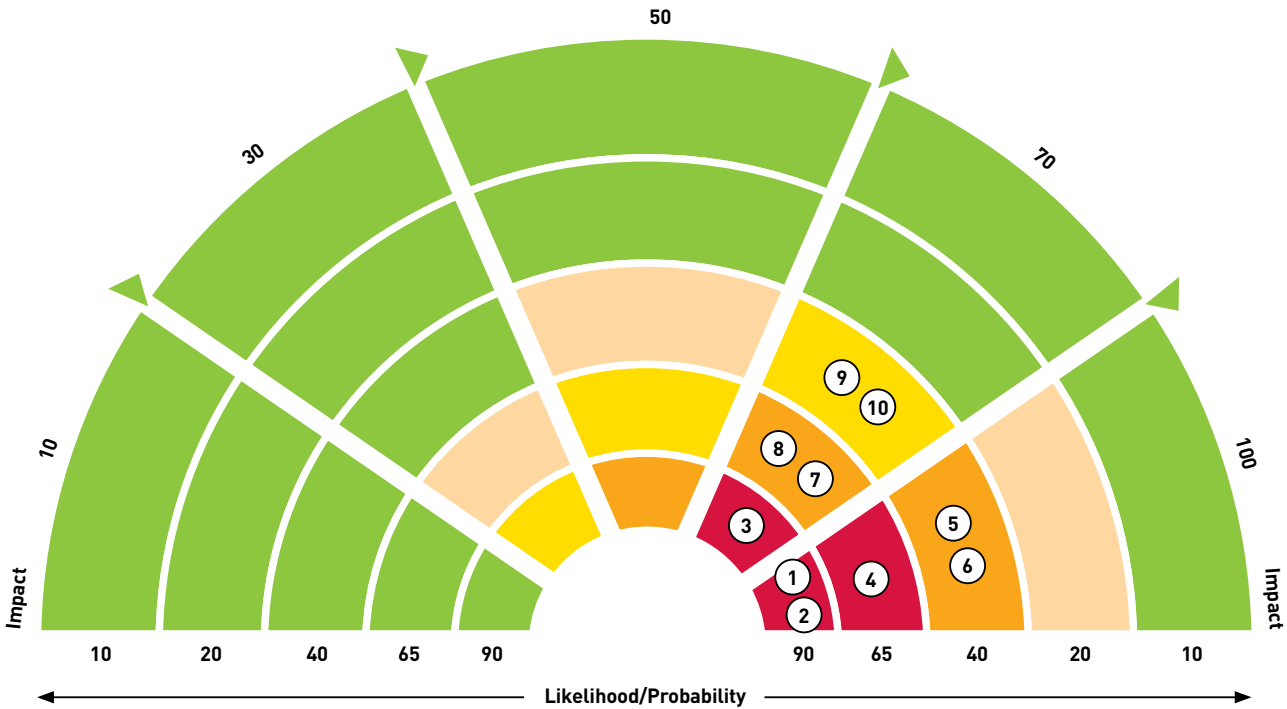
Figure 16: Strategic Inherent Risks Heatmap



**Impact key**  
 Minor: 10%  
 Significant: 30%  
 Serious: 50%  
 Critical: 70%  
 Catastrophic: 100%

**Residual risk exposure**  
 Priority 1 – Extreme  
 Priority 2 – High  
 Priority 3 – Moderate  
 Priority 4 – Low  
 Priority 5 – Insignificant

Figure 17: Strategic Residual Risks Heatmap



**Impact key**  
 Minor: 10%  
 Significant: 30%  
 Serious: 50%  
 Critical: 70%  
 Catastrophic: 100%

**Residual risk exposure**  
 Priority 1 – Extreme  
 Priority 2 – High  
 Priority 3 – Moderate  
 Priority 4 – Low  
 Priority 5 – Insignificant





**Table 8: Top 10 Key strategic risks**

No	Risk name	Risk owner	Consequence of the risk	Current control processes in place to mitigate the risk exposure	Perceived control effectiveness	Residual risk exposure	Action plans
1	Inadequate business continuity plans and disaster recovery plans	COP	<ol style="list-style-type: none"> <li>1 Financial loss</li> <li>2 Damage to reputation</li> <li>3 Loss of information/data</li> <li>4 Delays and customer dissatisfaction</li> <li>5 Compromised safety performance</li> </ol>	<ol style="list-style-type: none"> <li>1 Business Continuity Plans</li> <li>2 Four Positions at OR Tambo SSS</li> <li>2 IT Disaster Recovery plans and test</li> <li>3 Disaster recovery plans/Emergency evacuation plans</li> <li>4 Engagement with employees with regard to validation to operate other airports and provide training for such required validation</li> </ol>	Weak	Priority 1	<ol style="list-style-type: none"> <li>1 Project roll out site to site replication and service restoration technology at OR Tambo</li> <li>2 Conduct an integrated DR tests for critical Departments (HC and Finance)</li> <li>3 Project by ATM to investigate additional positions and requirements for SSS OR Tambo</li> <li>4 Complete and implement the project for disaster recovery at FAOR and National contingency plan to cater for BCM</li> <li>5 Complete and implement the project for disaster recovery at FAOR and National contingency plan to cater for BCM</li> </ol>
2	Unstable IT network	CIO	<ol style="list-style-type: none"> <li>1 Virus outbreak</li> <li>2 Non- use of application to use to its full capacity</li> <li>3 Delays in accessing the network and project</li> <li>4 Non availability of the capacity</li> </ol>	<ol style="list-style-type: none"> <li>1 Failed over line               <ol style="list-style-type: none"> <li>1.2 WAN/LAN services</li> </ol> </li> <li>2 Internet policy</li> <li>3 Blue coat for internet reporting               <ol style="list-style-type: none"> <li>3.2 Fire walls</li> <li>3.3 Anti-virus</li> <li>3.4 Vulnerability test twice a year</li> <li>3.5 Penetration test yearly</li> <li>3.6 Intrusion prevention and detection system</li> </ol> </li> </ol>	Weak	Priority 1	<ol style="list-style-type: none"> <li>1 Segregation of OT network</li> <li>2 ADSL Installation to take place country-wide</li> <li>3 Install load balancing line</li> <li>4 Conduct user awareness training with regard to the IT policy</li> <li>5 Redesign ATNS WAN/LAN Network</li> <li>6 Align the IT intervention with the CAPEX replacement project</li> </ol>
3	Physical Security of Infrastructure	CSS	<ol style="list-style-type: none"> <li>1 Increased costs</li> <li>2 Loss of information and equipment</li> <li>3 Compromising staff safety and systems availability</li> <li>4 Compromised service delivery</li> <li>5 Breach of systems</li> </ol>	<ol style="list-style-type: none"> <li>1 Security Policy and Directive</li> <li>2 Liaison with OT on security issues at regional sites</li> <li>3 Technical Services delegated security services at regional sides</li> <li>4 Utilisation of Technical Services personnel to assist in security functions</li> <li>5 Dedicated HO Security resources               <ol style="list-style-type: none"> <li>5.2 Outsourced Security at some sites</li> </ol> </li> <li>6 Installed alarm systems, physical guards and smoke cloaks</li> <li>7 Security assessments conducted with action plans               <ol style="list-style-type: none"> <li>8.1 Deployed security at the centers and remote sites</li> </ol> </li> </ol>	Weak	Priority 1	<ol style="list-style-type: none"> <li>1 Develop standardised processes and procedures for the security management systems</li> <li>2 Develop and implement awareness training for OT personnel delegated for security function</li> <li>3 Investigate the feasibility of training and registration of delegated Security OT personnel to comply with PSIRA</li> <li>4 Conduct a feasibility study for the centralisation of the security services</li> <li>5 Development an Aviation program for ATNS</li> <li>6 Draft technical specifications and project manage the implementation of the security measures for the six remote sites (2 HF sites, 1 DVOR, 1 RADAR site and 1 FRS site)</li> </ol>
4	Cyber security threats	CIO	<ol style="list-style-type: none"> <li>1 Reduction in service to customers</li> <li>2 Loss of life attributed to ATNS</li> <li>3 Reputational damage</li> <li>4 Corruption and loss of sensitive company data</li> <li>5 Financial loss</li> </ol>	<ol style="list-style-type: none"> <li>1 Firewalls</li> <li>2 Anti-Virus software</li> <li>3 User awareness training</li> <li>4 IT Steering Committee in place</li> <li>5 IT governance policies and procedures</li> <li>6 Restricted physical access to servers</li> <li>7 Annual IT audits</li> </ol>	Weak	Priority 1	<ol style="list-style-type: none"> <li>1 Implement the Information Security Management System</li> <li>2 Develop Cyber Security Policy Framework</li> <li>3 Conduct a vulnerability assessment and penetrating testing</li> <li>4 Develop IT Security Strategy</li> </ol>





No	Risk name	Risk owner	Consequence of the risk	Current control processes in place to mitigate the risk exposure	Perceived control effectiveness	Residual risk exposure	Action plans
5	Reliance on third party service providers	COT	1 Loss or disruption of service 2 Increased cost to ATNS 3 Decreased reliability (unpredictable levels of service) 4 Reduced safety performance 5 Financial loss 6 Reputational damage 7 Failure to provide flight inspections (CAA) flight calibration	1 Service level agreements 2 Standard operating procedures to restore services and continuation 3 Implemented contingency plans 4 Monitoring, tracking and reporting of third party service provider performance against contracted service levels 5 Disaster recovery facilities/Redundant systems 6 Contract with DAC for the Billing System	Good	Priority 2	1 Annual review of the SLAs 2 Annual review of the disaster recovery plans 3 Regular testing of the contingency plans 4 Project to be initiated for the service provider to transfer skills to internal ATNS employees (Application Developers) 5 Currently in the process of recruiting for the vacant Application Developer position
6	Major safety event	CATS	1 Loss of life 2 Reputational damage 3 Public liability 4 Financial loss	1 Recurrence training program 2 Compliance with the requirements of Safety Management Systems 2.1 SSI (Station Standing Instructions) 2.2 Annual proficiency training 2.3 Visible safety campaign 2.4 Safety and Regulation departments audits 2.5 OPS Management and regulatory oversight 2.6 Visible safety campaign and peer supervision 2.7 Fatigue management process 3 Maintenance on infrastructure and equipment 4 Compliance with the security directive 4.1 Continuous interactions with National Security agencies	Satisfactory	Priority 2	1 Establish a Safety Database 2 Analyse contributing factors 3 Ensure database complete through appointment and deployment of appropriate resources 4 Conduct user training on Xtrax data analysis methodology 5 Ensure speedy on-line access through adequate infrastructure 6 Conduct Continuation Training focused on contributing factors 7 Ensure simulator availability in both Tower and SSS through adequate funding and allocation of budget 8 Ensure adequate staffing of facilities to enable resourcing of simulator facilities 9 Safety promotions and communications 10 Implement ATS supervisors 11 Reinforce safety recognition
7	Critical skills in global demand	E HC	1 Inability to meet set objectives 2 Financial loss and unsustainability 3 Inability to meet clients' demand/expectations 4 Increased safety risk 5 Lack of continuity/organisational growth	1 Planned intake for ATC and Technicians 2 Integrated Human Capital Plan (Strategy) to address skills shortages 2.1 ATS Training pipeline meetings 2.2 Use of guest instructors at ATA 3 Premium pay including global allowances 3.1 Researched remuneration (retention) strategy: i International salary benchmarking conducted every three years for ATS and ET ii Annual salary benchmarking exercise for other employees 4 Relationship with department of Education 4.1 Career marketing/Road shows at Universities, FETs and High Schools	Satisfactory	Priority 2	1 HC to formalise Succession Planning for critical roles (included in reward philosophy) 2 All JDs to be reviewed (included in reward philosophy) 3 Retention and transfer of the institutional knowledge 4 Branding as employer of choice 5 Partnering NGOs and Career centers 6 Investigate the scarcity/hardship allowance (look at B&B, relocation costs, etc.)



No	Risk name	Risk owner	Consequence of the risk	Current control processes in place to mitigate the risk exposure	Perceived control effectiveness	Residual risk exposure	Action plans
8	Financial unsustainability	CFO	<ol style="list-style-type: none"><li>Declining income vs. escalating cost base</li><li>Failure to meet regulatory requirements</li><li>Inability to meet financial obligations</li><li>Loss of reputation</li><li>Non-recovery of debts</li></ol>	<ol style="list-style-type: none"><li>Cost cutting measures and continuous management of budget<ol style="list-style-type: none"><li>Engaging Regulator/Shareholder/industry on a regular basis</li><li>Access to cheap funding (Loan facility)</li><li>Bank guarantees for top 20 customers</li></ol></li><li>Supply Chain Management Policy to guide procurement<ol style="list-style-type: none"><li>Financial Policies</li></ol></li><li>Finance policies/directives and procedures</li><li>Permission/project planning</li><li>ATNS International initiatives<ol style="list-style-type: none"><li>Governance structure to oversee the non-regulated business</li></ol></li><li>Ongoing monitoring of the ATNS strategy progress</li></ol>	Satisfactory	Priority 2	<ol style="list-style-type: none"><li>Complete and implement the Governance Model</li><li>Complete and implement the supply chain operating model to achieve economies of scale</li></ol>
9	Unavailability of deployed CNS technology	COT	<ol style="list-style-type: none"><li>Service disruption</li><li>Decreased reliability</li><li>Compromised safety performance</li><li>Operational inefficiencies (duplication of operations)</li><li>Increased cost</li><li>Inability to meet user requirements</li><li>Loss of reputation</li><li>Loss of ACSA airport certification</li><li>Regulatory punitive measures by economic regulator</li></ol>	<ol style="list-style-type: none"><li>Service level agreements and support contracts, including penalty clauses, with service providers<ol style="list-style-type: none"><li>Preventative maintenance plans</li><li>Redundancies in system design which minimise common points of failure</li><li>Continuously monitor performance of deployed CNS technology and service providers</li></ol></li><li>CNS technology roadmap</li><li>Corrective maintenance</li><li>CNS and EP team competencies<ol style="list-style-type: none"><li>CAPEX project schedule</li><li>System upgrades</li></ol></li><li>Supply Chain Management Policy</li></ol>	Good	Priority 3	<ol style="list-style-type: none"><li>Monitor the trend analysis and action any deviation observed</li><li>Implement ad hoc equipment life extension plans</li><li>Critical issue to be completed and implemented to address supply chain management challenges to be finalised</li></ol>
10	Political instability	E CS	<ol style="list-style-type: none"><li><ol style="list-style-type: none"><li>Financial loss</li><li>Delayed/non-payment</li><li>Inability to transact or fulfil contractual obligations</li><li>Damage to assets</li></ol></li><li>Injuries and fatalities</li><li>Damage to company reputation</li></ol>	<ol style="list-style-type: none"><li>MOUs are in place with respective organisations</li><li>Service Agreement with respective companies</li><li>Government to Government relationships with other countries<ol style="list-style-type: none"><li>Continuous and regular engagement with SA embassies/DIRCO/State Security Agency/DoT/DTI offices in relation to the respective countries</li></ol></li><li>Dedicated account management</li><li>Government Bilateral Agreements</li><li>Supporting Aviation Forums</li><li>Legal System/Independent Arbitration</li><li>Working with the UN bodies</li></ol>	Satisfactory	Priority 3	<ol style="list-style-type: none"><li>Develop periodic political barometers and environmental scan to keep abreast with developments in each country</li><li>Create a common repository with all the country reports between Risk Management and Commercial Service staff</li><li>Build strong relations with the senior government officials by using existing government-to-government channels, i.e. bilateral</li><li>Improve on building strong relations with internal and external clients</li></ol>





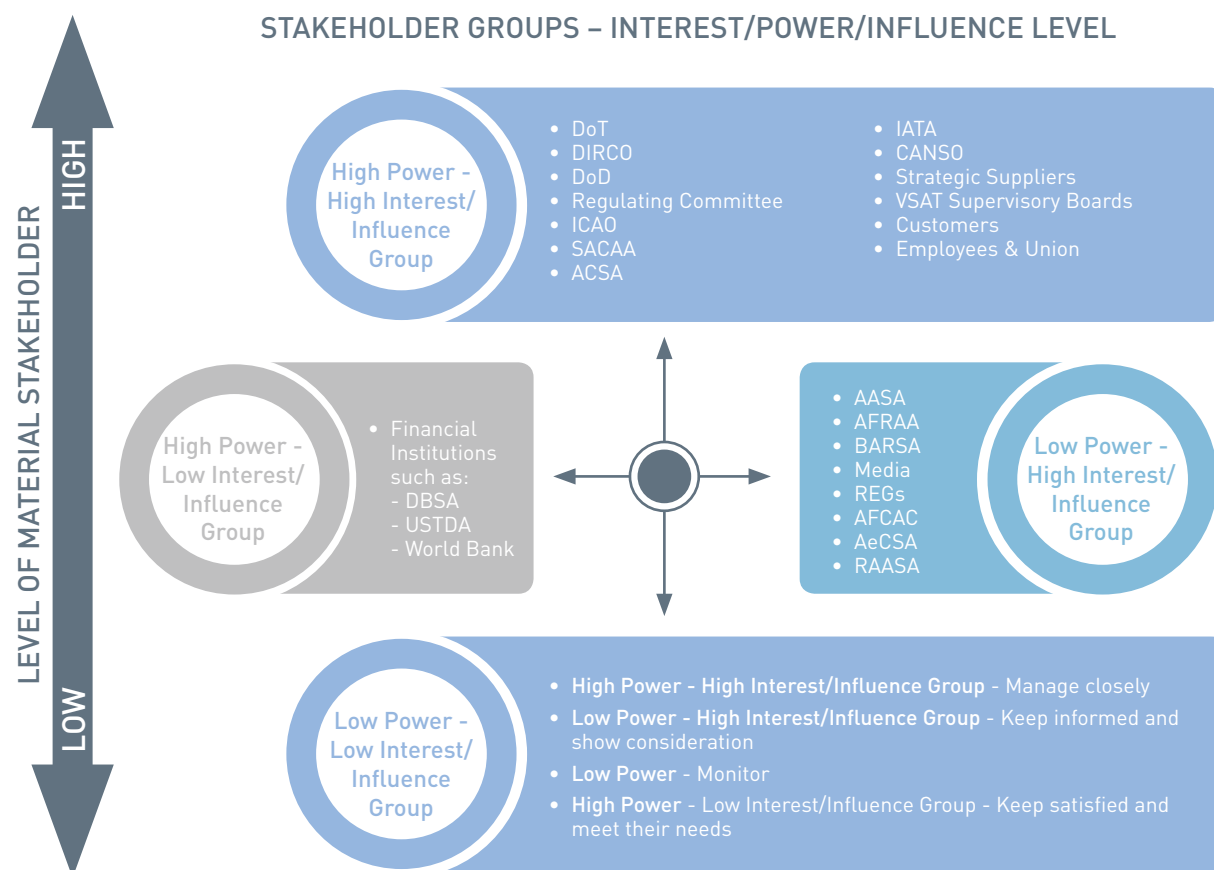
## STAKEHOLDER ENGAGEMENT



Our approach to ensuring effective stakeholder engagement is through long-term success by enhancing transparency, information sharing and encouraging innovation. The Company has primary and secondary stakeholder groups, with the primary stakeholders being recognised as being material to our long-term sustainability. As the only ANSP within South Africa and operating in 10% of the world's airspace, positive stakeholder relations influence business growth, and ensures that stakeholder needs are met and aligned to our priority issues. Integration of economic, social and environmental sustainability is central in all our stakeholder engagements in order to enhance positive stakeholder relations that will improve our operations and business continuity.

As a Company, we are committed to understanding and continuously improving the relationship with employees, through platforms such as value moments, which encourages open and effective communication. Our materiality assessment informs our stakeholder processes. 'Material impacts' refer to issues that have been identified as critical for our business.

**Figure 18: Stakeholder Groups – Power and influence: Material issues**



The above stakeholder groups have been identified and prioritised according to:

- High power/High interest/influence group;
- High power/Low interest/influence group;
- Low power/High interest/influence group and
- Low power/Low interest/influence group.



Our key stakeholder groups are reflected below:

### GOVERNMENT

(Department of Transport, South African Air Force, Department of Environmental Affairs, Department of International Relations and Cooperation)

- ATNS is responsible for fulfilling the mandate of providing ATM solutions & associated services for the Dept of Transport.
- Furthermore, as our activities affect the natural environment, the Dept of Environmental Affairs influences the decisions taken by the business.
- National Treasury.
- The engagements with SAAF ensure flexible use of airspace and the collaboration of delivering engineering and technical services.
- DIRCO engagements ensure that our continental objectives are aligned to the department in order to develop and maintain a good relationship with embassies within Africa and secure funding for infrastructure development within the African community.

### EMPLOYEES

- Employee engagement ensures that our internal stakeholders are given the platform to be empowered and developed. We realise that to enhance performance, the satisfaction of our employees plays a critical role in the overall business.
- Programmes to contribute to employee satisfaction include constant training on both soft and technical skills to improve on the delivery of services and good employee relations. Our Rewards and Recognition initiative rewards our employees on their services rendered.

### INDUSTRY & CUSTOMERS

(ICAO, CANSO, IATA, SACAA Airlines Association of South Africa, Strategic Partnerships)

- The maintenance of solid relations within the aviation industry impacts on the sustainability, economic, social and environmental, of our services and products. We adhere to the governance requirements and as well as the expectations of our customers to ensure the efficient service delivery and consistent customer satisfaction.
- The participation in various forums provides a platform to engage with other industry stakeholders in order to facilitate continuous improvement and innovation that will achieve the desired level of customer satisfaction through the provision of efficient and effective services and products, thus ultimately improving our economic sustainability.

### CONTRACTORS

- Our contractors adhere to our internal policies and procedures to ensure good services rendered that influences a positive business reputation and stakeholder expectations being achieved.
- We require our contractors to be conscious of all three pillars of sustainability to achieved the ultimate maturity of our sustainability goals.



