AIR TRAFFIC & NAVIGATION
SERVICES SOC LIMITED

INTEGRATED
REPORT
2017

AIR TRAFFIC & NAVIGATION SERVICES

AT NS

“ In this year of 2017, the 100th centenary year of OR Tambo, we thank our forefathers and we celebrate leadership in our organisation, our communities, our regions and in South Africa.

We are blessed with great and powerful leadership that drives transformation and excellence.

Within each of us is a great leader...find that kernel within yourself, let it grow, flourish and make a meaningful contribution in all you do. ”

THABANI MTHIYANE
ATNS CEO

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PERFORMANCE HIGHLIGHTS

Strategic objectives	Indicator		2015/16	2016/17	Performance
Ensure long-term financial sustainability	Turnover		R1,509 billion	R1,557 billion	
	Operating costs		R1,254 billion	R1,300 billion	
	Net profit		R243 million	R228,3 million	
Enhance operational efficiencies in line with global ATM standards	Total capital expenditure		R230 million	R318 million	
	Average systems availability	Communication	99,61%	• C: 99,80%	
		Navigation	96,15%	• N: 97,98%	
		Surveillance	100%	• S: 99,99%	
Create a transformative organisation	Overall EE representation		• ATS AIC: 66,67% • ATS Female: 41,38% • ATNS AIC: 73,15% • ATNS Female: 44,55% • People with disabilities: 2,79%	• ATS AIC: 70,01% • ATS Female: 42,43% • ATNS AIC: 75,12% • ATNS Female: 44,88 • People with disabilities: 3,31%	
Build a culture of safety	Safety events per 100,000 air traffic movements		2,73 safety events per 100,000 air traffic movements	2,57 safety events per 100 000 air traffic movements	
Build a skilled and capable employee resource base	Total number of ATS bursars		74	81	
	Total number of engineering learnerships		6	6	
	Training investment as percentage of a salary bill		7,57%	8,13%	
Develop enterprise-wide awareness for environmental impacts	Total number of employees trained on environmental training programmes		535	316	
Manage the organisation's contribution to Climate change	Total carbon inventory		25,510.96 tons CO2e	23,292.01 tons CO2e	
Manage and preserve scarce and vulnerable resources	Overall annual electricity usage		20,154,721.16 kWh	20,515,469 kWh	
	Overall annual fuel usage		95,965 litres	89,761 Litres	
Ensure constructive and collaborative stakeholder relationships	CSI spend		R1,426, 576	R3,445,441.77	

ABOUT THE INTEGRATED REPORT

Scope and boundary of report

- ATNS's fifth consecutive Integrated Report.

- Financial reporting period from 1 April 2016 to 31 March 2017.

- Combines financial and non-financial performance in a single and integrated reporting format.

- All references to forward-looking information and targets are extracted from the 2017/18 ATNS Corporate Plan approved by the Board of Directors.

- The reporting boundary is largely the ATNS legal entity. In some instances reporting on material aspects extends to entities outside of the Company, as ATNS's operations are located at different airports.

The previous Integrated Report was approved by the ATNS Board of Directors on 16 August 2016 and published for the period 1 April 2015 to 31 March 2016. Downloadable versions of the three-volume suite of reports is available online at www.atns.co.za.

Navigating this report

Icons associated with strategic objectives

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). Performances commentary links the ATNS's value creation story to the strategic goals of the Organisation through the use of the following icons:

Ensure long-term financial sustainability

Manage the organisation's contribution to Climate Change

Enhance operational efficiencies in line with global ATM standards

Manage and preserve scarce and vulnerable resources

Develop leadership capability in Africa ATM space

Develop enterprise-wide awareness for accountable environmental impact

Create a transformative organisation

Maintain an impeccable governance framework

Build a culture of safety

Ensure regulatory alignment and compliance

Build a skilled and capable employee resource base

Ensure constructive and collaborative stakeholder relationships

Icons associated with the six capitals

💰 Financial capital

👥 Human capital

⚙ Manufactured capital

💬 Social and relationship capital

🧠 Intellectual capital

🍃 Natural capital

Icons referencing King III principles applied

Abridged governance disclosures in this report are accompanied, where applicable, by icons referencing the applicable King III principle by means of the following icons:

👑 King III fully applied   👑 King III partially applied   👑 King III not applied

Icons associated with material issues

⚖ Icon denoting one or more of ATNS's 19 material issues.

🌐 Icon denoting ATNS's material developmental and environmental issues. Where appropriate in this report, material issues forming part of ATNS's material developmental and environmental issues – as detailed in the online Sustainability Report – are denoted by means of this icon.

Referencing content online

The 2016/17 Integrated Report, and ATNS's Annual Financial Statements are available on our website as downloadable documents: http://www.atns.co.za/annualreports.

Feedback

We welcome feedback on our integrated reporting to ensure that we continue to disclose information that is pertinent to all our stakeholders. For further queries or suggestions kindly contact: Ms Onicca Mashangoane at OniccaM@atns.co.za.

Approach to integrated reporting

The 2016/17 Integrated Report offers a 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).[1]

We apply the principle of 'materiality' to:

• Inform disclosures, so that they are both important to the organisation and relevant in terms of our reporting priorities for the year under review.
• Link disclosures on ATNS's financial, social and environmental performance to the Company's strategic objectives, top risks and to the six capitals.
• Link performance to the Company's developmental context, regulatory context, commercial context and its global business context.

Materiality has been determined by the ATNS Board of Directors and Executive Management through a process of extensive consultation within the organisation and with ATNS' stakeholders. The process considered ATNS' strategic objectives whilst taking into account the Company's material risks, strategic opportunities and the ATNS value chain.

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 Organization (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 integrated reporting discloses both financial and qualitative (non-financial) performance information as it relates to ATNS's business outcomes and the Company's contributions to the country's overall economic efficiency and ATM competitiveness. Where applicable, the report includes Standard Disclosures from the GRI Sustainability Reporting Guidelines.

[1] According to the IIRC:
"The capitals… are: financial capital, manufactured capital, intellectual capital, human capital, social and relationship capital, and natural capital. Together they represent stores of value that are the basis of an organization's value creation."

Further:
"Integrated Reporting is an approach to corporate reporting that demonstrates the linkages between an organisation's strategy, governance and financial performance and the social, environmental and economic context within which it operates" (2013a).

Assurance

ATNS's integrated assurance plan and framework encompass the assurances provided by the Company's Board of Directors, management, internal specialists, internal and external audit functions and other business advisers.

Table 1: ATNS Integrated Assurance framework for the annual integrated reporting process

Assurance content	Assurance providers	Assurance frameworks, standards and guidelines	2016/17 outcome
Annual Financial Statements (AFS)	• ATNS Board of Directors • The Company's Directors • External auditors: Rakoma and Associates	• Financial Reporting Standards • Requirements of the Public Finance Management Act (PFMA) • Companies Act • Public Audit Act • International Standards on Auditing (ISA)	Qualified audit report for 2016/17
Risk management and review of the efficacy of internal controls (including fraud risk)	• ATNS Board of Directors • ATNS Audit and Risk Committee • ATNS Internal Audit function • ATNS Risk and Compliance Department • ATNS IT Steering Committee • External auditors: Rakoma and Associates • The Company's Directors	• ICAO Standards and Recommended Practices (SARPs) • The King Code of Governance for South Africa (2009) (King III) • Requirements of the Public Finance Management Act (PFMA) • ISO standards relating to safety and environment • ERM and compliance standards including guidelines relating to the Risk Management and Compliance Institute of South Africa • The Civil Aviation Act (Act 13 of 2009), supported by Civil Aviation Regulations and Technical Standards • Key Performance Areas (KPAs) stipulated in the Shareholder Compact	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
Corporate Governance and regulatory compliance (including IT governance)	• ATNS Audit and Risk Committee • ATNS's Internal Audit Function • ATNS IT Steering Committee • Permission Planning Committee	• ICAO Standards and Recommended Practices (SARPs) • The Civil Aviation Act (Act 13 of 2009), supported by Civil Aviation Regulations and Technical Standards • The King Code of Governance for South Africa (2009) (King III) • Requirements of the Public Finance Management Act (PFMA) of South Africa • Companies Act • ATNS Permission applications as mandated by the Regulating Committee in its Approach Document[2] • Relevant Key Performance Areas (KPAs) stipulated in the Shareholder Compact • ATNS Code of Ethics	There were material findings. Irregular expenditure.
Broad-Based Black Economic Empowerment, representation and contributor level	• ATNS Internal Audit function • ATNS Board • ATNS Social and Ethics Committee • ATNS Human Resource Committee • ATNS Procurement Committee	• DTI Codes of Good Practice • B-BBEE Act and associated Charters • Generic Transport Public Sector Charter • Relevant Key Performance Areas (KPAs) stipulated in the Shareholder Compact	• B-BBEE Level 2 • Total B-BBEE score: 94.51
Safety management and performance	• ATNS Board of Directors • ATNS Safety Committee • ATNS Audit and Risk Committee • External assurance provider: South African Civil Aviation Authority (SACAA)	• ICAO Standards and Recommended Practices (SARPs); ICAO Annex 19 requirement for States to implement ATS safety management programmes • The Civil Aviation Act (Act 13 of 2009), supported by Civil Aviation Regulations and Technical Standards • South African Civil Aviation Regulations (CARs) Part 40 • Relevant Key Performance Areas (KPAs) stipulated in the Shareholder Compact • ATNS Safety Management System (SMS) and SMS Policy • CANSO and EUROCONTROL Standards of Excellence	• The safety ratio attained was 2,57 safety events per 100 000 movements against a target of 2 safety events per 100 000 movements
Environmental management and performance	• ATNS Board of Directors • ATNS Social and Ethics Committee • ATNS Project Management Office	• ICAO Standards and Recommended Practices (SARPs) • Relevant Key Performance Areas (KPAs) stipulated in the Shareholder Compact • National Environmental Management Act (NEMA) • Outcomes of the South African Civil Aviation Authority (SACAA) Aviation Environmental Protection (AEP) Forum • Greenhouse gas (GHG) Protocol Corporate Standard • Carbon Disclosure Project (CDP)	• Carbon emissions resulting from ATNS's operations amounted to 23 292,01 CO2e, of which 89% was due to electricity consumption, 1% due to fuel usage, and 10% due to business travel • 316 (25%) of 1 258 ATNS employees and 24 bursars received environmental sustainability training during the year
Integrated Annual Reporting	• ATNS Board of Directors • ATNS Company Secretary • Internal audit • External audit	• The King Code of Governance for South Africa (2009) (King III) • Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines • International Integrated Reporting Framework V1.0 (International Integrated Reporting Council (IIRC)) • United Nations Global Compact (UNGC) • Carbon Disclosure Project (CDP)	• Board-approved Integrated Report, consolidating financial and non-financial information • Additional external assurance on certain aspects of the non-financial sustainability information reported in the Integrated Report

[2] 2015/16 – 2019/20 Approach Document.

Statement of precautionary principle

Airspace safety performance is at the core of our business. With air traffic movements expected to increase in future, flexible airspace optimisation will ensure that safety and an operationally-efficient environment are achieved.

ATNS uses a 'safety ratio' to measure the number of safety events attributed to its operations per 100 000 movements. The safety ratio enables us to verify that we are meeting our safety performance targets. Accordingly, data is collected and analysed to assess our levels of safety performance. The safety ratio is calculated using a 12-month rolling average method. Safety performance assurance and investigation activities are both reactive and proactive.

ATNS provides safe operations through the application of 'separation standards' based on Instrument Flight Rules (IFR). With respect to air traffic control, 'separation' refers to the concept of keeping aircrafts a minimum distance from each other to reduce the risk of colliding, as well as preventing accidents due to wake turbulence. Minimum separation standards for airspace are specified by ATS authorities based on ICAO standards.

ATNS uses a Risk Safety Index (RSI) matrix to measure the various levels of safety risk in terms of the categories of probability and severity. This is done to increase visibility of risks and assist management decision-making. Safety meetings are held with General Aviation at unit and regional levels to discuss safety performance, hazards, risks and mitigations. Root causes for safety events include human-related errors and fatigue, and extends to external factors such as weather phenomena, airspace design, and complex traffic scenarios.

Board of Directors Approval Statement

The ATNS Board of Directors, assisted by its various committees, is ultimately responsible for overseeing the integrity of the 2016/17 Integrated Report.

The Board of Directors has applied its collective mind to the preparation and presentation of the Integrated Report and has concluded that this report is presented in accordance with the International Integrated Reporting Framework v1.0. The Integrated Report also contains Standard Disclosures from the GRI Sustainability Reporting Guidelines.

The Integrated Report was approved by the Board of Directors on 17 August 2017, and signed on its behalf by:

Chairman
Ms Phindile Riba
29 August 2017
Johannesburg

> Airspace safety performance is at the core of our business. With air traffic movements expected to increase in future, flexible airspace optimisation will ensure that safety and an operationally-efficient environment are achieved.

ORGANISATIONAL PROFILE

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.

Values

- Accountability.
- Fairness and Consistency.
- Safety and Customer Service.
- Open and Effective Communication.
- Continuous Improvement and Innovation.
- Employee Engagement and Development.

Nature and purpose of our business

- The Air Traffic and Navigation Service Company Limited (ATNS) is a State-Owned Company (SOC).
- Established in 1993 in terms of the ATNS Company Act (Act 45 of 1993) to provide air traffic management solutions and associated services on behalf of the State.
- ATM services accord with International Civil Aviation Organisation (ICAO) standards and recommended practices, and the South African Civil Aviation Regulations and Technical Standards.
- ATNS is governed by South Africa's legislative and administrative framework.
- ATNS is a commercialised ANSP operating on the "user pay" principle that relies on current revenues and debt funding for its operational and capital expenditure requirements.

The principal purpose of ATNS is to plan and operate safe and efficient services in the airspace for which the state is responsible through:

- Airspace infrastructure provision;
- Development of human capital (ATC, Engineering Technicians and ATM and related Specialists); and
- Partnerships and collaboration with other stakeholders.
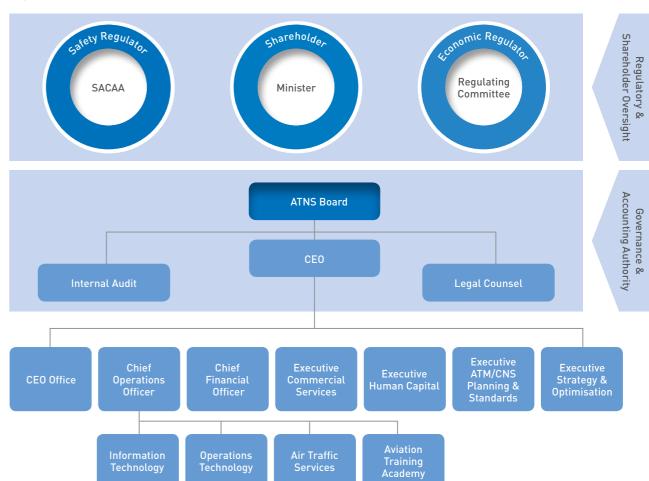
The economic regulation regime is specified in Section 11 of the ATNS Company Act. ATNS can't levy an air traffic service charge unless it is in possession of a valid written Permission that provides a tariff regime to be charged to users over a five-year cycle. The Permission is issued by the Regulating Committee, which is required to balance the interests of the Company with the interest of our clients. This encourages timely investment and ensures that we are well placed to finance our obligations and have a reasonable prospect of earning a commercial return.

The Company has its head-office at Eastgate Office Park, Block C, South Boulevard Road, Bruma, (Postal code: 2198) in Gauteng.

Organisational structure and business model

- ATNS is a state-owned entity incorporated as a company.
- A Board of Directors, appointed by the Minister of Transport, provides leadership and oversight and guides the implementation of the ATNS mandate.
- ATNS' structure aligns with international legislation, such as the International Civil Aviation Organisation (ICAO) ATM Operational Concept and Global Air Navigation Plan (GANP).

Figure 1: ATNS structure

Corporate function

The ATNS corporate function determines the direction of the Company as mandated by the Board of Directors. The CEO is responsible for formulating and executing the strategy. This function ensures that ATNS Executives adequately plan and utilise resources as guided by the five-year permission cycle. Departmental, operational and business plans also drive planning.

Support functions

The support functions, such as Human Capital (HC), Finance, Information Technology, Risk and Compliance and Aviation Training Academy (ATA), create an enabling operating environment though governance frameworks, processes and professional practices.
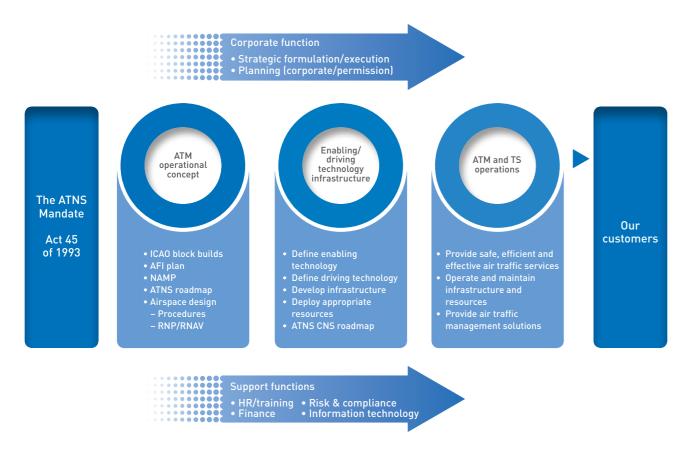
Regulated Business

The principal activities of ATNS's regulated business encompass the planning and operation of safe and efficient services in the airspace for which the state is responsible. At present 90% of ATNS's revenue is obtained through its regulated business.

The ATNS structure enables its unique value chain, which comprises three main blocks:

1. ATM Operational Concept and Global Air Navigation Plan (GANP).
2. Enabling infrastructure and resources.
3. ATM and technical support (TS) operations.

Figure 2: ATNS's regulated business model

Air navigation services and infrastructure

ATNS's air navigation infrastructure and services consist of the following main components:

1. Communications, Navigation and Surveillance infrastructure.
2. Auxiliary aviation services, such as aeronautical information publications, flight procedure design and aeronautical surveys.
3. Air traffic management.

ATNS's infrastructure and service development is informed by user expectations and regulatory requirements at a global level; as well as new technologies and the needs of the air traffic management (ATM) community.

Traffic Movement Assumptions

With the ATM industry being strongly linked to growth in air traffic movements and overall economic growth, ATNS projects the Company's revenue based on expected growth in air traffic movements. The latter has a high correlation to Gross Domestic Product (GDP) at approximately 80%.

Table 2: New ATM revenue based on AAGR and actual ATM for 2016/17

Revenue	2015/16	2016/16	2017/18	2018/19	2019/20
ATM	494,030	502,774	513,131	528,064	546,915
AAGR	3,02%	1,77%	2,06%	2,91%	3,57%

Air traffic service charges

Table 3: ATNS air traffic service charges for the regulated business

Main Mass Category	Cost Component	Formulas and Coefficients (FCs)		
		Aerodrome Charge	TMA Access Charge	Area Charge
FAOR ↖ 5 000 kg	VC	27.87	27.87	
	BSC	113.24	113.24	
	FC	59.74	110.38	
5 000 kg ← MCM ↖ 15 000 kg	VC	27.87	27.87	27.87
	BSC	113.24	113.24	113.24
	FC	119.51	22.08	15.84
→ 15 000 kg	VC	27.87	27.87	27.87
	BSC	138.67	138.67	138.67
	FC	146.38	270.38	194.09

Each rand-value coefficient in Table 3 is multiplied by 100% for domestic, regional and international flights.

The above coefficient formula applies to all charges except in the case of FCs for aerodrome, and TMA access charges at FAOR for aircraft with MCM ←5,000 kg, where the coefficient as stated in the table applies.

Training institution

ATNS runs a successful training institution as a division within the Company, namely: the Aviation Training Academy (ATA). The ATA offers a full range of training products relevant to the disciplines of technical support, engineering, air traffic services and air traffic management.

Training is provided to delegates in South Africa and the broader African continent. The ATA is an ISO9001:2008-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), 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 has been formally recognised as the International Air Transport Association (IATA) Worldwide Top Regional Training Partner for five years in succession. In the period under review ATA received an IATA award for contributing towards the development of professional aviation in the continent.

The ATA holds full ICAO Trainair Plus membership and has been designated by ICAO as a Regional Training Centre of Excellence. During the prior year (2015/16), ATNS reviewed the ATA's training model to further optimise its service offerings, which will positively impact the entire training value chain going forward. The review started the ATA's journey towards profit-centrism. During the 2016/17 financial year, both the ATA strategy and subsequent structure were reviewed and further optimised. The pursuit of registration as an academic institute with the Council of Higher Education is a key initiative of the ATA.

Non-regulated business

ATNS's non-regulated business currently contributes 10% of the Company's revenue. The non-regulated business is the vehicle through which the Organisation will execute its long-term strategy of regional expansion. The non-regulated business – "ATNS International" – operates as a subsidiary of ATNS. The non-regulated business operates concurrently with the three regulated business model structures. The subsidiary will enable the Company to take 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 to harness more valuable market opportunities while extending its regional influence and reach.

ATNS Services

ATNS' services 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 (ATM) service delivery component is enabled by an advanced ATM system deployed at the Johannesburg and Cape Town air traffic control centres and associated terminal control units using enabling technologies such as communications, navigation and surveillance systems. The illustrated value chain (Figure 3) is scalable across the total user-demand spectrum in the South African airspace.

Figure 3: ATNS service overview
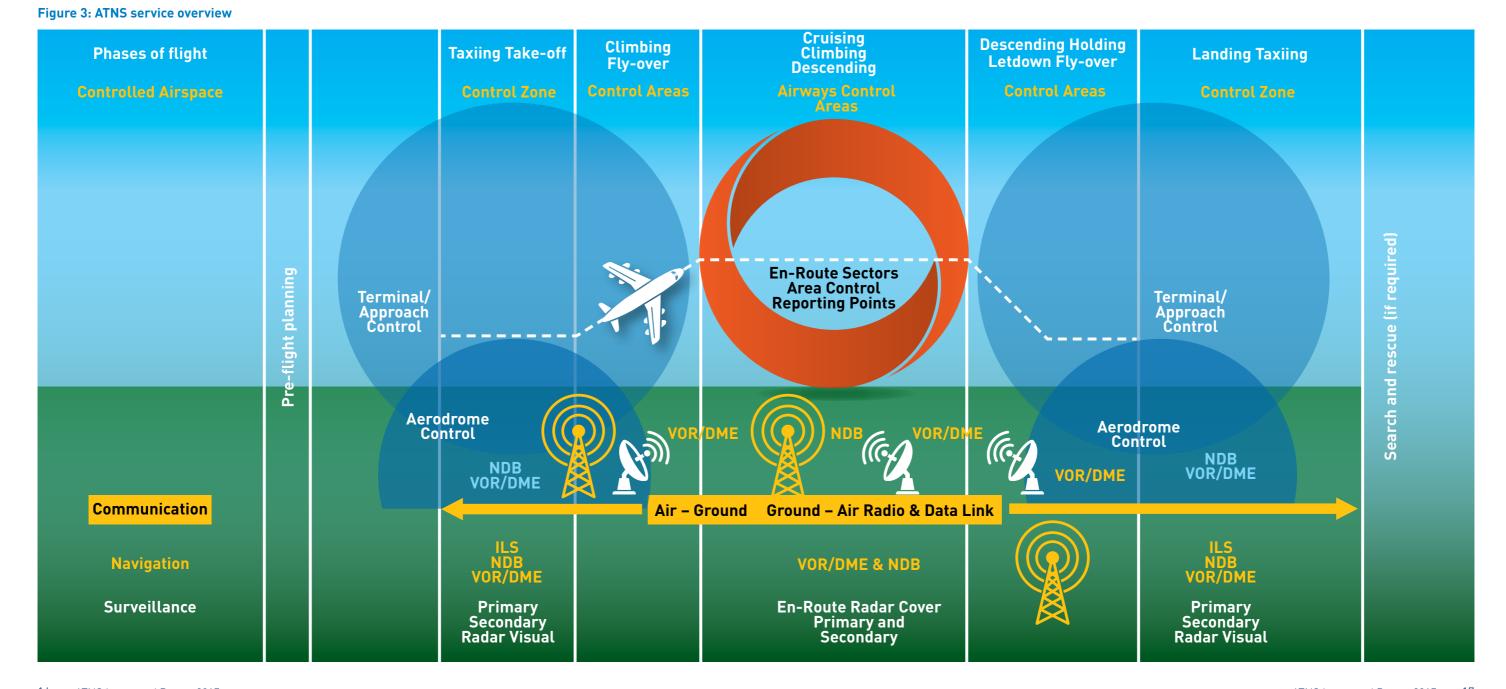
Table 4: Current and new products and services

Existing products and services	New products and services in development
Air Traffic Flow Management (ATFM)	Collaborative Decision Making (CDM)
Training	Information/knowledge services, (e.g. XTRAX, A-SMGCS, 4D) management information
Air Traffic Services (ATS) – Air Traffic Control (ATC) and Aeronautical Information Management (AIM)	Carbon credits (efficient procedures / technologies)
Centralized Aeronautical Database (CAD)	NAVAIDS Flight Calibration
Engineering and Technical support	New consulting services (high visibility ATM event planning e.g. ASBU)
Aeronautical Billing & Collection Service	African Centralized Aeronautical Database (A-CAD)
Aeronautical WGS-84 Survey	ATMS Support Tools
Consultancy Services	
Airspace Management	
Flight Procedure Design	
Dataset Management (e.g. display systems)	

Table 5: market segments and geographic markets

Current markets	New markets
RSA – Statutory	Selected global ATM markets
RSA – Contractual	
SADC – Prioritized	
Africa and surrounding ocean islands	

ATNS's presence in South Africa

Figure 4: ATNS's presence in South Africa

ACSA Airports
Regional Airports

ATNS service reach:
• Aerodrome and approach control services: 9 ACSA airports
• Aerodrome services: 12 regional airports
• Approach procedural services: 4 regional airports

Additional services:
• National Aeronautical Information Management and Oceanic Control services
• Operates Aeronautical Rescue Coordination Centre on behalf of the DoT

Figure 5: ATNS African Indian Ocean (AFI) regional airspace cover
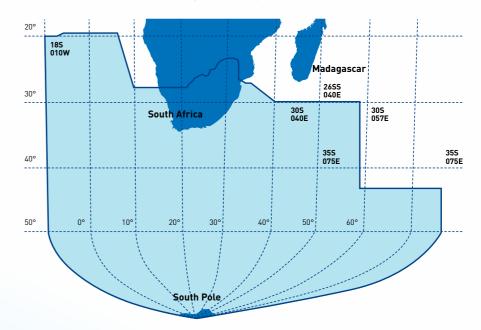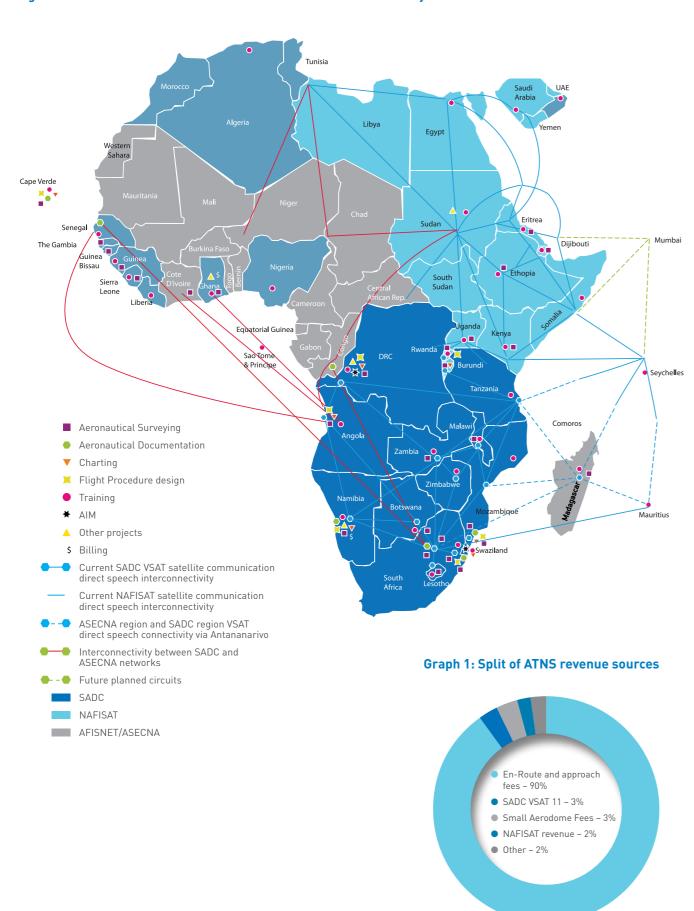
Figure 5 depicts ATNS's current and potential new markets in the AFI region. ATNS bases its selection of the markets on the following criteria:

• Analysis of external market research and intelligence gained through customer engagements.
• Countries where ATNS already has established contracts and good working relationships.
• ATNS's current capabilities and what is required to build and extend these to new markets.
• Current and potential revenue contributors.
• Strategic intent for the organisation's long-term aspirations.