Table 9

Stakeholder	Type of Engagement	Frequency of Engagement	Engagement Objective	Proposed activities to address stakeholder objectives	Outcomes
GOVERNMENT					
DoT (Department of Transport)	Involve and consult	Quarterly/ When need arises	<ul style="list-style-type: none"><li>• Work closely with the DoT and gain support in paving way from difficult customers</li><li>• ATNS to provide air traffic and navigation expertise and support in local and international forums</li><li>• Keep stakeholder informed on company strategic plans and company performance</li></ul>	<ul style="list-style-type: none"><li>• Quarterly meetings to engage on areas for support</li><li>• Join in the bilateral negotiations with targeted states</li><li>• Support the DoT on regional, continental and global ATM issues (CAC, APIRG, AFCAC, etc)</li><li>• Support DoT to deliver on the departmental outcomes</li></ul>	<ul style="list-style-type: none"><li>• Alignment of the DoT's continental objectives to that of ATNS</li><li>• Close and effective cooperation with the DoT</li><li>• Increased transparency and effective communication</li></ul>
DIRCO (Department of International Relations and Cooperation)	Involve and consult	Quarterly/ When need arises	<ul style="list-style-type: none"><li>• Inform DIRCO of ATNS initiatives in specific countries</li><li>• Work closely with the DIRCO (Africa Desk) and obtain insight in internal country environment</li><li>• Solicit support in providing services to a specific state i.e. provision of UAC services to R. South Sudan, Angola, DRC etc</li><li>• Have insight in the international and regional funding available</li></ul>	<ul style="list-style-type: none"><li>• <b>Bi-annual meetings</b> with DIRCO (Africa) to solicit support when required</li><li>• <b>Embassy call when on country visit</b> - engage with the trade missions/embassies at targeted states</li><li>• Obtain international funding details - engagement with the department in order to take advantage of the continental and international funding available for targeted states</li></ul>	<ul style="list-style-type: none"><li>• Alignment of the department's continental objectives to that of ATNS</li><li>• Development of good relationship with the embassies in the continent</li><li>• Solicit international funding for infrastructure development for targeted states that ATNS can implement</li></ul>
Department of Environmental Affairs	Involve and Consult	When need arises	<ul style="list-style-type: none"><li>• Compliance to environmental legislation to enhance environmental performance</li></ul>	<ul style="list-style-type: none"><li>• Consultation to benefit environmental sustainability</li></ul>	<ul style="list-style-type: none"><li>• Compliance to National Environmental Management Act and associated legislation</li></ul>
South African Civil Aviation Authority (SACAA)	EXCO meetings: ATNS Bruma and SACAA Campus	Quarterly	<ul style="list-style-type: none"><li>• Regulatory compliance and enabling regulations</li></ul>	<ul style="list-style-type: none"><li>• Critical Stakeholder workshops. Sharing of information and collaborations on safety training and ATM</li></ul>	<ul style="list-style-type: none"><li>• Improved working relationships and synergy</li></ul>
INDUSTRY & CUSTOMERS					
CANSO (Civil Aviation Navigation Service Organisation)	Collaborate/ Empower	Quarterly/ When need arises	<ul style="list-style-type: none"><li>• Optimise the ATNS/CANSO partnership for ATNS commercial benefit as elaborated in the CANSO strategic document</li></ul>	<ul style="list-style-type: none"><li>• Build a strong CANSO Africa to the benefit of ATNS</li><li>• Active participation in their program</li><li>• Identify areas of cooperation and partnering for commercial purposes</li></ul>	<ul style="list-style-type: none"><li>• Strong effective partnerships and achievement of ATNS strategic imperatives</li><li>• Identification of areas of cooperation for ATNS commercial benefits i.e. training, etc</li></ul>





Stakeholder	Type of Engagement	Frequency of Engagement	Engagement Objective	Proposed activities to address stakeholder objectives	Outcomes
INDUSTRY & CUSTOMERS (continued)					
IATA (International Air Transport Association)	Collaborate & Empower - Some issues involve and consult	Quarterly/ When need arises	<ul style="list-style-type: none"><li>Optimise ATNS/IATA collaboration for commercial and safety benefits</li></ul>	<ul style="list-style-type: none"><li>Quarterly meetings with IATA to determine areas of improvement</li><li>Continue to collaborate and partner in the provision of VSAT, training, and other services</li></ul>	<ul style="list-style-type: none"><li>Continuous effective collaboration and effective management of strategic projects in the continent</li></ul>
ICAO (International Civil Aviation organisation)	Collaborate/ Empower	Quarterly/ When need arises	<ul style="list-style-type: none"><li>Understand GANP and GASP requirements and comply with the Regional implementation plans</li><li>Influence the Regional plans to the benefit of South Africa and ATNS</li></ul>	<ul style="list-style-type: none"><li>Active participation in the ICAO and other meetings</li></ul>	<ul style="list-style-type: none"><li>Effective collaboration</li><li>Active engagement in the provision of the RSS UAC</li></ul>
Strategic Suppliers	Collaborate/ Empower	Quarterly/ When need arises	<ul style="list-style-type: none"><li>Forge strategic alliances for commercial purposes – Joint tendering, Joint Ventures and partnership, provide training and technical support, etc</li></ul>	<ul style="list-style-type: none"><li>Identify and compile data of strategic partners</li><li>Negotiate and conclude strategic JV or strategic cooperation agreements</li></ul>	<ul style="list-style-type: none"><li>Identify possible partners and services to cooperate on</li><li>Sign MoU or strategic partnership with specific identified companies</li></ul>
ASECNA	Collaborate/ Empower	Quarterly/ When need arises	<ul style="list-style-type: none"><li>Interact and Collaborate with ASECNA at a strategic level to determine long term ATM implementation objectives</li></ul>	<ul style="list-style-type: none"><li>Arrange a joint meeting to map and also share ideas on the ATM implementation programs i.e. ASBU</li></ul>	<ul style="list-style-type: none"><li>Workshop to be arranged</li></ul>
ANSPs (Clients)	Involve/consult	Quarterly/ When need arises	<ul style="list-style-type: none"><li>Position ATNS as African service provider that understands the needs of the continent</li></ul>	<ul style="list-style-type: none"><li>Facilitate cooperation for the advancement of integration and harmonisation to achieve safe skies i.e. UAC in R. South Sudan, Lesotho, Angola and DRC</li></ul>	<ul style="list-style-type: none"><li>Positioning of ATNS as the preferred service provider</li></ul>
Regional economic Group i.e. (SADC)	Involve/consult	Quarterly/ When need arises	<ul style="list-style-type: none"><li>Influence the speedy implementation of the UACC</li></ul>	<ul style="list-style-type: none"><li>Active participation in the SADC steering committee to influence the fast implementation of the UACC</li><li>Active participation in the CAC meeting to influence to implementation of the UACC project</li></ul>	<ul style="list-style-type: none"><li>Implementation of the UAM project</li></ul>
NAVISAT	Collaborate /Empower	Quarterly/ When need arises	<ul style="list-style-type: none"><li>ATNS wishes to cooperate with the Egyptian organisation for the purposes of providing consulting and related services when the opportunity arises</li></ul>	<ul style="list-style-type: none"><li>Engage with NAVISAT management to identify areas of collaboration and partnership</li></ul>	<ul style="list-style-type: none"><li>Sign a MoU</li></ul>
South African Air Force (SAAF)	Involve/consult	Quarterly	<ul style="list-style-type: none"><li>Flexible use of airspace, UACC, Training</li><li>Engineering and technical services</li><li>Delivery of ATNS products and services</li></ul>	<ul style="list-style-type: none"><li>Engage with SAAF to identify areas of collaboration and partnership</li></ul>	<ul style="list-style-type: none"><li>Sign a MoU and SLAs</li></ul>
Airlines Association of South Africa (AASA)	Business meetings: AASA	Quarterly	<ul style="list-style-type: none"><li>Meeting industry needs</li></ul>	<ul style="list-style-type: none"><li>Forum to be used as form of customer feedback i.e. OPSCOM Forum = Stakeholder + Users that ATM serves</li></ul>	<ul style="list-style-type: none"><li>Service alignment with our user expectations</li></ul>



Stakeholder	Type of Engagement	Frequency of Engagement	Engagement Objective	Proposed activities to address stakeholder objectives	Outcomes
INDUSTRY & CUSTOMERS (continued)					
Economic Regulator	Meetings	Bi-annual	<ul style="list-style-type: none"><li>Tariff management and service standards reporting</li></ul>	<ul style="list-style-type: none"><li>Lobbying and reporting</li></ul>	<ul style="list-style-type: none"><li>Maintaining open lines of communication leading to sustainable relationships</li></ul>
ANPS Continental	Call schedules and market visits	Quarterly	<ul style="list-style-type: none"><li>ATNS products and services</li></ul>	<ul style="list-style-type: none"><li>Procure ATNS services and products</li></ul>	<ul style="list-style-type: none"><li>Contract signing</li></ul>
Media	PR and sound media management	Quarterly/ When need arises	<ul style="list-style-type: none"><li>ATNS is credible, open and accessible</li></ul>	<ul style="list-style-type: none"><li>Share product and service information through sound media relations</li></ul>	<ul style="list-style-type: none"><li>Improved media relations</li></ul>
Regional aerodrome owners	Scheduled meetings	Quarterly/ When need arises	<ul style="list-style-type: none"><li>ATNS is a partner in safety and growth</li></ul>	<ul style="list-style-type: none"><li>Share plans and information on ATNS's future growth and service offerings</li></ul>	<ul style="list-style-type: none"><li>Improved business and working relations</li></ul>
CAASA	Scheduled meetings	Bi-annually	<ul style="list-style-type: none"><li>ATNS is a partner in safety and growth</li></ul>	<ul style="list-style-type: none"><li>Share plans and information on ATNS's future growth and service offerings</li></ul>	<ul style="list-style-type: none"><li>No audit findings related to aviation safety, ATM, environment</li></ul>
Strategic partnerships with ANSPs outside the continent	Scheduled meetings	Quarterly/ When need arises	<ul style="list-style-type: none"><li>Improved relations lead to better collaborations in ATM</li></ul>	<ul style="list-style-type: none"><li>ATNS signing MOU</li></ul>	<ul style="list-style-type: none"><li>Improved working relations</li></ul>
INTERNAL STAKEHOLDERS					
ATNS Staff	Direct staff engagement	Monthly	<ul style="list-style-type: none"><li>Individual employee concerns within the work environment</li></ul>	<ul style="list-style-type: none"><li>Talent sourcing, reward and development</li></ul>	<ul style="list-style-type: none"><li>Employee satisfaction and skills retention</li></ul>
Contractors	Direct engagement	Monthly	<ul style="list-style-type: none"><li>Expected service delivery in-line to ATNS expectations as per industry requirements</li></ul>	<ul style="list-style-type: none"><li>Alignment to ATNS policies and procedures for efficient service delivery</li></ul>	<ul style="list-style-type: none"><li>Provision of efficient communication, navigation and surveillance infrastructure and supporting services</li></ul>
Students	Social media and road-shows	Quarterly/ When need arises	<ul style="list-style-type: none"><li>The sky is not the limit – it is where it all begins!</li></ul>	<ul style="list-style-type: none"><li>Brochures to schools and activation through social media</li><li>Bursary and learnership scheme</li></ul>	<ul style="list-style-type: none"><li>Improved learner registration at the ATA subsequent recruitment into the ATNS workforce</li></ul>
Job Seekers	PR/Media	Quarterly/ When need arises	<ul style="list-style-type: none"><li>ATNS is an employer of choice</li></ul>	<ul style="list-style-type: none"><li>Advertising through website</li></ul>	<ul style="list-style-type: none"><li>Trained individuals accessing the job market</li></ul>





## ATNS PERFORMANCE SCORE 2016/17

Item no.	Business Objectives	Objective Measures	Annual performance indicators	Annual Actual 2016/17 (Full Year)	Annual Targets 2016/17 (Full Year)
1. Transport safety and security					
1.1	Risk Safety Index (RSI)	Reduce the risk associated with safety events	Risk associated with safety events at a level of 40 or higher in accordance with the Risk Assessment Tool	47	RSI equal to or greater than 48
1.2	Safety service provision	Increase the successful safe operation	Providing successful safe operation and application of separation standards based on IFR flight hours to equate to 99.995% and an error margin of 0.005%	99.995% successful safe operation and an error margin of 0.005%	99.995% successful safe operation and an error margin of 0.005%
1.3	Operational efficiency	Reduce overall traffic delays	Average delay per delayed flight	33 seconds	120 seconds
1.4	Operational efficiency	Achievement of CNS Systems Availability	Average CNS Systems Availability	C: 99.80%	C: 99.67%
				N: 97.98%	N: 98.65%
				S: 99.99%	S: 99.77%
1.5	Ensure commercial sustainability	Ensure financial sustainability	Meeting financial target as per Budget	D/E = 0%	D/E =10-45%
				C/A = 5:2:1	C/A =2.5:1
				ROCE = 9.6%	ROCE =12.6%
1.6a	Performance-based navigation (PBN) ACSA Airports	Implement ICAO PBN concept in South Africa  Near-term implementation targets in line with South African PBN Roadmap	4 Design Reports for submission to SACAA (RNP APCH)	3 Design Reports for submission to SACAA (RNP APCH)  RNP APCH in 100% of instrument runways located at ACSA airports	RNP APCH in 100% of instrument runways located at ACSA airports by 31 March 2017
			10 Design Reports for submission to SACAA (RNAV 1 and 2 SID/STAR)	10 Design Reports for submission to SACAA (RNAV 1 SID/STAR)	RNAV 1SID/STAR for 5 (or 80%) international airports (ACSA-owned) by 31 March 2017
1.6b	Performance-based navigation (PBN) Non-ACSA Airports	Implement ICAO PBN concept in South Africa  Near-term implementation targets in line with South African PBN Roadmap	8 Design Reports for submission to SACAA (RNP APCH)	8 Design Reports for submission to SACAA (RNAV 1 SID/STAR)	RNAV 1SID/STAR for 1 ACSA Domestic airport where there are operational benefits by 31 March 2017
2. Infrastructure development and high-level investment plan for transport					
2.1	Development of optimised and efficient aviation infrastructure in a cost-effective manner	Adoption and approval of CAPEX Implementation of CAPEX 2015/16 - Strategic plan - Roadmap - Operational plan	Compliance with the acquisition and implementation of milestones of the CAPEX plan	R127.86m	R115m



Item no.	Business Objectives	Objective Measures	Annual performance indicators	Annual Actual 2016/17 (Full Year)	Annual Targets 2016/17 (Full Year)
2.2	Operation of the satellite communication networks – SADC VSAT 2	Optimise revenue and ensure network availability	Achievement of the revenue and network availability as per SLA targets	SLA - 99.94%	SLA – 98.5%
				Revenue: R49.0m	Revenue: R42.2m
2.3	Operation of the satellite communication networks – NAFISAT	Optimise revenue and ensure network availability	Achievement of the revenue and network availability as per SLA targets	SLA - 99.94%	SLA – 98.5%
				Revenue: R42.3m	Revenue: R32.7m
3. The fight against fraud and corruption					
3.1	Comply with relevant legislation, regulation and standards	100% compliance	Reports with no material findings from auditors  Sound internal control systems	Qualified audit opinion was raised for 2016/17 period  Irregular expenditure was recorded. An investigation is being undertaken into the instances of irregular expenditure and appropriate action will be taken where necessary. See note 33 in the AFS  Maintaining legislative Regulatory Universe for ATNS by facilitating the risk prioritisation of all pieces of legislation in the regulatory universe. Escalate compliance matters to management	Unqualified audit report to be achieved for 2016/2017  Zero material non-compliance findings
3.2	Fraud and whistle-blowing policy	Fighting corruption and promoting good governance	Matters investigated as per policy timelines	Eight (8) whistle blowing issues were reported for the year. Four (4) were completed within 90 days and the other four are still under investigation as they were reported in the last quarter of the year	Investigation of matters reported through the Whistle Blowing to be completed within 90 days
4. Environmental protection					
4.1	Implementation of environmental plan	Measure ATNS' Carbon footprint	ATNS 2015/16 Carbon footprint inventory report	ATNS carbon footprint quarterly results Q1 – Q4 2016/17	Calculate and report on ATNS Carbon Footprint 2016/17 quarterly
		Human resources/training	Trained ATNS employees on Sustainability and climate change matters	Environmental awareness training delivered to 27% of ATNS employees (incl. 24 bursars)	Develop e-learning platform and Deliver Environmental awareness training to 25% of ATNS employees
		Performance assessment	Environmental performance assessments	Annual ATM environmental performance report compiled for 2016/17	Environmental Assessment Report (1 Annual Report at year-end)
5. Training to contribute to job creation					
5.1	Address societal challenges, thereby building a meaningful legacy for ATNS and the communities in which we operate	ATS bursaries and engineering learnerships	Trained ATS and engineering learnerships	ATS - 81	ATS - 80
				Engineering Learnership: 6	Engineering Learnership 6
				ETS – GEDP: 10	ETS – GEDP 10
				Unemployed Graduates: 12	Unemployed Graduates 8





Item no.	Business Objectives	Objective Measures	Annual performance indicators	Annual Actual 2016/17 (Full Year)	Annual Targets 2016/17 (Full Year)
5.2	Manage the training pipeline for ATS and technical staff	Adoption and approval of HC plan as per budget ATS and TS training plan Operational or implementation plan	Achievement of the numbers as per budget Adoption and approval of training plan Compliance with the milestones of the plans	ATCO 3: 210	ATCO 3 – 226
				ATCO 2: 30	ATCO 2 – 37
				ATCO 1: 136	ATCO 1 – 119
				Eng. Techs – 78	Eng. Techs – 74
				Eng. Satellite Technicians – 5	Eng. Satellite Technicians – 5
5.3	Review and implement the HR plan to recruit, develop, retain, and reward employees across all disciplines	Development programmes for employees, with emphasis on AIC and women	Training investment as percentage of a salary bill	8.13% Rand value of Cost to Company	3% Rand value of Cost to Company
6. Broad-based black economic empowerment					
6.1	Achieve B-BBEE targets Achieve preferential procurement targets as set by the Transport Charter	Percentage of discretionary spend on B-BBEE Total discretionary OPEX budgeted Total CAPEX budgeted	Achievement of B-BBEE targets as per the Transport Charter	B-BBEE Level 2	B-BBEE level 3
7. Employment equity					
7.1	ATS EE targets (AIMO, ATSO, ATCO 1-3)	Achieve representation towards alignment of company staff profile with the demographics of the country	7% increase: 2015/2016 AIC Target	70.01% ATS AIC	Achieve a target of 65% ATS AIC
			2% increase: 2015/16 ATS female target	42.43% ATS female	Achieve a female target of 42% ATS
7.2	ATNS EE targets	Increase representation of black (AIC) racial grouping with a particular focus on African and female representation towards creating alignment with the demographics of the country	2% increase – 2015/16 AIC	75.12% AIC	Achieve a target 74% AIC
			1% increase: 2015/16 Female target	44.88% female representation	Achieve a company target of 47% female
			Target = 1% higher than the National target of PwD	3.31% people with disabilities	Achieve a company target of 3% for people with disabilities



Table 10 : Material Issues and their alignment to the Six Capitals and the Strategic Objectives

Material Issues Cluster	Material Issues	Linkage Capitals	Linkage to Strategic Objectives
Information and communication technology	Cyber security event impacting operations		
	Disaster recovery and BCM		
	Unstable IT network		
Procurement	Supply chain management compliance		
Financial	Capital expenditure in line with the Permission Plan		
	Management of employment costs		
	Financial unsustainability		
	High operational costs		
	Emerging risk: delayed service payments from regional airports		
Infrastructure	Physical security of infrastructure		
	Unavailability of deployed CNS technology		
Service	Reliance on 3rd party service providers		
	Major safety event		
	Responding to climate change		
Human capital	Inability to create and retain institutional knowledge		
	Ethical leadership		
	Maintaining positive employee morale		
	Employee awareness on environmental issues		
Stakeholder engagement	Poor internal communication of ATNS' long term planning		
License to operate	Economic regulatory uncertainty impacting ATNS permission		



# ECONOMIC PERFORMANCE

## Introduction

ATNS' financial performance is explicitly outlined in the Integrated Annual Report and Annual Financial Statements. This financial performance represents one of the fundamental elements of ATNS' economic sustainability. ATNS, however, considers creating broader economic value in order to influence the wider South African economic system and contributing to broader stakeholder and customer value creation as another fundamental aspect of the Company's economic sustainability.

The economic indicators discussed in this report illustrate the general and specific flows of economic outcomes from the organisation to key stakeholder groups and between these different stakeholders. They further demonstrate the main economic impacts of the organisation on society whilst illustrating appropriate management controls that will empower the organisation to continuously improve on its sustainability objectives. ATNS' strategic goals continue to be outcomes-oriented, formulated to respond to national priorities and industry needs and expectations.

## Aviation and South African economic growth

The aviation industry has a significant economic impact on major African markets and is widely accepted as a catalyst for growth. In South Africa, the aviation industry supports 2,1% of South African GDP and 227,000 jobs or 1,7% of the South African workforce. If the sector's contribution to the tourism sector is included, these figures rise to 3,1% of South Africa's GDP, creating 343,000 jobs, or 2,6% contribution to the domestic workforce. ATNS is one of the vehicles that the Department of Transport uses to fulfil its responsibility to create employment for the youth and for previously disadvantaged communities. However, jobs can only be created in a growing market and an important avenue for ATNS to be exposed to greater economic growth potential is to expand into the African continent.

## Material Economic Sustainability Issues

### Building stable, reliable and sustainable infrastructure

This economic section is based on the following material issues to drive performance and enable a positive economic outlook. The issues are outlined below:

- Cyber and physical security of our operations incl. infrastructure
- Reliance on 3rd party service providers
- Operational efficiency, service reliability and network performance
- Capital infrastructure and reliable technology
- Improved supply chain management
- Disaster recovery and BCM planning

ATNS infrastructure planning is guided by the ASBU concept which aims to promote global quality standards for the maintenance and enhancement of aviation safety. Enabling such requires a structured planning and monitoring process for CNS (communication, navigation and surveillance) infrastructure. Within the business this planning and monitoring is guided by ATNS project management frameworks. ATNS has developed the ATM and CNS road map, which is aligned with the ASBU industry road map. The road map aims to build harmonisation of programmes to improve air traffic management and infrastructure, the removal of barriers to future aviation efficiency, and the achievement of environmental gains at a reasonable cost. By aligning with the ASBU concept, ATNS promotes various operational efficiencies, including fuel-efficient routing and optimal traffic flow.





This section outlines key economic material issues, performance and outlook.



## Material issue: Cyber and physical security of our operation

Why it matters to us	Reference to IR
<p><b>Cyber Security</b></p> <p>Incidents of cybercrime are on the increase nationally and globally, prompting corporates to implement proactive measures to protect the organisation against possible cyber-attacks. Cyber security has also been identified as one of ATNS' top ten risks and therefore is a priority for the organisation. ATNS cyber security response is integrated within the IT Strategy, which is aimed at repositioning Information Technology and leveraging on the competitive advantage created by innovative technologies. In the current reporting period, there has been a review of the IT strategy, with an increased focus on governance related to IT investment, reporting, business continuity and cyber security. Cyber security is a priority as it impacts on protection of key data, information and infrastructure assets of the organisation. In the highly interconnected world in which ATNS operates, vulnerability on our side can adversely affect our business partners, both suppliers and customers. Cyber security has therefore become a business imperative.</p>	Page 70 and 97
<p><b>Physical security</b></p> <p>ATNS' approach to physical security stems from the requirements of the National Minimum Physical and Information Security Standards policy directives and the Aviation Security policy requirements. It is further influenced by the increasing incidents of vandalism, break-in and theft at our remote CNS sites. The objective of physical security is to protect the personnel, assets and information of the company. The lack of physical security measures impact on the ability of ATNS to provide Communication, Navigation and Surveillance services if the equipment is vandalised. It further reduces productivity of staff members where they feel that they are not in a safe or secure environment.</p>	
<p><b>Management approach</b></p> <p><b>Cyber security</b></p> <ul style="list-style-type: none"><li>• Appoint Strategic Partner</li><li>• Develop Cyber Security Roadmap and Policy Framework</li><li>• Cyber Security Initiative Executive Sponsorship</li><li>• Conduct a vulnerability Assessment</li><li>• Implement cyber security initiatives</li><li>• Assess Maturity Level and Continuous Improvement</li></ul> <p><b>Physical security</b></p> <ul style="list-style-type: none"><li>• Develop standardised processes and procedures for the security management systems</li><li>• Develop and implement awareness training for Operation's Technology (OT) personnel delegated for security function</li><li>• Investigate the feasibility of training and registration of delegated Security OT personnel to comply with PSIRA</li><li>• Conduct a feasibility study for the centralisation of the security services</li><li>• Development of an Aviation security program for ATNS</li></ul>	

## Performance

### Cyber security

Performance measure	Target in 2017	Achievement in 2017	Focus for 2018
<b>Review of the IT strategy to inform approach to cyber security</b>	<ol style="list-style-type: none"><li>1. Obtain Executive Buy-in</li><li>2. Conduct Cyber Security Awareness Training</li><li>3. Conduct a technical assessment to identify vulnerabilities</li></ol>	<ol style="list-style-type: none"><li>1. Engaged CSIR as a strategic partner on Cyber Security</li><li>2. Identified areas of collaboration with strategic partner</li><li>3. Defined a program of action (project plan) for Cyber Security Initiatives</li></ol>	<p>Technical Assessment Executive Sponsorship</p> <p>Engagement of CSIR as a strategic partner has been concluded. ATNS and CSIR have agreed on areas of collaboration around cyber security and these areas are listed below in opportunities. One of the immediate steps to be undertaken this calendar year is to perform a technical assessment of the IT environment to determine vulnerabilities</p>

### Physical security

Performance measure	Target in 2017	Achievement in 2017	Focus for 2018
<b>Physical Security Standards for all different types of ATNS premises.</b>	<ol style="list-style-type: none"><li>1. Adoption of Physical Security Standards for all different types of ATNS premises</li><li>2. Conduct a feasibility study for the centralisation of the security services</li><li>3. Investigate the feasibility of training and registration of delegated Security OT personnel to comply with PSIRA</li><li>4. Develop a draft Aviation Security Programme for ATNS</li></ol>	<ol style="list-style-type: none"><li>1. Tender to appoint service provider to draft technical specifications and project manage the implementation of the standards awaiting appointment of service provider</li><li>2. Draft Integrated Security Policy establishes the requirement for a centralisation of the Security Services within ATNS</li><li>3. Legal opinion which militates against delegating security functions to Operational Technology</li><li>4. Draft Security Programme achieved</li></ol>	<p>Establishment and implementation of Integrated Security Steering Committee/ Forum</p> <p>Adopt Company specific strategic security threats, risk document/register</p> <p>Workshop and adoption of an Air Traffic Management Security Strategy and Implementation Programme:</p> <ul style="list-style-type: none"><li>• Cyber Security sub strategy and programme</li><li>• Personnel Security vetting and supplier screening procedure and programme</li><li>• Information/Document security classification and protection framework and standard</li></ul> <p>Roll-out of project to draft and implement physical security standards for ATNS premises</p>



Risk: Cyber and Physical Security			
Risk classification	Risk impact	Opportunities	ATNS's response
<ul style="list-style-type: none"><li>• Financial</li><li>• Institutional</li><li>• Regulatory</li></ul>	<p>Cyber Security has been identified as one of the organisation's top ten risks. Cyber vulnerability poses the following risks to the business:</p> <ul style="list-style-type: none"><li>• Loss of data for both operations and billing processes</li><li>• Inaccessibility of such data</li><li>• Confidentiality of employee data</li><li>• Customer and supplier data</li><li>• No access to productivity applications</li></ul> <p>The security measures are being reviewed with a view to close the gaps and improve the capacity to deter the incidents and increase the organisations ability to detect, delay, respond and recover from security incidents.</p>	<p>ATNS have agreed with the strategic partners to pursue the following opportunities, among others:</p> <ul style="list-style-type: none"><li>• Cyber Security Strategy with roadmap</li><li>• Enterprise Architecture (EA) Support</li><li>• Security Architecture</li><li>• Cyber Security Governance</li><li>• Technical Assessment</li><li>• Information Technology and Operations Technology Security</li><li>• Cyber Security Skills Capacity Development</li><li>• Cyber Security Awareness and Training</li><li>• Cyber Security Capability Implementation Support</li><li>• Smart User/Smart Buyer Support</li><li>• Business Continuity Management including Cyber security Incident Management</li></ul>	<p><b>Cyber security</b></p> <ul style="list-style-type: none"><li>• Appoint Strategic Partner</li><li>• Develop Cyber Security Roadmap and Policy Framework</li><li>• Cyber Security Initiative Executive Sponsorship</li><li>• Conduct a vulnerability assessment</li><li>• Implement cyber security initiatives</li><li>• Assess Maturity Level and Continuous Improvement</li></ul> <p><b>Physical security</b></p> <ul style="list-style-type: none"><li>• Develop standardised processes and procedures for the security management systems</li><li>• Develop and implement awareness training for Operation's Technology (OT) personnel delegated for security function</li><li>• Investigate the feasibility of training and registration of delegated Security OT personnel to comply with PSIRA</li><li>• Conduct a feasibility study for the centralisation of the security services</li><li>• Development an Aviation security program for ATNS</li></ul>



Material issue: Reliance on 3rd party service providers


Why it matters to us	Ref to IR
<p>ATNS Communications and Surveillance systems availability can be impacted by third party service providers, due to unreliable data and voice communication links. Where feasible, ATNS endeavours to use at least two different third party service providers to provide redundancy in the provision of data and voice communication links for remote Radio and Surveillance systems. In some cases, ATNS uses satellite links as a backup for terrestrial data and voice communication links. ATNS endeavours to have service level agreements with all third party service providers.</p> <p>In an effort to maintain and improve the services provided by 3<sup>rd</sup> party service providers, ATNS continuously measures their performance through the contracted Service Level Agreements. Redundant Communications and Surveillance system architecture, disaster recovery plans and other mitigation strategies reduce the negative impact that the reliance on 3<sup>rd</sup> party service providers may have on our business.</p>	Page 66 and 107
Management approach	
<ul style="list-style-type: none"><li>• Annual reviews of SLAs with the third-party service provider</li><li>• Annual review of the disaster recovery plan</li><li>• Regular emergency testing and contingency plan when there is network failure</li></ul>	
Risk, impact and opportunities	
<p>The reliance on third parties poses a risk and has been identified in the top 10 risk for ATNS. Details of impacts and effectiveness of the management approach is outlined below.</p>	

Risk: Increased dependency on third party service providers			
Risk classification	Risk impact	Opportunities	ATNS's response
<ul style="list-style-type: none"><li>• Financial</li><li>• Institutional</li><li>• Regulatory</li></ul>	<p>An over-reliance on third party service providers could result in institutional knowledge being drained from the Company rather than forming part of ATNS's institutional knowledge. Further, ATNS could face additional risks of non-compliance with safety or professional standards, which in turn may cause regulatory risks, reputational harm and financial losses.</p>	<p>ATNS can build lasting strategic partnerships with key suppliers and industry partners. These relationships should be built on trust, relevance, flexibility and be mutually beneficial. Skills transfer and process improvements can become an important aspect of these relationships, particularly in terms of the Company's expansion strategy.</p>	<ul style="list-style-type: none"><li>• Approved supplier database</li><li>• Service level agreements (SLAs)</li><li>• Annual review of the disaster recovery plans</li><li>• Regular testing of the contingency plans</li><li>• Supplier code of conduct</li><li>• ATNS training and leadership development programmes</li></ul>





## Performance

Performance measure	Target in 2017	Achievement in 2017	Indicator	Focus for 2018
Achievement of CNS Systems Availability	C: 99.67% N: 98.65% S: 99.77%	C: 99.80% <span></span> N: 97.98% <span></span> S: 99.99% <span></span>	 *Navigation performance not achieved	Improvements in CNS network availability and increased relations with third party providers (SENTECH, TELKOM, MTN)

## Outlook

- Annual review of the SLAs
- Annual review of the disaster recovery plans
- Regular testing of the contingency plans.
- Project to be initiated for the service provider to transfer skills to internal ATNS employees (Application Developers)
- Currently in the process of recruiting for the vacant Application Developer position



## Material issue: Operational efficiency, service reliability and network performance



Why it matters to us	Ref to IR
<p>ATNS' own economic sustainability is directly dependent on the demand for air travel. Ensuring operational efficiency and reliability for our customers would not only maintain and improve safety standards, but will also keep operating costs down, which in turn would ensure that air transport stays affordable and that the number of flights increases. Alongside the AFI expansion strategy, ATNS' focus remains firmly on the regulated business in terms of creating the necessary efficiencies that will translate to value-add for the client base (users). ATNS' information communications technology is hosted on the ATNS wide area network. Critical consideration is given to the equipment that is used to establish and maintain the network infrastructure. There is also a requirement to implement the highest level of security on the network to ensure that network integrity is maintained. Due to the complex nature of the network, network usage and availability is consistently monitored and maintained within pre-determined parameters.</p> <p>The SADC II and NAFISAT Very Small Aperture Terminal (VSAT) networks fulfil the region's communication requirements in terms of the ICAO Africa Indian Ocean (AFI) plan. The networks have succeeded in integrating a regional communications network, contributing to increased communication, allowing for greater safety on air traffic movements, and are financially sustainable.</p> <p><b>Operational Efficiency</b></p> <p>Air traffic movement refers to aircraft take-off or landing at an airport. The aircraft movements include all arrivals, departures and training operations at all airports within the ATNS mandate. As part of our provision of air traffic services, ATNS manages around 600 050 IFR flights yearly which operate between more than 25 city pairs domestically and regionally. One of ATNS' strategic objectives is to improve operational efficiency and cost effectiveness of air traffic services. Air Navigation Service Providers (ANSPs) globally</p>	Page 98, 115 - 116 and 129



are continuously pressured to provide services that maximise the efficient use of airspace and airport capacity and therefore facilitate the efficient flight concept for the benefit of the airspace users, and thereby assist airlines in managing their operating costs. In the current reporting period, ATNS recorded a cumulative total of 1 089 471 movements.

### Arrival & Departure Delays

Average delay per flight delay (ADD) is a metric that gives an indication of the severity of delays. ATNS has an ADD target of 2 minutes (120 sec). The delays are measured at two levels: the average delay per flight and the average delay per delayed flight. These delays are reported as part of the DoT KPI performance metrics measures. ATNS routinely measures departure delays arising from any operational disruption attributable to among others: ATNS, airport operators, airline operators, weather and other air navigation service providers.

### Airborne Delays

Currently, no automated methodology exists for the determination of airborne delays and the analysis of individual flights is the only means of assessing the extent of such delays. The flight plan times (for various routes between major city pairs) are used to measure airborne delays. Delays are calculated on a quarterly basis by comparing the Estimated Elapsed Time (EET) of the flight plan and the time difference between departure times and landing time. Only flights for which actual departure times, actual elapsed times, and flight plan EETs are available are used in this data analysis. The contributing factors to these delays are not described, as it is not possible to determine whether the delay was due to head-wind, weather avoidance, inaccurate estimated elapsed time provided, or ATNS related restrictions and en-route holding.

### IT Network

ATNS recognises it is crucial to have adequate and optimal IT network infrastructure to ensure continuous business operations and high quality customer service. Network performance is important to the service that IT provides to the business. ATNS' geographic location in relation to the main IT location, which is at Head Office, influences the response time in addressing some of the network performance issues. As a result, solutions that continuously monitor network performance revolves around the need to establish or adopt methods to monitor network to ensure the successful protection of the business' information.

In the current reporting year, ATNS conducted a network health assessment to assess the level of performance on the network. This included reliability, incident response time and gap analysis. A comprehensive action plan has been compiled to address gaps and provide a road map.

### Communications Navigation Aid and Surveillance Systems Availability

To provide safe, expeditious and efficient Air Traffic Management Services, comprehensive Air Traffic Management infrastructure, Communications, Navigation and Surveillance systems have to have high operational availabilities to ensure high level safe and efficient Air Traffic Management Services. ATNS has set the following system availability targets for its Air Traffic Management infrastructure:

Communications	99.67%
Navigation Aids	98.65%
Surveillance	99.77%



Management approach	
<p><b>Operational Efficiency</b></p> <ul style="list-style-type: none"><li>• Monitoring Arrival &amp; Departure Delays in accordance with performance target</li><li>• Supervision of service delivery by unit managers to ensure proper planning and directing of air traffic service requirements are achieved</li><li>• Continuous training of air traffic service personnel</li><li>• Management training to ensure enhancement of employee morale</li><li>• Ensure more accurate estimated elapsed time is provided</li></ul> <p><b>Service reliability</b></p> <ul style="list-style-type: none"><li>• Maintaining Air Traffic Management infrastructure</li><li>• Investment in CNS Technology</li><li>• ATNS infrastructure development and CAPEX investment plan</li></ul> <p><b>Network reliability</b></p> <ul style="list-style-type: none"><li>• Monitor infrastructure performance in line with SLA</li><li>• Developing Enterprise Architecture to enable systematic approach in addressing IT issues including the unstable IT network</li><li>• Real time and predictable performance monitoring of IT network</li></ul>	

Risk: Improved operational efficiency, service reliability and network performance			
Risk classification	Risk impact	Opportunities	ATNS's response
<ul style="list-style-type: none"><li>• Financial</li><li>• Institutional</li><li>• Regulatory</li></ul>	<p>Overall business operations and possibly financial impacts as a result of delayed and inability to provide a service. These impacts have a ripple effect and ATNS has to provide a service to the aviation industry and South African public, therefore the impact crosses the boundary to ATNS business. As a result, the business image and reputation might be compromised if the service is not reliable or achieved as defined in service level agreements (SLA).</p> <p>Improving flight efficiency in our service delivery will become critical going forward in line with environmental objectives and efficiencies to support the airlines to reduce cost and enable environmental efficiency programmes. At a global level, air traffic management is continuously identified as one of the major drivers of fuel efficiency in flight operations. While this objective is mainly part of the ANSP's function, the airport owners are impacted directly and therefore inefficiencies at airports should be considered as a business risk for ANSPs with airport owners trying to find solutions for such inefficiencies.</p>	<p>ATNS has an opportunity to improve overall efficiency given the financial stability. Therefore investment in effective tracking systems is possible. Furthermore ATNS can leverage current regional partnerships with key suppliers and airlines.</p>	<ul style="list-style-type: none"><li>• Implementation of a comprehensive operational efficiency programme to monitor performance of service provided by ATNS to the customers</li><li>• Proactive network assessment and monitoring tools</li><li>• Service level agreements (SLAs)</li></ul>



Risk: Inflexible and inefficient operations			
Risk classification	Risk impact	Opportunities	ATNS' response
<ul style="list-style-type: none"><li>• Physical</li><li>• Institutional</li><li>• Financial</li><li>• Reputation</li></ul>	<p>Inflexible and inefficient operations could have a critical impact on the business, including major safety events. Operational inefficiencies impact the availability and reliability of ATNS' services and can also have critical environmental impacts. Operational inefficiencies can further result in poor service, financial losses and reputational risk.</p>	<p>ATNS's focus remains firmly on creating the necessary efficiencies that will translate to value-add for its clients (users). The recently approved permission cycle 2015/16 – 2019/20 will provide an opportunity to achieve the most efficient structure for ATNS to meet its strategic objectives and to deliver operational performance and cost- effectiveness.</p> <p>ATNS has a history of financial statements to effectively support the organisations operating costs and other areas.</p>	<ul style="list-style-type: none"><li>• Continuously engage with stakeholders to influence legislation</li><li>• Procurement and implementation of operational performance reporting tool which will enable the collection and analysis of operational data</li><li>• Implementation of ATS Resource Tool that will assist in optimum staff utilisation</li><li>• Participation in development of Airport Slot Management and compliance framework</li><li>• Participation in national airspace design review and upper airspace project and other regional initiatives</li><li>• Participation in appropriate ICAO and regional forums</li><li>• Participation in Collaborative Decision Making (CDM) process with all stakeholders including neighbouring ANSPs</li></ul>







## Performance

Performance measure	Target in 2017	Achievement in 2017	Indicator	Focus for 2018
Achievement of CNS Systems Availability	C: 99.67% N: 98.65% S: 99.77%	C: 99.80% N: 97.98% S: 99.99%	  *Navigation performance not achieved	Improvements in CNS network availability and increased relations with third party providers (SENTECH, TELKOM, MTN)
Operation of the satellite communication networks SADC VSAT 2	SLA - 98.5%	SADC 99.89%		Achievement of the network availability as per SLA targets.
Operation of the satellite communication networks NAFISAT	SLA - 98.5%	NAFISAT 99.94 %		Achievement of the network availability as per SLA targets
Reduce overall traffic delays (average delay per flight)	120 seconds	33 seconds		Delay performance monitoring in accordance with targets
Implement ICAO PBN concept in South Africa  Near-term implementation targets in line with South African PBN Roadmap	4 Design Reports for submission to SACAA (RNP APCH)	3 Design Reports for submission to SACAA (RNP APCH)  RNP APCH in 100% of instrument runways located at ACSA airports		Implementation of South African PBN road map to support overall ATM road map in line with the ASBU road map
	10 Design Reports for submission to SACAA (RNAV 1 and 2 SID/STAR)	10 Design Reports for submission to SACAA (RNAV 1 SID/STAR)		
	8 Design Reports for submission to SACAA (RNP APCH)	8 Design Reports for submission to SACAA (RNAV 1 SID/STAR)		



## Material issue: Capital infrastructure and reliable technology

Why it matters to us	Ref to IR
<p>ATNS' investment in cutting-edge technology is a central service enabler to create advanced infrastructural value for the Company and the country's air traffic navigation sector. Our Infrastructure Investment Strategy and Capital Expenditure Plans are key enablers of this infrastructure value. Our infrastructure development is informed by regulatory requirements at a global level, new enabling technologies and the need to address the specific requirements of the air traffic management (ATM) community. A critical guiding paradigm is that of the International Civil Aviation Organisation (ICAO) Aviation System Block Upgrades (ASBU) concept. ATNS recognises the crucial role of deploying innovative technology and continues to implement the Collaborative ATNS Air Traffic System (CAATS), which will enable a new era to automated operational technology infrastructure. Overall infrastructure deployment is actively consulted through a regulated process to enable users to support and align to the new technological changes. The South African aviation infrastructure is considered as one of the best in the world, contributing to the country's aviation safety record. It is, therefore, imperative that we continue to invest wisely in this infrastructure to support the country's overall transport infrastructure.</p> <p><b>Local supplier development</b></p> <p>The ATNS CAPEX roll out plan is mainly dependent on third party suppliers. ATNS is pressured as a state owned company to respond to the broader society and economy to enable and support local procurement through the company's Enterprise and Supplier Development Strategy (refer to page 100 for details).</p> <p><b>Management approach</b></p> <ul style="list-style-type: none"><li>• ATNS CAPEX infrastructure plan which is based on the 5 year permission application</li><li>• Implementation of the ASBU Road Map which encompasses the CNS (Communication, Navigation and Surveillance) Road Map, ATM Road Map, and the PBN (Performance Based Navigation) Implementation Plan.</li><li>• Industry communication of infrastructure plan through the permission application process.</li><li>• ATNS approved permission application by the Minister of Transport.</li><li>• Rigorous Project Management approach to monitor infrastructure implementation for the next 5 years.</li><li>• Developing and monitoring local supplier development programme.</li></ul> <p><b>Risk, impact and opportunities</b></p> <p>Compliance to the approved Permission is important to ATNS long term sustainability. Therefore, the spent on CAPEX is key to the business performance and a result of continued non-performance to CAPEX expenditure, which leads to "claw-backs" where the industry may request return of funds paid for projects not delivered by ATNS.</p>	Page 91, 108 and 113



Risk: Improved capital investment and enabling reliable technology			
Risk classification	Risk impact	Opportunities	ATNS' response
<ul style="list-style-type: none"><li>Physical</li><li>Institutional</li><li>Financial</li><li>Reputation</li></ul>	Compliance to the approved Permission is important to ATNS long term sustainability. Therefore the spent-on CAPEX is key to the business performance and a result of continued non-performance to CAPEX expenditure, which leads to "claw-backs" where the industry may request return of funds paid for projects not delivered by ATNS.	ATNS ability and increased brand reputation enable the organisation to gain confidence of shareholder and aviation industry as a result of the organisation's ability to implement leading technology in the continent.	<ul style="list-style-type: none"><li>Continuously engage with stakeholders to approve CAPEX projects as indicated in the draft permission application</li><li>Implementation of supply chain model to support CAPEX implementation</li><li>Local supplier incubation and training programme to enable B-BBEE compliance and supplier opportunity in the core value chain</li></ul>

## Performance

Performance measure	Target in 2017	Achievement in 2017	Indicator	Focus for 2018
Adoption and approval of CAPEX implementation of CAPEX 2016/17 Strategic plan, Roadmap and operational plan	R115m	R127.86m		R131m

## Outlook

- The current policies, processes and procedures are reworked and optimised to achieve integration and coherence and effective drive of the CAPEX projects through effective project management processes and tracking projects at all phases in respect of commitment, cash flow and capitalisation phases;
- Enabling of implementation through the use of existing governance committees from board and operational committees;
- Finalisation of the 2018 – 2020 permission application by June 2018 to enable approval of tariffs structure and projects by the users, Regulating Committee and Minister. Furthermore, the following will be prioritised to meet CAPEX objectives:
  - Accelerate local supplier development and enable supplier joint venture and knowledge and skills transfer programme
  - A new Capital Expenditure Delivery Framework is being developed that will improve CAPEX delivery
  - Deployment of ATNS infrastructure in line with the goal of being an ATM technology innovator in the African continent and ensuring operational efficiencies.
  - Monitor infrastructure performance through service level agreement targets.