Figure 6: ATNS's extended services on the African continent and beyond

Legend:
- ■ Aeronautical Surveying
- ● Aeronautical Documentation
- ▼ Charting
- ✖ Flight Procedure design
- ● Training
- ✳ AIM
- ▲ Other projects
- $ Billing
- ●━● Current SADC VSAT satellite communication direct speech interconnectivity
- ── Current NAFISAT satellite communication direct speech interconnectivity
- ●-●- ASECNA region and SADC region VSAT direct speech connectivity via Antananarivo
- ●━● Interconnectivity between SADC and ASECNA networks
- ●-●- Future planned circuits
- ■ SADC
- ■ NAFISAT
- ■ AFISNET/ASECNA

Graph 1: Split of ATNS revenue sources

- ● En-Route and approach fees – 90%
- ● SADC VSAT 11 – 3%
- ● Small Aerodome Fees – 3%
- ● NAFISAT revenue – 2%
- ● Other – 2%

Contextualising our operations

Regulatory context

The international aviation regulatory environment was formed through the International Civil Aviation Organization (ICAO), a specialised body of the United Nations Organization responsible for global civil aviation. ICAO was established through the Chicago Convention, signed by participating states in 1944. South Africa is a signatory to the Convention, and has acceded to abide by the terms and conditions. In terms of Article 28 of the Chicago Convention, the South African Government is required to provide air navigation services and infrastructure in compliance as promulgated from time to time by ICAO.

ATNS's regulated business is carried out in its capacity as a State-Owned Company (SOC), mandated under Act by its Shareholder, the Department of Transport (DoT). Given its monopoly status, this business is regulated by the Regulating Committee (RC), a statutory body established by the DoT to regulate ATNS's economic activities.

Economic regulation
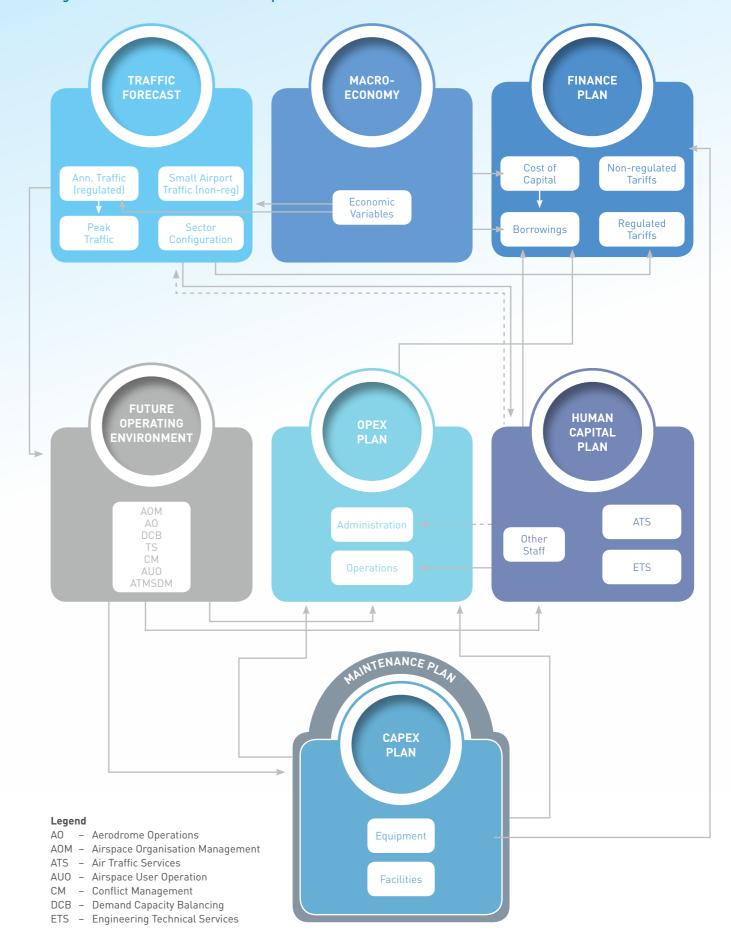
ATNS's Permission Modules provide a structured and justified framework for the Company's infrastructure (CAPEX), Human Capital (Skills Plans) and Operational (OPEX and Support) investment plans over a five-year planning horizon, and form the core pillars of the Permission Application process. These modules are informed by the current operating environment, as well as the forecasted operating conditions, macro-economic factors and drivers, and the ATNS ATM Roadmap. The Permission Modules are developed primarily by the ATM/cns and Strategy and Optimisation departments within ATNS.

Eight modules that assist in building the permission application

ATNS Traffic Forecast Module
Covers the demand for the core air traffic control services. The annual traffic, together with tariffs, drives revenue. Peak traffic and the related design and configuration of airspace sectors determine how the core (frontline) business is organised.

Future Operating Environment Module
Defines the activities of ATNS to satisfy the requirements of the South African National Airspace Masterplan (NANP) and implement the initiatives contained within the ATNS ATM Roadmap with in the context of the Permission Application.

ATNS Human Capital Module
The frontline staff component of the Human Capital module, as well as from the equipment component of the Capex Module (i.e. the number and organisation of the frontline staff depend on the sector configuration). The other staff components flow largely from the enabling technology environment, i.e. the aggregate staff component flow the frontline staff.

ATNS Macro-Economic Module
Drives aggregate (annual) traffic, and also sets the pricing parameters (inflation, interest and cost of capital) for the company.

ATNS Finance Module
Ties the other modules together, which in simple terms is purely the aggregate traffic divided by the company's expenditure base ('revenue requirement').

ATNS CAPEX Module
Basis for the Maintenance Plan Module, i.e. the capital expenditure over time provides the capital base that needs to be maintained. The annual traffic drives the level of activity in the company and therefore the operational expenditures. Administrative and largely driven by the staff organisation of the company, as well as statutory requirements, etc.) These components are aggregated into the **Opex Plan Module**.

ATNS Operations and Maintenance Module
The annual traffic drives the total level of activity in the company, and therefore the operational expenditure. The Capex Module is at the same time the basis of the Maintenance Plan Module, i.e. the capital expenditure over time provides the capital base that needs to be maintained.

Administration Module
Administrative expenditures are largely driven by the staff organisation of the company, as well as statutory (governance, auditing, etc.) requirements.

TRAFFIC FORECAST
- Ann. Traffic (regulated)
- Small Airport Traffic (non-reg)
- Peak Traffic
- Sector Configuration

MACRO-ECONOMY
- Economic Variables

FINANCE PLAN
- Cost of Capital
- Non-regulated Tariffs
- Borrowings
- Regulated Tariffs

FUTURE OPERATING ENVIRONMENT
- AOM
- AO
- DCB
- TS
- CM
- AUO
- ATMSDM

OPEX PLAN
- Administration
- Operations

HUMAN CAPITAL PLAN
- Other Staff
- ATS
- ETS

MAINTENANCE PLAN / CAPEX PLAN
- Equipment
- Facilities

Legend
AO   – Aerodrome Operations
AOM – Airspace Organisation Management
ATS – Air Traffic Services
AUO – Airspace User Operation
CM   – Conflict Management
DCB – Demand Capacity Balancing
ETS – Engineering Technical Services

Global business context

Globally, 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. ICAO member states have endorsed the ICAO Global Air Traffic Management Operational Concept, which defines the seamless global aviation system concept. In turn, this concept translates into the Global Air Navigation Plan (GANP), supported by the Global Aviation Safety Plan (GASP) and is underpinned by the ICAO Standards and Recommended Practices (SARPs).

The GANP is translated into a Regional Air Navigation Plan (RANP), which considers the regional demand differences 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 systems.

The Africa Indian Ocean (AFI) Regional Plan is encapsulated in the ICAO document 7030/4 and forms the basis of the South African National Airspace Master Plan (NAMP), which is approved by all South African aviation stakeholders. 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's ATM service delivery plans, and are supported by enabling communications, navigation and surveillance infrastructure.

Developmental context

As a State-Owned Company, ATNS aims to advance and support National Governmental socio-economic outcomes – which aim to eliminate poverty and reduce inequality by the year 2030 through the National Development Plan (NDP).
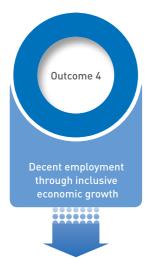
Statement of Strategic Intent and Shareholder Compact

ATNS's activities are informed by the Minister of Transport's Statement of Strategic Intent as well as our Shareholder Compact. We are further guided by the Medium-Term Strategic Framework (MTSF), implemented by the South African Government to measure the NDP's enabling milestones.

The MTSF constitutes a five-year implementation phase of the NDP, structured into 14 priority outcomes, which cover the NDP focus areas and Government's electoral mandate: education, health, safety and security, economic growth and employment, skills development, infrastructure, rural development, human settlements, local government, environment, international relations, public sector, social protection, nation-building and social cohesion.

The DoT, and by extension ATNS, focuses on the implementation of four of the 14 outcomes for Government to achieve related MTSF outputs.
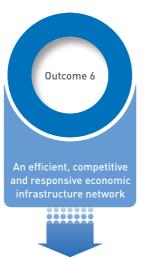
Outcome 3 — A transport sector that is safe

Outcome 4 — Decent employment through inclusive economic growth

Outcome 6 — An efficient, competitive and responsive economic infrastructure network

Outcome 10 — Protect and enhance our environmental assets and natural resources

Table 6: Shareholder Compact: business objectives and objective measures

KPA no.	Business objectives	Objective measures for 2016/17
1.	DoT Outcome 3: Transport safety and security	
1.1	Risk Safety Index (RSI	Reduce the risk associated with safety events
1.2	Safety service provision	Increase successful safe operation
1.3	Operational efficiency	Reduce overall traffic delays
1.4	Operational efficiency	Achievement of CNS Systems Availability
1.5	Ensure commercial sustainability	Ensure financial sustainability
1.6	PBN Operational Enhancement	PBN Roadmap implementation
		Independent Parallel Runway operations at FAOR
2.	DoT Outcome 6: Infrastructure development and high-level investment plan for Transport	
2.1	Development of optimised and efficient aviation infrastructure in a cost-effective manner	Approved CAPEX Commitment Plan for 2017/18
2.2	Operation of the satellite communication networks: SADC VSAT 2	Optimise revenue and ensure network availability
2.3	Operation of the satellite communication networks: NAFISAT	Optimise revenue and ensure network availability
3.	DoT Outcome 9: The fight against fraud and corruption	
3.1	Comply with relevant legislation, regulation and standards	Full (one is either compliant or not & therefore percentile measurement not accurate)
3.2	All whistle blowing matters reported are investigated	Fighting corruption and promoting good governance
4.	DoT Outcome 10: Environmental protection	
4.1	Implementation of environmental plan	Measure ATNS Carbon footprint
		Performance assessment
5.	DoT Outcome 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
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
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
6.	DoT Outcome 4: Broad-Based Black Economic Empowerment (B-BBEE)	
6.1	Achieve B-BBEE targets	Percentage of discretionary spend on B-BBEE
	Achieve preferential procurement targets as set by the Transport Charter	Total discretionary OPEX budgeted
		Total CAPEX budgeted
7.	DoT Outcome 4: 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
7.2	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

Commitments to external initiatives

The ICAO Aviation System Block Upgrades (ASBU)

- To meet the future challenges of air traffic growth, ICAO has collaborated with member states, industry and international organisations to develop the ASBU concept.
- ASBU helps to ensure the following operational imperatives:
  – Maintaining and enhancing aviation safety.
  – Harmonising air traffic management improvement programmes.
  – Removing barriers for future aviation efficiency and environmental gains at reasonable cost.
- ATNS fully endorses the ASBU initiative as it is essential in setting the vision and framework for the global harmonisation of air traffic management.

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

- ATNS is a founding member of the Indian Ocean Strategic Partnership to Reduce Emissions (INSPIRE).
- INSPIRE is a partnership with airlines, ANSPs and airport partners to address aviation's impact on the environment.
- INSPIRE is a collaborative partner network across the Arabian Sea and Indian Ocean region dedicated to improving aviation efficiency and sustainability.

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

- The Aviation Training Academy (ATA), an ATNS division, 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.
- Accreditation is awarded upon submission of a fully-documented logbook – valid for two years; and subsequently the university awards a National Diploma in that respective discipline.

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

- ATNS in collaboration with the United States Trade and Development Agency (USTDA) contributed towards a funding 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 selected African countries.
- 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).

University of Pretoria (Leadership)

- To ensure superior achievement of "Absorptive Capacity" and to promote strategic collaboration, ATNS has established a strong coalition with the University of Pretoria's Department of Electrical Engineering and Computer Systems in the areas of telecommunication.
- This initiative also builds capacity and learning opportunities for undergraduate and postgraduate engineering students who come from historically-disadvantaged backgrounds.

The GHG Protocol Corporate Standard

- ATNS Carbon Emission Inventory and footprint is calculated using best practice methodology to account for all greenhouse gas (GHG) emissions released as a result of its operations.
- In line with international leading practice, ATNS calculates its carbon inventory in accordance with the GHG Protocol Corporate Standard.

Civil Air Navigation Organisation (CANSO)

- ATNS is a founding member of the Civil Air Navigation Organisation (CANSO) in Africa.
- ATNS hosts the CANSO Regional Office in Africa.

ATNS recognises that its IT infrastructure requires strengthening to precisely address some of these internal control failings and to facilitate streamlined, standardised and transparent business processes with real time data. All of which will enable effective oversight and governance. The Board continues, therefore to oversee the IT service delivery framework as part of its IT governance responsibilities. Some aspects around the policy direction and governance structure have been approved for this financial year, however, the mapping of the required Enterprise Infrastructure in line with the business processes, cyber security concerns and disaster recovery are ongoing.

Despite these challenges, ATNS has largely performed and achieved 81.6% of its performance targets in line with our shareholder compact for this reporting period.

We achieved 3% increase in Revenue of R1,557 billion compared to the previous year (2016: R1,509 billion). A 4% increase in operating costs dampened our cash generated from operations by 3%, registering R431 million compared to R445 million in 2016. Whilst ATNS continues to be profitable, we are registering declining profitability, with our PBT reflecting a 9% decline at R317,780,117 compared to the previous year (2016: R348,583,236)

Last year I indicated that a critical focus for ATNS is readying the entity to execute on its medium to long term strategy to expand its non-regulated business into the AFI region. This is being done to grow and sustain our revenue streams through new service offerings and new markets to mitigate our declining local market revenues against increasing operational costs.   I am pleased to report satisfactory progress in this regard.

A critical lever of the AFI market strategy is our internationally recognised and ICAO accredited aviation training academy (ATA). We started the process to optimise the ATA's current training model to ensure that it evolves into a sustainable profit centre and lucrative alternative revenue stream for ATNS. New training offerings, as part of our new services initiative, have been identified and the operating structure reviewed. An MOU has been signed with Ghana to provide training. Additionally, we are progressing well with the process of registering ATA as an academic institute with the Council of Higher Education which will enable the ATA to confer academic qualifications in a historically vocational ATM environment. This step will be a major milestone for our new markets strategy and further strengthen our position as the preferred training partner in the Continent. We are also realising significant revenue above target from our SADC VSAT and NAFISAT business. This positive trajectory in the new markets is set to continue in the coming years.

More details of ATNS's performance are outlined in the CEO's report.

Looking ahead

Our revenue streams continue to be under pressure against rising operational costs. Central to our financial performance and sustainability is securing the ATM tariff permission 2018/19 to 2022/23 for the regulated business, and, sourcing new markets.

The process of submitting the Permission application to the Regulating Committee is underway amidst global and domestic economic constraints. Tariffs for the regulated business are based on projections of air traffic movements out of and into South Africa and the mix of aircraft being used. Although the South African economy has weakened considerably and projected to grow on average at 1.3% in 2017, compared to last year's modest 0.5%, the overall outlook for foreign tourism into South Africa is expected to remain positive. International visitor numbers into South Africa breached the 1 million mark for the first time in Jan 2017 and the upward trend is expected to continue in the permission period, despite the recent country downgrade by the ratings agencies. Whilst the impact on local travel is not yet apparent, given the 12-18 month lag between changes in GDP and impact air traffic movements, we believe that any downward trends will be offset by the inward air travel if it indeed materialises.

MS PHINDILE RIBA
Chairman

ATNS's key purpose is to plan and operate air traffic management services that are safe, expeditious and efficient on behalf of the state, whilst ensuring ATNS financial sustainability.

The value of the integrated report is not only in how well we chronicle and connect our performance disclosures, but the extent to which the principles of interconnectivity and transparency are visibly carried through in our daily activities. Thus, as we pause, take stock and report on our progress, we remain true to our principle by reporting equally on our positive achievements, challenges and potential failings, with the intention of continuing our excellence and improving where we need to.

Results

During this reporting period, the Board was confronted with multiple whistleblowing matters that, after internal investigation, indicated ATNS needed to strengthen its financial management, and, procurement practices and processes. However disheartening this might have been for the Board, it is important to recognise that our employees felt both empowered and safe to report these incidents. Accordingly, remedial action was and continues to be taken to rectify and ensure PFMA and other legislative compliance. The outcomes of the external audit leading to a qualified audit further highlight the need for in-depth scrutiny and remediation in these areas of internal controls.

The CEO's report provides further detail on the management action to be taken to address the findings of the external auditors.

We continue to see the mutual benefits for both the South African economy and the economies of neighbouring African states in expanding beyond the local regulated markets into the continent and beyond. It is, therefore, prudent for ATNS to quicken the pace of its AFI strategy to capture new market opportunities leveraging off its existing infrastructure and skills base, and identifying new service offerings. This will require, amongst others, a more assertive readying of resources (financial, infrastructural, human, and intellectual) to take the next outward steps.

The Shareholder and, indeed Government as a whole, has a critical role to play in setting the course of this expansion in partnership with all the aviation sector players. The Shareholder, we believe, is well positioned to help identify the areas of common commercial value, streamline and foster collaboration between the broader network of South Africa's state-owned entities that could, collectively, ensure South Africa's growing competitiveness in the aviation transport sector. As ATNS, we have already signed the requisite MOUs with ACSA and SACAA , in which we have agreed to 'hunt as a pack'. We are now looking towards the actual execution. South Africa is regarded internationally as a beacon of ATM strength, a benchmark of leadership on the continent, and a prospective hub from which to springboard air safety services and infrastructure into the rest of Africa. ATNS is already playing a leading role on the continent by hosting the Civil Air Navigation Organization (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. We will continue to leverage this positioning to mutual benefit for all.
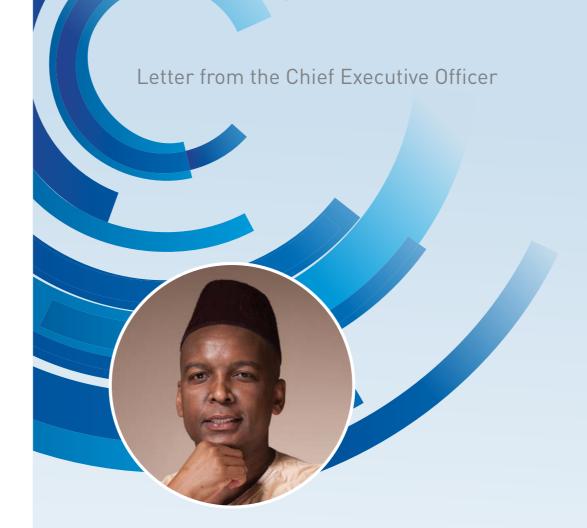
ATNS, as a state-owned company, is also mandated to drive the national government's developmental mandate through the empowerment of local enterprises, employment equity, poverty alleviation and responsible environmental stewardship. This is not unique to South Africa's SOCs. World-wide, SOCs are vital instruments for governments in building and preserving societal and public value. Within appropriate contexts, they collaborate with private companies, as well as other stakeholders such as academia, not-for-profit organisations and citizens to build this broad-scale economic value. Often, the dual commercial and developmental mandates driving SOCs' performance appear divergent and even mutually exclusive. In reality, developmental outcomes should be the necessary and natural outcomes of all commercial activities – for both SOCs and also for the private sector. ATNS will accordingly continue to explore and create opportunities for local business participation in core aspects of its business as part of governments radical economic transformation objectives.

As I move on to other commitments, I will continue to take a keen interest in how ATNS, together with its partners in aviation, plays its part in driving South Africa's national programmes and international aspirations into the continent, thereby contributing towards South Africa's, and ultimately Africa's, holistic plan for durable socio-economic growth, the very basis of the African Union's aspirational Agenda 2063.

I would like to extend my gratitude and compliments to the Shareholder, my fellow Board members, the ATNS Executive and all employee's. I have been humbled and gratified by the dedication and passion of the men and women within ATNS whose efforts have not only positioned the Company as a preeminent ANSP in Africa, being a founding member and Africa Chair of the Civil Air Navigation Services Organisation (CANSO), but also as one of the leading ANSPs globally.

Chairman
Ms Phindile Riba

MR THABANI MTHIYANE
Chief Executive

Introduction

As we become more focused on long-term horizons we are confronted by an increasing sense of unpredictability both nationally and globally. Nationalistic and protectionist rhetoric from world leaders, and the continued impact of the economic recession have created a challenging business environment; albeit, that the outlook is beginning to look more positive globally. Notwithstanding the economic challenges, nationally in particular, air traffic has increased in recent years. South Africa's subdued economy, with the weakening Rand, contributed towards improved international inbound tourism on the one hand but slowed-down domestic travel on the other. ATNS experienced a decrease of 0,66% in total air traffic movements. The revenue generating movements increased by 0,61% and this helped to some extent mitigate the negative impact of a zero-tariff increase.

One might say, interconnected external variables, such as currency volatility and international air traffic movements, had a positive influence on our operations. Looking ahead, we need to acknowledge the factors that are either within, or beyond our control and understand how the interplay between them impact the sustainability of the business.

What we have control over is how we shape our organisation, not only to survive in the context of an unpredictable world, but also to thrive in it. As we review the past year's performance it is imperative that we relate our achievements and setbacks to our strategic trajectory to determine if our company structure, governance frameworks and systems environment continue to be fit for purpose to co-create the ATNS we intend to become.

Performance through the six capitals

💲 Financial capital

Our regulated business relies on revenue generated from service-based tariffs with revenue being linked to air traffic movements. Given a set tariff, as air traffic movements increase, revenue increases and visa versa. ATNS is currently in the process of submitting a Permission application for the period 2018/19 to 2022/23, which will inform our tariffs and the service standards required for the regulated business for this period.

Revenue from operations increased by 3% to R1,557 billion (2016: R1,509 billion) mainly due to a slight increase in air traffic movements. Viewed on their own, our key metrics for measuring commercial sustainability reflect satisfactory performance. Return on capital employed (ROCE) is at 20,1%, against a target of 12,6%. Further demonstrating ATNS' sound financial management, our balance sheet maintained its strength with our liquidity ratio (C/A) being at 5.3:1 (2016: 6.3:1) and our gearing ratio at 0% (2016: 0%).

Operating costs increased by 4% to R1,300 billion (2016: R1,254 billion); the net result of which was a reduction in net profit before tax to R228 million (2016: R243 million); as well as a 3% reduction in cash generated from operations to R431 million (2016: R445 million). The reduced margins are reflective of the challenge faced by the organisation with increasing costs and a regulated market that is plateauing. The commercial impetus to increase profits in our non-regulated business, and thus extend our business beyond South African borders, is framed by this context. It must be emphasised that ATNS' financial sustainability is strongly dependent on the successful execution of our Africa expansion strategy; and our revenue growth relies on our ability to develop new services and markets.

⚙️ Manufactured capital

A critical consideration for us going forward is how to continue to provide quality services at reduced cost, and to do so more efficiently. ATNS is responsible for providing and maintaining reliable airspace infrastructure in South Africa, thereby enabling the delivery of air traffic services in a safe and efficient manner. We do so through the use of best-in-class Communications, Navigation and Surveillance (CNS) infrastructure. During the year, we increased our capital expenditure by 38% to R318 million (2016: R230 million). However, as we intensified the pace of investment, our procurement processes and systems highlighted various inefficiencies and capacity constraints. As our business expands, we need to re-design our procurement function to align with our growth aspirations, both from a structural and governance perspective. This implies assessing whether our systems are still fit for purpose. Historically, ATNS operated a decentralised procurement function and a decision was taken during the year to centralise it, mainly to strengthen governance controls. As we unfold our international agenda, local supplier partners will help lead ATM infrastructure solutions into new Africa markets, thereby benefiting ATNS, its suppliers, our broadening customer base, and the South African economy as a whole.

During the year we progressed our CAATS programme to replace the existing legacy ATNS national ATM system with a modern version. The new, advanced ATM technology will enable us to meet the demands of high-level airspace management, and improve operational efficiency to support future capacity and scalability requirements. The programme scope includes the supply, delivery, installation, testing, commissioning, training, transitioning and support of the new ATM System at Southern Region airports[1] and Northern Region airports[2] together with associated services. The Programme reached an important milestone by the 20th of May 2016, when the commissioning and site acceptance testing for the Southern Region airports was successfully completed. Going forward we will consider how to create even greater efficiencies and economies of scale at the airports where we operate. With some airports being more central and operationally demanding than others in outlying areas, we will design and plan more economically to match infrastructure and resource investments to the unique requirements of these different locations. For instance, we are able to service small outlying airports with minimal air traffic through remoting services without the need for people to be physically present on site. This said, as ATNS management, we are sensitive to how this new design rationale might impact our people who live and work in these outlying areas, particularly as their critical skills could be better applied in more operationally-intensive locations, which could necessitate the relocation of some employees in future.

Along similar lines, we recently formalised the acquisition of space-based surveillance capability to support our international strategy. Through this technology, we are able to provide remote ATM services anywhere on

the African continent, and indeed, anywhere in the world without a physical presence in a serviced country, and without a hefty upfront capital outlay. We look forward to this aspect of our strategy coming into effect in 2019/20.

🧠 Intellectual capital

We are particularly proud of our expanding in-house training facility, the Air Traffic Academy (ATA), which is ISO 9001:2008 accredited and growing in strength to provide new educational offerings. During the year, the ATA explored ways to transition from the conventional face-to-face training approach to a more interactive e-learning methodology. Our current training content will be converted to an e-leaning platform to offer ATA clients more flexible learning avenues. From the perspective of our international strategy, the new e-learning format offers exponentially increased opportunities for distance learning. The benefits of training through the ATA will become all the more attractive as we register as an academic institute with the Council of Higher Education to provide certified academic qualifications.

Also noteworthy is our Applied Research (AR) strategy and plan formulated by the ATNS Operations Technology Department. The strategy will shift ATNS from being a user of acquired technologies to contributing to the local technology value chain. Similarly, through our Aviation Innovation Laboratory ATNS will develop, test and validate future technology solutions with the potential to be commercialised or operationalised in the ATM environment. Accordingly, we look forward to positioning ATNS as an African leader in the 21st-century innovation economy.

👥 Human capital

Operating costs increased by 4% to R1,300 billion, due partially to ATNS' staff cost of R816,220,292 (2016: R754,329,324). With operational costs rising, and revenue flattening in our regulated business, we need to look at more efficient ways to operate our regulated business; not to mention how we structure our international business going forward. It is our goal to nurture a commercial mindset and passion for improvement to yield greater efficiencies for existing customers, and ultimately for passengers.

Our non-regulated business will be resourced mainly from our current staff component. At the same time, we need to consider what our operational environment will look like in 15 to 20 years; and what competencies will be required in the air traffic management environment. As ATNS management, we are currently assessing new resourcing models that will enable an optimally-efficient and agile operational landscape. It is becoming increasingly apparent that we need to cultivate cross-functional skills and a flatter, 'matrix-oriented' operational structure to enable the fast-paced and dynamic business landscape of the emerging digital business paradigm. In this resourcing model, we envisage multi-skilled people working collaboratively to create interconnected value-chains through the timely and efficient application of their combined skills. This new resourcing model has the potential to ensure greater cost efficiencies while also promoting greater opportunities for innovation and cross-functional knowledge building.

We see it as both a responsibility and an opportunity to contribute meaningfully towards a more equitable society in South Africa. Accordingly, we seek to employ a diverse employee base that reflects the demographics of South Africa, both from a gender and ethnicity perspective. During the year, we maintained our B-BBEE Level 2 score, with an overall B-BBEE score of 94.51 according to **the dti** Code. While we didn't achieve all of our employment equity targets we achieved 73,15% representation against a target of 72% for African, Indian and Coloured (AIC) employees. Additionally, we achieved a 3,31% level of representation for people with disabilities against a target of 3,0%. However, fell short of our targets for female representation, with women representing 44,88% of employees against a target of 47%. According to the Status of Women in the South African Economy Report 2015, it is estimated that the present contribution of women to our national GDP features somewhere between 35% to 45 %. This is not an insignificant contribution; however it does suggest that there is still much to do if we are to advance our economy by using its full human capital. Going forward, we need to place more emphasis on this aspect of our developmental mandate, and grow female representation within all cadres of our organisation.

💬 Social and relationship capital

Our social license to operate, granted to us by society, begins with the provision of safe skies. Indeed, we have an impeccable safety record, and ATNS is seen, globally, as a beacon of safety in airspace navigation. ATNS uses a dynamic mix of metrics to measure safety performance. These include the risk safety index (RSI), which is an

[1] Cape Town airport, East London airport , George airport and Port Elizabeth airport
[2] OR Tambo airport, King Shaka airport, Bloemfontein airport, Lanseria airport and South African Air force (SAAF)

internationally-recognised risk assessment tool that indicates the risk associated with each safety event. During the year, ATNS's risk associated with safety events was at 47, narrowly missing our 2017 target of 48. A number more than 44 indicates less risk and a number below 44 indicates increased risk.

Another key safety metric is the 'safety ratio'. We use the 'safety ratio' to assess the number of safety events attributed to our operations per 100 000 movements. During the year, we achieved a ratio of 2,57 safety events per 100 000 movements, which is marginally below our target of 2 safety events per 100 000 movements. We did, however, see improvements in all our other safety indicators during the year. Going forward, we hope to maintain high safety performance standards through our safety-management system (SMS), which outlines specific organisational safety policies as well as procedures and performance measurement indicators. Our SMS benchmarking is conducted against CANSO and EUROCONTROL Standards of Excellence.

An important measure of our ability to create social value is through our corporate social investment projects. During the year, ATNS contributed R3,445,441.77 (2016: R1,426,576) towards direct CSI initiatives. Our flagship CSI projects included an IC computer library and strong room, equipped with the latest educational software at Selowe Primary School. We also sponsored a new science centre at Ramohlakana High School. While our CSI initiatives target a broad range of outcomes, including basic needs such as food and hygiene, we make a concerted effort to target social development through education.

Natural capital

ATNS continues to support the activities of ICAO's technical Committee on Aviation Environmental Protection (CAEP) in establishing global standards and procedural recommendations for minimising the impacts of aviation on the environment – particularly the improvement of airspace air quality and the reduction of airspace noise. I am pleased to share with our readers that the 39th ICAO Assembly held during 2016/17 culminated in the aviation sector reaching a monumental milestone agreement to collaborate in reducing the impact of the industry's carbon emissions to collectively mitigate climate change. Important outcomes included the establishment of a Global Market Based Measure (GMBM) to offset international aviation CO_2 emissions. It further included a commitment to prevent risks arising from conflict zones, interactions between national, regional and global rules on drones; the adoption of a CO_2 standard for aircraft emissions; and ultimately the sector's overarching commitment to progress towards sustainable global air transport. Further, as the ATM sector implements more efficient measures in procedure design, aircraft will be able to optimise the airspace to gain not only fuel saving, but also cost savings and ultimately emission reductions. Further, new global market-based measures officially adopted at the 39th ICAO Assembly, will commit the aviation community to reducing emissions through a basket of measures, such as levies/tax, offsetting, and emission trading.

ATNS intends to set company-specific energy-reduction targets for each of our operational sites and to integrate our energy objectives into our core organisational plans. However, for us to embed these energy sustainability objectives in the wider ATNS, we need to continue educating our people on the benefits of sustainable business practices. During the year, 316 out of 1 258 employees and 24 bursars received environmental sustainability training. We are also exploring a new Environmental Management System (EMS), which will enable us to integrate various environmental sustainability indicators into business operations, thereby enhancing overall environmental performance.

As part of its on-going commitment to reducing Green House Gas (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. It is gratifying to note that our carbon emissions from operations improved from the prior year at 23 292.01 CO_2e (2016: 25 510.96 CO_2e).

Maintaining a strong governance function

We acknowledge the importance of a strong governance function within ATNS. Not only does it provide a stringent ethical framework for decision-making but it also creates an enabling environment for operational performance while protecting organisational value.

For the year under review, ATNS obtained a qualified audit opinion largely due to the management of fixed assets as well as irregular expenditure arising from the procurement of goods and services. Irregular expenditure due

to non-compliance with Procurement policy was identified during the period reported on and management is in the process of conducting investigations to establish the facts, after which appropriate action will be taken in line with PFMA requirements.

As management, we have taken note of the internal control challenges encountered this year. Together with the Board, as the accounting authority, we take them very seriously. Consequently, I have instituted a number of urgent interventions:

- We are working to resolve the asset management deficiencies by 31 March 2018. In this regard, management has formed a high-level task team to clean up the fixed asset area. This project aims to ensure that all company assets are verified, componentized (where applicable), bar-coded and correctly accounted for in the books. Management has also requested Internal Audit to provide assurance on this area once the project is completed.
- We are further capacitating our skills within the Financial function.
- We are implementing the recently-approved Supply Chain Management framework to address some of the identified governance weaknesses.
- We are addressing IT deficiencies through various IT interventions, which will be further strengthened by the recent appointment of a new Chief Information Officer.
- We are addressing the performance management system to closely align with the audit outcomes and, to elevate the level of importance required to address outstanding audit findings.

I am confident that these urgent actions and other related interventions will address some of the challenges we experienced during this financial year.

Appreciation

In reflecting on the year under review, I am most grateful to ATNS's talented people. To all employees across ATNS, thank you for your valuable contributions to our continued success and overall sustainability. Our organisation is growing and changing and, as ATNS management, we understand that the growing pains can be unsettling at times as new systems and approaches shake up the status quo. That we need to become a more resilient organisation in future is not in question; but it will require that each one of us envisions ATNS' success as our own, and that we are all empowered with the right tools, encouragement and competencies to give of our best.

On behalf of my colleagues on the ATNS Board, I would also like to acknowledge the important contribution of our Shareholder, the Minister of the Department of Transport, to our continued success. Your council and oversight are invaluable to our long-term wellbeing.

Thank you also to our customers, our suppliers and sector partners. We appreciate your trust and continued support and look forward to strengthening our partnerships both in South Africa and beyond local borders.

I would like to acknowledge the exceptional contribution of our colleague, Peter Marais, who retired from ATNS in December 2016. Peter's influence in the aviation industry and the achievements of more than 34 years – of which 20 years were spent at Executive level within ATNS – leaves a legacy which will be difficult to match. We wish him all best for the future.

Finally, I would also like to take this opportunity to thank our outgoing Chairman, Ms Phindile Riba for her wisdom and single-minded determination in helping to shape our organisation during her two-year tenure as Board Chair. Her warm friendship and support have meant a great deal to me, my fellow Board members and to all those within ATNS who have come to know her. We wish her well in her future endeavours.

Chief Executive
Mr Thabani Mthiyane

ABRIDGED GOVERNANCE AND ASSURANCE

ATNS is committed to sound corporate governance practices, which are continuously reviewed to ensure that leading practice standards are maintained as recommended by the King Code of Governance for South Africa (2009) (King III); The Company's governance practices are underpinned by the values and principles that inform our day-to-day activities, including responsiveness, collaboration, transparency, integrity and accountability.

As a State-Owned Company, ATNS's governance relationship with its sole Shareholder – the Government of South Africa, exercised through the Ministry of Transport – is managed through the Shareholder's Compact. The Compact sets out the Shareholder's commercial and developmental requirements and expectations.

The Board of Directors is the focal point for – and the custodian of – the Company's governance framework through its committee structures, its relationship with management, its Shareholder and other Company stakeholders. The primary purpose of the Board of Directors is to provide strategic direction to ensure the Company fulfils its statutory, commercial and developmental objectives, thereby promoting long-term financial and organisational sustainability.

The Board of Directors are committed to the highest standards of corporate governance and strive to achieve the highest moral and ethical operational and behavioural standards, as well as sound and transparent business practices.

Application of King III

ATNS continues to review the Company's corporate governance practices to ensure that leading practice standards are maintained as recommended by the King Code of Governance for South Africa (2009). We are committed to the governance principles of King III and continue to develop governance policies, practices and procedures in line with an integrated governance, risk and compliance framework.

We maintained our application of King III during the year, and considered the impact that King IV will have on processes and policies going forward. The Board of Directors is satisfied that every effort has been made in 2016/17 to apply all material aspects of King III as far as appropriate.

In line with our integrated view of King IV, our plans for 2017/18 include:

• A detailed gap analysis;
• Training for the Board of Directors, executive management and key staff; and
• Detailed planning to address identified gaps, which will include amending all Board of Directors and relevant company documentation.

For the 2016/17 financial year, the Company continued to comply – either fully or partially – with all aspects of the Code, except in the following cases:

• Non-executive directors' fees are determined by National Treasury.
• Directors' fees are determined for the Company given that attendance fees as well as a performance appraisal system are in place to address non-attendance at meetings.

King III
Chapter 1
Fully
applied

Ethical leadership and corporate citizenship

The Board of Directors – as the focal point for and custodian of corporate governance – and senior management are committed to the highest standards of corporate governance and strive to achieve the highest moral and ethical operational and behavioural standards, as well as sound and transparent business practices.

The Board of Directors met ten (10) times during the year. Its paramount responsibility is to ensure that the Company performs optimally in creating value by setting direction through strategic objectives and key policies. In doing so, the Board of Directors appropriately considers the legitimate interests and expectations of all its stakeholders.

King III
Chapter 2
Fully
applied
(Exception
2.16, 2.17,
2.7)

Board of Directors
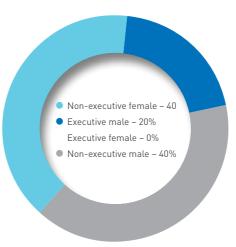
Appointment of directors

The appointment of directors to the Board is a formal and transparent process and a matter considered by the Shareholder and Cabinet as a whole. The appointment of directors is facilitated by the Department of Transport Oversight Unit, with the support of the ATNS Human Resources Committee, which also serves as the Nominations Committee. The ATNS HR Committee is constituted of non-executive directors, the majority of whom are independent. The committee is chaired by a non-executive director.
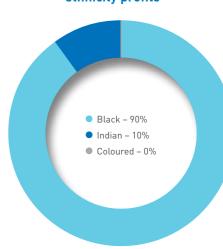
All appointments are subject to approval by the Government Cabinet, as well as 'fit and proper' tests in terms of the Public Finance Management Act, the Companies Act, and any other applicable legislation. All directors' appointments are subject to Shareholder approval at the annual general meeting immediately following the date of their appointment.

The ATNS Board of Directors is governed by a Board of Directors Charter, which outlines the principal provisions of the ATNS Act, the fiduciary responsibilities of directors, the relationship with executive management, and matters of policy that the Shareholder and the Board of Directors ought to follow to ensure good corporate governance. The Board of Directors regards the Charter as a living document, updated periodically to align with changes required by relevant legislation and regulation.

Graph 2: Board of Directors representation – representation – gender profile

● Non-executive female – 40
● Executive male – 20%
   Executive female – 0%
● Non-executive male – 40%
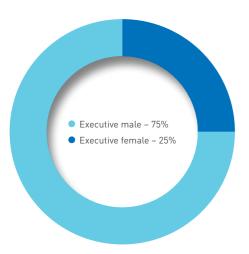
Graph 3: Board of Directors ethnicity profile

● Black – 90%
● Indian – 10%
● Coloured – 0%

Graph 4: Executive Committee representation

- Executive male – 75%
- Executive female – 25%

Period of office of Board of Directors members

The appointment of ATNS Directors is governed by the Company's Memorandum of Incorporation (MOI). Non-Executive Directors have a three (3) year fixed term of appointment. A third of the directors retire by rotation each year and are eligible for re-election by the Shareholder at the Annual General Meeting (AGM) of the Company. Directors appointed to fill a vacancy on the Board of Directors during the year retire at the next AGM, enabling the Shareholder the opportunity to confirm their appointment.

Composition of the Board of Directors

The Company has a unitary Board of Directors structure comprising two (2) Executive Directors and eight (8) Non-Executive Directors.

The Non-Executive Directors are drawn from diverse backgrounds and bring a wide range of experience, insight and professional skills to the Board of Directors to ensure effective leadership of the Company.

The Shareholder follows a formal and transparent process when appointing new directors. The HR Committee considers Director and Executive succession planning and makes appropriate recommendations to the Board of Directors. It evaluates skills, knowledge, gender, race and experience required to implement the ATNS strategy.
The independence of the Chairman and the separation of the Chairman's responsibilities from those of the Chief Executive Officer (CEO) ensures a balance of authority precluding any one director from exercising unencumbered powers of decision-making. The Chairman is responsible for leading the Board of Directors and its overall effectiveness. The chief executive is responsible for the execution of strategy and the day-to-day business of the Company. In this, he is supported by the Executive Committee (Exco) which he chairs.

The Board currently has two vacancies. The ATNS Chairman has engaged the Shareholder on the filling of vacancies with CA and IT skills to augment the boards existing skills set.

Changes to the Board of Directors

There were no material changes to the Board of Directors during the Reporting year.

Roles and Responsibilities

The Board of Directors conducts its business in accordance with the principles of King III, which include exercising discipline, independence, responsibility, fairness, social responsibility and transparency, and the accountability of directors to all stakeholders.

The Board of Directors's formal charter sets out its roles and responsibilities:

- Providing effective leadership based on an ethical foundation.
- Ensuring that the Company has an effective and independent Audit and Risk Committee.
- Contributing towards and approving the strategic direction of the Company.
- Satisfying itself that the strategy and business plans proposed for the achievement of the ATNS's objectives do not give rise to risks that have not been thoroughly assessed by management.
- Ensuring that the strategy will result in sustainable outcomes, considering financial, environmental and social objectives as approved by the Board of Directors.
- Ensuring the integrity of the Company's integrated annual report.
- Defining levels of authority and areas of materiality, and approving a framework for delegated authority.
- Reporting on the effectiveness of the Company's system of internal controls.
- Taking responsibility for the governance of risk through effective risk management practices, including regularly reviewing and evaluating risks to the Company and ensuring the existence of an effective risk-based internal audit function, as well as appropriate internal controls.
- Ensuring that the Company is, and is seen to be, a responsible corporate citizen.
- Identifying, managing and monitoring any gaps between stakeholder perceptions and the performance of the Company to manage ATNS's reputation. The Board of Directors is kept appraised of ATNS's going concern status and monitors the Company's solvency and liquidity on a regular basis.

Independence of directors

The independence of directors is reviewed annually by the Human Resource Committee (HRC), following a detailed analysis of the circumstances of all independent non-executive directors. The HRC has satisfied itself that these directors meet the criteria for independence in terms of King III.

Rotation of directors

In terms of the Company's Memorandum of Incorporation (MOI), a third of directors retire by rotation each year and are eligible for re-election by the Shareholder at the annual general meeting (AGM). Having concluded its assessment, the HRC shall recommend the re-election of the retiring directors. These retiring directors are eligible for offering themselves for re-election at the forthcoming AGM.

Newly appointed directors

As stated above, in terms of the Company's MOI, new directors may only hold office until the next annual general meeting (AGM), at which time they will be required to retire and offer themselves for re-election.

Induction of directors

A formal induction process in place for directors. Upon appointment, directors are provided with recent Board and committee documents, information on legal and governance obligations, the Company's MOI and recent reports. Guidance is provided on the requirements of the Public Finance Management Act, No.1 of 1999 (PFMA); King III and the Companies Act, No 71 of 2008, as amended from time to time. Meetings are arranged between new directors and members of Exco, to ensure that the former develop a full grasp of their areas of responsibility and of the complex businesses and operations that make up ATNS.
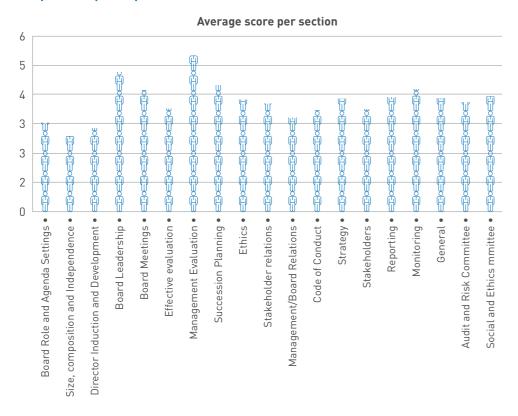
Board of Directors and committee evaluations

The performance of the Board of Directors and its Committees are evaluated on an annual basis and includes:

- An assessment of the performance and effectiveness of the Board of Directors and that of individual directors inclusive of the CEO and CFO;
- A peer evaluation by all Directors ranking their fellow directors in terms of their contribution to the Board of Directors; and
- An evaluation of each committee by members of the committee, focusing on effectiveness of the Chairman and contribution of individual committee members.

The evaluation process takes place by way of one on one interviews conducted by an independent board evaluation consultant and the completion of questionnaires by individual directors. Director responses are based on their respective observations and experiences in the conduct of board business throughout the year. The results are discussed by the Board of Directors; and one-on-one meetings are held with directors to discuss the results of the evaluations and to propose developmental actions, should they be required.

Graph 5: Graphical presentation of overall Board of Directors evaluation

Average score per section

Note: The rating demonstration above is based on a ratio from 1 – 6, which is based on benchmarking of ten (10) State Owned Companies' performance appraisals. ATNS's overall scores for all sections fared well as per the rating scale of 1 – 4, scoring an overall average rating of 3.82. The rating indicates that the performance of the ATNS Board of Directors falls within – and indeed exceeds – best practice.

Director training and development

All directors are expected to keep abreast of ATNS's business and market trends. Site visits to the operations are arranged at least once a year to familiarise the directors with the operational and environmental aspects of the business.

Roles and responsibilities

Chairman of the Board of Directors and Chief Executive Officer

The roles of the Chairman of the Board of Directors and the Chief Executive Officer are separate, with clearly-defined individual responsibilities. The Chairman is responsible for leading the Board of Directors and ensuring its effectiveness. The Chief Executive Officer is responsible for the execution of ATNS' strategy and the Company's day-to-day operations. He is supported by the Executive Committee, which he chairs.

Independent non-executive directors

Directors' skills

The independent non-executive directors possess varied skills and experience from diverse industries. They are principally free from any business relationships that could hamper their objectivity or judgement in terms of the Company's business and activities.

Access to information

All the independent non-executive directors have unrestricted access to the Company's information, documents, records and property in the interest of fulfilling their responsibilities as non-executive directors. The independent non-executive directors contribute a multiplicity of skills, business acumen, independent judgement and experience on many varied issues, including strategy, planning, risk management, corporate governance, operational performance and leadership. Directors' independence is determined according to the definition in the King III Code, which includes the number of years a director has served on the Board of Directors.

Independent advice

In allowing the Board of Directors to discharge its corporate responsibilities by exercising the care that an ordinary prudent person would exercise under similar circumstances, the Board of Directors committees may engage the services of external experts at ATNS's expense.

Company Secretary

The ATNS Company Secretary is responsible for providing guidance to the Chairman and directors – both individually and collectively – on their duties, responsibilities and powers. The ATNS Company Secretary also advises on corporate governance, and on compliance with legislation and the PFMA. At the HRC meeting held on 24 March 2017, the Company Secretary provided the Committee with documentary evidence of his levels of competence in terms of fulfilling his responsibilities as Company Secretary, which included his qualifications and experience. Mr S. Mngomezulu has 15 years' experience in the company secretarial field, having held consulting and in-house positions, and has never been censured by any professional body or penalised or fined for any misconduct. The Board of Directors is satisfied that the Company Secretary maintains an arm's length relationship with the executive team, Board of Directors and individual directors, and that the Company Secretary is not a director of ATNS.