Table 9: ATNS Capital Expenditure Actual vs Projections

Description	Target	Actual	Current Budget	Projections	Projections
	2016/2017	2016/2017	2017/2018	2018/2019	2019/2020
TOTAL	115,171,668	131,543,169	134,680,558	179,214,402	115,739,138



## Material issue: Improved supply chain management

Why it matters to us	Ref to IR
<p>ATNS identified supply chain management as one of the key business enablers and more specifically the implementation of CAPEX projects. In that regard, a supply chain model was developed to ensure implementation of acquisition of goods and services at the right price, time and quantity within approved procurement processes. The model was approved by EXCO and Board for implementation in the 2017/18-2018/19 financial years. In addition, the supply chain policy and structure will be reviewed to ensure alignment to National Treasury recommendations.</p> <p>In the current reporting period, ATNS facilitated national roadshows to source service providers that meet the Company's Preferential Procurement requirements (≥51% black owned and/or ≥30% black female owned). There was an overwhelming response from service providers, with workshops conducted in Cape Town, Durban and Johannesburg. ATNS' Operations Technology department highlight services that ATNS most requires and the legislation governing the Aviation space.</p> <p>Following the workshops, ATNS selected 20 Engineering Service Providers – using set criteria – to participate in a pilot Incubation programme to prepare suppliers to participate in the Aviation sector; and to compete meaningfully with multinationals that are already operating in this space in the current reporting period.</p>	Page 107 and 111













Strategic goals	SCM Model	Outputs	
<div>Supply Chain Management strategy aligned to business objectives</div> <div>Integrated SCM Operating model and supporting Organisational structure</div> <div>High-performance Supply Chain Management</div> <div>Achievement of ATM/ CNS &amp; ESD mandates</div>	<p><b>Figure 19</b></p> <p>The diagram illustrates the Integrated SCM model, centered around four main pillars: Demand Management, Acquisition Management, Transformation, and Supplier Management. These pillars are further broken down into specific functional areas. The model is supported by IT and PMO (Project Management Office) across all levels. The diagram is divided into two main horizontal sections: Effectiveness (left) and Efficiency (right).</p>	<p>An Integrated Supply Chain Management operating model to enable</p> <p>Integrated Supply Chain Management</p> <ul style="list-style-type: none"><li>• End-to-end value chain (from demand to disposal)</li><li>• Strategic and holistic business imperatives</li><li>• Best practice focus</li></ul> <p>Interfaces between teams during planning, commitment and implementation</p>	
		<p><b>Management approach</b></p> <ul style="list-style-type: none"><li>• Implementation of the approved supply chain model</li><li>• Capacitate the current approved supply chain structure</li><li>• Change management and communication plan to roll out model to enable improved efficiency</li><li>• Review policies, procedure and business processes</li><li>• Enterprise development plan and accelerate incubation of local suppliers</li><li>• Preferential procurement regulations</li></ul> <p><b>Risk, impact and opportunities</b></p> <ul style="list-style-type: none"><li>• Lack of CAPEX expenditure due to inefficient supply chain processes and inadequate structure to support business</li><li>• Increased possibilities for procurement irregularities</li><li>• Non-compliance to legal requirements (Treasury requirements)</li></ul>	



Risk: Inefficient supply chain processes and inadequate structure to support business.			
Risk classification	Risk impact	Opportunities	ATNS's response
<ul style="list-style-type: none"><li>Failure to successfully implement SCM Operating Model</li></ul>	<ul style="list-style-type: none"><li>Delays in procuring goods and services resulting in poor Air Traffic Management and related services</li><li>Clawback</li><li>Customer dissatisfaction</li><li>Irregular expenditure</li><li>Loss of business</li><li>Failure to transform the industry</li><li>Over pricing of services</li><li>Non adherence to Supply Chain Management Policy</li><li>Bad reputation due to non-delivery</li><li>Inability to achieve the Greenhouse Gas Emission Reduction targets for ATNS</li><li>Non-compliance to environmental legislation</li></ul>	<ul style="list-style-type: none"><li>Increase reputation especially for non-regulated business</li><li>Self-funding</li><li>Ensure that future CAPEX acquisition contributes to emission and environmental impact reduction</li><li>Black owned supplier will partake in the provision of CNS services</li><li>Job creation</li><li>Set aside projects targeting designated groups or suppliers</li></ul>	<ul style="list-style-type: none"><li>Organisational readiness for change -organisational resistance will result in failure to successfully implement</li><li>Team commitment to the entire process</li><li>Adding environmental specifications may increase the CAPEX cost in the short term. The benefits from environmental compliance will improve business sustainability e.g. avoiding fines resulting from non-compliance</li><li>Develop Demand Management strategy. This will provide guidance on areas where ATNS can develop EME black owned suppliers, graduate and become service providers</li><li>Clear procurement acquisition strategy must be developed to indicate services that can be procured by Black Owned EMEs within the equipment value chain</li></ul>



Performance

Performance measure	Target in 2017		Achievement in 2017	Indicator	Focus for 2018
Adoption and approval of CAPEX implementation of CAPEX 2015/16 Strategic plan, Roadmap and operational plan	R115m		R318m		R134.68m
B-BBEE					
	Transport charter targets	Atns targets	Achievement in 2017	Indicator	Focus for 2018
Management Control	10	7	7.50		10
Employment Equity	15	13	16.12		15
Skills Development	25	20	24.34		25
Preferential Procurement	30	20	30.00		30
Enterprise Development	15	10	11.55		15
Socio Economic Development	5	5	5.00		5
<b>B-BBEE</b>			Level 3		Level 2
<b>Total</b>	<b>100</b>	<b>75</b>	94.51		

Broad-Based Black Economic Empowerment (B-BBEE) aspects

Broad-Based Black Economic Empowerment (B-BBEE) contributes directly to the economic transformation of South Africa and aims to bring about substantial increases in the numbers of black people that manage, own and have a controlling stake in the country's economy. It further intends to significantly decrease income inequalities. ATNS internal BBBEE report is measured against the Old Transport Public Sector Sub-Sector Codes, Gazette 21, August 2009 mainly because the Draft Amended Transport Public Sub-Sector BBBEE Codes are awaiting sign off by the Minister.

ATNS, as a Public Entity, wholly owned by the Department of Transport, is exempt from complying with the ownership element of the BEE scorecard. The Company complies with the adjusted generic B-BBEE scorecard. The scorecard addresses six areas, namely: 'management control', 'employment equity', 'skills development', 'preferential procurement', 'enterprise development' and 'socio-economic development'. In the current reporting period the company maintained a BEE level of 2 when compared to the 2015/16 financial year. ATNS has developed a strategic plan to address the B-BBEE challenges. The plan aligns with the South African Government's transformation initiatives of job creation, poverty alleviation and skills development. The plan is continuously being reviewed to determine relevance to the new B-BBEE codes and enable performance.



## Local supplier development

ATNS' Enterprise and Supplier Development strategy supports and develops emerging black owned suppliers in the aviation industry. Due to the small number of black-owned suppliers in this sector, ATNS aims to identify suppliers in these strategic areas to participate more meaningfully in the aviation industry going forward. ATNS through its Enterprise and Supplier Development designed an Incubation Programme for twenty Engineering Suppliers. An intense gap analysis audit was conducted to identify gaps and relevant interventions were employed to those identified gaps. This exercise was prompted by the minimal black owned companies participating in the Aviation space. This programme is intended to develop these suppliers to be active suppliers to ATNS and do business beyond ATNS. Furthermore, to support CAPEX projects by getting local suppliers to participate in the Communication Navigation and Surveillance (CNS) space, and to engage multi-nationals to partner with local black owned suppliers and transfer the skills for installation and maintenance of the equipment. These initiatives are intended to support current and future CAPEX projects to enable black owned companies to participate in the CNS space.



## Material issue: Disaster recovery & business continuity plan



Why is matters to us	Ref to IR
Disaster Recovery Plan provides a strategy for the organisation to continue its service provision when some or all of its critical operations are not available due to a disaster occurring. Given the uncertainty of the global economy as well as the alarming climate changes occurring in the past couple of years, implementing a continuity plan represents a critical risk management step no business owner should ignore. This plan will give the organisation an advantage in the aviation industry, while providing a safety net; it will also protect the organisational image, which is key in this industry. An assessment was conducted in the FAOR SSS which was designed to provide a disaster recovery for the FAOR ATS and CAMU operations and it was found to be inadequate.	Page 66, 67, 69, 97 and 107
Management approach	
A plan was then developed to mitigate this inadequacy as follows: <ul style="list-style-type: none"><li>A phased approach was adopted, prioritising ATS and FAOR, FALA and FALE as Phase 1 and included in the permission plan Disaster Recovery Plan. Phase 1 is planned for the 2018 2019 permission in line with the CAPEX Plan of the 2018/19 – 2022/23 Permission.</li><li>Phase 2 will focus on Cape Town and the other southern airports (FAEL, FAGG and FAPE). The Disaster Recovery team will be going to Cape Town to assess the SSS's readiness as a disaster recovery centre.</li><li>Phase 3 will focus on the Non-Regulated/Regional airports. The Model, in cooperating IT and Security, is currently being developed and should be concluded by end of July 2017 and the Disaster Recovery Plan is also being developed and should be done by August 2017.</li></ul>	
RISK, IMPACT AND OPPORTUNITIES	
This aspect that been identified as one of the top ten (10) organisational risks and the impact has been determined as catastrophic if it were to happen. Details regarding effectiveness of management control is detailed below.	



The impact/risk of not having a mature Disaster Recovery Plan is as follows:

- Should a catastrophic event take place at the main equipment room and a disaster recovery platform be required.
- The redundant server for the CAMU system would be isolated with no major external interfacing e.g. CAMU WEB and connection to the Regional Airports rendering very limited functionality.
- The disaster recovery platform would have limited external interfaces for the ATM management inputs services, connection to the adjacent remote control units, limited telecommunication means to the other controlled airports and very limited connection to the end-users and the ATM stakeholders.
- Without the recording capability and disaster recovery operations from the FAOR SSS building would be in contravention of the SACAA part 172 regulations.
- The current provisions for the VHF installation would offer limited controlled airspace coverage for the air traffic controller to pilot communications and may not support business continuity requirements.
- There would be no contingency frequencies in place for the FAOR West sector, emergency frequency 121.5 MHz and the D-ATIS 126.2 MHz frequency.
- There would also be no equipment status indication during the disaster recovery operations.
- In summary, the disaster recovery platform offers complete redundancy at the ATM systems level should there be degradation with the performance of the main system. However, it offers a limited disaster recovery platform in case of catastrophic event with the main operations centre given the limited integration of all the operational systems.

## Performance

Performance measure	Target in 2017	Achievement in 2017	Focus for 2018
Roll out disaster recovery plan	Roll out disaster recovery plan	Replication of ATNS business data information for OR Tambo has been initiated.  Currently an assessment to the FAOR SSS has been completed.  The requirement for the FAOR SSS to meet the required Disaster Recovery Plan (Phase 1) has been completed and included in the next permission (2018/2019).	This has been identified as one of the strategic critical issues for ATNS 2017/18 financial year and the priority is to develop an enterprise wide plan and test readiness.  The FACT SSS assessment was scheduled for 8 June 2017.





## Material issue: Maintaining financial sustainability within a regulated environment



Why it matters to us	Ref to IR
<p>As a State-Owned Company, ATNS' financial dividends are re-invested in the business. Furthermore, we are mandated by our Shareholder, represented by the Minister of Transport and the entire Department of Transport, to deliver on the Government's developmental mandate with the awareness that we have a broader responsibility to the entire South African nation.</p> <p>Our mandate from Government requires us to act as a primary catalyst for economic growth and job creation in South Africa; and to deliver considerable economic outcomes to society through operational efficiencies, competency development, new market development, job creation, local supplier development, ethical business practices, regulatory compliance, and the prudent and efficient use of natural resources.</p> <p>Whilst the social and environmental sustainability interests of the Company will be elaborated on further in this report, this section on economic sustainability is chiefly concerned with the following material drivers of economic growth:</p> <ul style="list-style-type: none"><li>• Maintaining long term financial sustainability and growing revenue in ATNS' non-regulated business.</li><li>• Protecting South Africa's economic interests and trade.</li><li>• Creating employment opportunities for our employees and the broader South African citizenry.</li><li>• Playing a leading role in development of Air Traffic Management in Africa and selected markets.</li><li>• Deploying and using leading technologies in the ATM community.</li><li>• Delivering continuous improvement in air traffic safety performance.</li><li>• Providing efficient Air Traffic Management solutions and associated services which meet the needs and expectations of the ATM community.</li></ul> <p>In the financial year 2016/2017, South Africa's subdued economy presented a double-edged sword for the local tourism and aviation sectors, with the weakening Rand attracting international inbound tourism on the one hand but slowing down domestic travel on the other. Additionally, with the South African Reserve Bank raising interest rates, local consumer spending – and hence spending on domestic air travel – was adversely impacted by reduced disposable income. The tough market conditions resulted in some airlines discontinuing operations altogether. Adding further pressure to our financial capital, ATNS did not increase tariffs during the year. However, a 2% increase in overall air traffic movements helped to mitigate the negative impact of the zero tariff increase, which will be amended and gazetted when the Regulating Committee (RC) concludes the new Permission application process.</p> <p>At present, ATNS takes a more robust and agile stance in the non-regulated business market without posing undue risks to its regulated market and Shareholder. It will also enable ATNS to enter joint ventures and partnerships with external suppliers so that the Company can harness more valuable market opportunities whilst extending its regional influence. The Company is in a sound financial position in that it has access to sufficient borrowing facilities to meet its foreseeable cash requirements. Challenges still prevail as impact of the permission, because Capital expenditure was declined.</p> <p>In the reporting year, the company had a zero tariff increase in air traffic charges which had a negative impact on the overall company's profits. However, a slight increase in air traffic movements and the strength of the Rand against the Dollar contributed to an increase in revenue.</p>	Page 113 and 128

Management approach
<ul style="list-style-type: none"><li>• Complete and implement the ATNS Governance Model</li><li>• Complete and implement the supply chain operating model to achieve economies of scale</li><li>• The ATNS 10-Year Business Plan</li><li>• Africa expansion strategy</li><li>• The ATNS ATM Roadmap</li><li>• The Africa Indian Ocean (AFI) Strategy implement</li><li>• Capital Investment Strategy</li><li>• Sound financial management</li></ul>

Financial sustainability			
Risk classification	Risk impact	Opportunities	ATNS's response
<ul style="list-style-type: none"><li>• <b>Financial</b></li><li>• <b>Reputation</b></li></ul>	Regulating Committee (RC) restricts revenue from tariffs by a price cap. This has a potential of limiting revenue growth within the South African market. Further, the maturity of ATNS' domestic operations will create future challenges for the business to generate new customers in South Africa.	It is imperative for ATNS to secure future growth and revenue by broadening its service offerings to other markets. The business' Africa strategy provides opportunities to maximise revenue and strengthen ATNS' position globally. Furthermore, the functioning of the industry's economic regulation is also undergoing a review of the Funding Model used for the economic regulation of ACSA and ATNS. ATNS is actively collaborating with the Regulating Committee to ensure sustainable and favourable outcomes for the industry.	<ul style="list-style-type: none"><li>• Continuously monitor and highlight non-compliance at executive level.</li><li>• Lobbying for approval of the ATNS permission application and ensure adheres to approved permission i.e. CAPEX.</li></ul>



## Performance

Performance measure	Achievement in 2016	Target in 2017	Achievement in 2017	Indicator	Focus for 2018
Cash generated	R414 million	-	R415 million	↑	Deliver on organisational objectives as outlined in the corporate score card
Turn over	R1,509 billion	-	R1,557 billion	↑	Deliver on organisational objectives as outlined in the corporate score card
Capital commitment	R491 million	R115 million	R127,86 million	↓	R131 million
Capital Exepediture	R230 million	R201 million	R318 million	↑	R124 million
Meeting financial target as per Budget	D/E = 0 C/A = 6:3:1 ROCE = 0%	D/E = 10-45% C/A = 2:5:1 ROCE = 12.6%	D/E = 0% C/A = 5:2:1 ROCE = 9.6%	↓ C/A achieved	
Operation of the satellite communication networks SADC VSAT 2	R47,5 million	R42,2 million	R49,0 million	↑	Achievement of the network availability as per SLA targets
Operation of the satellite communication networks NAFISAT	R39,01 million	R32,7 million	R42,3 million	↑	Achievement of the network availability as per SLA targets
Payment to shareholder	0	0	0		
Non-regulated revenue		R160 million	R186 million	↑	R206 million



## Material issue: Increased operating costs and regional airport reliance

Why it matters to us	Reference to IR
<p>The largest anticipated contributor to the growth in aircraft movements between 2015 and 2024 will be within the Africa-Europe trade region, followed by Intra-African aircraft movements. From 2015 to 2024 the average annual compound aircraft movement growth in Africa-Europe and Intra-Africa will be 4,5% and 7,5% respectively. This growth is primarily due to anticipated increases in trade in Africa. As a fully commercialised entity operating in the African market, ATNS could also be a beneficiary of the increase in trade flows between BRICS nations and the rest of the African continent. ATNS continues to monitor operating costs within the business and implements effective cost reduction measures where necessary in line with Treasury policies.</p> <p>ATNS' additional revenue is influenced by the regional or private owned airports. Debt recovery is challenging as there are delays in payments from these airports. The organistion is still focused on providing services to these airports as part of the national objective and the mandate set out in the Act. The organisation will focus on finding amicable resolution to address payment and service level issues.</p> <p>Operating costs increased by 4%, mainly due to increased staff costs, telecommunication expenses as well as the impact of the fluctuating foreign exchange rates on our administration and contract maintenance costs. This resulted in our operating profit decreasing by 20% compared to prior years which led to our cash flow margins deteriorating to 25% (2016:30%).</p>	Page 113, 131 and 139-140
Management approach	
<ul style="list-style-type: none"><li>• Effective cost management and tracking of operational spending</li><li>• Enforce internal policies and procedures on operational spending through effective performance management organisation wide</li><li>• Maintain staff cost and align to the approved permission staff complement numbers</li><li>• Monitor maintenance cost and contracts</li><li>• Dedicate personnel resources to recover regional airport funds and ongoing consultation as well as agreement need to be maintained.</li></ul>	
Risk, impact and opportunities	
<p>The increase in operational costs need to be effectively tracked and monitored as increased cost may escalate and impact the financial sustainability of the business resulting in non-viability of the business. Therefore, ATNS needs to ensure that costs for OPEX and CAPEX are kept at a minimum, ATNS staff complements are 80% core and 20 non-core (support). Therefore, the organisation needs to maintain such in line with the approved permission.</p>	



## Performance

Performance measure	Target in 2017	Achievement in 2017	Indicator	Focus for 2018
Operating Costs	R1,254 billion	R1,300 billion		Deliver on organisational objectives as outlined in the corporate score card