Succession planning

The Human Resources Committee and the Board of Directors review succession planning as a regular item on their respective agendas. The HRC, in line with its terms of reference, and from time to time, reviews the general composition of the Board of Directors and makes appropriate recommendations on the appointment of new executive or non-executive directors.

Conflict of interest

On an annual basis, the Company actively solicits from its directors, details regarding external shareholdings and directorships that have the potential to create conflicts of interest while they serve as directors on the Board of Directors. Directors are required to regularly update the Declaration of Shareholding and Directors register should there be any changes during the year. Additionally, a declaration of interest and conflict has been made a standing item on the Board and Committee agenda for all meetings. The declarations received from the directors are closely scrutinised by both the Chairman and the Company Secretary, and are tabled at the beginning of each quarterly Board of Directors meeting. Where a conflict arises, directors are required to recuse themselves from the discussions. As far as possible, the Company requires that directors avoid any potential conflicts of interest.

Materiality

Levels of materiality regarding capital expenditure and changes in the operation of the business have been determined, with all matters falling outside these parameters requiring formal Board of Directors authorisation. These matters are monitored and evaluated on a regular basis through the Procurement Committee. ATNS has a Materiality and Significance Framework to monitor and manage the risk of material losses through criminal conduct, irregular expenditure, and fruitless and wasteful expenditure.

It is the responsibility of the Minister of Transport (with whom rests the primary responsibility for appropriate ATNS oversight and accountability to Parliament) to ensure that these risks are identified, reduced and managed. The ATNS Significance Framework is designed to assist the Minister in discharging this responsibility.

Committees of the Board of Directors

The Board of Directors has established various standing committees that are ultimately accountable to it. These committees assist the Board of Directors by focusing on specialist areas. The committees meet independently, and provide feedback and make recommendations to the main Board of Directors through their respective Chairman. The roles of, and representation on these sub-committees are listed in figure 9 on page 52.

Audit and Risk Committee

King III
Chapter 3
Fully
applied

The Board of Directors – which carries ultimate responsibility for risk management within the Organisation – is continuously kept appraised of risks facing the business. The Audit and Risk Committee supports the Board of Directors in this task by ensuring an effective risk-based internal audit function and enterprise-wide risk governance. The committee provides the Board of Directors with regular risk reporting as well as feedback on the status of the Company's control environment.

The Audit and Risk Committee ensures that the combined assurance received is appropriate to address the significant risks facing ATNS. The combined assurance model consists of management, the Audit and Risk committee, internal assurance providers, (i.e. finance, internal audit, risk and various external assurance providers). The following principles of King III have been included within the scope of the Audit and Risk Committee's roles and responsibilities.

Governance of risk

King III
Chapter 4
Fully
applied

As a State-Owned Company operating within an international regulatory environment – as well as a globally volatile economic climate – ATNS needs to ensure vigilant risk management. Further, the Company provides organisation-wide assurance on priority issues such as regulatory compliance,

safety management, environmental compliance, reputation management, operational efficiency, and project and financial risk management. The Board of Directors ultimately determines the various levels of risk tolerance of the organisation, and delegates the overall design, implementation and monitoring of risk to management. An annual enterprise risk assessment is performed and mitigation controls are monitored through the enterprise risk management framework.

The governance of information technology (IT)

King III
Chapter 5
Fully
applied
5.1, 5.3, 5.4,
5.6, 5.7

The IT Steering Committee, chaired by the ATNS CEO, assists the Board of Directors in discharging its duties relating to IT performance management, ensuring that IT governance supports the effective and efficient management of IT resources, and facilitates the achievement of the Company's strategic objectives. The main objective of the IT Steering Committee is to ensure that IT strategic objectives are aligned with changes in ATNS' strategic needs, and judiciously manages IT risks and identifies opportunities to be acted on.

Partially
applied

The ATNS Risk and Capital Management Committee measures the Company's overall exposure to IT risks and ensures that proper processes are in place to manage these risks. The responsibility for the implementation of IT governance is assigned to the Chief Information Officer.

Compliance with laws, codes, rules and standards

King III
Chapter 6
Fully
applied

The Board of Directors recognises its accountability to all ATNS' stakeholders under the regulatory requirements applicable to its business and remains committed to high standards of integrity and fair dealing in its conduct. Given the importance of complying with the ever-increasing domain of regulatory requirements, and the increased national and international emphasis placed on regulatory supervision, the Board of Directors, Executive Committee and employees continue to monitor, align and adhere to compliance requirements. Further, ATNS remains vigilant in monitoring material risks and developing an appropriate control environment to ensure company-wide compliance.

During the year, there were no material – or immaterial, but often repeated – regulatory penalties, sanctions, fines for contravening or non-compliance with statutory obligations imposed on the Company, its officers or its directors. However, there was a sanction against an employee for non-compliance with procurement processes.

The responsibility for effective implementation of compliance throughout ATNS has been delegated to the ATNS Compliance Officer. The compliance function enables the business to adhere to applicable regulatory requirements by ensuring that actions, processes and procedures are risk-appropriate and that the business can achieve its business goals without fear of penalties and loss of reputation.

Incidents of non-compliance are reported to the responsible executives or heads of business units, divisions, departments or subsidiaries for prompt resolution. The office of the ATNS Compliance Officer is also charged with the responsibility of assisting, guiding and advising the various business units, divisions and departments within ATNS on how to discharge their duties in managing their compliance responsibilities and obligations.

The ATNS Audit and Risk Committee oversees compliance matters within ATNS. The Committee requires that:

- the compliance officer reports non-compliance with laws and regulations or supervisory requirements to the Audit and Risk Committee; and
- the compliance officer submits a report on the level of compliance with laws and regulations or supervisory requirements at every meeting of the Audit and Risk Committee.

The ATNS compliance officer has a direct reporting line to the ATNS Audit and Risk Committee; as well as unrestricted access to the Chairman of the committee.

Internal audit

King III
Chapter 7
Fully
applied

The ATNS internal audit function is an essential management tool and a key measure introduced by ATNS to maintain the integrity, adequacy, efficiency and effectiveness of ATNS's financial and other risk management control systems. The scope of the Company's internal audit function encompasses the examination and evaluation of the adequacy and effectiveness of ATNS' system of internal control, information systems, governance processes and the quality of performance in carrying out assigned responsibilities.

To ensure independence, ATNS Internal Audit is directly responsible to the Audit and Risk Committee and will remain independent of all line and functional management.

ATNS Internal Audit function is governed by the Audit Charter reviewed annually and approved by the Audit and Risk Committee. The Audit Charter defines the purpose, authority and responsibilities of the function. Audit processes of the Internal Audit function are detailed in the audit methodology prepared in consideration of the auditing standards set by the Institute of Internal Auditors.

ATNS Internal Audit is responsible for utilising a systematic, disciplined approach to evaluating and improving the effectiveness of internal controls, which includes:

- Developing and maintaining a comprehensive audit programme to ensure compliance with accounting standards, policies and procedures necessary to safeguard assets.
- Communicating results of reviews by preparing timely reports, including recommendations for modifications of management practices, fiscal policies and accounting procedures as justified by audit findings.

Governing stakeholder relationships

King III
Chapter 8
Fully
applied

ATNS recognises that it does not operate in a vacuum and is therefore cognisant of the environment within which it operates. This includes acknowledging the Company's direct and indirect impact on its stakeholders, thereby informing how it conducts its business. ATNS strives to maintain proactive stakeholder relationships and to manage stakeholder expectations as well as potential reputational risks by aligning the Company's objectives with stakeholder priorities. A stakeholder management strategy has been developed and guides all engagements with stakeholders

The Board of Directors further undertakes to use its best efforts to balance the diverse interests of ATNS' stakeholders and to engage stakeholder groups on material issues that may impact the Company's long-term economic, social and environmental sustainability.

Integrated reporting and disclosure

King III
Chapter 9
Fully
applied
9.1, 9.2

Through its integrated reporting, ATNS aspires to provide a comprehensive and integrated representation of the Company's performance in terms of both its finances and its sustainability. ATNS's Integrated Report is published annually and presents an overview of the Company's activities, practices and financial performance for the year; and presents a balanced analysis of our sustainability performance strategy in relation to issues that are relevant and material to ATNS and its stakeholders.

Partially
applied

The Integrated Report is reviewed by the Audit and Risk Committee and the Board of Directors to satisfy themselves of the materiality, accuracy and balance of disclosures. In addition, various aspects of the Integrated Report are independently assured by multiple assurance providers.

ATNS Board

Director		Date appointed
	Ms Phindile Riba* Chairman of the Board of Directors Date of birth: August 1965 * Ms. Phindile Riba resigned as Chairman and Director of the Company as of 24 May 2017	1 September 2015
	Ms Nwabisa Mtshali Chairman of Human Resource Committee Member of Social and Ethics Committee Date of birth: April 1973	1 September 2015
	Mr Daniel Gray Mwanza Member of Procurement Committee Member of Human Resource Committee Date of birth: June 1965	1 September 2015
	Dr Bridget Ssamula Chairman of Audit and Risk Committee Member of Human Resource Committee Member of Procurement Committee Member of the ATNS International Committee Date of birth: February 1979	1 September 2015
	Mr President Qiniso Dhlamini Member of Social and Ethics Committee Member of Human Resource Committee effective Date of birth: January 1958	1 September 2015

Qualifications	Areas of core expertise	Current directorships on other Boards
• BA Social Science, Public Administration and Political Sciences (University of Swaziland) • MBA Strategic Human Resource Management and Small business management (Cardiff Business School, UK, University of Wales) • Executive Development Programme (Wits University)	• Corporate governance • Business transformation • Change management • Corporate HR strategy • Leadership and management development	• DDP Holdings Pty Ltd • Golden Dividend 456 Pty Ltd • City Square Trading 947 Pty Ltd
• MBA (Aerospace Management) – ESCT France; • New Management programme (Wits business school) • Diploma HR Management (Damelin) • BA in Communications (University of Fort Hare	• Recruitment and HR management • Job Evaluation and training • Skills Development Facilitation • Payroll administration • Aerospace management	• Working with Fire
• Diploma Certificate Computer Aided Engineering (East Warwickshire College, UK) • MSc Degree Mechanical Engineering – Maintenance of Aircraft & Aero-Engines (National Aviation University of Kiev, Ukraine)	• Aircraft mechanical engineering • CAD, CAM and CNC • Aircraft Accident and Incident Investigation (including human factors) • Management of Air Transportation in Southern Africa • Knowledge of Boeing structures • Technology management	• Mr. Mwanza does not currently serve on other company Boards
• MBA (Aviation Management) – Embry Riddle Aeronautical University, USA • PhD (Transportation Engineering) – University of Pretoria • MEng (Transportation Engineering) – University of Pretoria • BSc (Civil Engineering) – Makerere University, Uganda	• Transport sector experience • Aviation operations management • Strategy development • Strategic management and advisory services	• Consulting Engineers of South Africa • Mayibuye Transport Corporation • University of Pretoria: Department of Civil Engineering
• Master of Business Administration (Management College of SA) • Diploma in Aviation Safety Management (IATA Training and Development Institute) • Diploma in Adult Education (University of Swaziland); • Post Graduate Certificate in Management Studies (Management College of SA) • Certificates in Human Factors in Aviation, Accident Prevention and Accident Investigation (SWEDAVIA)	• Airline pilot • Aviation safety management • Aircraft Accident and Incident Investigation (including human factors)	• Swaziland Civil Aviation Authority

Director		Date appointed
	Mr Isaac Nkama Chairman: ATNS International Member of Audit and Risk Committee Member of the Procurement Committee Date of birth: June 1965	1 September 2015
	Advocate Edwin M. Mphahlele Chairman of Procurement Committee Member of Audit & Risk Committee Date of birth: November 1970	1 September 2015
	Ms Shaila Hari Chairman of Social and Ethics Committee Member of Audit and Risk Committee Date of birth: October 1971	1 September 2015

Qualifications	Areas of core expertise	Current directorships on other Boards
• Chartered Marketer – CM (SA) (Institute of Marketing) • MBA (International Business) – Bond University, Australia • MSc (Leadership & Change Management) – Leeds Business School, UK) • Post Graduate Diploma in Future Studies (Scenario Planning/Futures Strategy) – University of Stellenbosch Business School • MPhil in Futures Studies (Scenario Planning/Futures Strategy) – University of Stellenbosch Business School	• Strategic Marketing • Corporate Governance • Africa Business Expansion and Trade Development • Aerospace and Defence Industries • International Affairs • Tax Regulations • Professional Futurist/Scenario Planner	• Facilitation Africa • South African Institute of International Affairs • African Futures Council
• B. Proc (University of Limpopo), LLB (Wits) • Graduate Diploma in Finance Law (University of Melbourne, Australia)	• International transaction law • Corporate and project finance • Mergers and acquisitions • Corporate workout and turnarounds • Transaction modelling • Deal structuring, negotiations and contractual arrangements for major commercial transactions	• Bradbury Consulting Services & Adnivest (Pty) Ltd • Tshwane Housing Company (SOC) • Litsamaiso (Pty) Ltd, operating company of Rea Vaya BRT
• BCompt and BCompt Honours (University of South Africa) • Public Sector Governance SBL (University of South Africa)	• Auditing and Public-sector governance • Financial management, accounting and financial administration • Corporate governance • Social and Ethics	• Gauteng Gambling Board • Spanjaard Ltd • National School of Government • International Trade Administration Commission of South Africa • Gaming Committee

ATNS Board Members

Back row (from left to right): Mr Isaac Nkama, Ms Shaila Hari, Mr Daniel Gray Mwanza, Advocate Edwin M. Mphahlele, Mr President Qiniso Dhlamini
Front row (from left to right): Ms Nwabisa Mtshali, Ms Phindile Riba, Dr Bridget Ssamula

Board of Directors committees

Figure 9: Board of Directors Committees structure and core functions

ATNS Board

COMPOSITION — **CORE FUNCTIONS**

Audit & Risk Committee
- **Chair: Non-Executive**
- 2 Executive Directors
- 4 Non-Executive Directors
- Convenes: 4 p/a

Oversight:
- Monitors financial controls and reporting
- Reviews audit plans and adherence by external and internal auditors
- Ascertains reliability of audits
- Ensures financial reporting complies with IFRS and Companies Act
- Oversight of financial matters
- Nominates auditors for appointment
- Monitors risk appetite and controls
- Governance of risk and IT

Human Resources committee
- **Chair: Non-Executive**
- 2 Executive Directors
- 4 Non-Executive Directors
- Convenes: 4 p/a

Oversight:
- Establishes overall principles of reward and remuneration
- Determines remuneration of executive directors and executive heads in line with the market
- Ensures compliance with relevant laws and regulations
- Considers, reviews and approves Group policy on executive remuneration
- Reports on remuneration to stakeholders in the Company's integrated report

Social & Ethics Committee
- **Chair: Non-Executive**
- 2 Executive Directors
- 3 Non-Executive Directors
- Convenes: 4 p/a

Oversight:
- Monitors and develops compliance with section 72(8) of the Companies Act (read in conjunction with regulation 43)
- Assists the Board with oversight of social and ethical matters related to the Company, incl.:
  - good corporate citizenship;
  - environment;
  - health and public and safety; and
  - consumer relationships, labour and employment.

Procurement Committee
- **Chair: Non-Executive**
- 2 Executive Directors
- 3 Non-Executive Directors
- Convenes: 4 p/a

Oversight:
- Oversees the ATNS Capital Expenditure programme in line with the Economic Regulator permission document
- Ensures that appropriate procurement and provisioning systems are fair, equitable, transparent, competitive and cost-effective

ATNS International
- **Chair: Non-Executive**
- 2 Executive Directors
- 4 Non-Executive Directors
- Convenes: 4 p/a

Oversight:
- Assesses and evaluates the viability of ATNS International
- Formulates the ATNS International strategy
- Established in accordance with applicable legislation
- The implementation of ATNS's African strategy is aligned with ATNS' strategic objectives
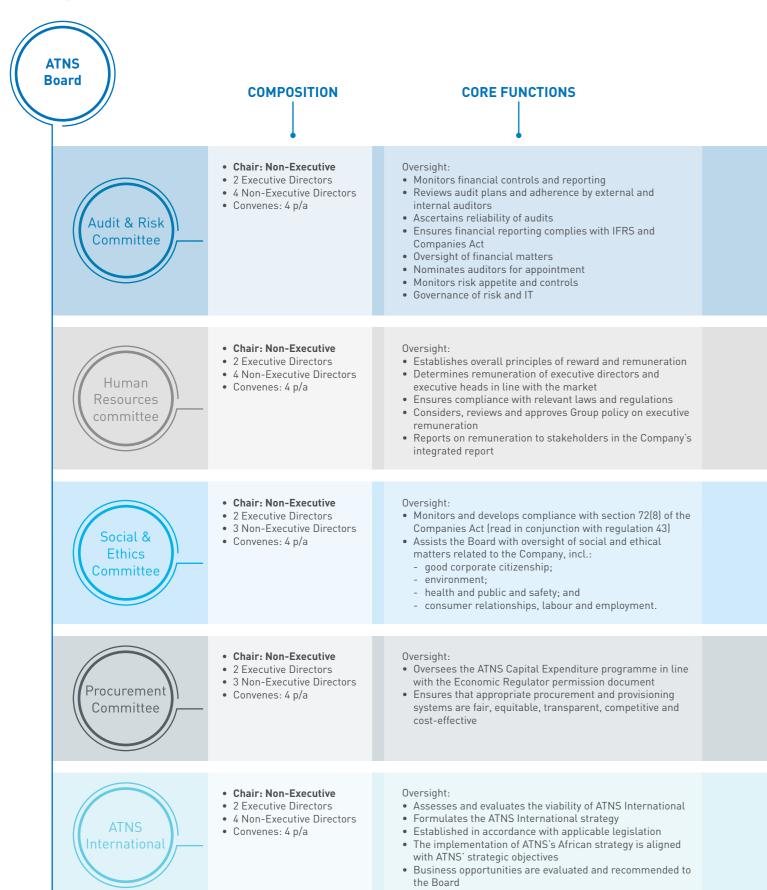- Business opportunities are evaluated and recommended to the Board

Table 7: Composition of the Board of Directors and Board of Directors Committees

Committee	Total	Exec & Non-Exec	% Male				% Female			
			African	Coloured	Indian	White	African	Coloured	Indian	While
ATNS Executive Committee	11	Exec	7	0	0	2	2	0	0	0
ATNS Board of Directors	10	Exec	2	0	0	0	0	0	0	0
		Non-Exec	4	0	0	0	4	0	0	0
Audit and Risk Committee	6	Exec	2	0	0	0	0	0	0	0
		Non-Exec	3	0	0	0	0	0	1	0
Human Resources Committee	6	Exec	2	0	0	0	0	0	0	0
		Non-Exec	2	0	0	0	2	0	0	0
Social and Ethics Committee	5	Exec	2	0	0	0	0	0	0	0
		Non-exec	1	0	0	0	1	0	1	0
Procurement Committee	6	Exec	2	0	0	0	0	0	0	0
		Non-Exec	3	0	0	0	1	0	0	0

Table 8: Board of Directors Committee responsibilities for integrated reporting elements

Integrated Reporting elements	Required activities	Board Committee
Risks and opportunities	- Review adequacy and effectiveness of ATNS's Enterprise Risk Management (ERM) process and associated control environment - Identify and assess material risks - Ensure effective mitigation activities to prevent or minimise the adverse impacts of material risks - Identify opportunities for innovation and growth	Audit and Risk Committee
Strategy and resource allocation	- Ensure appropriate strategic responses to risks and opportunities - Ensure appropriate and efficient processes, procedures and policies to provide an enabling environment and structural support to the Company's business - Ensure appropriate allocation of the various 'capitals', including: – Financial capital (e.g., long-term borrowings) – Manufactured capital (e.g., property, plant and equipment) – Intellectual capital (e.g., brands, trade-marks and patents) – Human capital (e.g., permanent employees) – Social and relationship capital (e.g., industry alliances) – Natural capital (e.g., air space, electricity and fuel)	- Audit and Risk Committee - Human Resource Committee - Procurement Committee - Social and Ethics Committee - ATNS International
Remuneration and incentives	- Ensure appropriate, market-related remuneration, linked to performance - Ensure incentives and rewards are market-related and managed according to performance against targets, as per ATNS' Shareholder Compact and strategic objectives	- Human Resource Committee - Social and Ethics Committee

Integrated Reporting elements	Required activities	Board Committee
Safety and health	• Ensure a safe working environment for ATNS employees • Ensure alignment with global safety standards • Ensure 'safe procurement' • Ensure 'safety culture', including safety training	• Procurement Committee • Social and Ethics Committee • Human Resource Committee
Organisational transformation	• Ensure ATNS B-BBEE Strategy aligns with Dti's Codes of Good Practice • Maintain and ensure favourable black representation at Board of Directors and Top Management levels • Ensure on-going equal opportunity initiatives • Ensure that procurement practices align with ATNS's enterprise development (ED) and supplier development (SED) objectives	• Audit and Risk Committee • Human Resource Committee • Procurement Committee • Social and Ethics Committee
Environmental management	• Ensure environmental sustainability through the management of carbon emissions and energy efficiency • Ensure responsible operational impacts on communities and bio-spheres (e.g., noise reduction) • Ensure environmental risk management and compliance • Ensure organisational awareness for environmental sustainability issues • Ensure environmentally-responsible procurement practices • Ensure 'Green technology' practices	• Audit and Risk Committee • Social and Ethics Committee • Human Resource Committee • Procurement Committee
Stakeholder engagement and relationship management	• Ensure positive stakeholder relationship engagement and management • Ensure proactive support for suppliers and constructive supplier management • Ensure positive employee relations and encourage adherence to ATNS's Code of Conduct and embed the Company's Values throughout the organisation • Ensure proactive SLA compliance management with suppliers • Ensure an enabling work environment for employees to achieve their professional and personal goals, share ideas, communicate openly and report concerns	• Social and Ethics Committee • Procurement Committee • Human Resource Committee • Audit and Risk Committee

Meeting dates of directors and attendance: April 2016 to September 2016

Attended ✓   Absent/Apology ✗   Chairman **C**   Member **M**

Meeting	Date	Riba	Mtshali	Hari	Dlamini	Mwanza	Mphahlele	Ssamula	Nkama
Board of Directors Meeting	07/06/2016	C✓	M✓	–	M✓	M✓	M✓	M✓	M✓
	05/09/2016	C✓	M✓	M✓	M✓	M✓	M✓	M✓	M✓
Special Board Meeting	02/08/2016	Telecon	M✓	M✓	M✓	M✓	M✓	Telecon	✗
HRC Meeting	24/05/2016	–	C✓	–	M✓	M✓	–	M✓	–
	23/08/2016	–	C✓	–	M✓	M✓	–	M✓	–
Special HRC	02/06/2016	–	C✓	–	M✓	M✓	–	M✓	–
PROCOM	25/05/2016	–	–	–	–	M✓	C✓	M✓	M✓
	24/08/2016	–	–	–	–	✗	C✓	M✓	M✓
Audit & Risk	26/05/2016	–	–	M✓	–	–	M✓	C✓	M✓
	25/08/2016	–	–	M✓	–	–	M✓	C✓	M✓
Special Audit & Risk	01/08/2016	–	–	M✓	–	–	M✓	Telecon	M✓
Social & Ethics	25/05/2016	–	M✓	C✓	M✓	M✓	–	–	
	24/08/2016	–	M✓	C✓	M✓	M✓	–	–	
ATNS International	26/05/2016	–	–	–	M✓	–	M✓	M✓	C✓
	25/08/2016	–	–	–	M✓		M✓	M✓	C✓
AGM	05/09/2016	C✓	M✓	M✓	M✓	M✓	M✓	M✓	M✓

Meeting dates of directors and attendance: September 2016 to March 2017

Meeting	Date	Riba	Mtshali	Hari	Dlamini	Mwanza	Mphahlele	Ssamula	Nkama
Board of Directors Meeting	06/12/2016	C✓	M✓	M✓	M✓	M✓	M✓	M✓	M✓
	21/01/2017	C✓	M✓	M✓	M✓	M✓	M✓	M✓	M✓
	14/03/2017	C✓	M✓	M✓	M✓	M✓	M✓	M✓	M✓
Special Board of Directors Meeting	19/10/2016	C✓	M✓	M✓	M✓	M✓	M✓	M✓	M✓
	08/11/2016	C✓	M✓	M✓	M✓	M✓	M✓	M✓	M✓
	05/02/2017	C✓	M✓	M✓	M✓	M✓	M✓	M✓	M✓
	08/02/2017	C✓	M✓	Telecon	M✓	Telecon	✗	M✓	M✓
HRC Meeting	21/11/2016	–	C✓	–	M✓	M✓	–	✗	–
	21/02/2017	–	C✓	–	M✓	M✓	–	M✓	–
Special HRC	02/06/2016	–	C✓	–	M✓	M✓	–	M✓	–
PROCOM	23/11/2016	–	–	–	–	M✓	C✓	M✓	M✓
	22/02/2017	–	–	–	–	Telecon	C✓	M✓	M✓
Special PROCOM	13/03/2017	–	–	–	–	M✓	Telecon	Telecon	M✓
Audit & Risk	24/11/2016	–	–	M✓	–	–	M✓	C✓	M✓
	23/02/2017	–	–	M✓	–	–	M✓	C✓	M✓
Social & Ethics	21/11/2016	–	M✓	C✓	M✓	M✓	–	–	
	21/02/2017	–	M✓	C✓	M✓	M✓	–	–	
ATNS International	24/11/2016	–	–	–	M✓	–	M✓	M✓	C✓
	23/02/2017	–	–	–	M✓	–	M✓	M✓	C✓
Board of Directors Strategy Session	05/09/2016	C✓	M✓	M✓	M✓	M✓	M✓	M✓	M✓
	20/01/2017	C✓	M✓	M✓	M✓	M✓	M✓	M✓	M✓

Departures of senior executives

Executive	Capacity	Date of departure	Reason for departure
Mr. Peter Marais	COO	31 December 2016	Retirement

ATNS Exco Members

Back row (from left to right): Mr. Solomon Mngomezulu, Dr. Sandile Malinga, Mr. Dumisani H. Sangweni, Mr. Hennie Marais, Ms. Thandi Thankge, Mr. Phillip Boshielo, Mr. Thabani Myeza, Mr. Jeoffrey Matshoba
Front row (sitting from left to right): Ms. Nombulelo Lekota, Mr. William Ndlovu, Mr. Thabani Mthiyane, Ms. Tendani Ndou

ATNS Executive Committee

Executive	Qualifications	Areas of core expertise
Mr. Thabani Mthiyane Chief Executive Officer Date appointed: 5 July 2013	• BEng (Hon) Mechanical Engineering (University of Pretoria) • BSc Engineering in Electrical Engineering (University of Natal) • National Diploma in Electronic Engineering (Technikon Natal) • Diploma in Management of ANSP (IATA Institute) • Completed the International Executive Development Program with Wits University and the London Business School • MBA (George Washington University)	• Air services • Licensing, compliance and governance • Strategy and planning • Engineering (Mechanical, Electrical and Electronic Engineering) • Operational management • Capital projects and policy development
Mr. William Ndlovu Chief Financial Officer Date appointed: 1 April 2013	• CA (SA) SAICA • Global Executive MBA (Georgetown University, USA, and Esade Business School, Spain)	• Audit and risk • Financial management • Governance and compliance
Dr. Sandile Malinga Chief Operations Officer Date appointed: 1 September 2016	• PhD in Physics (Rhodes University) • MBA (Business School, Netherlands)	• Aerospace technology & systems • Navigation, communication and surveillance management • Research, Development & Innovation management • High-value Project Implementation • Operations management • Strategy and planning

Executive	Qualifications	Areas of core expertise
Mr. Solomon Mngomezulu Company Secretary Date appointed: 1 July 2003	• MBA (GIBS) • BA LLB (University of Durban-Westville) • Diploma in Dispute Resolution (Arbitration Foundation of Southern Africa) • Diploma in Company Direction (GIMT)	• Governance and compliance • Strategy and planning • Corporate reporting • Legal: commercial and contract
Ms. Nombulelo Lekota Acting Chief Information Officer Date appointed: 1 October 2016	• PhD Informatics (Current) (University of Pretoria) • Masters in Information Technology (MIT) (University of Pretoria) • Bachelor of Social Science (Natal University)	• Enterprise Architecture • Business Process Management • IT Project Management • SAP ERP implementation • Integration Management
Mr. Phillip Boshielo Chief Technology Officer Date appointed: 1 December 2015	• BSc Electrical Engineering (University of Cape Town) • BEng Honours Computer Engineering (University of Pretoria) • Master of Engineering (University of Pretoria) • MBL (University of South Africa – SBL) • Certificate in Advance Executive Programme (University of Witwatersrand)	• Telecommunications and technology – systems design, planning, development, implementation and maintenance • Technology lifecycle management and support services • Electronic engineering • Ventures and business development • Project Management

Executive	Qualifications	Areas of core expertise
Mr. Thabani Myeza Executive: Commercial Services Date appointed: 1 April 2015	• BCom Accounting (University of Zululand) • MBA General Management (Texas Southern University)	• Commercial services and business development • New market strategies (locally and internationally) • Policy development and operational policy alignment • Regional business expansion
Mr. Jeoffrey Matshoba Executive: ATM/cns Date appointed: 1 July 2015	• Bcom (University of South Africa) • Aerodrome and Approach Procedural Validation (Aviation Traning Academy) • International Executive Development Programme (Wits Business School and Condon Business School)	• Air traffic navigation – planning and management • Management of air traffic standards • Civil aviation • Regulatory compliance
Mr. Hennie Marais Chief: Air Traffic Services Date appointed: 1 March 2010	• Aerodrome, Approach an Area Procedural and Radar validations (University of Stellenbosch)	• Aviation operations management • Training and mentoring • Governance, compliance and regulatory oversight • Safety management • Strategy and planning

| Executive	Qualifications	Areas of core expertise
Mr. Dumisani H. Sangweni Executive: Strategy and Optimisation Date appointed: 9 May 2013	• BSc in Aviation Technology (Embry Riddle Aeronautical University, USA, 1991) • Postgraduate diploma: Transport Economics (Rand Afrikaans University, Johannesburg 1997) • Postgraduate diploma: Business Administration (PBL) (University of South Africa (University of South Africa, 1999)	• Commerce and business analysis • Strategy and Planning • Aviation operations management • Transport and airline logistics
Ms. Tendani Ndou Principal: Aviation Training Academy Date appointed: 1 June 2011	• BCom (Hons) Cost Management Accounting (University of Venda) • CIA and Certificate in Control Self-Assessment (CCSA) (Institute of Internal Auditors (IIA) • Higher Education Diploma (UNISA) • Global Executive MBA (Gerogetown, USA and Esade Business School, Spain)	• Risk, audit and compliance • Corporate governance • Accounting, finance and management
Ms. Thandi Thankge Executive: Human Capital Date appointed: 1 September 2014	• MCom in Business Management (University of Johannesburg) • BA Honours Degree – Industrial Psychology (University of South Africa) • Advanced Programme in Organizational Development (University of South Africa) • Advanced Programme in Labour Relations (University of South Africa) • National Diploma in Library and Information Services (ML Sultan Technikon)	• HR Generalist • Talent management and transformation • Organisational development • Labour relations • Information services • Industrial psychology
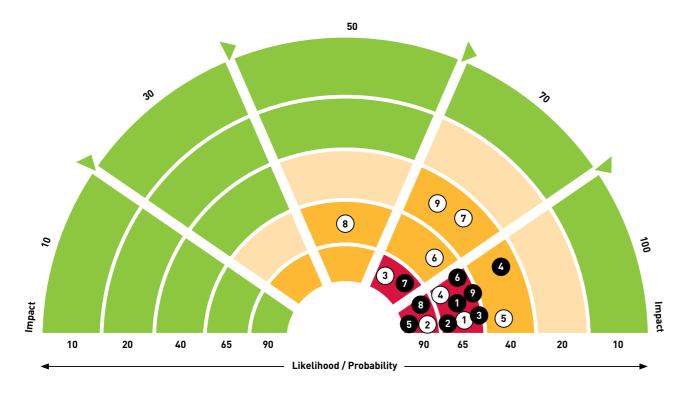
How ATNS's control framework creates value

Component	How it creates value for the organisation

Internal audit	• Supports the Company by providing objective assurance over the adequacy and effectiveness of the governance, risk management and control environment, including other key controls as presented by management, and risks emanating from the top 10 strategic risks of the company.
	
	• Helps the organisation to accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes to ensure that the following objectives are achieved:
	  – Risks are properly managed.
	  – Policies, regulations and laws are complied with.
	  – Data is accurate, timely, useful, reliable and relevant.
	  – Operations are effective and efficient and add value.

Fraud prevention, detection and investigation	• ATNS's Fraud Prevention Plan was developed to comply with Treasury Regulations and the PFMA.
	
	• The Plan should be read together with the ATNS Fraud Management Policy, Whistle-Blowing Policy and the ATNS Management Directive on Conflict of Interest.
	
	• The Fraud Prevention Plan takes into account the risks of fraud as identified in the Company's enterprise risk assessments and details strategic fraud and corruption risks that must be addressed.
	
	• The Fraud Prevention Plan aims to:
	  – Encourage a culture where all employees, the public and other stakeholders behave ethically in their dealings with, or on behalf of, ATNS.
	  – Improve accountability, efficiency and effective administration within ATNS.
	  – Improve the application of systems, policies, procedures and regulations.
	  – Change operational aspects within ATNS that could encourage fraudulent behaviour and corruption and, which may go unnoticed or unreported.
	  – Encourage all employees and other stakeholders to strive towards the prevention and detection of fraud and corruption.

IT governance	• The IT governance process establishes a formal regulatory framework to govern ATNS's information technology (IT) function and provides a platform from which to develop processes and procedures to support the governance framework.

Component	How it creates value for the organisation
Regulatory compliance	• ATNS established a Permission Planning Committee (PPC) as a permanent EXCO subcommittee, with the express purpose of facilitating the permission planning process. • ATNS subscribes to a modular approach in compiling permissions and the PPC, through its Permission Module Managers project team, drives the preparation and maintenance of information modules needed to compile permission applications as mandated by the Regulating Committee in its Approach document. • The PPC also ensures modules are kept 'live' and updated on an annual basis to monitor progress in the implementation of the current permission, thereby tracking 'actual' versus 'budgeted' permission Key Performance Indicators (KPIs) and reporting on deviations. This provides input for the yearly budgeting process in addition to developing a repository of historic permission data needed to feed into and help guide subsequent permission application processes.

Enterprise risk management (ERM)	• Key activities of ATNS's annual ERM process include:
	  – Performing an annual risk assessment to identify and affirm material strategic, operational and compliance-related risks according to their likelihood of occurrence and the potential severity of their impact on the organisation.
	  – Defining control activities through appropriate policies and procedures to mitigate the probability and impact of material risks at all levels of the organisation.
	  – Ensuring the smooth flow of communication and information-sharing pertaining to material risks within and between business units; including the communication of the Company's risk appetite, risk tolerance levels, and embedding a common risk language.
	  – Providing on-going training on the risk management process to embed a culture of risk awareness and enterprise-wide risk management within the Company.
	  – Allocating management responsibility for identified risks to 'risk champions' within the Company who can take ownership of the monitoring and reporting aspects of the risk management process.
	  – Monitoring and reporting on progress in managing identified risks through the Executive Management Committee and its sub-committees.

Major risk movements – 2015/16 – 2016/17

Figure 10: ATNS residual risk heatmap

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

Residual risk exposure
● Priority 1 – Immediate action
● Priority 2 – More controls required
● Priority 3 – Monitor risk exposure
● Priority 4 – Acceptable risk exposure
● Priority 5 – Reduce controls

Residual risk movements
⊕ 2015/16
● 2016/17

| 2016/17 no.:	2016/17 priority	2015/16 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
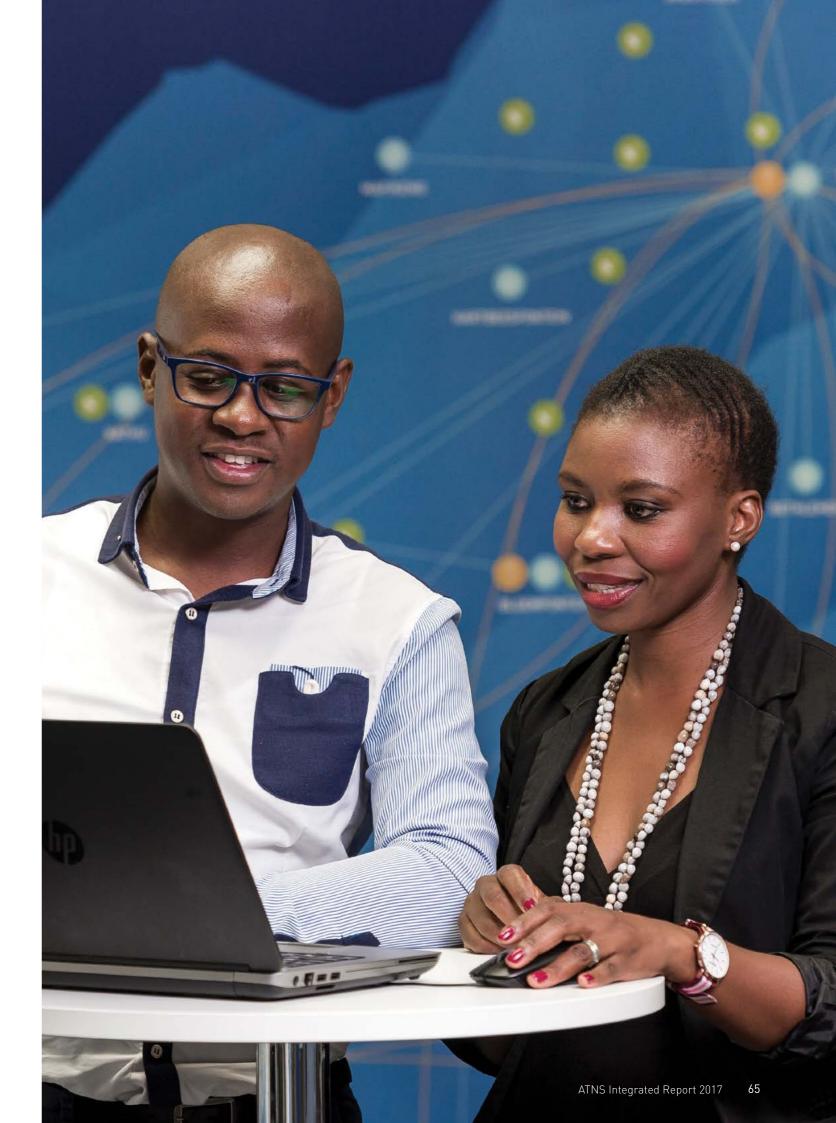
Table 9: ATNS top risks aligned to strategy

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	Chief Operating Officer	• Financial loss • Reputation damage • Compromised safety performance	• Business Continuity Plans • Disaster recovery plans	Weak	Priority 1 ●	• Business Continuity Project roll-out site-to-site replication and service restoration technology at OR Tambo • Complete and implement disaster recovery plan at FAOR; and complete and implement national contingency plan to cater for BCM
2	Unstable IT network	Chief Information Officer	• Business Disruption • Reputation damage • Financial Cost	• Internet policy • IT security policy • Fire walls • Anti-virus	Weak	Priority 1 ●	• Segregation of IT network • Align IT intervention with the CAPEX replacement project
3	Physical security of infrastructure	Chief Security Specialist	• Financial loss • Compromised service delivery • System breaches	• Security Policy and Directive • Dedicated Site Security • Security assessments conducted with action plans	Weak	Priority 1 ●	• Develop standardised processes and procedures for the security management systems • Conduct a feasibility study for the centralisation of the security services • Develop an Aviation program for ATNS
4	Cyber security threats	Chief Information Officer	• Reputational damage • Corruption and loss of sensitive company data • Financial loss	• Anti-virus software • IT governance policies and procedures	Weak	Priority 1 ●	• Implement the Information Security Management System (ISMS) • Develop cyber security policy framework • Develop IT security strategy
5	Reliance on third party service providers	Chief Technology Officer	• Loss or disruption of service • Reduced safety performance • Financial loss • Reputational damage	• Service level agreements (SLAs) • Standard operating procedures to restore services and continuation • Disaster recovery facilities	Good	Priority 2 ●	• Annual review of the SLAs • Annual review of the disaster recovery plans • Regular testing of the contingency plans
6	Major safety event	Chief Air Traffic Services	• Loss of life • Reputational damage • Public liability • Financial loss	• Safety Management Systems (SMS) • Station Standing Instructions (SSI) • Fatigue management policy and process • Maintenance of infrastructure and equipment	Satisfactory	Priority 2 ●	• Ensure speedy Online access through adequate infrastructure • Conduct continuation training focused on contributing factors • Ensure simulator availability in both tower and SSS through adequate funding and allocation of budget • Implement ATS Supervisors
7	Critical skills in global demand	Executive Human Capital	• Financial loss • Inability to meet client demand expectations • Increased safety risk • Lack of continuity and compromised organisational growth	• Planned intake for ATC and Technicians • Integrated Human Capital plan (strategy) to address skills shortages • Career marketing road shows at Universities, Technical collages and High Schools	Satisfactory	Priority 2 ●	• Human Capital to formalize Succession Planning for critical roles (included in reward philosophy) • Retention and transfer of institutional knowledge • Be an employer of choice and branded as such • Partnering of NGOs and career centres
8	Financial sustainability	Chief Financial Officer	• Declining income versus escalating cost base • Failure to meet regulatory requirements • Inability to meet financial obligations • Loss of reputation	• Engaging the Regulator, Shareholder and industry on a regular basis • Supply Chain Management Policy to guide procurement • Finance polices, directives and procedures • Permission planning	Satisfactory	Priority 2 ●	• Complete and implement the Governance model • Complete and implement the supply chain operating model to achieve economies of scale

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
9	Unavailability of deployed CNS technology	Chief Technology Officer	• Service disruption • Decreased reliability • Compromised safety performance • Operational inefficiencies (duplication of operations) • Loss of reputation • Loss of ACSA airport certification • Regulatory punitive measures by economic regulator	• Service level agreements and support contracts • Preventative maintenance plans • Redundancies in system design which minimize common points of failure • CNS technology roadmap • Corrective maintenance • System upgrades	Good	Priority 3 🟡	• Implement ADHOC equipment life extension plans • Critical issue to be completed and implemented to address supply chain management challenges
10	Political instability	Executive: Commercial Services	• Financial loss • Delayed/non-payment • Inability to transact or fulfil contractual obligations • Damage to assets • Injuries and fatalities • Damage to company reputation	• Memorandum of understanding with other countries • Government to Government relationships with other countries • Regular engagement with SA embassies / DIRCO/ State Security Agency/ DoT/DTI offices in relation to the respective countries • Working with the UN bodies	Satisfactory	Priority 3 🟡	• Build strong relations with senior government representatives • Develop periodic political barometers and environmental scan to keep abreast with developments in each country

Statement of adequacy of ATNS's internal control environment

Based on the consideration and analysis of information and explanations from management, the assessment of internal controls by internal audit, including internal financial controls and external audit reviews; the Audit and Risk Committee is of the opinion that the internal controls of the Company were partially effective throughout the year under review in ensuring that:

• Risks are properly managed;
• The Company's assets were safeguarded;
• Proper accounting records were maintained; and
• Compliance with laws, regulations and contracts was ensured.

Where internal control weaknesses were identified, these were discussed with management and corrective actions were taken to minimise the risk. Consequence management linked to unresolved audit findings is being driven at Board of Directors level to ensure management responds adequately to repeat findings by both internal and external auditors. Management is undertaking an overhaul of ATNS's IT systems to improve internal controls.

The Committee and management have also addressed issues of non-compliance with policies and procedures received through the auditors and the whistleblowing hotline. The Committee is driving an internal educational process to re-emphasise the importance of regulatory compliance within the Company.

The following areas have been identified as action plans within the IT environment:

IT Governance

The IT Department has adopted Cobit Framework and King III code of good governance as guidelines for IT Governance. There is a plan to review both Organisational structures and policies to ensure that governance standards are improved.

Disaster Recovery

Data security is paramount within ATNS. The OR Tambo office has been identified as a 'failover' site to ensure duplication of systems. There is an ongoing project to link the Bruma Head Office to OR Tambo to enable the Disaster Recovery failover arrangement. Regular tests will be conducted to ensure effective operation of this strategy.

Network Stability

The IT network backbone connects all ATNS operations; as such, stability needs to be guaranteed. There is a project underway to upgrade the Wide Area Network (WAN) connectivity to ATNS centres. This will be further augmented by upgrading the internal Local Area Networks (LANs) within specific centres. This intervention will improve both speed and reliability within the network. This is a multi-year programme in line with infrastructure upgrades.

Cyber Security

Cyber Security is an organisation-wide initiative. A collaborative MOU has been entered into between ATNS and the CSIR to collaborate on cyber security solutions. This will culminate in a maturity assessment and a holistic approach to addressing identified cyber vulnerabilities. ATNS continues to invest in the improvement of its IT capability in line with ever-changing business demands.

Quality Statement

The Strategy and Optimisation function is the custodian of the Quality Management System (QMS). ATNS is ISO 9001 Certified in that it has embraced the Total Quality Management system. This year the Company again performed a surveillance audit on the QMS. No major or minor findings were reported. As a result, ATNS continues to maintain its certification. This emphasises ATNS's commitment to sound governance and ethical leadership; and, above all, to provide quality and safe services.

Remuneration

The section on remuneration that follows includes the Company's for the 2016/17 financial year.

The Human Resources Committee recommends annual remuneration for both executive and non-executive directors and considers associated performance measures and benefits when assessing remuneration. State-Owned Companies require people with exceptional competencies and experience to provide strategic leadership; as well as strengthen opportunities for direct and indirect employment for thousands of people. They are also responsible for generating returns on investor funding and have the added responsibility of managing strategic national resources.

ATNS views remuneration as a business issue not only a human resource issue. The organisation's remuneration directive will have a direct impact on operational expenditure and profitability, company culture, employee behaviour and ultimately with correct alignment on the ongoing sustainability of the organisation.

Remuneration philosophy

ATNS's 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. Remuneration is not considered to be a stand-alone management process, but rather one that is fully integrated into other management processes.

Benchmarking and position in the market

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 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. This benchmark informs the organisation of the market-related salaries of executive management within the South African labour market.

Components of remuneration
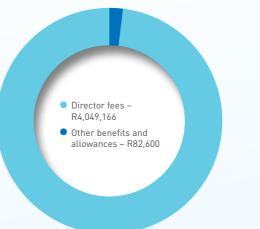
Total remuneration consists of guaranteed pay, variable pay, plus short-term incentives.

Guaranteed pay

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.

Graph 6: Consolidated non- executive remuneration – 2016/17 compared to 2015/16

Consolidated non-executive remuneration 2016/17

- Director fees – R4,049,166
- Other benefits and allowances – R82,600

Consolidated non-executive remuneration 2015/16

- Directors fees – R3,549,380
- Other benefits and allowances – R135,783

Retirement benefit

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 post-retirement benefit obligations.

ATNS offers employees a flexible pensionable / non-pensionable remuneration split, including:

- 60% pensionable 40% non-pensionable.
- 70% pensionable 30% non-pensionable.
- 80% pensionable 20% non-pensionable.
- 85% pensionable 15% non-pensionable.
- 100% pensionable 0% non-pensionable.

Healthcare Benefit

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

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.

Short-term performance incentive bonus

Performance incentive bonuses are based on:

- The 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.
- The performance of the department.
- The employee's performance against balanced scorecard objectives.

The Company applies a five-point rating scale to the measurement of the employee's performance against balanced scorecard objectives. Performance incentive bonuses are awarded to employees in the following categories:

- Meeting expectations.
- Exceeding expectations.
- Significantly exceeding expectations.

Non-executive directors' remuneration

Non-executive directors receive fees for their services on the Company's Board and Board Committees. Directors' fees are determined by the Department of Transport (DoT).

Salaries and related costs

Graph 7 provides a summary of the ATNS cost of employment for the year. All remuneration policies and procedures are fully compliant with current legislation and, where applicable, adhere to the collective substantive salary agreement entered into between ATNS and the recognised trade union, Solidarity. This agreement is a four-year agreement and terminates on 31 March 2019. Payroll is audited annually by both internal and external auditors. If any findings result from the audit, these are reported to the Audit and Risk Committee of the ATNS Board of Directors. In line with ATNS's philosophy of continuous improvement, the current remuneration philosophy is being reviewed and benchmarked against global best practice to ensure industry relevance. The completion of this project will result in an improved, globally acceptable remuneration policy and practice.

Graph 7: Total cost of employees

	Salaries and wages	Incentive bonus	Pension costs – defined contribution scheme	Training and development
2015/16	600,434,082	68,833,745	59,983,454	13,961,358
2016/17	656,669,940	68,068,238	64,853,005	13,395,475

Code of ethics

ATNS's 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; open and effective communication; and zero harm to self, others and the environment. 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 Procurement 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. The Code is reviewed annually. The Code informs fraud and corruption awareness training, and is accessible to all ATNS employees on the Company's intranet.

The Code is accessible to the public online at http://www.atns.co.za/annual-reports.

⚖ MATERIAL ISSUES

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.

For the 2016/17 Integrated Reporting process, ATNS reviewed the Company's material disclosures for the year and refined the process for identifying, validating, prioritising and approving material issues. The diagram below outlines the process followed.