## Material issue: Regulatory uncertainty in the permission application

Why it matters to us	Ref to IR
<p>The Regulated business carried out by ATNS is a statutory requirement governed by the ATNS Act (Act 45 of 1993) and as a state owned entity, the organisation is mandated by the Shareholder, the Department of Transport (DoT). In this regard, ATNS is a monopoly and regulated economically by the Economic Regulating Committee (RC) that is a statutory body formed and appointed by the Shareholder, the DoT.</p> <p>In 2014, ATNS applied for a permission in line with the ATNS Act for the 2015/16 – 2019/20 period. Due to the delays attributed to the RC administrative challenges, the RC granted ATNS zero tariff increase starting 1 April 2015 to mid-December 2016 to enable ATNS to have a valid Permission in line with the applicable Act. On 21 December 2016, the Minister of Transport approved the permission application for ATNS. This authorised ATNS to levy air traffic services charges for the 2015/16 – 2019/20 period. Subsequent to the issuance of the final Permission, ATNS has published the amended charges in the Government Gazette of 30 December 2016 to become effective from 1 April 2017 to 31 March 2020. The amended charges in the Government Gazette, published on 30 December 2016 to supersede the Zero Tariff Increase Permission. In the current period, ATNS inability to spend the CAPEX budget provided, the organisation was requested by the Regulating Committee to pay a claw back of R454m. This money will be paid over a period of three years effective from 2017.</p> <p>ATNS' permission is also influenced by the uncertainty of the economic regulation. The Shareholder policy of implementing a Single Transport Economic Regulator (STER) results in a great uncertainty as the immediate impact is not yet known. Furthermore, the mechanism and legislative amendment will need to be implemented. ATNS identifies this as an emerging risk to the company and will keep on monitoring developments.</p>	Page 93
Management Approach	
<ul style="list-style-type: none"><li>Working with industry (users) to set out a shortened consultation schedule for the development of permission modules/financial model and internally with the Board to agree on a fast tracked application process.</li><li>ATNS and ACSA will need to discuss and agree on the approach to funding the developmental work for legislation and regulation through earmarked and dedicated budget allocation through internal processes and approvals.</li><li>ATNS will have to mobilise Subject Matter Experts (SMEs) internally to be able to respond and give input to the development process alongside ACSA and Users.</li><li>ATNS playing a role in current amendment to current regulations and legislation and monitoring developments on STER.</li><li>Effective monitoring and implementation of the approved permission application.</li></ul>	



Risk, impact and opportunities
<ul style="list-style-type: none"><li>Inability to levy the proposed tariffs due to permission application not being approved and users not in agreement with the tariffs' structure and the information contained in the proposed permission modules.</li><li>Inability of ATNS to effectively monitor the implementation of the approved permission, results in lack of confidence by the regulator and industry, thereby resulting in on-going clawback, future low tariffs being accepted by the industry and ultimately inability of ATNS to remain financially viable to support the regulated mandate as per the Act.</li></ul>

Risk 4: Structural economic challenges in South Africa			
Risk classification	Risk impact	Opportunities	ATNS's response going forward
<ul style="list-style-type: none"><li>Physical</li><li>Financial</li></ul>	Slow rates of global and local economic growth, volatile commodity markets, widening social inequality, structural unemployment and skills shortages in South Africa have a direct impact on ATNS's business, its customers, funders, employees and suppliers.	As a State-Owned Company, ATNS is mandated by the Department of Transport to create employment, particularly for unemployed youth and previously disadvantaged communities and to boost local supplier development. New product and market developments in the regulated business – as well as ATNS's Africa expansion strategy – are ideal vehicles to achieve these critical developmental imperatives.	<ul style="list-style-type: none"><li>Implementation of human capital plan to address skills shortages (to be done as part of approved strategy).</li><li>Remuneration review (included in reward philosophy).</li><li>HC to formalise Succession Planning for core critical positions (included in reward philosophy).</li><li>All JDs to be reviewed (included in reward philosophy).</li><li>Retention and transfer of the institutional knowledge.</li><li>Implementation of talent management plan.</li><li>Expedite ATNS regulated and non-regulated business model.</li><li>Fast tracking of ATNS enterprise development programme to support business objectives.</li></ul>





Performance

Performance measure	Target in 2017	Achievement in 2017	Focus for 2018
Permission application 2015/2016 – 2019-20	Approval of the Permission application 2015/2016 – 2019-20	Levy air traffic services charges for the 2015/16 – 2019/20 for the approved permission	User consultation and Submission of the 2017/18 – 2022/23 permission application  Monitoring of the 2015/2016 – 2019-20 permission application

Outlook

- ATNS remains positive as a result of the new Regulating Committee reviewing certain decisions and finalising the companies’ 2015/2016 – 2019-20 permission.
- ATNS to commence with the planning and consultation for a permission application for the financial years 2017/18 until 2022/23. The next period of the permission in the new financial will involve continued module development and finalisation, leading to the assumed target date of June 2017.

Table 10: AAGR (Average Annual Growth for current 2015/16 permission)

AAGR	15/16	16/17	17/18	18/19	19/20
Revenue	3,02%	1,77%	2,06%	2,91%	3,57%
GA	-5,64%	0,60%	-0,09%	0,26%	0,20%
TOTAL	-0,34%	0,91%	1,09%	1,42%	1,77%



SOCIAL PERFORMANCE



This section outlines key social material issues and performance.



Material issue: Increasing employee development, wellness and employment equity

Why is matters to us	Ref to IR
<p>ATNS has an explicit role to play in contributing to employee development through various programmes aimed at enhancing employee participation in the working environment. ATNS, as a leading ANSP in Africa, can only maintain this standing if we continue to employ and foster capable and knowledgeable people who are aligned with the Company’s culture of safety, sustainability, and professional excellence. Accordingly, we continue to promote an optimal flow of pertinent skills throughout the Company, with a strong focus on the employment of women, people of colour and people with disabilities. ATNS’ long-term planning for core personnel is influenced by technological evolution of the aviation industry. The industry’s long term objective is to focus on space based technology which will directly influence or require specific functions to evolve to meet industry requirements. Furthermore, the objective is to ensure that during this transition employees are capacitated. We, however, acknowledge the need to balance a human capital-intensive business with the increased emphasis on technology in the ATM sector, playing an integral part in our long-term infrastructure and human resource planning. During the current year, we realigned several processes and positions within the Company to facilitate a more agile structure to respond to challenges and opportunities in a fast-paced industry.</p> <p>Investment in training and development continues to remain a high priority within ATNS. ATNS spent approximately R44 million on training in the reporting year. This also aligns to the National Skills Development Strategy addressing historic inequalities. Challenges prevail and ATNS competes with peer international ANSPs for highly skilled air traffic controllers, as a result high salaries are offered, to ensure that these critical skills are retained through various programmes. ATNS has embarked on a mentorship programme aimed at transferring knowledge from those knowledgeable and experienced within the sector to transfer knowledge to enable a capable workforce.</p> <p>Our remuneration structure remains competitive and fair to all employees and details of the structure is included in the section on ATNS Remuneration Philosophy, furthermore we continue to remain an organisation that actively invests and supports women in key decision making roles. In the current reporting year, the organisation developed a detailed women empowerment and implementation plan which aimed to address the following objectives:</p> <ul style="list-style-type: none"><li>• Adopt a wide set of options for capacity development in order to achieve women’s empowerment and gender equality for the creation of a non-sexist state</li><li>• Create a leadership pipeline through which women can be capacitated and developed for upward mobility, including the establishment of programmes for leadership development such as bursaries, mentorships, internships and ADP</li><li>• Adopt a wide set of options for governance and institutional development in order to promote women’s empowerment and gender equality</li><li>• Adopt a wide set of options for economic growth and development in order to promote women’s empowerment and gender equality</li></ul>	Page 135



### Management approach

- Implementation of a woman empowerment programme
- Implementation of people with disabilities action plan
- Maintain a representative structure in line with the approved permission application
- Reduction of staff resignation and roll out of Employee Value Proposition (EVP)
- Implementation of Employment Equity plan (initiatives and programmes)
- Ongoing investment in core and non-core training for employees

### Performance

#### Risk: Failure to achieve the target employment equity (EE) and B-BBEE targets

Risk classification	Risk impact	Opportunities	ATNS's response going forward
<ul style="list-style-type: none"><li>• <b>Institutional</b></li><li>• <b>Regulatory</b></li></ul>	Employment equity remains a business imperative for ATNS. If we fall short of our EE targets, we will fail to align with national demographics and the integrated transport sector's B-BBEE charter.	As a State-Owned Company, ATNS can set the bar high in terms of a transformative organisational structure, and play a leadership role in reflecting national demographics by creating a balanced profile of employees through all occupational categories and levels in the workforce.	<ul style="list-style-type: none"><li>• The Board approved the five-year ATNS EE plan.</li><li>• ATNS's B-BBEE strategy addressing management control, employment equity, skills development, preferential procurement, enterprise development and socio-economic development.</li><li>• Enterprise Development and Preferential treatment policy.</li><li>• Improve the Skills Development Forum agenda to be aligned to the Skills Development Act requirements.</li><li>• Implement the Recruitment Strategy to promote ATNS careers and attract suitable EE/PWD candidates.</li></ul>



Performance measure	Target in 2017	Achievement in 2017	Indicator	Focus for 2018
Achievement of B-BBEE targets as per the Transport Charter	B-BBEE Level 3	B-BBEE level 2	↑	B-BBEE level 2
Employment Equity – Increase representation of black (AIC) racial grouping with a particular focus on African females	74% AIC	75.12%	↑	Increase in AIC 76%
2% increase AIC, 1% increase female targets	47% of company targets (female)	44.88% female representation	↓	Increase in female representation 47%
Development of programmes for all employees with emphasis on Woman, AIC, PWD (Core – ETS, Engineering, ATS)	-	R37 320 151		Development of all employees with emphasis on AIC, Woman Training pipeline for Engineering, ATS as per target
Development of programmes for all employees with emphasis on Woman, AIC, PWD (non-core)	-	R13 315 764		Development of all employees with emphasis on AIC, Woman
ATS Bursaries and Engineering learnerships	ATS – 80	ATS – 81	↑	ATS – 20
	Engineering Learnerships – 6	Engineering Learnerships – 6	↑	Engineering Learnerships – 6
	ETS – GEDP: 10	ETS – GEDP: 10	↑	ETS – GEDP: 10
	Unemployed Graduates: 8	Unemployed Graduates: 12	↑	Unemployed Graduates: 16
Manage the training pipeline for ATS and technical staff	ATCO 3: 226	ATCO 3: 210	↓	ATCO 3: 226
	ATCO 2: 37	ATCO 2: 30	↓	ATCO 2: 37
	ATCO 1: 119	ATCO 1: 136	↑	ATCO 1: 121
	Engineering Technicians: 74	Engineering Technicians: 78	↑	Engineering Technicians: 74
	Engineering Satellite Technicians: 5	Engineering Satellite Technicians: 5	↑	Engineering Satellite Technicians: 5



## ATNS Performance and Reward

ATNS recognises the critical links between effort and performance, and between performance and reward. The Company's key performance areas (KPA's) and associated targets – as mandated by the Shareholder Compact – direct our collective efforts and deliverables. In turn, our recognition and reward system aims to cultivate a culture of trust, confidence, shared innovation and performance leadership within the aviation sector. This is particularly relevant in terms of the vital contributions ATNS employees make to safety management in the normal course of ATM operations. ATNS and the recognised trade union, Solidarity, have entered a four-year substantive salary agreement that commenced on 1 April 2015. Contained in this agreement is a newly developed scheme for all employees within the administrative bargaining unit. This scheme will, furthermore, be applicable to all administrative employees outside the bargaining unit in administration as well as selected Technical Bargaining unit positions performance management system.

The focus of this scheme is to align performance to strategic objectives, professional competencies and industry expectations. ATNS' reward and remuneration practices are aligned to selected international and appropriate local markets and comply with all relevant laws and regulations. This was affirmed during the year when ATNS received an Award for the 'Best Achiever' at the South African Board of People Practices (SABPP) on the following:

- Reward and Recognition.
- Organisational Development.
- HR Service Delivery.

Table 11

TARGETS AND ACTUALS AS AT END OF MARCH 2017													
	HCP Target 2016/17	2016/17 Actual	EE Target 2016/17	2016/17 Actual	Females 2016/17 Target	2016/17 Actual	P.W.D 2016/17 Target	2016/17 Actual					
	1148	1157	74	75,12	47	44,88	3	3,31					
Occupational Levels	Male					Female					Total	AIC %	Female %
	African	Indian	Coloured	White	Foreign Nationals	African	Indian	Coloured	White	Foreign Nationals			
Top Management	2	0	0	0	0	0	0	0	0	0	2	100	0
Senior Management	6	0	0	2	0	3	0	0	0	0	11	81,82	27,27
Professionally Qualified and Experienced Specialist	17	3	0	7	0	10	0	2	3	0	42	76,19	35,71
Skilled Technical Workers Junior Managers	288	46	43	202	10	302	32	36	84	4	1047	71,35	43,36
Semi-skilled and Discretionary Decision	16	0	5	1	0	3	0	0	0	0	25	96	12
Unskilled and Defined Decision Making	7	0	0	0	0	23	0	0	0	0	30	100	76,67
Sub-total	336	49	48	212	10	341	32	38	87	4	1157	72,95	43,04
%	29,04	4,24	4,15	18,32	0,86	29,47	2,77	3,28	7,52	0,35			
Eng. Learner/Graduates	7	2	0	0		7	0	0	0		16	100	43,75
Graduate Support	3	0	0	0		9	0	0	0		12	100	75
ATCO Bursars/Trainee	0	0	1	0		19	0	1	0		21	100	95,24
ATSO Bursars/Trainee	16	3	2	0		19	2	0	2		44	95,5	52,27
PWD Internship	4	0	0	0		6	0	0	0		10	100	60
AIMO Bursars/Trainee	2	0	0	1		6	1	0	0		10	90	70
<b>Sub-total</b>	<b>32</b>	<b>5</b>	<b>3</b>	<b>1</b>		<b>66</b>	<b>3</b>	<b>1</b>	<b>2</b>		<b>113</b>	<b>97,35</b>	<b>63,72</b>
%	28,32	4,42	2,65	0,88		58,41	2,65	0,88	1,77				
ATS	38	2	4	0		44	2	1	1				
<b>Sub-total</b>	<b>368</b>	<b>54</b>	<b>51</b>	<b>213</b>	<b>10</b>	<b>407</b>	<b>35</b>	<b>39</b>	<b>89</b>	<b>4</b>	<b>1270</b>	<b>75,12</b>	<b>44,88</b>
%	28,98	4,25	4,02	16,77	0,79	32,05	2,76	3,07	7,01	0,31			
	Mar-14	Mar-15	Mar-16				Dec-16	Jan-17	Feb-17				
AIC- %	67,06	69,56	73,15				74,16	74,96	75,20				
Females - %	40,92	44,05	44,50				44,22	44,84	44,93				
PWD- %	2,85	2,76	2,79				3,29	3,36	3,38				
Head Count	1033	1076	1112				1142	1150	1154				
											Mar-17	Variance	
											75,12	1,12	
											44,88	2,12	
											3,31	0,31	
											1157	9	





Table 11: Core Skills Statistics for period (April 2016 to March 2017)

Core skill		Numbers trained	African		Indian		Coloured		White	
Gender			Male	Female	Male	Female	Male	Female	Male	Female
Air Traffic Services		495								
Engineering		344								
	April 2016 intake	27	12	12	0	0	1	0	1	1
	July 2016 intake	27	10	11	1	2	2	0	1	0
	Jan 2017 intake	27	5	14	3	2	0	0	1	2
ETS learnership										
	Jan 2017 intake	6	1	5	0	0	0	0	0	0
Graduate engineering program										
	Jan 2017 intake	10	6	2	2	0	0	0	0	0
A total of R37 320 151 has been invested in ATA based training for the period April 2016 to March 2017.										

Table 12: Non-core Skills Statistics for period (April 2016 to March 2017)

Non core skill	Numbers trained	African		Indian		Coloured		White	
		Male	Female	Male	Female	Male	Female	Male	Female
Tertiary Studies	87	33	40	-	5	-	1	4	4
Short courses	348	116	131	8	17	5	3	42	26
Coaching & conferences	64	14	34	2	3	1	3	2	5
Graduate interns	11	3	8	-		-	-	-	-
People with Disability Learnership	10	3	7	-	-	-	-	-	-
University bursars (unemployed youth)	20	8	12	-	-	-	-	-	-
Child of employee study assistance (unemployed youth)	22	4	9	-	-	-	1	2	5
A total of R13 315 764 has been invested in non-core training									



Material issue: Training and skills development in the sector

Why it matters to us				Ref to IR
<p>ATNS capability in leading sector specific training is key to enabling industry leadership within the African continent and beyond. Our ATA academy is well recognised globally and has won awards including IAIA recognition. The sector specific skills training provided by the ATA strengthens the Company’s ATM intellectual capital and aligns to industry trends to enable long-term sustainability of the institution to support the overall strategic goals of the company and international expansion strategy. Furthermore, our contribution to enhancing skills in the Maths, Science and Engineering fields in the communities we operate in is key to our performance as a state owned entity and supports the Shareholder’s developmental mandate to address societal challenges and leave a meaningful positive legacy in society.</p>				Page 107
Management approach				
<ul style="list-style-type: none"><li>• Corporate Social Investment planning (Maths &amp; Science flagship programme)</li><li>• Ongoing Stakeholder relations with key institutions</li><li>• Learnership programmes</li><li>• ATA (Aviation Training Academy) training pipeline and programmes</li><li>• ATA strategy roll-out</li></ul>				
Risk, impact and opportunities				
Failure to source critical skills that are globally in demand				
Risk classification	Risk impact	Opportunities	ATNS’s response	
<ul style="list-style-type: none"><li>• Institutional</li><li>• Physical</li></ul>	<p>The failure to attract, recruit and retain critical skills can result in reduced competency, efficiency and productivity for the Company. Operating in the ATM sector, these can have catastrophic consequences in terms of safety, reliability and cost-effectiveness.</p>	<p>ATNS can leverage its existing skills expertise and institutional knowledge as it expands into the African continent to transfer skills to other countries that lag in skills and social development.</p>	<ul style="list-style-type: none"><li>• ATNS’ Training Academy (ATA) and training programmes provide a pipeline of skilled engineering graduates.</li><li>• Implementation of human capital plan to address skills shortages.</li><li>• Workshop the internal parity exercise for ET instructors.</li><li>• Formal HR benchmarking process.</li><li>• Review, refinement and implementation of ATNS training.</li><li>• Succession planning for core critical positions.</li><li>• Skills development programmes – e.g. Leadership Development Blueprint.</li></ul>	



## Performance

For performance on skills development, see the performance information under the previous material issue (increasing employee development, wellness and employment equity) on page 109.

2016/17 CSI (Corporate Social Investment) Expenditure

Project name	Costs (R)
SOWISO Tutorial programme	273 000,00
Bray ICT and Science Labs	502 771,54
Ebenezer Laundry Equipment	137 333,35
Rev Mapheto Primary & Setumo Khabi Secondary, Mabopane – ICT, Sanitary towels and toiletry	495 249,81
Go-Maths Winter School	489 500,00
Child headed House hold – Blankets and Groceries	965 200,90
Informal Settlement affected by fire	76 380,00
Mgezeni Science laboratory	506 006,17
<b>TOTAL</b>	<b>3 445.441,77</b>

## Outlook

- The designing of a process to track employees' training and feedback from line management on how they see the impact/ROI from training budget expenditure is currently in progress this will form part of the skills development reporting for corporate training interventions in the 2017/18 FY for corporate level programs as well as for departmental spending on a monthly basis.
- The corporate competency library has been completed and is being designed into the Individual Development Plan template which will be managed online in the near future with a robust reporting capability as well as allowing managers to view and manage employee development and the departmental skills gaps.

The following learning and development opportunities at a corporate level is currently active:

- ABET expanded to a regional level (FAOR, ATA, KZN and Free State).
- Mentorship training for the Legacy Programme and Engineering Department
- The Corporate Training Calendar (divided into courses for all staff, existing managers and WDP). Staff is able to book training slots online for the following courses offered: EQ, assertiveness, conflict to collaboration, business writing skills, minute taking, and finance for non-financial managers plus effective presentation design and delivery skills.
- NQF Level 4 Learnership for 10 people living with a disability.
- Coaching intervention for a group of ATS managers. This is a partnership between ATNS and the University of Johannesburg with experienced corporate experts completing their Masters in Coaching degree and ATNS providing the volunteers for their practical portfolio of evidence.
- Child of Employee study assistance programme, Thusanani bursar programme, Technogirl programme, graduate internship programme and PWD learnership programme are additional interventions.