We have used a combination of internal and external criteria to determine whether an issue is material, including factors such as the external commercial environment, ATNS's business context, its partnership landscape,

regulatory and policy environment, stakeholder concerns and interests. Overall the Company identified 19 material issues, clustered into eight overarching clusters:

1. Information and communication technology.
2. Procurement management.
3. Infrastructure management.
4. Human capital management.
5. License to operate.
6. Services management.
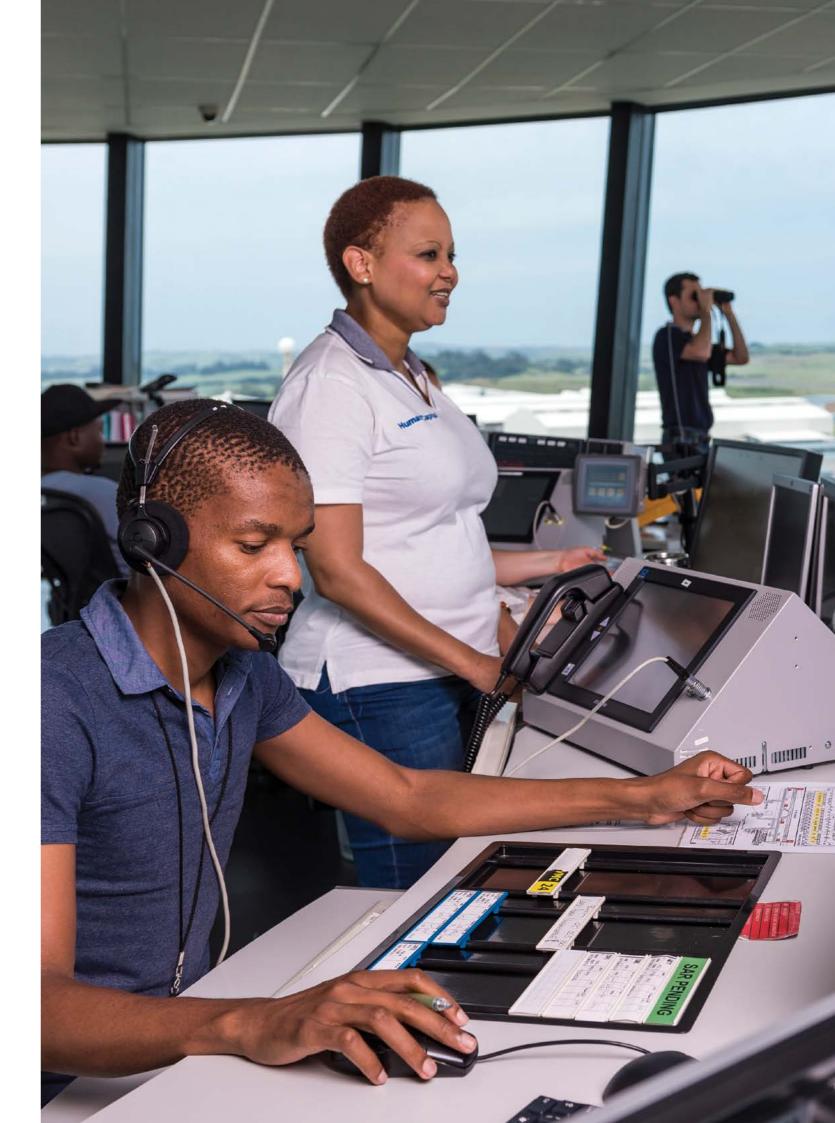7. Stakeholder engagement.
8. Financial management.

Figure 11: ATNS Integrated reporting process for determining material issues

	STEP 1 Identification	STEP 2 Validation	STEP 3 Prioritisation	STEP 4 Approval
Process	Workshop to identify material issues for 2017 reporting period	• A two-step electronic survey distributed to workshop attendees • Determine "importance" and "relevance" of issues identified during the workshop	Management process to prioritise and cluster material issues	• Approval of the material clusters and most material issues • Submission of material issues profile to Board Committees for approval • Management perspective applied
Facilitator	Workshop coordinated by the office of the ATNS Company Secretary and facilitated by an independent corporate reporting firm	• Survey prepared by independent corporate reporting firm and circulated by the Office of the Company Secretary • Survey finding collated by independent corporate reporting firm and approved by the Company Secretary	The Office of the Company Secretary	The Office of the Company Secretary
Participants	Management, governance representative and "process owners"	Management, governance representative and "process owners"	Executive management	• Executive management • Board of Directors (through Board Committees)
Criteria	Identifying issues of material interest to ATNS with a pre-determined boundary: • Business context • External environment • Partnership landscape • Regulatory and policy environment • Stakeholder engagement – Stakeholder identification	Validate issues based on importance to ATNS in terms of: • Likelihood of materialisation • Magnitude of impact • Rating process aligned to ATNS's ERM process for validating material risks and opportunities Determine the relevance of material issues based on past, present or future impact on:	Overall importance of top validated material issues to ATNS based on: • Area of impact • Time-frame of impact (short, medium or long term) • Qualitative impacts • Quantitative impacts • Where impact occurs (internal or external)	• Alignment of material clusters and associated material issues with ATNS' strategy and business context • Alignment with ATNS's top risks and opportunities and emerging risks • Alignment with Shareholder Compact reporting disclosures
Outcomes	A set of 60 material issues (unclustered)	Top 25 material issues (unclustered)	Prioritised material issues for the 2016/17 reporting year	Approved Material issue clusters for the 2016/17 reporting year

Our assessments of materiality also consider the basic expectations expressed in the national and international standards and agreements with which the organisation is expected to comply.

Table 10 summarises the internal and external environmental factors that contextualise key disclosures and the material issues informing key disclosures.

Table 10: Context for key disclosures and material issues

Reporting considerations	Internal criteria	External criteria
Aviation industry requirement by the broader civil aviation community.	ICAO Performance-Based ATM Operational Framework and ASBU Methodology; and global aviation regulatory requirements.	Global air traffic management (ATM) requirements, trends and standards; as well as leading practice safety performance benchmarks.
Basic expectations expressed in the national and international standards and agreements with which the organisation is expected to comply.	Statement of Strategic Intent and Shareholder Compact; 12 National Outcomes of Government and departmental outcomes of the Department of Transport.	Changes in the socio-economic developmental agenda and priorities of National Government.
ATNS key performance indicators as outlined by the Shareholder's compact.	ATNS Performance-Based Navigation Roadmap and Implementation Plan.	Socio-economic changes and challenges (e.g. barriers to market entry) in ATNS's key market segments (local and regional).
ATNS key performance indicators as outlined by the Shareholder's compact.	ATNS's mission, vision and values; Business Concept; strategic imperatives; critical issues; programmes; and Key Performance Indicators (KPIs).	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 impact ATNS's reputation, thereby influencing its ability to promote sustainable growth.
ATNS top 10 high-level organisational risks.	ATNS's Enterprise Risk Management (ERM) Process, including the key operational risks impacting ATNS' strategic and operational objectives and the associated mitigating activities; as well as ATNS's governance and compliance frameworks; and the Company's Sustainability Framework and associated policies and processes to manage financial, social and environmental sustainability outcomes.	The provisions of various frameworks including: Public Finance Management Act (PFMA); King III/IV Code on Corporate Governance (King III/IV); Discussion papers issued by the International Integrated Reporting Council (IIRC); International Financial Reporting Standards (IFRS); GRI Framework; United Nations Global Compact; Carbon Disclosure Project; B-BBEE Code.
List of key internal and external stakeholder issues as outlined by our stakeholder relation process and broader social expectations.	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.	Changes in the national, regional or global political environment and a changing regulatory landscape.

Figure 12: ATNS material issues universe aligned to strategy and the six capitals

Clustering of ATNS's material issues

Materiality universe

The Materiality universe clusters and links material issues to the six capitals nd ATNS' strategic imperatives.

ICONS ASSOCIATED WITH THE SIX CAPITALS

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

Material issues cluster

Material issue

Capitals and strategic objectives impacted

ICONS ASSOCIATED WITH STRATEGIC OBJECTIVES

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

Material issues cluster:

- ICT related
- Procurement related
- Infrastructure related
- License to operate
- Human Capital
- Services
- Stakeholder Engagement
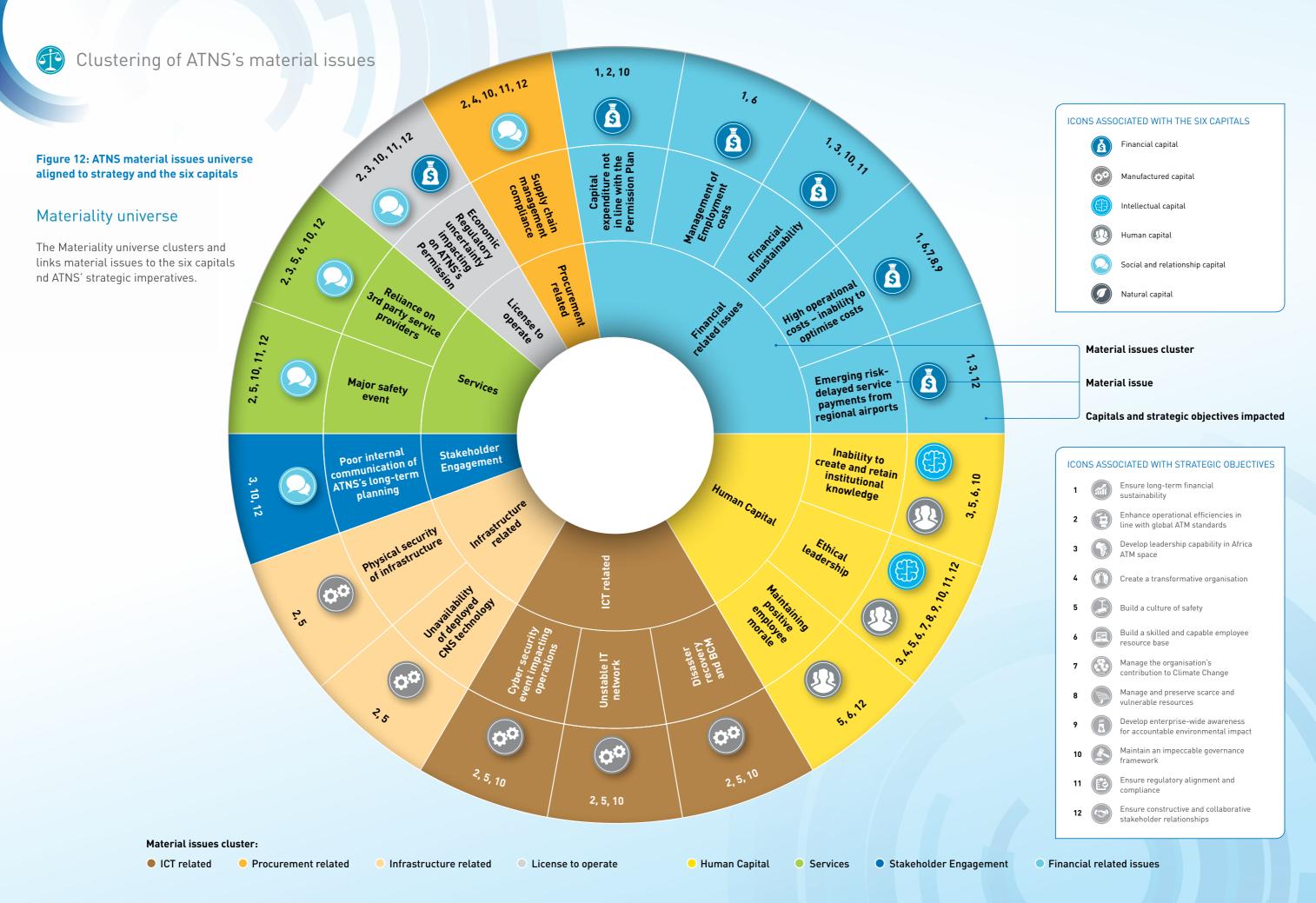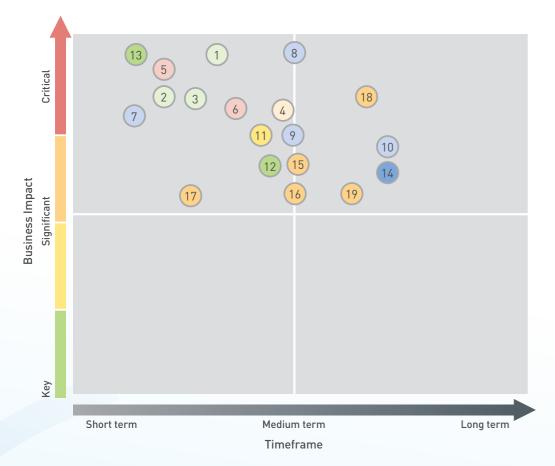- Financial related issues

Figure 13 illustrates ATNS's prioritisation of material issues in terms of the Company's short, medium and long-term strategic vision.

Figure 13: Prioritisation of material issues in terms of ATNS' short-, medium- and long-term strategic vision

1. Cyber security event impacting operations
2. Unstable IT network
3. Disaster recovery and BCM
4. Supply chain management compliance
5. Physical security of infrastructure
6. Unavailability of deployed CNS technology
7. Low employee morale
8. Ethical leadership
9. Critical skills in global demand
10. Inability to create and retain institutional knowledge
11. Economic regulatory uncertainty impacting on ATNS's permission
12. Reliance on 3rd party service providers
13. Major safety event
14. Poor internal communication of ATNS's long-term planning
15. Capital expenditure not in line with the Permission Plan
16. Emerging risk delayed service payments from regional airports
17. High operational costs – inability to optimise costs
18. Financial unsustainability
19. Management of employment costs not commensurate with strategic objectives to remain financially sustainable

STAKEHOLDER ENGAGEMENT

Key stakeholders

ATNS recognises the importance of securing stakeholder support for our long-term success by enhancing transparency, sharing knowledge, and generating innovative solutions. The Company regularly engages key stakeholder groups that are most relevant to the business. These dialogues inform our 'Material Assessment' and thereby, informs our Sustainability Framework (Figure 17) and ultimately provides invaluable input into our overall Strategic Model (Figure 15).

ATNS' Stakeholder Engagement Policy is available online at http://www.atns.co.za/annual-reports. More detail relating to our stakeholder engagement and management practices is available on page 141 of this report in Annexure A.

ATNS's key stakeholders include:

- International Civil Aviation Organisation (ICAO).
- South African Air Force (SAAF).
- South African Civil Aviation Authority (SACAA).
- International Air Transport Association (IATA).
- Airlines Association of South Africa (AASA).
- Board of Directors of Airline Representatives of South Africa.
- National Department of Transport (DoT).
- South African Weather Services (SAWS).
- Economic Regulator.
- ATNS staff.
- Continental ANSPs.
- Media.
- CANSO.
- Solidarity Trade Union.
- Schools, students and Educational institutions and Universities).
- Job seekers.
- Regional aerodrome owners.
- CAASA.
- Strategic partners, e.g., ANSPs outside the continent and selected supply chain entities.

Figure 14 provides an overview of stakeholder priorities in terms of material issues whilst prioritising these issues in terms of ATNS' strategic and operational imperatives. It is important to state that ATNS views the business's long-term commercial wellbeing and its stakeholders' interests as mutually inclusive.
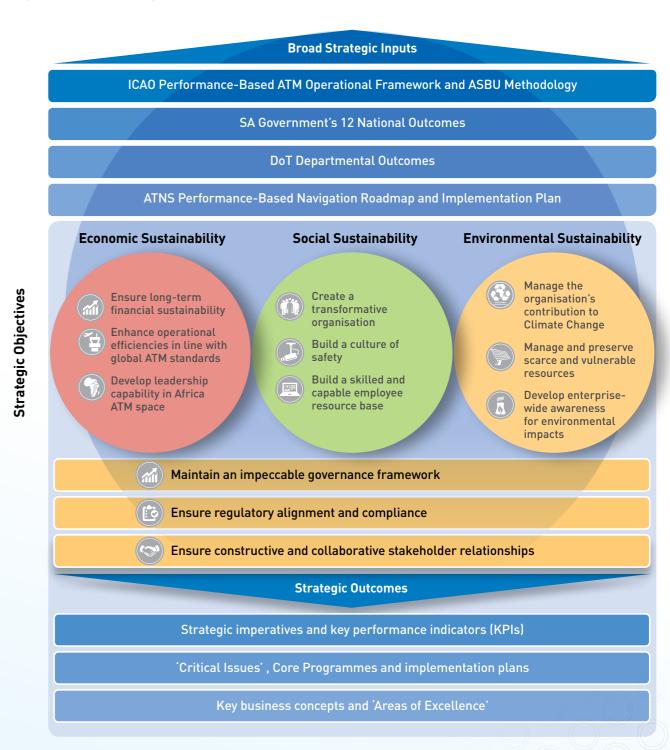
Figure 14: Stakeholder prioritisation of material issues

ATNS' Stakeholder Engagement Policy is available online at http://www.atns.co.za/annual-reports.

Relevance to stakeholders

Critical
Significant
Key

13
11
8
18
4
1
6
14
9
7
2
16
19
3
5
10
12
17
15

Short term | Medium term | Long term

Importance to ATNS

1. Cyber security event impacting operations
2. Unstable IT network
3. Disaster recovery and BCM
4. Supply chain management compliance
5. Physical security of infrastructure
6. Unavailability of deployed CNS technology
7. Low employee morale
8. Ethical leadership
9. Critical skills in global demand
10. Inability to create and retain institutional knowledge
11. Economic regulatory uncertainty impacting on ATNS's permission
12. Reliance on 3rd party service providers
13. Major safety event
14. Poor internal communication of ATNS's long-term planning
15. Capital expenditure not in line with the Permission Plan
16. Emerging risk delayed service payments from regional airports
17. High operational costs – inability to optimise costs
18. Financial unsustainability
19. Management of employment costs not commensurate with strategic objectives to remain financially sustainable

STRATEGY

Figure 15: ATNS strategic model

Broad Strategic Inputs

ICAO Performance-Based ATM Operational Framework and ASBU Methodology

SA Government's 12 National Outcomes

DoT Departmental Outcomes

ATNS Performance-Based Navigation Roadmap and Implementation Plan

Strategic Objectives

Economic Sustainability
- Ensure long-term financial sustainability
- Enhance operational efficiencies in line with global ATM standards
- Develop leadership capability in Africa ATM space

Social Sustainability
- Create a transformative organisation
- Build a culture of safety
- Build a skilled and capable employee resource base

Environmental Sustainability
- Manage the organisation's contribution to Climate Change
- Manage and preserve scarce and vulnerable resources
- Develop enterprise-wide awareness for environmental impacts

Maintain an impeccable governance framework

Ensure regulatory alignment and compliance

Ensure constructive and collaborative stakeholder relationships

Strategic Outcomes

Strategic imperatives and key performance indicators (KPIs)

'Critical Issues', Core Programmes and implementation plans

Key business concepts and 'Areas of Excellence'

ATNS' Strategic Model

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 Air Traffic Management (ATM) Operational Framework at a global level; the South African Government's national outcomes; the Department of Transport's departmental outcomes; and the ATNS Performance Based Navigation Roadmap and Implementation Plan.

Our 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.

'Critical issues' essentially bridge the Company's current strategic profile and the future strategic profile. At an even more granular level, 'High priority critical issues' are set to be achievable within a single financial year. Critical Issues are reviewed annually and, when required, new critical issues are developed in line with the Company's profile, strategic objectives and risk appetite.

For the period 2016/17, ATNS developed the following High Priority Critical Issues to secure an integrated action plan to reach the set strategic objectives in the strategic profile.

Figure 16: Mapping strategic imperatives to 'critical issues' and 'core programmes'

Strategic imperatives	Deliver a high-performing Strategic Supply Chain in response to changing market	Build a market intelligence function (people, processes and systems)	Implement Talent management Plan	Deploy an enabling IT Infrastructure	Implement Safety interventions to improve safety performance
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	●	●	●		●

Strategic imperatives (Core Programmes)	An operating / governance model to align regulated and non-regulated business	CAPEX Program Implementation and alignment to the Permission	ISO 9001:2008 – ISO 9001:2015 Standards Migration	Isando / Spartan new corporate offices, ATA, ATM centre	Remote Service Provision	Cyber/Site Security	Disaster Recovery
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	●	●					

ATNS future strategic profile and business model

ATNS recognises the significant value it provides in the Republic of South Africa through the regulated provision of Air Traffic services within the borders of the country. The Company will continue to provide excellent and optimised services in the regulated business.

ATNS also offers a range of related services that are strategically relevant throughout South Africa and other African countries. These additional, unregulated international business deliverables are essential to the Company's growth and positioning in the African continent. Our market-driven strategy is largely focused on driving ancillary services, such as air traffic control training, procedure design, consulting and sophisticated satellite communications technology through the non-regulated business model. The products and services offered through the non-regulated business have been carefully selected to enhance ATNS's current offerings and to provide innovative packages for the future needs of both the business and the ATM sector. These products and services will position ATNS as a leading trans-national supplier of air traffic expertise and technology.

Key products and services to be provided through the non-regulated business across the continent will include:

- ASBU planning and deployment consulting services.
- Air Traffic Control.
- Engineering (Technical) Training.
- AIS – AIM products and services.
- Flight Calibration.
- ATFM/ ATM Consulting services.
- CAD.
- CNS/ATM Systems maintenance/ installation/ consulting.

Monitoring sustainability outcomes

In pursuit of a culture of sustainability, ATNS has identified three key areas that must be addressed to ensure that our business is viable and relevant for the future, namely: economic, social and environmental sustainability. ATNS will ensure that each of these areas is well-rooted, and that the business continues to thrive in a changing world.

Sustainability is a journey for ATNS and the aim is to achieve corporate citizenship as well as sustainable development which is crucial for our and society's wellbeing.

ATNS' strategic economic, social and environmental performance outcomes are monitored through the Company's Sustainability Framework, which reflects the full spectrum of ATNS's key sustainability outcomes.
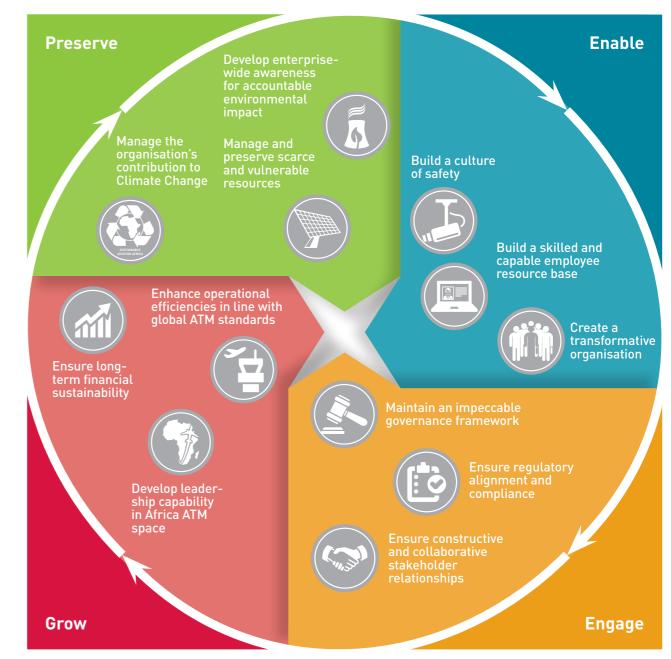
Figure 17: ATNS sustainability framework

Key sustainability outcomes

- Manage climate change impacts
- Preserve scarce resources

Key sustainability outcomes

- Core and critical skills / training and development
- Institutional knowledge
- Culture of safety
- Employee satisfaction and collaborative culture
- Create a representative workforce
- Long-term job creation

Preserve
- Develop enterprise-wide awareness for accountable environmental impact
- Manage the organisation's contribution to Climate Change
- Manage and preserve scarce and vulnerable resources

Enable
- Build a culture of safety
- Build a skilled and capable employee resource base
- Create a transformative organisation

Grow
- Enhance operational efficiencies in line with global ATM standards
- Ensure long-term financial sustainability
- Develop leadership capability in Africa ATM space

Engage
- Maintain an impeccable governance framework
- Ensure regulatory alignment and compliance
- Ensure constructive and collaborative stakeholder relationships

- Enhance safety, reliability and availability
- Ensure operational efficiency
- ICT enablement
- Innovation and R&D
- Ensure working capital
- Leadership development
- Grow revenue in regulated and non-regulated business
- Maintain Airline economic sustainability

- Ensure impeccable governance and ethics
- Ensure regulatory compliance
- Develop local suppliers
- Shareholder management
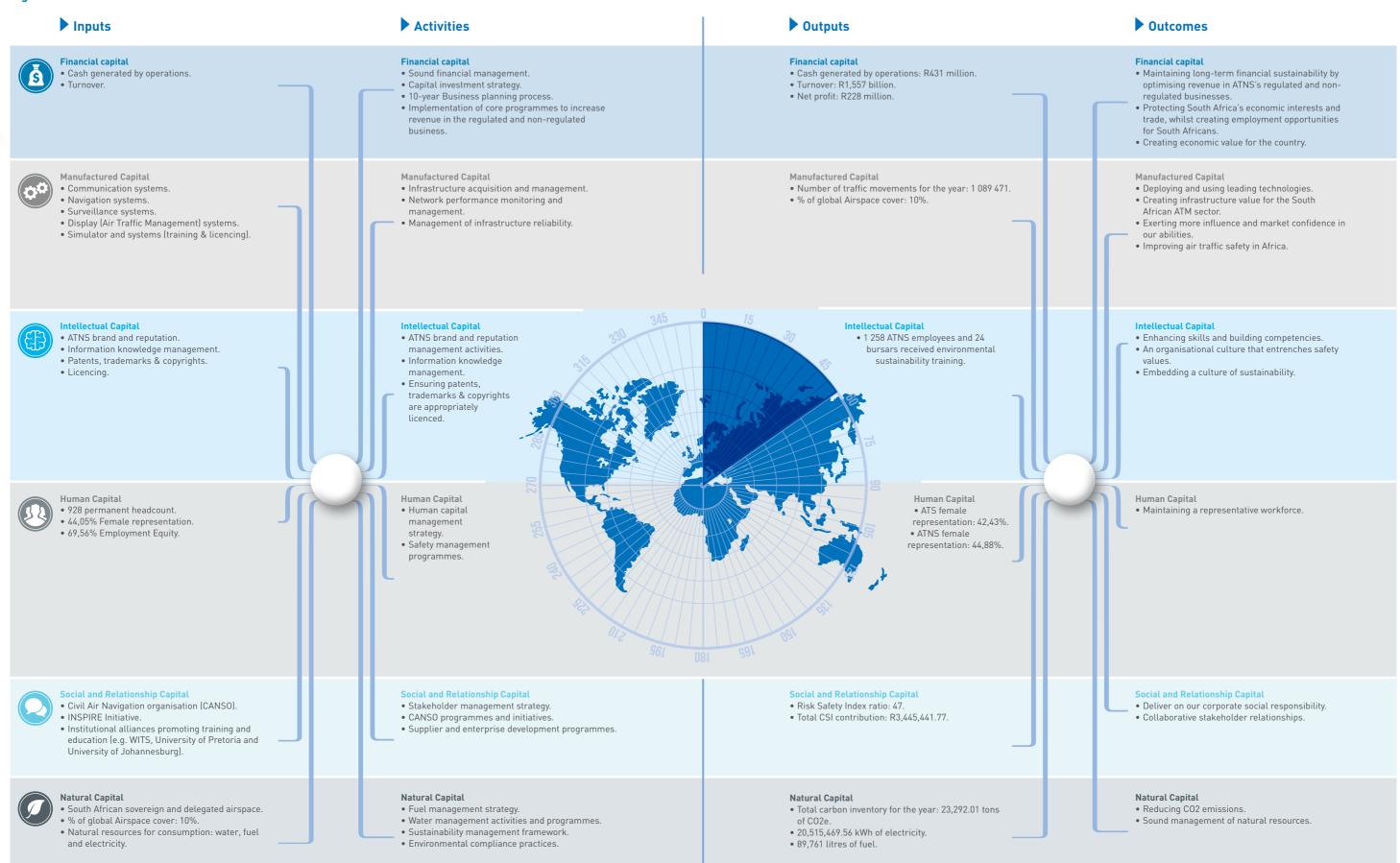- Strategic partnership development
- Positive community development

ATNS's detailed Sustainability Report is available online at http://www.atns.co.za/annual-reports.

CREATING VALUE THROUGH THE CAPITALS

Figure 18: ATNS's value creation model

▶ Inputs

Financial capital
• Cash generated by operations.
• Turnover.

Manufactured Capital
• Communication systems.
• Navigation systems.
• Surveillance systems.
• Display (Air Traffic Management) systems.
• Simulator and systems (training & licencing).

Intellectual Capital
• ATNS brand and reputation.
• Information knowledge management.
• Patents, trademarks & copyrights.
• Licencing.

Human Capital
• 928 permanent headcount.
• 44,05% Female representation.
• 69,56% Employment Equity.

Social and Relationship Capital
• Civil Air Navigation organisation (CANSO).
• INSPIRE Initiative.
• Institutional alliances promoting training and education (e.g. WITS, University of Pretoria and University of Johannesburg).

Natural Capital
• South African sovereign and delegated airspace.
• % of global Airspace cover: 10%.
• Natural resources for consumption: water, fuel and electricity.

▶ Activities

Financial capital
• Sound financial management.
• Capital investment strategy.
• 10-year Business planning process.
• Implementation of core programmes to increase revenue in the regulated and non-regulated business.

Manufactured Capital
• Infrastructure acquisition and management.
• Network performance monitoring and management.
• Management of infrastructure reliability.

Intellectual Capital
• ATNS brand and reputation management activities.
• Information knowledge management.
• Ensuring patents, trademarks & copyrights are appropriately licenced.

Human Capital
• Human capital management strategy.
• Safety management programmes.

Social and Relationship Capital
• Stakeholder management strategy.
• CANSO programmes and initiatives.
• Supplier and enterprise development programmes.

Natural Capital
• Fuel management strategy.
• Water management activities and programmes.
• Sustainability management framework.
• Environmental compliance practices.

▶ Outputs

Financial capital
• Cash generated by operations: R431 million.
• Turnover: R1,557 billion.
• Net profit: R228 million.

Manufactured Capital
• Number of traffic movements for the year: 1 089 471.
• % of global Airspace cover: 10%.

Intellectual Capital
• 1 258 ATNS employees and 24 bursars received environmental sustainability training.

Human Capital
• ATS female representation: 42,43%.
• ATNS female representation: 44,88%.

Social and Relationship Capital
• Risk Safety Index ratio: 47.
• Total CSI contribution: R3,445,441.77.

Natural Capital
• Total carbon inventory for the year: 23,292.01 tons of CO_2e.
• 20,515,469.56 kWh of electricity.
• 89,761 litres of fuel.

▶ Outcomes

Financial capital
• Maintaining long-term financial sustainability by optimising revenue in ATNS's regulated and non-regulated businesses.
• Protecting South Africa's economic interests and trade, whilst creating employment opportunities for South Africans.
• Creating economic value for the country.

Manufactured Capital
• Deploying and using leading technologies.
• Creating infrastructure value for the South African ATM sector.
• Exerting more influence and market confidence in our abilities.
• Improving air traffic safety in Africa.

Intellectual Capital
• Enhancing skills and building competencies.
• An organisational culture that entrenches safety values.
• Embedding a culture of sustainability.

Human Capital
• Maintaining a representative workforce.

Social and Relationship Capital
• Deliver on our corporate social responsibility.
• Collaborative stakeholder relationships.

Natural Capital
• Reducing CO2 emissions.
• Sound management of natural resources.

How ATNS defines value creation

ATNS defines "value" as the Company's ability to create and preserve relative economic, social and natural worth in terms of the six capitals to meet – and exceed – stakeholder expectations. This includes: financial capital and economic value, manufactured capital and infrastructure value, intellectual capital value, human capital value, social and relationship capital value, and natural capital value.

The Company aims to create integrated and sustainable value by providing a single banner of service accountability to clients for air traffic management solutions and associated services, and to expand this service offering across South Africa's borders into the rest of Africa.

ATNS's value proposition is supported by:

- the creation of economic value for the country through its supply-chain practices;
- improved infrastructural systems through leading-edge technology;
- a commitment to safety compliance;
- the provision of training and career development for its people;
- the ability to attract and retain sector-specific staff competencies and critical skills in global demand;
- the ability to foster reliable industry partnerships; and
- a commitment to ethical business practices, environmental impact awareness and proactive corporate social responsibility.

Financial capital

As a provider of Air Traffic Control and Management (ATM) solutions for South Africa as well as 10% of the world's airspace, ATNS creates financial value for the Company through its regulated and non-regulated business activities. The air traffic management industry in South Africa is strongly linked to growth in air traffic movements and overall economic growth. The Company projects its revenue based on the expected air traffic movement growth. The air traffic movement has a high correlation to Gross Domestic Product (GDP) at approximately 80%. There is a time lag between a change on GDP and the impact on air traffic movements of between 12 and 18 months.

In the regulated business, ATNS as a monopoly service provider, is regulated economically by the Economic Regulating Committee (RC), which is empowered by the ATNS Company Act (Act 45 of 1993) to issue permission to ATNS. The permission cycle informs the Company's specified tariffs as well as the required service standards for the regulated business. ATNS actively collaborates with the regulating committee (RC) to ensure favourable and sustainable outcomes for the industry. The RC is required to balance the interests of the Company with the interests of its clients, which includes promoting safe, efficient, economic and profitable operations. This encourages timely investment in ATM infrastructure and ensures that ATNS can finance its obligations, with a reasonable prospect of earning a commercial return.

The aviation industry has a significant economic impact across some of the major African markets. ATNS's non-regulated business encompasses a long-term strategy to facilitate regional expansion through a wholly-owned subsidiary vehicle. ATNS's non-regulated business currently contributes 10% of the Company's revenue. A study by the International Air Transport Association (IATA) forecasts that if just 12 of Africa's economies opened their skies to each other, fares would drop by up to 35% and an extra 5 million African passengers could afford to fly. An additional 155,000 new jobs would be created and more than R12,9 billion ($1.3 billion) added to the GDP.[2] These are significant numbers for an industry that currently supports around 7 million jobs and more than $80 billion in GDP across the continent.

ATNS further delivers considerable economic outcomes to society. South Africa's air traffic routes connect the country to cities of more than 10 million inhabitants, with an average of 1,5 outbound flights per day available to passengers. It is estimated that a 10% improvement in air connectivity relative to GDP would see a R1,5 billion per annum increase in long-run GDP for South Africa's economy. South Africa's integration into the global air transport network therefore is important for the continued growth of the country's economy.

The International Air Transport Association (IATA) has forecast that the number of air passenger journeys to, from and within South Africa will more than double from the 23,6-million in 2016 to more than 54-million by 2036. This will be the result of an average annual growth rate in the country's local and international air travel of 4,3%, significantly above the expected rate of 3,5% for the aggregated global industry. IATA also reports sustaining about 490 000 jobs (including in the tourism sector) and generating $12-billion, or 3,5%, of the national GDP. Every year some 390 000 aeroplanes take off and land from South Africa's main airports. The busiest single airport is OR Tambo, through which more than 18,5-million passengers passed in 2014.[3] The IATA study confirms the vital role of air transport in facilitating over R129, 9 billion ($10 billion) in exports, some R181,9 billion ($140 billion) in foreign direct investment and around R116,9 billion ($9,2-billion) in inbound leisure and business tourism for South Africa.

Approach to creating financial capital value

ATNS's 10-Year Business Plan and accompanying Financial Model

- South African ATM industry strongly linked to growth in air traffic movements and overall economic growth.
- 10-year plan addresses key strategic and stakeholder concerns.
- Ring-fences resources and 'non-regulated' business costs and revenues from the current regulated business in the short to medium term.
- Identifies risks and opportunities in both the regulated and non-regulated businesses.

ATNS International Programme

- A long-term strategy to expand into the Africa region.
- A subsidiary vehicle established known as "ATNS International".
- Enables expansion in the non-regulated business market without undue risks to the regulated market and Shareholder.
- Facilitates joint ventures and partnerships with external suppliers to harness market opportunities.

Alignment of tariffing and service standards in the regulated business

- Strong correlation between service standards reporting and the Permission application.
- The Regulating Committee (RC) – sanctioned by the ATNS Act No.45 of 1993 – prescribes service standards.
- Service standards are prescribed in accordance with internationally-accepted practices.
- Reporting on quantitative and qualitative results – a necessary counterbalance to economic regulation.
- RC determines if ATNS's assets are sufficient, excessive or insufficient.
- RC deters Companies from implementing excessive charge increases through Consumer Price Index (CPI) – X price-cap regulation.
- Monitoring of service standards ensure that the price cap translates into increased efficiency, and not a deterioration of service levels.

ATNS's B-BBEE strategy

- Important driver in achieving ATNS's goals towards economic and social sustainability.
- B-BBEE Strategy developed in accordance with the B-BBEE Codes of Good Practice.
- Aligns with the South African Governments' transformation initiatives.
- B-BBEE Strategy addresses all six elements of the generic B-BBEE scorecard.
- ATNS's Enterprise and Supplier Development strategy supports and develops emerging black-owned suppliers in the aviation industry.

2 https://www.weforum.org/agenda/2016/05/africa-s-potential-is-sky-high-and-the-airline-industry-is-key/

3 http://www.engineeringnews.co.za/article/iata-forecasts-strong-growth-in-south-african-air-traffic-and-cites-its-role-in-the-economy-2017-06-20/rep_id:4136

Sound financial management

- ATNS raises funds from the market to finance its capital expenditure programme.
- The borrowing plan is driven by planned capital expenditure and cash generated from operations.
- Gearing of 45% is targeted to manage possible financial risks.
- ATNS obtains approval from the Minister of Transport and the Minister of Finance to borrow funds.
- Distributable profits are retained for re-investment and to maintain financial sustainability in the short term.
- Major share of revenue derived from monthly billings for air traffic control services rendered.
- Other revenue derived from less periodic income.
- CAPEX dependent on the requirements of specific projects.
- ATNS maintains a minimum cash balance of two months' operating expenditure plus capital loan payable within six (6) months.
- ATNS's 20-year capital expenditure plan, considers legislation, capacity requirements, efficiency, technological changes and end-of-life replacements of infrastructure.
- The capital expenditure plan is reviewed annually and approved by the Board of Directors.
- Approximately 60% of VSAT and NAFISAT revenue is generated by IATA members.
- As ATNS only transacts with South African registered companies, there is no need to hedge against currency volatility risks.
- Cash flow is monitored daily to ensure sufficient funds to cover operational expenses and loan obligations.
- All purchases are approved in accordance with the ATNS mandate matrix.

We report on:

- Financial performance.
- The Permission Planning process.
- Performance in the non-regulated business.

2017 Material issues impacting our ability to create financial capital value

Material issues	Why they matter	How we manage them
Capital expenditure not in line with the Permission Plan	• An inability to successfully plan, implement and expense ATNS's CAPEX programme in line with the Permission Plan could result in a penalty in the form of an imposed "clawback". • Acquisitions of appropriate training systems, equipment and simulators may impact training delivery should we not be able to keep up with best practice technologies.	• Integration of policies, processes and procedures to ensure coherence in planning capital. • On-time hand-over of projects to procurement department (6 – 12 months prior to commitment date) enables a streamlined tendering and contract awarding process. • A "master view" of project status through real-time information flow across the phases of 'commitment', 'cash flow' and 'capitalization enable's effective monitoring, reporting and control of projects. • ATA participation on various forums to ensure ATA requirements are addressed at concept/business case stages of projects.
Emerging risk – delayed service payments from regional airports	• On-time payments from regional airports ensures on-time payments to key suppliers and ED suppliers.	• Dedicated procurement officer is assigned to assist respective regional airports.

Material issues	Why they matter	How we manage them
High operational costs – inability to optimise costs	• Cost-optimisation forms part of operational efficiency objectives and helps to drive value for stakeholders in line with the Permission process. • Training delivery is viewed as an investment in the future of ATNS and its people. ATA expansion objectives may be compromised should costs not be optimised and if adequate funding is not allocated. Ultimately the journey towards becoming a profit-centre may be compromised.	• Standard cost-saving initiatives • Continuous organisational awareness promoted for cost-savings and operational efficiency. • An operations efficiency analysis will be conducted in 2017/18 with the intention of addressing existing bottlenecks and areas for cost optimisation.
Financial unsustainability	• Economic regulation by the South African Regulating Committee restricts monopoly abuse within the South African market by strictly applying tariff adjustments. • The maturity of ATNS's domestic operations will create challenges for the business to generate new customers in South Africa. It is therefore imperative for ATNS to secure future growth and revenue by broadening its service offerings to other markets, including the wider Africa market.	• The ATNS 10-Year Business Plan. • Africa expansion strategy, including the ATNS International programme and Ring- Fencing Project. • The ATNS ATM Roadmap. • The Africa Indian Ocean (AFI) Strategy Project. • Capital Investment Strategy. • Sound financial management. • ATA Strategy and associated expansion objectives geared towards becoming a profit-centre.
Management of Employment costs not commensurate with strategic objectives to remain financially sustainable	• ATNS needs to balance employee costs with the need to attract highly skilled and experienced staff – many of whom have skills in critical global demand.	• ATNS remuneration philosophy and Human resourcing plan.
Economic regulatory uncertainty impacting on ATNS's Permission	• Economic regulation by the South African Regulating Committee (RC) restricts monopoly abuse within the South African market by strictly applying tariff adjustments. ATNS's business and operational strategies hinge on RC approvals for its planning process – e.g. human capital and infrastructure planning.	• Apply for a 5-year Permission to levy charges. • Comply with the conditions of the Permission as set out by the RC. • Re-structuring and re-alignment of the ATA to deliver on the ATA Strategy. • ATNS playing a role in amendments to current regulations and legislation and monitoring developments on STER.
Increased cost and regional airport reliance	• Additional revenue is influenced by regional or privately-owned airports. ATNS's revenue recovery can be challenged if there are delays in payments from these airports. ATNS continues to provide services to these airports as part of the national objective and the mandate set out in the Act.	• Dedicate personnel resources to recover regional airport funds and ongoing consultation as well as agreement need to be maintained.

Key financial capital outputs for 2016/17

Total revenue	R1,557 billion
Operating costs	R1,300 billion
Capital expenditure	R318 million
SADC VSAT II Revenue	R49,0 million
NAFISAT Revenue	R42,3 million
Total assets	R2,7 billion
Total equity	R2,4 billion
Cash generated from operations	R431 million
Total investment in CNS technology	R151,8 million
Employee wages and benefits	R816 million
Total borrowings as at 31 March 2017	0
Borrowing facility in place	R650 million
Payments to Government as income tax (including deferred tax)	R89,5 million

Material financial and economic outcomes

- Maintaining long-term financial sustainability by optimising revenue in ATNS's regulated and non-regulated businesses.
- Protecting South Africa's economic interests and trade, whilst creating employment opportunities for South Africans.
- Creating economic value for the country.

Monitoring the trade-offs in the business

ATNS operates in an environment where it is required to pre-empt the future demand for air traffic capacity, services and technology as expected and articulated by its ATM stakeholders and users in the South African regulated and continental non-regulated environments; as well documented in the ATNS Permission framework approved by the Economic Regulating Committee. As capital expenditure in infrastructure increases (2016/17: 28% increase), the value of manufactured capital rises while financial capital value decreases. The increase in capital expenditure during the year to R318 million (2016: R230 million) was aimed at investing in operational infrastructure to continue providing safe operations.

Manufactured capital

ATNS provides and maintains reliable airspace infrastructure in South Africa, enabling the delivery of air traffic services in a safe and efficient manner. In line with the Shareholder Mandate to deliver safe skies and customer-centric services, our leading-edge communications, navigation and surveillance technology creates advanced infrastructural value for the Company and the country's air traffic navigation sector. Accordingly, ATNS invests in new and pioneering air traffic management technology to manage and control the national airspace system.

South Africa's aviation infrastructure is best-in-class globally, contributing to the country's excellent aviation safety record. ATNS's advanced Technology Investment Initiative is one of the largest single CAPEX investments that the Company has embarked upon in the last decade and is steered under the programme 'Collaborative ATNS Air Traffic System' (CAATS).

As the air traffic management and safety industry becomes more consolidated, ATNS is increasing 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. ATNS is already playing a leading role on the continent by hosting the Civil Air Navigation Organization (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.

Through its manufactured capital and infrastructural value creation ATNS supports the National Developmental Plan (NDP) by facilitating the achievement the following DoT outcomes:

- A transport sector that is safe.
- An increased contribution to job creation.
- An efficient and integrated transport infrastructure network for social and economic development.
- An increased contribution of transport to environmental sustainability.

Approach to creating infrastructural value

Performance-Based Navigation Implementation (PBN)

- Defines performance requirements for aircraft navigating on an ATS route, within a terminal procedure or a designated airspace.
- Supports increase in ATM system capacity and efficiency.
- Brings about environmental and safety benefits by reducing aviation congestion, conserving fuel and reducing impact of aircraft noise.
- National PBN Roadmap and National PBN Implementation Plan developed with the ATM Community.
- South African PBN Implementation Task Team established to deliver on the implementation plan.

ATNS information technology strategy

- Manages end-to-end internal and external client experiences to ensure catalogued IT services.
- Spearheaded by fast-maturing business process management and knowledge management.
- Online presence management and mobile applications.
- Ensures adequate support for various units within ATNS, especially for highly-skilled resources and change-management initiatives.

Continuous safety improvement and implementation of ATNS' Safety Management Plan

- Safety action plans are created annually and consider the findings of operational analyses.
- Operational analyses identify hazards and gaps, as well as factors contributing to previous safety events and new applicable operational safety concepts.
- Continuous adjustments and additions are made to safety plans in response to periodic operational demands to reduce event recurrence.
- Both national and unit-specific safety plans are in place to address human- and system- related failures.
- A Regional Airport Safety Programme helps to streamline contractual terms, resource allocation and service provision between various service providers.
- Safety performance assurance enables ATNS to verify that it is meeting its safety performance targets.
- A monitoring programme increases the probability of detecting weaknesses in the safety system's defences before an active failure leads to a serious safety occurrence or accident.
- Investigation of occurrence reports are aligned with safety performance assurance.
- Safety metrics include:
  - Safety Ratio
  - Separation standards based on IFR hours
  - Risk Safety Index (RSI).
  - Safe operation and application of separation standards are based on Instrument Flight Rule (IFR) flight hours.
  - The IFR metric is comparable to the same metric obtained from the Civil Air Navigation Services Organization (CANSO) and serves to support the benchmarking of safety performance.

Capital Investment Strategy

- Key enabler for creating infrastructural value.
- Continually enhances operational efficiencies and service reliability.
- Informed by regulatory requirements at a global level.
- Develops business cases for Capital Expenditure projects.

Integrated planning through the ATNS ATM Roadmap

- Support ATNS' strategic plan to implement ATM/ CNS systems.
- Roadmap provides more detailed guidance for the content of implementation plans.
- Provides motivation for permission requests and a foundation for budgets.
- Serves as input into the ATNS Integrated Technology Plan.

Remote service provision

- Consolidated approach control services for various airports terminal areas.
- Provides ATS services in remote airports even though traffic volumes are low.
- Leading-edge remote tower technology establishes aerodrome control services without being stationed at an airport.
- Improved levels of air traffic service at a lower cost.
- Improved levels of air traffic service at a lower cost.
- Reduced capital expenditure requirements on new towers.
- Greater staffing flexibility.

Communication, navigation and surveillance infrastructure provision and maintenance

- Air traffic services (ATS) provided at nine statutory ACSA airports and contractual air traffic control services at 12 regional airports.
- Extensive Very High Frequency (VHF) radio network.
- Voice communication and control system (VCCS) relays communications between air traffic controllers, pilots and air traffic service units.
- 9 ATS sectors; 10 approach radar sectors; and 30 aerodrome control sectors.
- 22 Local VHF Sites; 42 Remote VHF sites; and 2 HF Sites.
- Navigation infrastructure includes: 35 VOR sites; 10VDF sites; 20 DME sites; and 12 NDB sites.
- Surveillance infrastructure includes: 2 Surface Movement Radar Systems; 8 Primary Radar Systems; and 17 Secondary Radar Systems (9 stand-alone).

We report on:

- Infrastructure performance.
- Infrastructure investment.

2017 Material issues impacting our ability to create manufactured capital value

Material issues	Why they matter	How we manage them
Disaster recovery and BCM	ATNS could suffer severe operational disruptions, loss in revenue, and damage to the organisation's reputation should a large-scale disaster materialise. ATNS's disaster recovery strategy and process during or after a disaster are critical in maintaining operational security, safety and efficiencies as well as protecting intellectual capital and institutional knowledge.	ATNS's recently enhanced disaster recovery strategy and process address potential shortfalls in operational procedures (particularly in terms of information technology) to manage disaster recovery and consider: • ATNS's holistic risk profile • A regularly tested DR plan • Major stakeholder concerns • Aligning actions and processes with appropriate IT regulations and best-practices.
Unstable IT network	ATNS's IT network enable users to share files, access applications, and communicate and interact via various social and electronic platforms. An unstable network may: • Result in severe operational disruptions • Impact ATNS's financial sustainability • Lead to loss of customers (local and international) • Devaluation of ATNS's trade name.	• Change management process to assess all proposed changes and related performance impacts. • Action plans to enhance network requirements in place following recent 'network health' check. • IT infrastructure at the ATA to be addressed in the new financial year to ensure optimal functioning.
Cyber security event impacting operations	In the ever-increasing likelihood of cyber-breaches, ATNS needs to adopt a more secure, vigilant, and resilient approach to cybersecurity. The impact of a cyber-event may result in: • Compromised and leaked data and information (sensitive) • Legal actions • Financial instability • Operational disruptions • Loss customers (local and international) • Devaluation of ATNS's trade name • Loss of intellectual property (IP) • Training delivery, administration and document integrity may be severely compromised should the ATA suffer a cyber-attack.	• IT Cyber Initiative to address and mitigate cyber vulnerabilities and risks. • Holistic Cyber Security Strategy, Framework and Implementation Plan in partnership with CSIR. • Included in ATA Risk Register and associated mitigation controls.
Unavailability of deployed CNS technology	• ATNS Air Traffic Management service provision relies heavily on infrastructure and software deployment. Current ATNS CNS technology provides for effective and safe aircraft operations as required by International Civil Aviation Organisation. • All Engineering and ATS-related training make use of CNS technology.	• Current infrastructure availability levels are high and every effort is made to maintain existing standards. • Adequate redundancy to ensure service continuity. • Service Level Agreement. • Preventative maintenance. • ATA participation on various forums to ensure ATA requirements are addressed at concept/business case stages of projects.

🜨 Material issues	Why they matter	How we manage them
Physical security of infrastructure	ATNS physical infrastructure is experiencing theft and vandalism. This is also one of ATNS's top 10 risks on its ERM profile.	• Develop standardised processes and procedures for the security management systems. • Develop and implement an awareness training for OT personnel delegated for security function. • Investigate the feasibility of training and registration of delegated Security OT personnel to comply with PSIRA. • Conduct a feasibility study for the centralisation of the security services.
🌐 Operational efficiency, service reliability and network performance	Ensuring operational efficiency and reliability not only maintains and improves safety standards but also keeps operating costs down, which in turn ensures that air transport stays affordable and that the number of flights increases.	• Monitoring Arrival and Departure Delays in accordance with performance target.

Key infrastructure value outputs for 2016/17

Achievement of CNS Systems Availability	C: 99,80%
	N: 97,98%
	S: 99,99%
Operation of the satellite communication networks SADC VSAT 2	SADC 99,89%
Operation of the satellite communication networks NAFISAT	NAFISAT 99,94 %
Reduce overall traffic delays (Average delay per flight)	33 seconds
Implement ICAO PBN concept in South Africa. Near-term implementation targets in line with South African PBN Roadmap.	3 Design Reports for submission to SACAA (RNP APCH)
	RNP APCH in 100% of instrument runways located at ACSA airports
	10 Design Reports for submission to SACAA (RNAV 1 SID/STAR)
	8 Design Reports for submission to SACAA (RNAV 1 SID/STAR)

Material infrastructural outcomes

• Enhancing operational efficiencies and service reliability.
• Deploying and use of leading-edge technologies.
• Enhancing operational safety performance.