## Material issues: Safety culture and performance

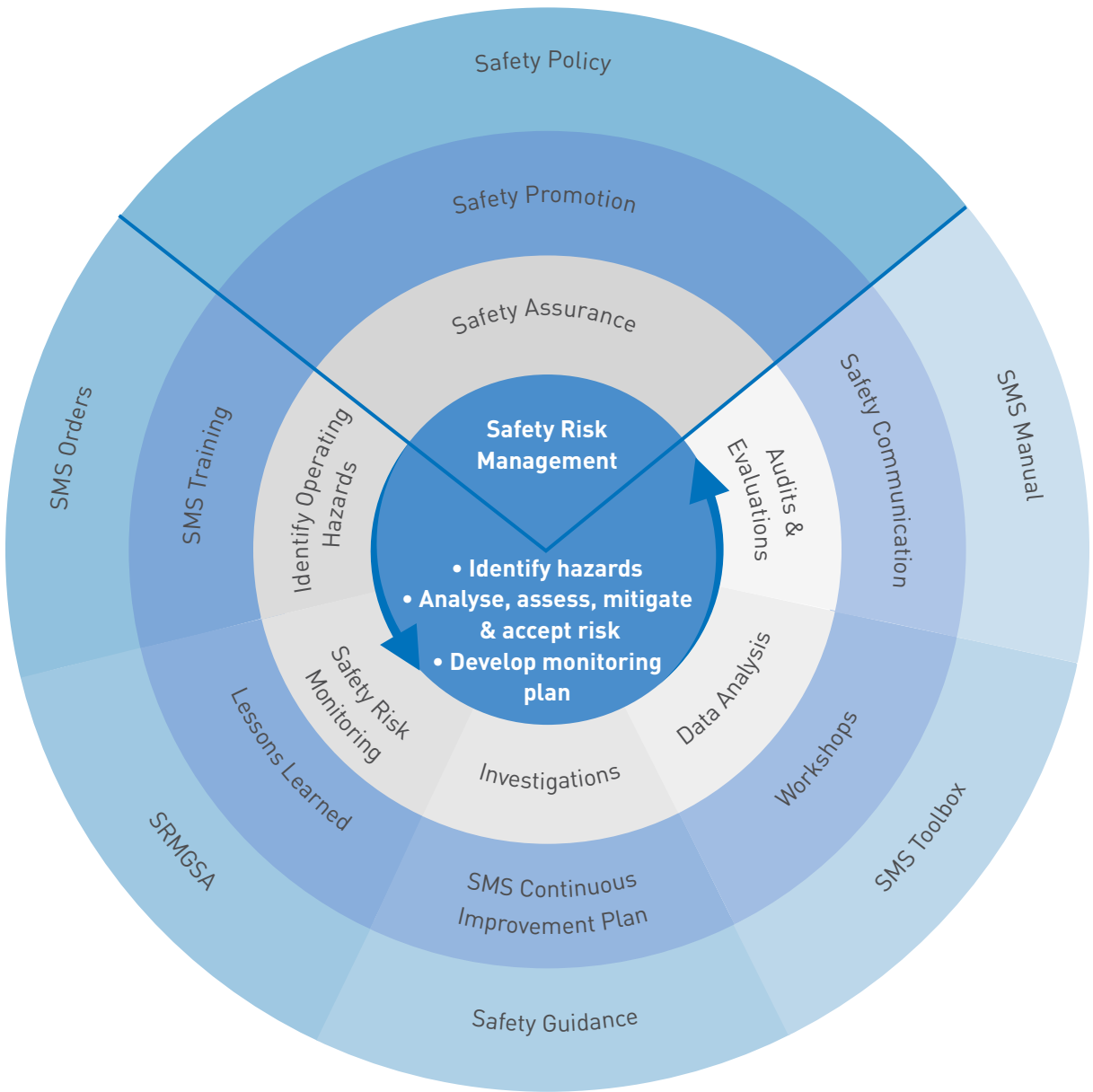
Why is matters to us				Ref to IR
Safety is the corner stone of our operation and a business imperative not only for our direct customers, but also the public at large. The public relies on ATNS to provide a safe and efficient transportation service to get to their destinations. We, as an organisation, acknowledge the significance of providing a safe service of the aviation industry to support long term economic and social sustainability of the business and the country. This aligns to our vision and motto of providing safer skies for all. Safety remains the overriding priority in the ATM environment. We ensure that all our activities are undertaken in a manner that complies with aviation legal requirements. We acknowledge that the environment we operate in is prone to incidents occurring due to human, technical and other related errors. ATNS strongly disregards behavior that deviates from our safety policies. We continuously investigate and report safety incidents using industry processes and matrices. In implementing remedial and mitigation measures, we implement programmes and initiatives to enhance safety culture within the business.				Page 102-104
Management approach				
<ul style="list-style-type: none"><li>• Ongoing implementation of Safety Management System (SMS)</li><li>• Annual safety workshops</li><li>• Regional Airport Safety Programme</li><li>• Research and Development of operational concepts and safety</li><li>• Management training to enhance employee engagement</li><li>• Safety award and recognition</li><li>• Supervision of service delivery</li></ul>				
Risk, impact and opportunities				
Risk: Safety related risks/failure to align with global air-traffic safety standards				
Risk classification	Risk impact	Opportunities	ATNS's response	
<ul style="list-style-type: none"><li>• Physical</li><li>• Reputation</li><li>• Regulatory</li><li>• Financial</li></ul>	Safety is the core driver for ATNS's collective efforts. In the ATM sector, safety incidents can have catastrophic impacts.	ATNS' key opportunity for expanding its operations into the continent is based on the issue of air traffic safety, as expressed through the maxim "working together for safer African skies". ATNS can play a leadership role in improving air-traffic safety in Africa through infrastructure management and skills transfer.	<ul style="list-style-type: none"><li>• Implementation of appropriate safety programmes i.e. training, education and communication.</li><li>• Participation in CANSO/ ICAO safety workshops.</li><li>• The introduction of supervisors in operations.</li><li>• Demand and capacity balancing in terminal airspaces (TMA).</li><li>• Participation in national airspace design review.</li><li>• Review, redesign and new procedure development.</li><li>• Introduction of automated processes/system (fostering tool).</li><li>• PANSOPS training for identified individuals.</li></ul>	



The Safety Management System encompasses all ATNS’s ATS activities, including that of the ATA. Its scope extends to all levels of management, including instructors involved in training ATS staff, operational air traffic controllers, air traffic service assistants, aeronautical information management personnel and technical support. Project planning and execution, as well as the acquisition and commissioning of equipment and systems are performed in conjunction with appropriate safety assessments and the identification and mitigation of associated risks, including security implications related to ATNS staff, installations and facilities.

The SMS has evolved into an integrated electronic SMS known as “XTRAX”. This system was developed to move away from the previous paper-dependent SMS – in line with environmental sustainability. The automated system has streamlined numerous working processes and has facilitated time frames and has reduced duplication of efforts for certain activities. The SMS benchmarking is conducted against CANSO and EUROCONTROL Standards of Excellence. The figure represents the core components of ATNS’ Safety Management System and demonstrates the Company’s integrated approach to safety management.

Figure 20: ATN Safety Management System



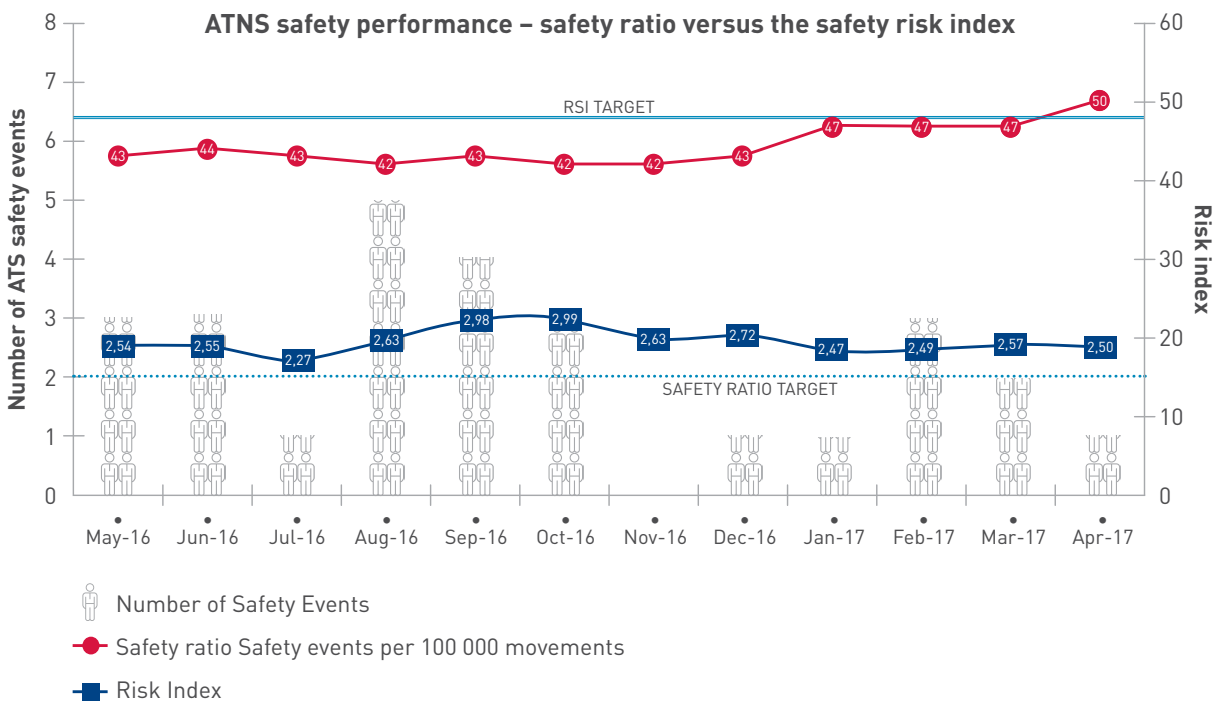
Performance

Performance measure	Target in 2017	Achievement in 2017	Focus for 2018
Reduce risk associated with safety events	RSI equal to or greater than 48	47	<ul style="list-style-type: none"><li>Improved aerodrome safe operations</li><li>Improved Safety Leadership and Accountability</li><li>Improve the ATS validation training process</li><li>Improved aerodrome safe operations</li><li>Improved Safety Leadership and Accountability</li><li>Improve the ATS validation training process</li></ul>
Increase the % successful safe operations	99.995% successful safe operation and an error margin of 0.005%	99.995% successful safe operation and an error margin of 0.005%	

Safety performance

The safety performance attained at the end of the financial year 2016/2017 was an RSI of 47 against a target of 48. This places the risk performance in the Tolerable region of the risk matrix. The safety ratio attained at FY end was 2.57 safety events per 100 000 movements against a target of 2 safety events per 100 000 movements. The overall targets were not met. However, there has been an overall improvement in safety performance. The ATNS Safe Operations benchmark vs CANSO benchmark was achieved at the end of the FY with the error rate at 0.005 with the percentage of safe operations achieved at 99.995% as per the target set. These are indicated in the figures below:

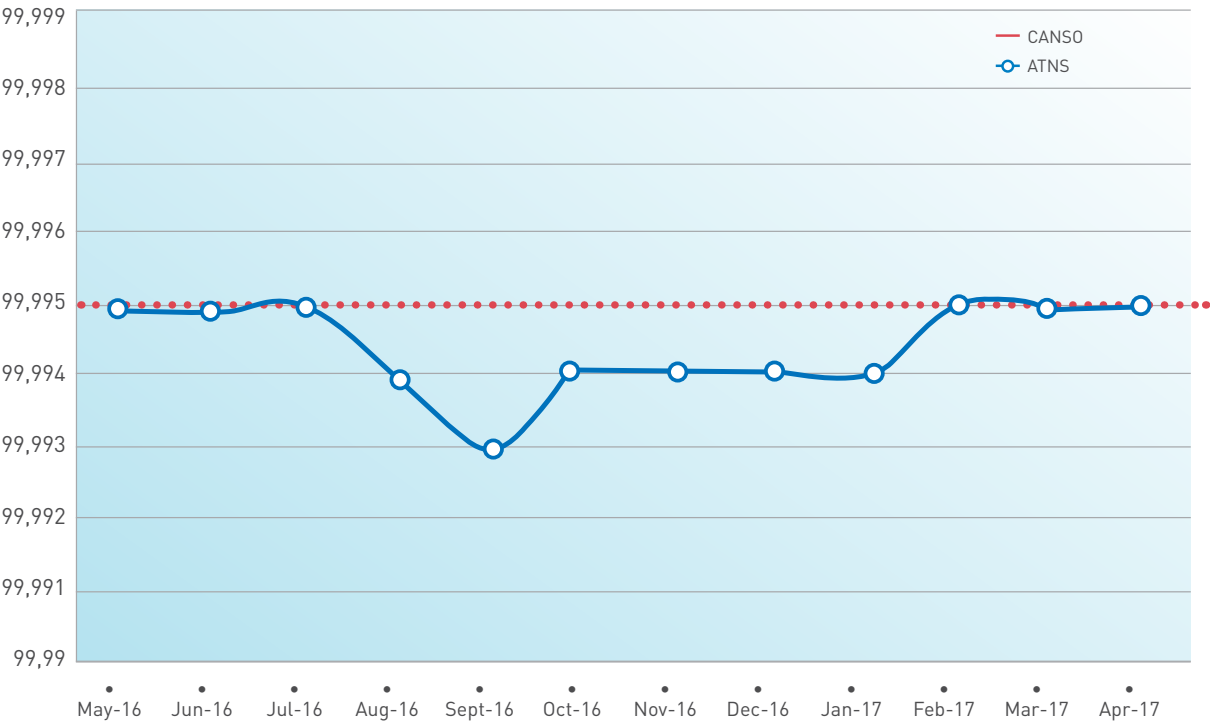
Graph 5: Safety performance





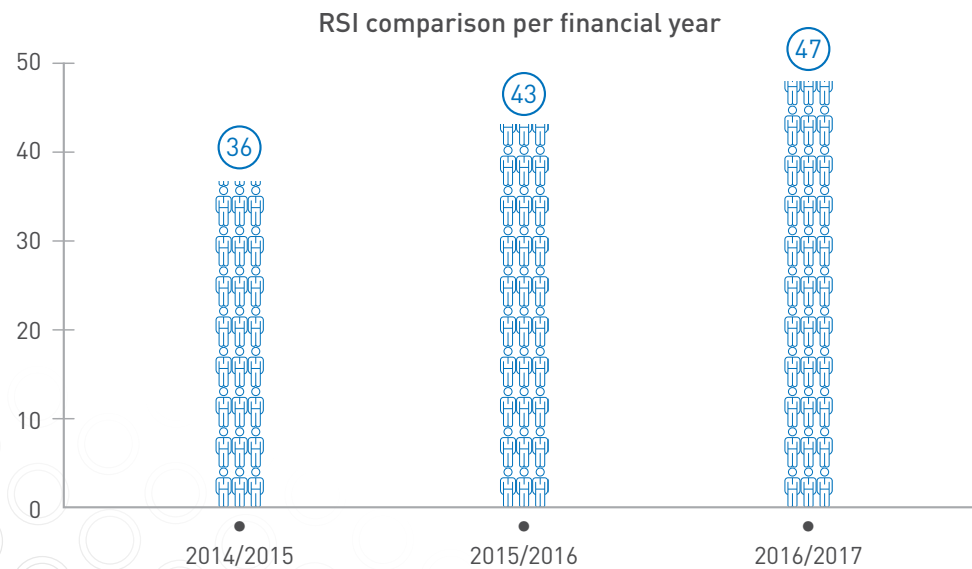


Graph 6



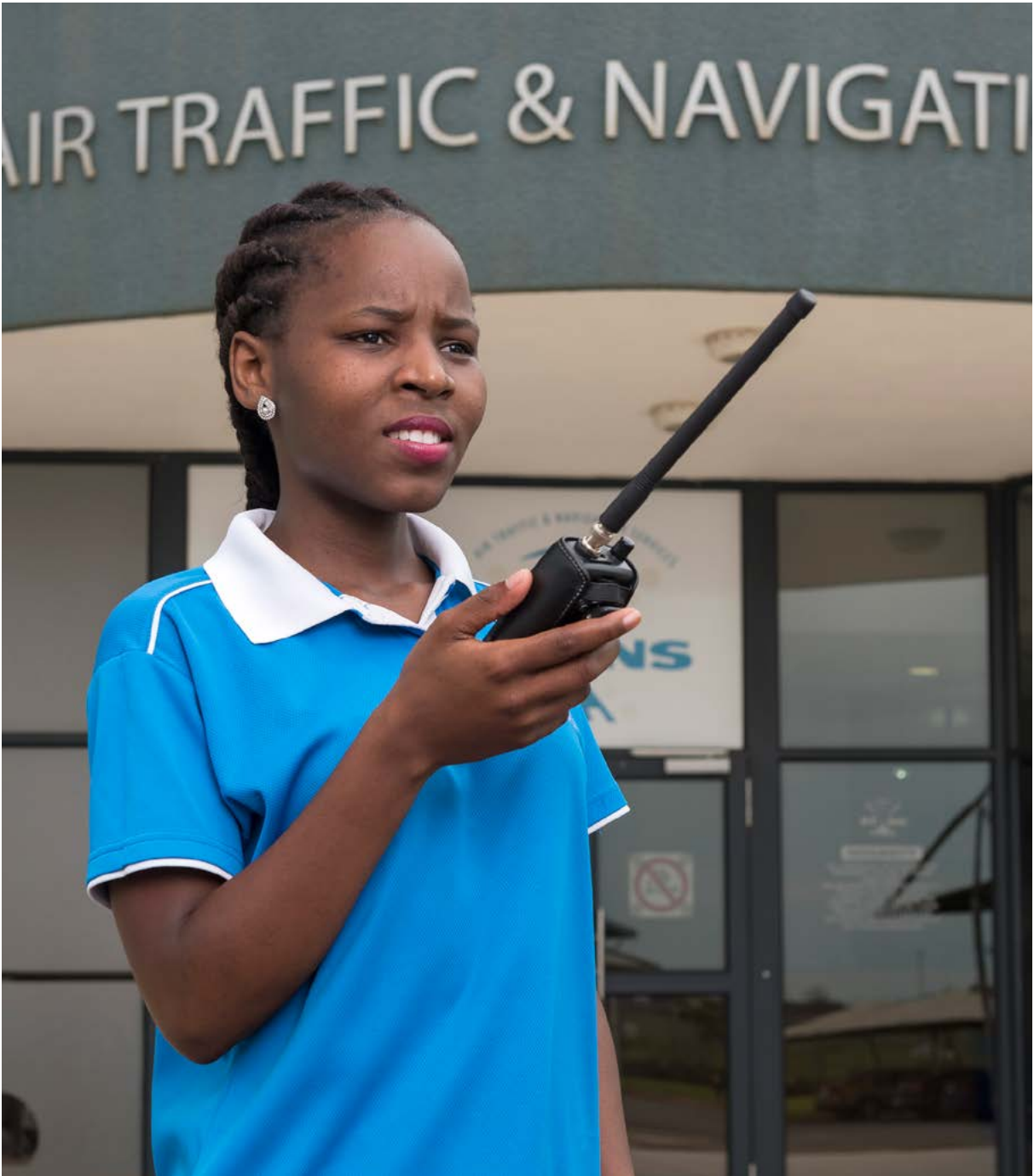
Safety Performance year on year is shown in the graph below which shows a steady increase over the three financial years.

Graph 7



ATNS is committed to building a culture of safety and engaging in activities that continuously improve safety performance and ensure sustainability of the business. The recent Civil Air Navigation Services Organisation (CANSO) Standard of Excellence in Air Navigation Services (SEANS) Review of the Safety Management System (SMS) is one such example. The SMS of the organisation was taken through a review process to determine the level of maturity. The levels of maturity are rated from level 'A' to 'E' with Level 'E' being the highest. Seventeen areas were surveyed and fourteen were found to either comply with level C maturity or exceed all specifications as mapped against ICAO Annex 19. Three study areas however, did not meet the C-level of compliance. This resulted in ATNS achieving an overall level 'B' rating. The areas found to be deficient have been included as part of an action plan to attain full level 'C' compliance through various activities planned for the next financial year.

Safety is a material issue to ATNS as it is the backbone on which the business is built. The absence of safety can have a negative impact on the organisation resulting in the license to operate being revoked by the regulator followed by the loss of customers and loss of income.





# ENVIRONMENTAL PERFORMANCE

## Business enabling Environmental Stewardship

Climate change has been recognised as global concern which requires collaborative effort from all members of international organisations, governments and communities to influence decision-making processes and policies. Within the aviation context, the majority of the environmental impacts are related to emissions that contribute to climate change. Therefore, ATNS as an Air Navigation Services Provider (ANSP), is expected by the industry to respond to climate change issues and address environmental impacts as a result of the organisation's activities and also support customers in achieving their goals. Furthermore, South Africa is a signatory member of the United Nations Framework Convention on Climate Change (UNFCCC) and thus, has committed to ensuring that mechanisms and policies are implemented to reduce emissions and keep global temperatures below the 2 Degrees Celsius threshold as adopted in the PARIS agreement.

International agreements such as the Kyoto Protocol, of which SA is also a signatory member and the Copenhagen Accord, further ensure that countries contribute to the development and implementation of various mechanisms and policies to combat climate change. ICAO has made it known that environmental sustainability is one of their strategic objectives and aligns to the UNFCCC goals by setting an industry goal of carbon neutral growth by 2020. The industry has established various programmes which are both market based and non-market based measures. The 39th Assembly held later in 2016 was instrumental in resolving a common vision by internationally adopting CORSIA which is implementation of the Carbon Offsetting and Reduction Scheme for International Aviation, aimed at completing the current non-market based measures implemented by states.

The Department of Transport is the Shareholder for ATNS and Outcome 6 refers to an, "Increased contribution of transport to environmental sustainability," which is in response to the National Development Plan's Outcome 10: "Protect and enhance our environmental assets and natural resources." Therefore, ATNS' environmental material issues are identified as a response to address the expectations of national legislation.

Therefore, international and national legislation influences the relevance of the ATNS Environmental Sustainability Strategy, which effectively drives the implementation of environmental sustainability programmes to respond to these objectives and ensure alignment with the broader organisational strategy for both regulated and non-regulated environment. The ATNS objective is to integrate environmental sustainability in the organisational value chain to ensure that it is included in the planning and implementation of the organisational value chain rather than addressing impacts. We acknowledge that environmental issues need to be integrated and appreciated with other areas of sustainability being economic and social aspects and where the trade off occur, this needs to be clearly undertaken and quantified.



### ICAO 39th Assembly outcomes

The proceedings of the 39th ICAO Assembly in 2016, resulted in the aviation industry reaching a monumental agreement to work towards reducing the impact of the industry's carbon emissions, through efforts to address climate change. The five main outcomes are reflected below:

1. The establishment of a Global Market Based Measure (GMBM) to offset international aviation CO<sub>2</sub> emissions.
2. The prevention of risks arising from conflict zones.
3. The interaction between national, regional and global rules on drones.
4. The adoption of a CO<sub>2</sub> standard for aircraft emissions.
5. Progress towards sustainable global air transport.

The resolution to establish a Global Market Based Measure, which is aimed to offset carbon dioxide emissions from international aviation in order to contribute towards carbon neutral growth from 2020 was adopted. The decision was a part of the introduction ICAO's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). The Scheme is designed to reduce carbon emissions through "offset credits" whereby countries trade emission units through a carbon market.

Implementation of CORSIA will begin with a pilot phase from 2021 to 2023, followed by a first phase from 2024 to 2026. Participation in both phases will be voluntary until the second phase, which is from 2027, where it will then be mandatory for all member states to comply, with a few exemptions. CORSIA does not apply to states, which are classified as the Least Developed Countries (LDCs), Small Island Developing States (SIDS), or Landlocked Developing Countries (LLDCs) due to historical circumstances, which have placed these countries in a position that makes them most vulnerable to the impacts of climate change, compared to their developed counterparts.

The International Civil Aviation Organisation has three environmental goals for ANSPs that guides the aviation community to consider the impact of aircraft emissions on local air quality, the reduction of noise pollution and the reduction of emissions resulting from the industry's activities. The industry focuses on integrating environmental sustainability into business practices by focusing on technological improvements, operational efficiency, infrastructure development and global market-based measures. The goals are set by ICAO to reduce emissions resulting from aviation that contribute to climate change.

Air Traffic Management (ATM) implementing more efficient measures in procedure designing ensures that aircraft optimise the airspace to gain not only fuel saving, but also cost savings and ultimately emission reductions. The development of aviation infrastructure that has minimal environmental impacts and promoting alternative energy sources contribute to the industry goal. Furthermore, the introduction of global market-based measures, officially adopted at the 39th ICAO Assembly, commits the aviation community to reducing emissions through a set of market instruments, namely, levies/tax, offsetting, and emission trading. The technological improvements considering environmental benefits and alternative fuels also seeks to contribute to the global agenda on environmental sustainability.



### ATNS Sustainability and Environment Strategy

In response to the above, ATNS has compiled a 5-year strategy with periodic reviews which addresses Environmental objectives of the organisation. The strategy enables the implementation of industry and legislative requirements. The Strategy has ten sustainability drivers that were identified as being instrumental to ATNS’ environmental performance. Each driver has been assessed and understood in shaping the ATNS strategic objective in addressing environmental sustainability of the business. The core components of this environmental strategy have been designed to utilise these drivers and propel ATNS to new heights and towards becoming a holistically sustainable business by realising its environmental goals.

The strategy aligns to ATNS values and the strategic imperative of striving to deliver high quality Air Traffic Management and associated services. As a result this re-emphasises the safe and environmentally sustainable business practices and furthermore, the responsibility we have to all our stakeholders, by means of implementing best practice solutions that showcase our agility, innovation and leadership within an African context and beyond from a sustainability point of view.

Figure 21: Environmental Sustainability Strategy and Key Sustainability Drivers



The Sustainability and Environment Strategy, which was reviewed in the current reporting period consists of six fundamental objectives that will ensure integration of environmental sustainability into the ATNS value chain in the first year of implementation.

The reviewed process resulted in the development of an integrated approach towards the strategy that will guide ATNS for the next five years.

ATNS’ sustainability maturity was analysed, based on an Environmental Sustainability Roadmap, the following six objectives were identified:

- Develop a comprehensive change management strategy communication plan
- Integration of environmental sustainability into Company and individual performance
- Green initiative budget resource plan to implement environmental sustainability strategy
- Acquire sustainability tools for enhancing monitoring, measuring and evaluating on natural resources in ATNS activities
- Integrate sustainability into core business
- Establish collaboration platform with aviation partners

Raising Awareness Year 1	Adaption and Efficiency – New Products & Revenue Streams Year 2 – 4	Full Integration, Revenue Streams & Green Brand Year 4 – 5
<ul style="list-style-type: none"><li>• Develop a comprehensive change management strategy communication plan</li><li>• Integrate sustainability into Company and individual performance</li><li>• Green initiative budget resource plan</li><li>• Acquire sustainability tools</li><li>• Integrate sustainability into core business</li><li>• Establish collaboration platform with aviation partners</li></ul>	<ul style="list-style-type: none"><li>• Review performance of environmental project, initiatives to determine success and long-term sustainability and maturity</li><li>• ATNS paperless organisation – ATA distance learning</li><li>• Sustainability commercialisation – non-regulated business (online services)</li><li>• Building a sustainability culture (sustainability integration to support performance, projects, business cases, ATA curriculum, etc)</li><li>• Integrated Environmental Management System (EMS) implementation</li><li>• Stakeholder partnership and alignment to CSI flagship projects (strategic supplier relations)</li><li>• Resource efficiency (waste, water, land, biodiversity, air quality, noise, green building, green transport, communication, impact)</li><li>• Improved operational efficiency to support green agenda in ATM Planning and operations</li></ul>	<ul style="list-style-type: none"><li>• Review performance of environmental project, initiatives to determine success and long-term sustainability and maturity</li><li>• Integrated EMS (QMS, other standards), external sustainability accreditation (ISO 14001, ISO 15001, SR index, CDP, etc)</li><li>• Resource efficiency, offsetting programmes and carbon neutrality</li><li>• Improved revenue streams within the business, creating green brand beyond compliance</li><li>• Enable a green brand, repositioning improvement (R&amp;D, HR, ATS, infrastructure)</li><li>• Stakeholder partnership, thought leadership (value creation)</li></ul>







This section outlines key environmental material issues and performance.

Material issue: Responding to climate change impacts

Why is matters to us	Ref. To IR
<p><b>Managing Carbon Emissions</b></p> <p>As an ANSP, ATNS recognises that it has an influence on the emissions released as a result of aviation activities. ATNS reports on its carbon footprint inventory quarterly, which is guided by the GHG (Greenhouse Gas Protocol), and compared to the baseline year, 2013. The calculation is based on Defra emission factors (UK Department for Environment, Food, Rural Affairs), which provide an internationally used conversion factors that enable businesses to determine emissions resulting from business activities, products and services. Managing the carbon emissions resulting from Company operations addresses minimising the amount of fossil fuels burnt that contribute to greenhouse gases and ultimately climate change.</p> <p>ATNS calculates carbon emissions from the following facilities:</p> <ul style="list-style-type: none"><li>• ATNS operations at regulated airports;</li><li>• ATNS’s head office and training academy; and</li><li>• ATNS’s infrastructure sites Communication, Surveillance and Navigational (CNS) equipment.</li></ul> <p>The carbon inventory includes reporting on Scope 1, 2 and 3, as detailed below:</p> <p><b>Scope 1: Fuel consumption in company-owned and leased vehicles:</b></p> <p>ATNS has a number of owned and leased vehicles within its operations. All fuels for the entire fleet (leased and owned) which were consumed during the financial year have been included in scope 1 of the carbon inventory calculation. This includes both petrol and diesel vehicles and generators.</p> <p><b>Scope 2: Electricity consumption:</b></p> <p>ATNS has a number of owned and leased sites across South Africa. Many of these sites include equipment, which consumes electricity. The emissions from electricity consumption at each of these operational sites are reported under scope 2 emissions.</p> <p><b>Scope 3: Business road and air travel (including accommodation):</b></p> <p>This includes emissions generated from air and road travel to fulfil business requirements.</p> <p><b>Airspace quality and efficiency</b></p> <p>ATNS has a number of air traffic management initiatives that address climate change by reducing the emissions released during operation. The design procedures, and implementation of Performance-Based Navigation (PBN), Continuous Climb and Descent Operations, Airport Collaborative Decision Making (A-CDM) and Wake Turbulence Re-Categorisation – all contribute to reducing fuel burn and emissions mainly for ATNS customers.</p>	Page 136

Furthermore, as a CANSO (Civil Air Navigation Services Organisation) member, which is part of ICAO’s CAEP, the Company is represented in the Environmental Working Group (ENVWG). The ENVWG is a committee which aims to ensure that global air navigation service providers (ANSPs) work in collaboration to reduce aviation emissions and manage noise pollution to support the ICAO global agenda on climate change. Air traffic management operations have an opportunity to minimise environmental impacts through efficient ATM operations. The Working Group forms a platform where environmental topics related to efficient air traffic management solutions are initiated and communicated to improve emission reduction and noise management, and to enhance overall environmental protection. ATNS addresses community concerns around noise pollution through a collaborative community engagement process, together with Airport Company of South Africa (ACSA) and local authorities.

Management approach

ATNS manages its response to climate change through measuring and monitoring its carbon footprint and operational efficiency programmes, which will guide the development of offsetting programmes to reduce the emissions resulting from ATNS operations. Through the implementation of the Sustainability and Environmental Strategy key programmes and requirements from the international community, such as ICAO, UNFCCC and national requirements, from the Department of Transport, ATNS is committed to ensuring that sustainability principles are integrated into the strategic objectives to reduce the contribution to climate change. The environmental impacts across the business’ value chain will be analysed and addressed in order to promote accountability and promote environmental sustainable business practices through:

- Implementation of Environmental & Sustainability Strategy
- ATNS Environmental Policy
- Operational Efficiency Programme
  - Runway delays
  - Average Taxi times
  - CCO & CDO
- Air Traffic Management plan through Performance Based Navigation and procedure design to reduce noise.
  - Flight procedure designs support compliance with noise abatement requirements as per NEMPA
  - Noise profiling and noise contours are being considered
  - Application of power setting and climb gradient restriction to support noise abatement.
  - Compliance with ICAO’s Guideline Manuals concerning noise and environmental assessment of ATM operational changes

Risk, impact and opportunities

Non-compliance to legislation and industry requirements could impact on the long-term sustainability of the company, not only from the environmental aspect, but also economic, in terms of cost implications resulting from the impact of climate change as well as social, when it comes to reputation and stakeholder relations. Integrating environmental sustainability into the business’ value chain will allow for ATNS to be one of the global leaders in terms innovation, technology, new products and revenue streams.



Performance

Performance measure	Achievement in 2015/16	Achievement in 2016/17	Focus for 2017/18
Total Emissions from Electricity	20 759, 36 ton CO2e	20 720, 62 ton CO2e	Improvement in emission reduction realised as per target
Total Emissions from Fuel	247.24 ton CO2e	233, 34 ton CO2e	Improvement in emission reduction realised as per target
Overall Total Emissions incl. scope 3 emissions	25 510,96 ton CO2e	23 292.01 ton CO2e	Improve overall carbon emissions for both ATNS value chain and improve customers carbon reduction objectives

Performance measure	Target in 2016/17	Achievement in 2016/17	Focus for 2017/18
Performance-based navigation (PBN) ACSA Airports	RNP APCH in 100% of instrument runways located at ACSA airports by 31 March 2017  RNAV 1SID/STAR for 5 (or 80%) international airports (ACSA-owned) by 31 March 2017	9 out of 9 ACSA airports have RNP APCH Equals 100%  6 International ACSA airports have RNAV 1 SID/STAR Equals 100%	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
Performance-based navigation (PBN) Non-ACSA Airports	RNAV 1SID/STAR for 1 ACSA Domestic airport where there are operational benefits by 31 March 2017	2 out of 3 ACSA Domestic airports have RNAV 1 SID/ STAR equals 70%	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
CDO (Continuous Departure Operations)	Report impact of CDO on environment	*6203.34 tonnes fuel saved	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
CCO (Continuous Climb Operations)	Report impact of CDO on environment	*40 749. 15 tonnes of fuel saved	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
A-CDM (Airport Collaborative Decision Making)	Report impact of CDO on environment	*19 589.69 tonnes of fuel saved	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
Wake-Categorisation	Report impact of CDO on environment	*544 538 kg tonnes fuel saved (high end of range)	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme

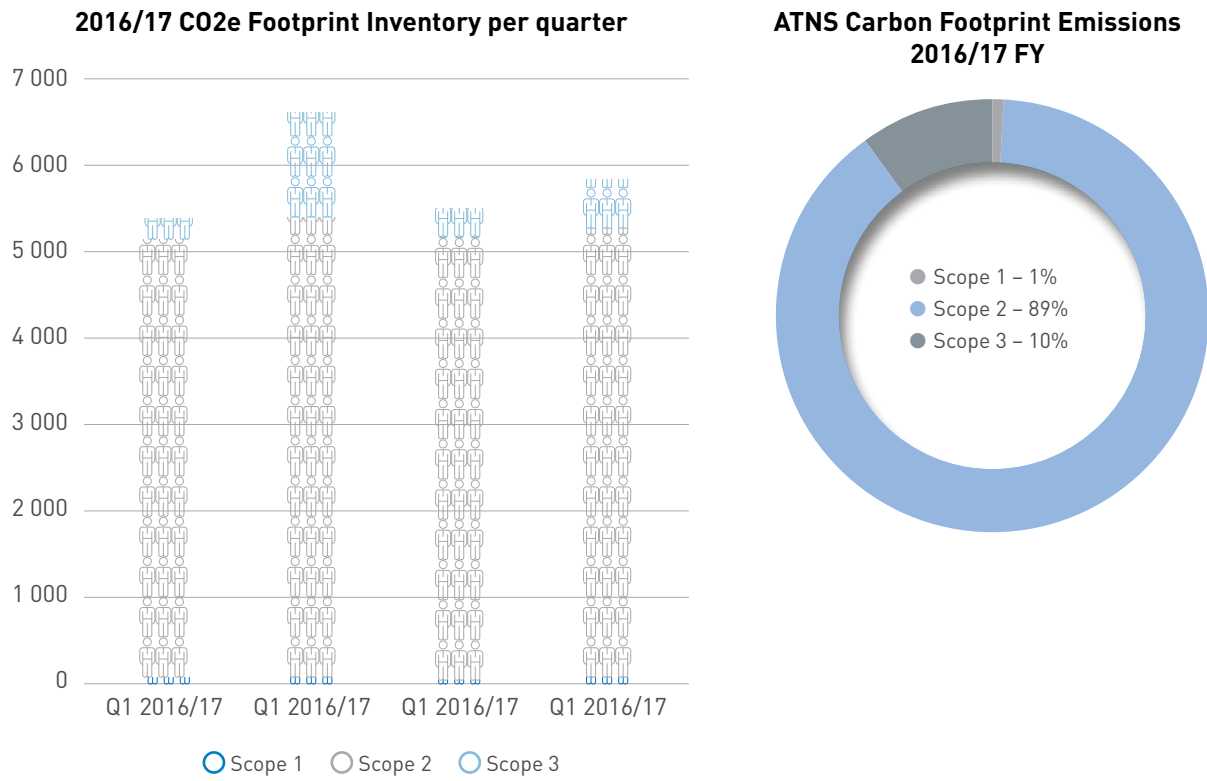
\*Results based on ICAO Doc 9988 Guidance revision 2016, Table C-2. Rules of thumb for estimating expected results by measure



Carbon emission results

For the 2016/2017 financial year, **ATNS operations resulted in 23 292.01 CO2e emissions**, 89% resulting from electricity consumption, 1% from fuel and 10% resulting from business travel. Fuel consumption for the financial year resulted in **89 761 litres** and electricity consumption was **20,515,469.56 kWh**.

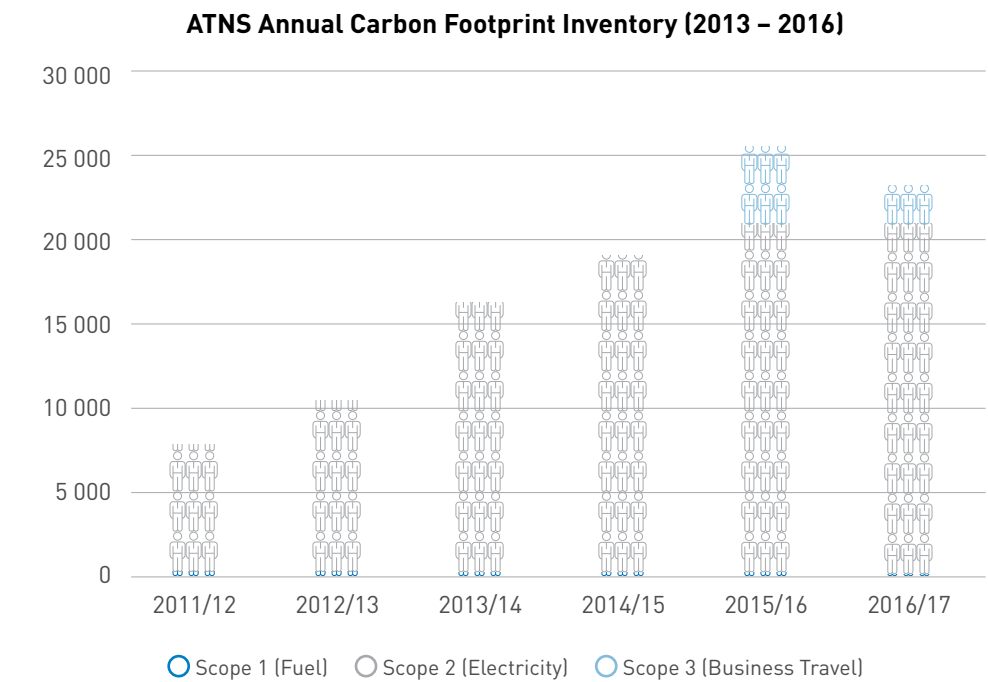
Graph 8: Graphical representation of the Carbon Footprint CO2e performance for 2016/2017 Financial Year



The figure below illustrates year on year carbon footprint inventory against the baseline. The majority of the emissions continue to result from **Scope 2 and 3 emissions**. When compared to the 2013 baseline year, when **10 469 ton CO2e** were reported, there has been an increase of **12 823.01 ton CO2e** from the base year. This has been as a result of an increase in business requirements. In the 2014 permission year, a number of infrastructure projects were implemented and furthermore, the ATNS employee complement increased by approximately 15% from 2012/13 baseline year .



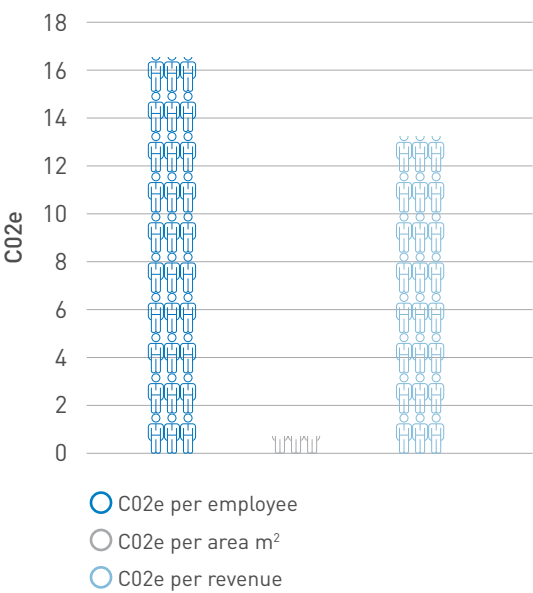
Graph 9: ATNS carbon footprint emissions performance in relation to 2013 baseline year.



Carbon emission Intensity

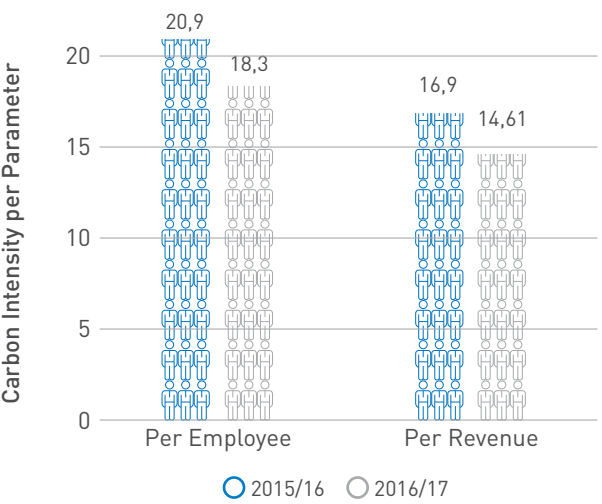
Emission intensity is a metric to evaluate emission performance over time and to benchmark performance externally against other similar companies or, internally, between different divisions. Emission intensities are calculated based on total tonne CO2e per intensity metric produced.

Graph 10: Emission intensity performance for 2016/2017

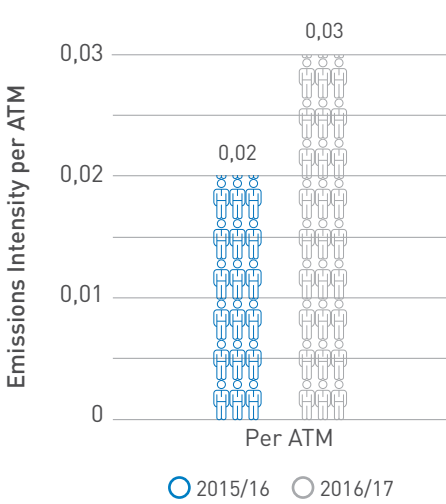


Emissions Intensity	Unit Measure	Performance 2015/16	Performance 2016/17
Per Air Traffic Movement	CO2e/air traffic movement	0.02	0.03
Per employee	CO2e/employee	20.9	16.46
Per Revenue	CO2e/revenue	16.9	13.15

Graph 11: Emission intensity per Employee & Revenue



Graph 12: Emission intensity per Air Traffic Movement



Energy Management

In 2015, an energy audit was conducted for three ATNS business areas; Head Office, OR Tambo and Training Academy. The final reports highlighted energy saving opportunities and recommendations, amongst others;

- Tariff optimisation – by investigating and reviewing the current billing system
- Centralised energy consumption monitoring system
- Identification of significant energy users to implement energy saving plan, and determine baselines per site
- Monitor and track energy consumption trends
- Measurement capability to evaluate effectiveness of any interventions

In the 2016/2017 Financial Year, ATNS initiated a smart energy metering project which is aimed at improving energy efficiency within the Company in response to the audit conducted in 2015. The smart metering system is aimed to measure and analyse the current energy consumption trends to determine a baseline that will assist in implementing interventions to lower the Company's energy footprint. Once a baseline is determined, monitoring and tracking energy consumption will allow for an efficient energy saving plan to be implemented. The project's first phase will be deployed at ATNS business units located at ACSA ATNS centre airports and equipment sites, with the second phase including the rest of ATNS locations.

The data from the meter readings will be sent to a centralised dashboard for processing and reporting on the energy consumption from the selected locations and more specifically the targeted on-site sources of energy consumption. The readings will be able to indicate energy trends which will enhance the current carbon footprint reporting process. Monthly power consumption reports will be able to monitor energy usage and make provisions for opportunities to implement energy efficiency measures.



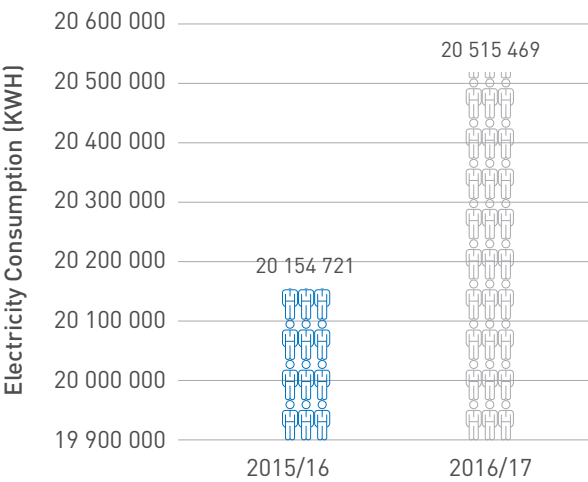


Performance

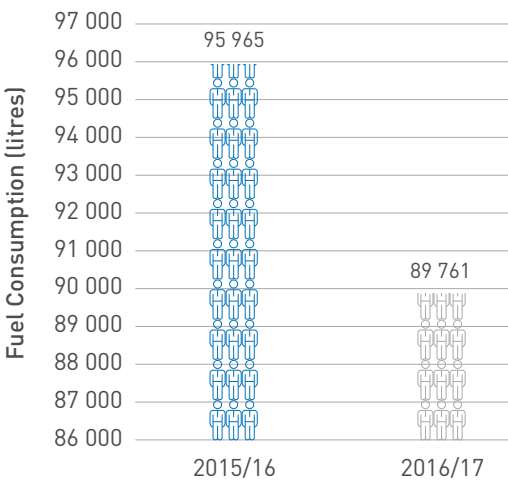
The electricity consumption for the 2016/17 financial year was 20,515,469.56 kWh while the fuel consumption was 89,761 litres. The total energy use reported during the reporting year compared to the previous reporting period is shown in the graph below. We report electricity efficiency performance in terms of kWh per air traffic movement. Energy consumed increased to 20,515,469 kWh compared to the 2015/16 reporting year which was 20 154 721 kWh. Fuel consumption decreased from 95 965L in 2015/16 to 89,761L in 2016/17. Our electricity efficiency for the financial year was 38.92 per air traffic movement while in 2015/16 it was 54.48 respectively.

Performance measure	Achievement in 2015/16	Achievement in 2016/17
Total Electricity Consumption	20 154 721 kWh	20 515 469 kWh
Total Fuel Consumption	95 965 Litres	89 761 Litres

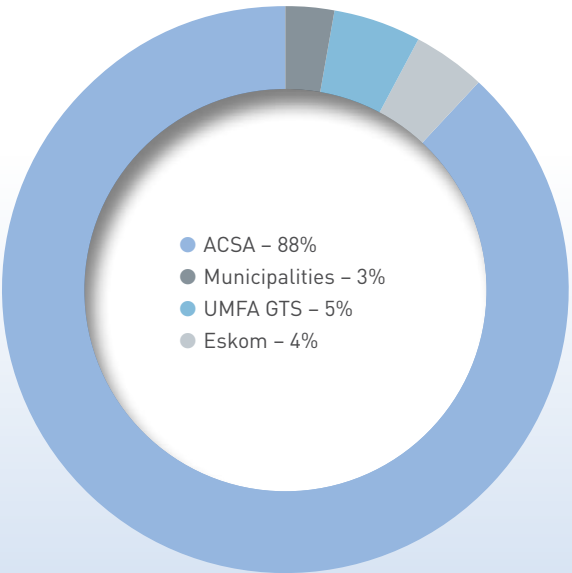
Graph 13: Electricity consumption



Graph 14: Fuel consumption



Graph 15: Electricity consumption per site



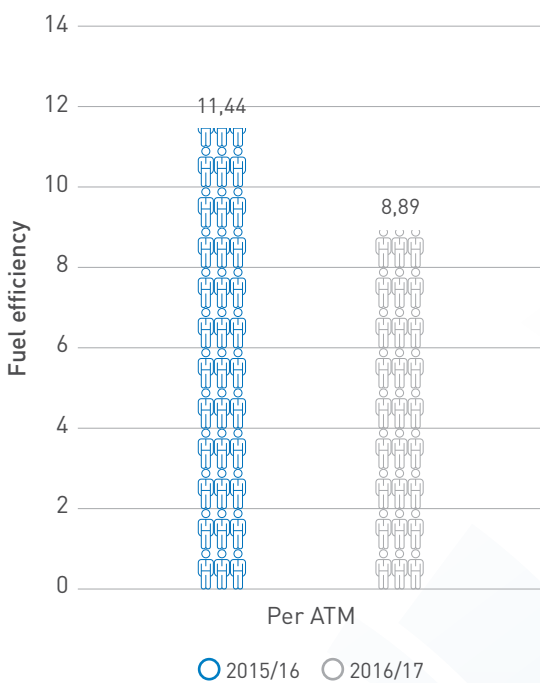
Electricity Efficiency

	Performance 2015/16	Performance 2016/17
Electricity Efficiency		
Per employee (Employee/MWh)	0.06	0.06
Per Revenue (Revenue/MWh)	0.06	0.08
Fuel Efficiency		
Per Air Traffic Movement (ATM/L)	11.44	8.89
Electricity Efficiency		
Per Air Traffic Movement (ATM/MWh)	54.48	38.92

Graph 16: Electricity efficiency per employee& revenue

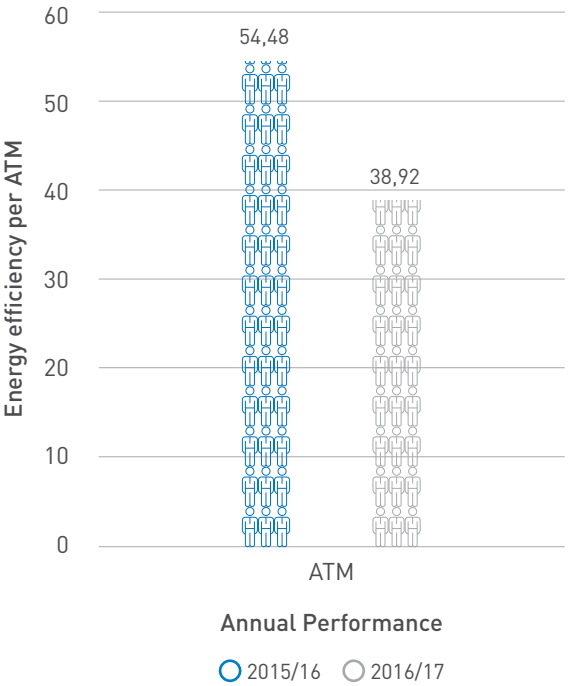


Graph 17: Fuel efficiency per Air Traffic Movement





Graph 18: Electricity efficiency per air traffic movement



Outlook

The overall short and long-term energy efficiency management objectives are summarised as follows:

- Determine current consumption trends;
- Determine energy reduction targets for each site;
- Review of the current energy efficiency long term plan and
- Develop a detailed implementation plan.
- Integrate energy objectives in the core organisational plans

Energy efficiency implementation is considered in infrastructure projects that have been identified to have potential to impact on energy efficiency.

In the continued effort to contribute towards reducing emissions, the Operational Efficiency Programme (OEP) is an initiative to identify airspace design and tactical improvements, which will enable ATNS together with the stakeholders to improve flight efficiency, capacity as well as reduce the environmental impact in the terminal areas.

Improving flight efficiency in our service delivery will become critical going forward in line with environmental objectives and efficiencies required to support the airline cost reduction and environmental efficiency programmes. At a global level, air traffic management is continuously identified as one of the major drivers of fuel efficiency in flight operations.



Material issue: Improved natural resource efficiency to reduce our impacts

Why is matters to us	Ref to IR
<p><b>Water Management</b></p> <p>ATNS utilises water for mainly consumption purposes and acknowledges that the country remains in a critical situation as South Africa is a water scarce country and impacts of climate change are evident in the country where other areas have been declared critically water constrained. ATNS prioritises the conservation and overall management of water at all our sites and implements various interventions to manage water accordingly. This is also driven though our training and communication plans. In the next financial year, all our operations will implement dedicated measures to minimise water usage. ATNS has embarked on a project to refurbish the ATA and OR Tambo centre, renovations will consider green building principles and water efficiency is one of the areas to target such as flow regulating taps and toilets as well as rainwater harvesting. Initiatives to implement water meters are currently being investigated as well as the installation of water tanks as alternative water sources.</p>	Page 136
<p><b>Waste Management</b></p> <p>Waste management is important to ATNS and as a result ATNS has developed a waste management policy to enforce proper waste management practices at our buildings and project sites. This enables ATNS to adopt a cradle-to-grave approach were waste is assessed for viability prior to disposal. Furthermore, hazardous waste generated is disposed in accordance with our procedures and detailed waste management register and records are kept to ensure compliance. The waste inventory for the 2016/2017 financial year resulted in 7 420 Kgs of electronic waste being recycled, 11 020 Kgs of Asbestos and 210 litre drum of fluorescent tubes being disposed of in accordance with legislation at licenced facilities.</p> <p>ATNS’ waste management is yet to be fully implemented and thus, the data collected currently is for the inception phase.</p>	
<p><b>Biodiversity Management</b></p> <p>ATNS project and infrastructure sites are located across the country and some of the sites are located in conservation areas where a more focused management approach is required. One example is the Radar Replacement Project in Blesberg with an approved Record of Decision (ROD) of 2002, where the Environmental Management Plan (EMPr) is being monitored as the radar is being replaced. The site is situated in the Cape Nature Reserve in the Swartberg Mountains of the Western Cape. We acknowledge that as an organisation, we need to adhere to legislation. The National Environmental Management: Protected Areas Act (NEMPA) requires that the Aviation industry complies with applicable sections of the act. We ensure that our procedure design processes consider biodiversity sensitive areas such as parks, nature reserves and furthermore promote minimal noise impact on communities in and around airports through a proactive, consultative process when designing our ATM procedures. We aim to support the industry to reduce impacts through efficient routes, reduce holding times and delays and collaborate more with our customers.</p>	



Environmental compliance is addressed through the implementation of ATNS' Environmental Policy as well as related policies and procedures. The National Environmental Management Act (NEMA) is considered for all projects. Most of ATNS' sites have been in existence for long periods; hence, the National Heritage Resources Act has become one of the factors that are considered in the replacement and refurbishment projects. For the period under review, the Bapsfontein High Frequency Receiver site building refurbishment project is compliant to a Heritage permit conditions as well as the ISANDO development project. Projects are audited to ensure compliance and minimise negative environmental impacts.

#### Management approach

- Environmental sustainability training and awareness
- Implementation of the environmental communication plan
- Compliance audits and inspections for EMPr authorisations
- Training and communication on the Environmental and waste management policies
- ATM procedure design guideline to support Environmental requirements

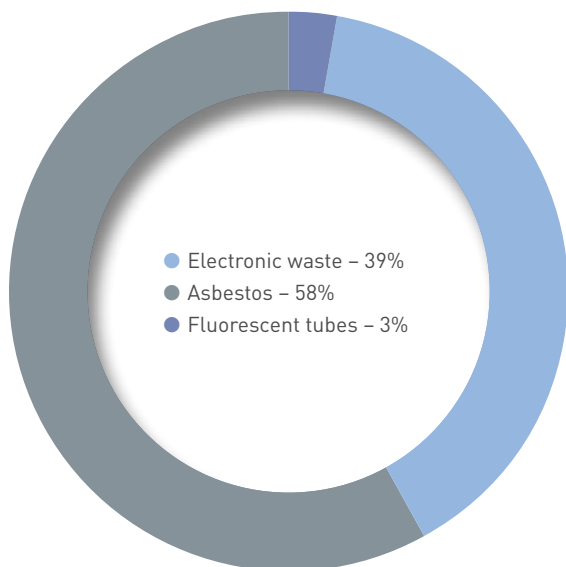
#### Risk, impact and opportunities

ATNS operations result in the generation of hazardous and general waste. The Company has developed an Integrated Waste Management Policy and Procedure in efforts towards contributing to managing waste in accordance to the Waste Hierarchy. Principles of the Waste Hierarchy form the foundation of ATNS' waste management. Currently, only a few sites are implementing recycling initiatives. However during the 2017/2018 financial year we will ensure that all sites adhere to the policy and procedure concerning waste management and implement recycling.

Biodiversity management is considered when deploying efficient air traffic management solutions. The design of procedures takes into cognisance sensitive, high conservation areas as well as the maintenance and introduction of infrastructure equipment. Currently, biodiversity is considered from planning, design, and implementation, operational and decommissioning phases of all projects.

## Performance

Graph 19: Hazardous waste composition



## Outlook

The installation of water efficiency measures within ATNS, through the deployed CAPEX projects, is planned for the upcoming financial year. Environmental assessments of proposed projects from the planning stage will be enhanced through the introduction of procedures and processes to assess all projects to minimise the actual and potential environmental impacts. Furthermore, the recycling and waste management initiative will be extended to ATNS sites.



## Material issue: Promoting employee awareness of environmental management



#### Why it matters to us

Sustainability and Environment training is one of the key initiatives that has been put in place in terms of the communication, education and awareness component of the Environmental sustainability programmes. The training is a measure put in place to raise awareness within the organisation about the contribution of ATNS to climate change as well as communicating initiatives to support the business and communicating expectations of employees in driving success of the initiatives.

For the 2016/2017 financial year, a target of 25% of 1258 ATNS employees to be trained was achieved. In total 316 employees and 24 bursars, were trained during financial year.

As a more sustainable option, ATNS has opted to transit from the conventional face-to-face approach of conducting sustainability and environmental awareness training to ATNS employees to e-learning training. The transition to an e-learning platform will ensure that more efficient and effective employee training is achieved through practical assessments of training material. It will contribute to employee engagement and development to achieve a truly transformative organisation that has embedded environmental sustainability within all internal stakeholders.

E-Learning as a training method at ATNS proposes the leveraging of technology to enhance the learning experience and increase the value-add of learning. The introduction of e-Learning at the Aviation Training Academy (ATA) will also allow the ATA to improve its competitive advantage. Thus, the adoption of e-Learning in the organisation will follow a phased approach; the first phase will be the translation of the current Sustainability and Environment (S&E) classroom training content into e-Learning content. Should this approach be successful, it will be used as a benchmark for the implementation of e-Learning for ATA courses.

#### Management approach

- Employee awareness training including induction programme & refresher training
- Implementation of Environmental communication plan
- Launching of Environmental knowledge bank

#### Ref to IR

Page 136





Risk, impact and opportunities			
Risk: Failure to embed environmental awareness programmes to integrate environmental issues in the business value chain			
Risk classification	Risk impact	Opportunities	ATNS's response
Institutional Reputation	<p>Lack of education and awareness creates the risk that sustainability efforts may be wasted due to a lack of understanding of how the Company's operations affect the natural environment.</p> <p>Another risk is that, due to a lack of education, opportunities may be lost as employees are unable to identify and suggest solutions, which could be beneficial for the Company.</p>	<p>The opportunity for ATNS is to embed a culture of sustainability excellence through education and environmental impact awareness.</p> <p>Educated employees will be able to identify opportunities and risks in their daily activities and as such drive innovation, especially when provided with a platform for feedback.</p>	<ul style="list-style-type: none"><li>• Providing sustainability and Environmental Awareness training to the organisation and EXCO.</li><li>• Implementing organisation-wide Sustainability and Environmental awareness programmes.</li><li>• Implementation of an environmental management system.</li><li>• Strengthening implementation and integrated reporting and to address three sustainability pillars (Social, Economic, Environmental).</li></ul>

Performance

Performance measure	Target in 2017	Achievement in 2017	Focus for 2018
25% of ATNS employees trained	315 of 1258	316 of employees	Transition of classroom Environmental training to a more flexible e-learning method

Outlook

For the upcoming financial year, the development of e-learning content will be implemented as well as the continuous communication and awareness to contribute towards changing the culture of the business to be more environmentally conscious.



Material issue: Enabling integration of environmental aspects to our business

Why is matters to us	Ref to IR
<p>ATNS continues to implement measures to integrate environmental sustainability into the core business. With the implementation of the reviewed Sustainability and Environmental Strategy's key programmes, the environmental performance of the Company is expected to increase toward the desired maturity level. Environmental performance can be measured and monitored in various facets of the organisation.</p> <p><b>Supply chain management compliance</b></p> <p>Sustainable procurement practices enable an organisation to ensure that its products and services have minimal environmental impacts. The assessment of ATNS' suppliers during the procurement phase of projects is being investigated and will enhance the environmental performance for the company.</p> <p>Assessing suppliers from where materials are sourced, manufacturing processes, transportation, operational phases as well as end of life need to be environmentally sustainable. Therefore, the integration of environmental sustainability into the overall supply chain model is of critical importance to truly enhance environmental performance.</p> <p><b>CAPEX value chain</b></p> <p>Environmental sustainability integration into infrastructure project planning to ensure that all projects have minimal environmental impacts. Currently, projects are assessed from the planning phase in order to plan towards minimising the associated impacts. Furthermore, the actual implementation and maintenance is monitored through environmental management plans. The decommissioning phase is also aligned to environmental objectives.</p>	Page 111
Management approach	
<ul style="list-style-type: none"><li>• Sustainability integration guideline and checklist</li><li>• Performance monitoring score card</li><li>• Dedicated resource to managing CAPEX, Procurement value chain</li></ul>	



Performance

Performance measure	Target in 2017	Achievement in 2017	Focus for 2018
Environmental Sustainability integration into Core Business.	Sustainability and Environmental Strategy Review.	Development of approach towards integrating environmental sustainability into business operations.	Development of an Implementation Plan that will result in all business facets being aligned to environmental sustainability. Set baselines for targets and evaluation of performance against set targets.

Outlook

The full integration of environmental sustainability into the Company is currently limited by various challenges, which include lack of sufficient resources to adequately implement all programmes identified in the Sustainability and Environmental (S&E) Strategy to fulfil the department’s mandate for environmental sustainability.

The introduction of an Environmental Management System (EMS) is currently being investigated and will enable ATNS to integrate environmental sustainability into all business operations to enhance the overall environmental performance of the Company. The EMS will ensure that all the necessary structures, processes and procedures are integrated into the Company in a manner that will enhance the S&E Strategy’s maturity.



SUPPORTING POLICIES, PLANS AND FRAMEWORKS

Table 14 provides an overview of key policies, plans, frameworks and programmes that support ATNS’s approach to managing material economic, social and environmental impacts of the Company.

Table 12: Key supporting policies, plans, frameworks and programmes

Policies	Plans	Frameworks	Programmes
• Dividend Policy*	• The Financial Plan	• Asset and Liability Management Framework	• Capital Expenditure Programme
• ATNS Risk Management policy*			
• Investment Policy/ Hedging Policy*	• The Borrowing Plan	• Risk Management • Solvency and liquidation • Materiality and significance framework	• Capital Expenditure Programme • ATNS EE Programmes: ATC training, Woman Development programme, Individual development programme
• Safety Management Policy*	• Safety Management Plan	• Normal Operational Safety Survey	• Safety management programme • Diversity and change management programmes
• ATNS Fraud Management Policy*	• Fraud Prevention Plan • Whistleblowing Policy	• Values and code of conduct	• Fraud and prevention workshops
• Talent Management & Succession Planning Policy*	• Human Capital Plan	• Permission module	• Skills and development programme
• Supply Chain Management Policy*			
• Employment Equity Policy*	• Employment Equity Plan	• ATNS Employment Equity framework	• ATNS EE Programmes: • ATS training • Learnership Programmes • Engineering Graduate Development Programme • Woman Development programme • Management Coaching and Mentoring programme • General Assistant Programme • PA/Secretaries Programme
• Corporate Social Investment (CSI) policy *	• Corporate Social Investment (CSI) plan	• Community projects (corporate and staff voluntarism projects)	• CSI Investment programmes
• Environmental Statement Policy*	• Sustainability and Environment business plan KPIs	• Sustainability and Environmental strategy	• Environmental management programme
• Integrated Waste Management Policy*	• Sustainability and Environment business plan KPIs	• Sustainability and Environmental strategy	• Waste management programme





# APPENDIX A: GLOBAL REPORTING INITIATIVE INDEX

This report has been compiled with reference to the GRI G4 Guidelines for Sustainability Reporting. This index describes coverage of General and Specific Standard Disclosures in this report. Where information is reported in other reports such as the Integrated Report (IR) and the Financial Report (FR) reference is made to these reports. Only disclosures that are covered in the report suite, are listed below.

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G4-4	Primary brands, products and sevicees	16-20
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G4-18	Process for defining report content and boundaries	4-5
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G4-24	List of stakeholder groups	70-75
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## APPENDIX B: ALIGNMENT TO UNGC

This appendix reports on activities and performance related to the United Nations Global Compact principles. Only those principles for which substantive information is reported, are listed.

Principle number	Principle description	Page
7	Business should undertake initiatives to promote greater environmental responsibility.	122-140
10	Businesses should work against corruption in all its forms, including extortion and bribery.	48-49