Monitoring the trade-offs in the business

ATNS's project and infrastructure sites are located across the country and some of the sites are located in conservation areas. An example includes the Blesberg Radar facility, situated in the Cape Nature Reserve in the Swartberg Mountains of the Western Cape. The surveillance service from this facility tracks aircraft within a 250 nautical mile radius from the facility. In establishing and maintaining this site extraordinary caution is taken to comply with all environmental recommendations and considerations to ensure harmonisation between technology and the environment. This approach to the environment is not only considered biodiversity sensitive areas such as parks, but is practiced with all infrastructure deployments.

🧠 Intellectual capital

ATNS's intellectual capital plays a critical role in the Company's future earning potential and encompasses a range of 'intangibles' that interrelate with the other capitals to create sustained value for the business and its stakeholders. ATNS considers three main categories of intellectual capital:

• Intellectual property: Research and development (including service and product development) as well as ATM training knowledge and capability.
• Organisational capital: ATNS's business concept, operational model and strategy; core programmes responding to industry dynamics; and business and governance processes, policies and procedures.
• Implicit and embedded knowledge: Market and sector knowledge, areas of excellence (including critical sector skills and capabilities).

ATNS aims to expand its service-offerings to become a registered, sector-specific training institution. ATNS's training capacity and expertise are key enablers of industry leadership, innovation and the Company's future earning potential.

In addition to reporting on the Company's performance in applied research and innovation, this section includes performance reporting on the **ATM sector-specific skills training and development** provided to staff and third parties by ATNS as a training institution; whereas **organisational training** intended to develop ATNS staff competencies (skills enhancement, leadership training and the development of functional competencies) is covered in the Human Capital section that follows.

Approach to creating intellectual capital value

The AVI AFRIQUE Aviation Innovation Summit

- Founded by ATNS in November 2012, the annual event aims to lead in the areas of ATM innovation.
- Integrates an applied research (AR) and innovation framework to align ATM solutions to the African market.
- Addresses needs that may not be met by research programmes in the USA and Europe.
- Widely supported by – and represents – key stakeholders:
  - Technology Innovation Agency.
  - Department of Science and Technology and Department of Transport.
  - Council for Scientific and Industrial Research (CSIR).
  - Aviation organisations such as IATA, Board of Directors of Airline Representatives of South Africa (BARSA), Boeing and Airlines Association of Southern Africa (AASA), among others.

Applied research unit within ATNS

- An Applied Research (AR) strategy and plan established by the ATNS Operations Technology Department.
- Shifts ATNS from being a user of acquired technologies to contributing to the local technology value chain.
- Established in 2011, the AR unit aligns with the Government's vision, to move South Africa towards a knowledge-based economy.
- Focus to date has been to capacitate the unit with appropriate skills and expertise.

ATNS's Aviation Training Academy

- Provides a full range of air traffic services training, technical support and related training.
- ISO 9001:2008 accredited institution.
- International cooperation agreements with partners such as the Embry Riddle Aeronautical University, ENAC and WITS.
- Maintain mutually beneficial partnerships in the presentation and accreditation of ATS international courses.
- ATA's current training model is being optimised with new service offerings to benefit the entire training value chain.
- Moving towards model of 'profit-centrism'.
- Pursuing registration as an academic institute with the Council of Higher Education.

Aviation Innovation Laboratory

- Develops and validates future technology solutions with the potential to be commercialised or operationalised in the ATM environment.
- Future emerging technologies are visualised, simulated and tested.
- AR outcomes include product development, process development and process improvement.
- Will drive and position ATNS as an African leader in the 21st-century innovation economy.

We report on:

- Performance in applied research and innovation.
- Training and development in sector-specific skills.

2017 Material issues impacting our ability to create intellectual capital value

Material issues	Why they matter	How we manage them
Inability to create and sustain institutional knowledge	• Globally regarded as a beacon of safety in airspace navigation, ATNS is regarded as a centre of excellence and an institute of reference. This standing can only be maintained if ATNS continues to attract, retain and develop competent people who are aligned with the Company's desired culture of safety, professional excellence and sustainability awareness. • If the ATA is unable to attract and retain instructional resources to continue delivering on the ATNS training demands, the ATA's expansion objectives may be impacted.	• ATNS's Aviation Training Academy. • Management training to enhance employee engagement and motivation. • Continuation training to maintain the skills of air traffic controllers. • Succession planning. • Innovation around operational concepts and safety performance. • The AVI AFRIQUE Aviation Innovation Summit. • Applied research unit within ATNS. • Aviation Innovation Laboratory. • ATNS's remuneration philosophy and willingness to pay a premium to both attract and retain scarce ATM skills.

Key intellectual capital outputs for 2016/17

Training success rate in ATS disciplines.	94,7%
Training success rate in Engineering disciplines	98,5%
International training success rate	97,5%
Engineering Technicians	78
Engineering Satellite Technicians	5
Additional highlights:	All ATS training successfully migrated to the CAATS-Topsky training simulator.
	Awarded IATA Premier Circle Membership.

Material intellectual capital outcomes

- Exerting more influence and market confidence in our abilities.
- Improving air traffic safety in Africa.
- Enhancing sector competencies.
- Contributing to a pool of engineering skills.

Monitoring the trade-offs in the business

ATNS's Air Traffic Academy (ATA) is a training institution and division within the Company through which we offer sector-specific skills training and development to staff and third parties. Our sector-specific training is a key enabler of new revenue opportunities both locally and in the rest of Africa. Historically, the ATA has been viewed as a cost-centre. However, in growing ATNS's intellectual capital through the ATA through a combination of financial capital investment, intellectual capital innovation and human capital capacitation, new revenue-generating opportunities are being explored that will not only add financial capital value to the Company, but also deliver the social capital value of producing technically-competent ATM professionals.

Human capital

ATNS builds human capital value through the individual and collective competencies, knowledge, skills and experience of the Company's employees and managers. The Company drives organisational effectiveness through its leadership capability and by creating an enabling environment for employees to contribute to organisational goals, while being fairly remunerated for their contribution and initiative.

ATNS's continued commercial and operational success relies on its ability to attract, recruit, develop and retain diversely qualified and skilled professionals. Our ability to create human capital value in the long term is underpinned by our philosophy of fair remuneration and reward; and our commitment to organisational transformation through equitable employment practices. Accordingly, we strive to create an organisation that reflects the diversity of our society and that maximises the potential of our employees.

Safety is a primary driver of reliable, efficient air traffic services to customers and the broader industry. A robust safety culture amongst employees is essential to maintaining consistently high safety performance, particularly where controllers are directly involved in the separation of aircraft.

Approach to creating human capital value

Developing skills and rewarding performance

- Learning programmes are provided for all employees in line with organisational needs.
- Learning Management System maintains records of training interventions implemented for all employees.
- Key performance areas (KPAs) and targets – as mandated by the Shareholder Compact – direct activities and deliverables.
- Recognition and reward system designed to cultivate a culture of trust, confidence, shared innovation in the Aviation sector.
- A four-year substantive salary agreement (commenced on 1 April 2015) exists between ATNS and the recognised trade union, Solidarity.
- A performance management system designed for all employees in the administrative bargaining unit.
- Aligns performance to strategic objectives, professional competencies and industry expectations.

ATNS Employment Equity Plan

- Workforce representation is guided by ATNS's internal Employment Equity (EE) Plan.
- EE Plan aligned to the Employment Equity Act, 1998 (Act No. 55 of 1998).
- A five-year EE Plan came into effect on 1 April 2015 to 31 March 2020 – reviewed annually.
- EE Plan championed by ATNS's CEO through various line department and executive management.
- Aims to:
  - Create a balanced profile of employees within the Company.
  - Eliminate any discriminatory practices in terms of race, gender or disability.
  - Provide for ATNS's present and future skills requirements.

Continuation training to maintain the skills of air traffic controllers

- Training spans various training programmes to maintain air traffic controllers' skills.
- Provide refresher courses and emergency training.
- Theoretical and practical courses, together with simulation training.
- Recurrent training maintains current competency levels.
- Build skills by cross-training selected controllers from quieter stations to gain experience in busier stations.

ATNS' Safety Culture Maturity Model and safety management practices

- A Safety Culture Maturity Survey is performed every three years.
- Routine safety monitoring and reporting practices.
- Safety performance indicators are measured against the number of Instrument Flight Rule (IFR) flight hours.
- Indicators measure the number of 'losses of separation' related to aircraft being provided with a service.
- ATNS' Safety Management System (SMS) Policy and System and Safety Management Plan form part of the Company's risk management and compliance.
- Safety imperatives include:
  - Embedding a safety culture and implementing safety assurance initiatives.
  - Excellence in safety, as a guiding principle across all ATM system activities.
  - Ensuring externally-supplied systems and services meet appropriate safety standards.
  - Appropriately skilled staff develop and implement safety strategies and policies.
  - Defining unique operational accountabilities for all personnel.

Service delivery supervision

- Pool Managers and Officers in Charge (OiCs) are responsible for planning and directing air traffic service delivery:
  - First-line supervision to air traffic controllers.
  - Evaluating the in- and out-flows of sector traffic.
  - Ensuring acceptable levels of traffic by implementing restrictive practices (as required).
  - Mitigating delays.
  - Providing leadership and direction while employing collaborative decision-making.
- Senior members from the Air Traffic Control Officer (ATCO) pools are appointed on a shift-by-shift basis to fulfil supervisory functions.

Leadership Competency Model

1. Helps to improve leadership skills and capacitates management to lead highly technical teams.
2. Entire ATS management team attend "ship training" to improve employee relations and safety performance.

We report on:

- Employment equity.
- Skills development.
- Employee wellness.

2017 Material issues

Material issues	Why they matter	How we manage them
Maintaining positive employee morale	• Employee wellness forms an integral part of ATNS' staff development focus and overall Human Capital Strategy. For ATNS, low employee morale and an operational environment that is not performance-oriented could impact the Company's overall efficiency and performance; lead to incurred costs as a result of absenteeism; and pose a safety risk.	• Defined Employee Engagement Programme. • Staff wellness programme. • A Leadership Competency Model. • Continuation training to maintain the skills of air traffic controllers. • Enhanced supervision of service delivery. • ATNS' Safety Culture Maturity Model. • Safety management practices. • Performance and reward.
Ethical leadership	• The Board of Directors and senior management are committed to the highest standards of corporate governance and strives to achieve the highest moral and ethical operational and behavioural standards, as well as sound and transparent business practices.	• ATNS's governance and compliance frameworks. • Board of Directors Mandate. • Board of Directors selection process. • Board of Directors committee responsibilities and accountabilities. • Board of Directors evaluation process. • Board of Directors induction process.
Critical skills in global demand	• ATNS competes globally in terms of attracting and retaining critical ATM skills. These skills often demand a premium due to their scarcity in the market and their value to the business. Accordingly, ATNS may need to pay a premium to both attract and retain these skills.	• ATNS's remuneration philosophy and willingness to pay a premium to both attract and retain scarce ATM skills. • Creating an enabling and dynamic operational environment and culture to ensure ATNS is perceived as an employer of choice.
Increasing employee development, wellness and Employment Equity	• A skilled, representative and motivated workforce contributes not only to ATNS' strategic and operational objectives, but also adds to the Company's competitiveness and stability.	• Woman empowerment programme. • People with disability 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). • Employment Equity plan (initiatives and programmes). • Ongoing investment in core training for employees.

Key human capital outputs for 2016/17

ATS AIC	70,01%
ATS female representation	42,43%
AIC	73,15%
Overall female representation	45,88%
People with disabilities	3,31%

Material human capital value outcomes

- Maintaining a representative workforce.
- Embedding a culture of sustainability.
- Promoting an organisational culture that entrenches safety values.
- Enhancing skills and building competencies.

Monitoring the trade-offs in the business

With ATNS competing globally to attract and retain critical ATM skills, it often pays a premium for employees due to the scarcity of their skills (intellectual capital value) in the market and their value to the business. During the year, operating costs increased by 4% to R1,300 billion, and was partially due to ATNS' staff cost of R816,546,505 (2016: R754,329,324). International demand for highly-skilled technical staff (human capital) impacts on our staff costs (financial capital), but this cost must be weighed against the value of technically-competent employees in ensuring safe skies for all ATM users (social and relationship capital value).

Additionally, ATNS's long-term planning has identified future challenges around the skills that we will need to evolve within a globally-competitive, technologically-driven aviation environment. In this future context, many of the sector's present skills will either be replaced by technological functions, thereby rendering them redundant, or requiring them to be adapted to match as yet unknown competency requirements. We are, therefore, aware of the need to balance a human-capital intensive business with the increased emphasis on technology in the ATM sector going forward.

Social and relationship capital

ATNS considers the value represented by and through our stakeholder relationships as critical to the long-term economic and social sustainability of the business. These relationships are exemplified by the strength of our supply chain relationships, community partnerships, government, regulatory relations and our relationships with our customers and sector partners.

Approach to creating human capital value

ATNS Corporate Social Investment (CSI) Strategy

- ATNS's CSI strategy is driven by the Company's requirement to align its strategy to national socio-economic developmental imperatives, national Government outcomes and the DoT's departmental outcomes.
- ATNS's community development programmes aims to drive expanded social transformation.
- ATNS's flagship CSI projects relate to the promotion of mathematics and physical science for Grades 10-12.
- Future CSI initiatives will encourage research and technology development initiatives driven through the R&D forum developed in 2012 known as Avi Afrique.

Sound supply-chain practices

- ATNS's procurement systems are focused on holistic and integrated Supply Chain Management (SCM).
- Enterprise Development (ED) stimulates growth for small, medium and micro enterprises (SMMEs) through the up-stream supply chain.
- ATNS's equipment requirements and infrastructure development, are informed by:
  - Regulatory requirements at a global level;
  - Enabling new technologies; and
  - The need to address the specific requirements of the air traffic management (ATM) community.
- ATNS approaches technology sourcing by engaging the expertise of both local and global suppliers.
- Procurement policies are geared towards localisation.
- Specific targets are set to transform the provision of aviation-related services.
- The Procurement Committee oversees the ATNS capital expenditure.

Proactive stakeholder management

- Focuses the business on issues that are material to both ATNS and stakeholder groups.
- Proactive engagement with Stakeholder groups through stakeholder-specific engagement channels, including (but not limited to):
  - Quarterly EXCO to EXCO meetings.
  - Road-shows.
  - Industry safety workshops.
  - 'Thought Leadership' programmes, such as the annual ATNS Avi Afrique Innovation Summit.
  - ATNS shares plans, collaborations and information on material issues of safety, training and Air Traffic Management (ATM); as well as Engineering and Technical Services (ETS).

Learnership programmes

- ATNS runs ATS Bursars Engineering Learnership programmes at its Aviation Training Academy.
- Successful students from the learnership pipeline typically feed into the pool of qualified engineering technicians and junior systems engineers.

We report on:

- Safety service provision.
- Supplier development and economic empowerment.
- CSI projects.

2017 Material issues

Material issues	Why they matter	How we manage them
Major Safety event	• Defined as an event where there was deviation from the desired system state, leading to the potential loss of or damage to equipment, persons or property if intervention was not applied. • A Major safety event could be a mid-air collision or a collision of aircraft on the ground as a result of ATC action /inaction. • A major safety event can give an impression that safety management systems are inadequate, which could lead to stakeholder mistrust, loss of service contract and loss of income.	• Continuation training and standards maintenance. • Implementation of recommendations resulting from investigations. • Safety management systems implementation and continuous improvement.
Supply chain management compliance	• The process of procuring of goods and services is vital for the organisation's operations. Long lead-times to address urgent acquisitions may result in interruptions to operational delivery.	• ATNS' SCM Model aims to facilitate the acquisition of goods and services at the right price, time and quantity in line with approved procurement processes. • ATNS suppliers are able to compete for business in an open, fair and transparent manner. • On-site financial administration and centralised management of ATA acquisitions.
Poor Internal communication of ATNS's long-term planning	• Poor internal communication of ATNS's long-term planning could result in misunderstanding and mistrust between employees and leadership and can lead to low employee morale, job insecurity, misalignment of priorities and ultimately lower operational performance.	• Quarterly staff meetings to discuss the company's objectives, address employee queries as well as questions face-to-face. • Email correspondence utilised to communicate on a more regular basis.
Reliance on third-party service providers	• A reliance on third-party service providers would suggest that ATNS lacks the requisite skills and competencies within the organisation to effect the same services. Unless skills transfer is ensured, these skills do not become part of the Company's institutional knowledge. • Third party's poor-quality service could have adverse operational and reputational impacts, e.g. data breaches, poor security practices, or supply chain issues stemming from a third party's poor disaster recovery procedures.	• Where feasible ATNS uses at least two different third-party service providers to introduce redundancy in the provision of data and voice communication links for remote Radio and Surveillance systems. • Satellite links are used as a backup for terrestrial, communication links in some instances. • Service level agreements are in place with all third-party service providers. • Where required, SLAs are accompanied by disaster recovery plans and mitigation strategies.
Training and skills development in the sector	• Leading sector-specific training is key to enabling industry leadership within the African continent and beyond our ATA academy. • The ATA has won awards including IAIA recognition. • Sector-specific skills training provided by the ATA strengthens the Company's ATM intellectual capital and aligns to industry trends.	• Ongoing stakeholder relations with key institutions. • Learnership programmes. • ATA (Aviation Training Academy), training pipeline and programmes. • ATA strategy roll-out.

Material social and relationship capital value outcomes

- Building positive stakeholder relationships to support economic, social and environmental sustainability.
- Promoting socio-economic value: Community development.

Key social and relationship capital outputs for 2016/17

Safety service provision	RSI of 47 against a target of 48. Safety ratio of 2,57 safety events per 100 000 movements (target: 2 safety events per 100 000 movements).
Supplier development and economic empowerment	B-BBEE level 2 Total B-BBEE score: 94.51
Total investment in corporate social investment projects	R3,445,441.77

Monitoring the trade-offs in the business

ATNS' social license to operate is based on the Company's ultimate impact on society. Accordingly, our enterprise development initiatives contribute meaningfully towards the creation of a more equitable society. However, many of the emerging technologies and innovations that will form part of ATNS's future operational landscape may only initially be accessible through foreign suppliers. ATNS will have to balance its need for leading-edge technologies and its developmental mandate to promote local supplier development.

Natural capital

The aviation industry's impacts on the environment are evident globally and appropriate legislative frameworks are being adopted by the ATM sector world-wide. ATNS supports the activities of ICAO's technical Committee on Aviation Environmental Protection (CAEP) in establishing global standards and recommendations for minimising the impact of aviation on the environment, and specifically the reduction of airspace noise and improvement of airspace air quality. A reduction of aviation CO_2 emissions can contribute towards keeping global mean surface temperatures below a 2-degree increase.

As an air navigation service provider, ATNS exerts influence on carbon emissions from aircraft, mainly in terms of the efficiency of the ATM network. As air traffic movements are expected to increase, flexible optimisation of the airspace is required to ensure that safety and an operationally-efficient environment are achieved. ATNS aims to promote environmental sustainability through continuously improving air traffic management practices. In aligning with the ASBU concept, ATNS is able to promote various operational efficiencies, including fuel efficient routing, optimal traffic flow management, Performance-Based Navigation (PBN) and attention to fuel optimal speed control. By continuously improving these processes, ATNS has an opportunity to provide added value to airspace users through a decrease in fuel usage, a reduction in fuel costs, and reduced CO_2 emissions.

Approach to creating natural capital value

Implementation of Aviation System Block Upgrades (ASBU)

- Operational efficiency is enhanced through the implementation of the ASBU concept:
  - Maintaining and enhancing aviation safety.
  - Harmonising air traffic management improvement programmes.
  - Removing barriers to future aviation efficiency and environmental gains at reasonable cost.
  - Improving airspace efficiencies.
  - Procedure design.
  - Oceanic random routing areas.
  - Reduced vertical separation minima (RVSM).
  - Air Traffic Flow Management (ATFM) tool: balancing demand and capacity.
  - Collaborative decision-making (CDM).
  - The INSPIRE initiative.
  - Sustainable energy management.
  - Sustainability and Climate Change Strategic Plan.

Implementation of Performance-Based Navigation (PBN)

- Utilizes the improved navigation capability of aircraft to enable more accurate operations in the departure, en-route and arrival phases of flight.
- Enhanced navigation capability allows for reduced separation between aircraft and facilitates optimum trajectories, resulting in reduced fuel burn and less CO_2 and noise emissions.
- ATNS developed a National PBN Roadmap and National PBN Implementation Plan in cooperation with the ATM Community.
- PBN procedures are in place at most of the international airports ATNS services.

Sustainable energy management

- Aims to reduce ATNS's ecological footprint.
- Aims to provide sustainable use of energy and environmentally aware operations.
- Applied in designing procedures and selecting sites for ground-based equipment.
- Aligns with the National Environmental Management Act (NEMA) and Civil Aviation regulation.

The INSPIRE initiative

- ATNS is one of the founding members of the Indian Ocean Strategic Partnership to Reduce Emissions (INSPIRE).
- Partnership with airlines, ANSPs and airport partners to identify ways to reduce aviation's impact on the environment.

Procedure design

- ATNS applies a design philosophy of 'clean speed arrivals and departures' and shortened routings, whenever flight procedures are being developed. [4]
- The ASBU initiatives of Continuous Climb Operations (CCO) and Continuous Descent Operations (CDO) are applied to all new designs.
- CDO reduces aircraft noise and gaseous emissions at airports and saves fuel consumption without compromising flight safety.
- CCO (aircraft operating technique) can reduce noise, while increasing flight stability and the predictability of flight paths for both controllers and pilots.

Oceanic random routing areas

- Random routing implemented within the Atlantic and Indian Ocean areas.
- Initiative allows aircraft to make optimum use of upper winds in route planning and execution, enabling higher efficiencies and reduced fuel burn, with less CO_2 emissions.
- User Preferred Routes (UPR) implemented in Indian and Atlantic Oceanic regions under ATNS's jurisdiction.

[4] The term 'clean speed' indicates that the aircraft flies at a speed and power setting that does not require the use of additional control surface (i.e., flaps, slats, and so forth). The ASBU initiatives of Continuous Climb Operations (CCO) and Continuous Descent Operations (CDO) are applied to all new designs as a matter of course.

Reduced vertical separation minima (RVSM)

- The RVSM initiative allows for aircraft to operate at optimised cruising levels with reduced vertical separation standards, depending on the aircraft and flight crew certification.
- RVSM contributes significantly to reduced fuel burn and the reduction of emissions.

Sustainability and Climate Change Strategic Plan

- Strategic plan to manage long-term environmental sustainability in the organisation.
- Supports the setting of appropriate environmental KPIs.

Air Traffic Flow Management (ATFM) tool

- Balances demand and capacity to minimise potential delays in the national airspace system.
- Two techniques reduce delays from operational and weather events:
  - Allocation of arrival and departure slots at slot-coordinated airports; and
  - Dynamic allocation of calculated take-off and arrival times on the day of operations.
- Reduces the need for aircraft to hold on the manoeuvring area with engines running, which reduces GHG emissions in the airport environment.

We report on:

- Managing carbon emissions.
- Managing natural and non-renewable resources:
  - Electricity and fuel.
  - Airspace quality.
  - Biodiversity and protected habitats.

2017 Material issues

Why they matter	How we manage them
Responding to climate change impacts	
As an ANSP, ATNS recognizes that it has influence on the emissions released as a result of aviation activities. Managing the carbon emissions resulting from our operations helps to reduce the amount of fossil fuels burnt that contribute to greenhouse gases and ultimately climate change. As an ICAO member state, ATNS supports and complies with standards and regulations set out to reduce the aviation sector's harmful impacts on the natural environment. Reducing CO2 emissions is aligned to one of the four 'relevant national outcomes' identified by the DoT – "an increased contribution of transport to environmental sustainability".	• Implementation of Aviation System Block Upgrades (ASBU). • Implementation of Performance-Based Navigation (PBN). • Improve airspace efficiencies. • Procedure design. • Oceanic random routing areas. • Reduced vertical separation minima (RVSM). • ATFM tool: balancing demand and capacity. • Collaborative decision-making (CDM). • The INSPIRE initiative. • Promoting employee awareness of environmental management.
Improved natural resource efficiency to reduce our impacts	
Energy efficiency: ATNS is committed to sound environmental stewardship and the responsible use of natural resources. The Company requires energy and fuel to provide communication, navigation and surveillance services to airlines to facilitate the safe movement of aircrafts in the controlled airspace. The failure to manage electricity consumption within the Company's daily operations can lead to inefficient operations and operational cost-increases.	• Energy efficiency implementation considered in infrastructure projects. • The Operational Efficiency Programme (OEP) identifies airspace design and tactical improvements. • Promoting employee awareness of environmental management.

Why they matter	How we manage them
Improved natural resource efficiency to reduce our impacts	
Water efficiency: While water usage relates mainly to consumption purposes, we acknowledge that South Africa remains a water-stressed country and aim to manage our own water consumption with due care.	• Considering 'green building' principles for ATNS's refurbishment projects. • Water efficiency initiatives include flow-regulating taps and toilets as well as rainwater harvesting. • Water meters. • Alternative water sources, such as water tanks. • Promoting employee awareness of environmental management.
Waste management: Further, as a more circular-economic ethos is embraced globally, ATNS intends to move towards more environmentally accountable waste management practices.	• ATNS's waste management policy enforces holistic waste-management practices. • A 'cradle to cradle' approach to waste management. • Assessing waste for alternative usage viability prior to disposal. • Hazardous waste generated in operations is disposed in accordance with formalised procedures. • ATNS maintains a detailed waste-management register. • Promoting employee awareness of environmental management.
Biodiversity management: ATNS's project and infrastructure sites are located across South Africa, with some sites located in conservation areas. These sites require a more focused approach to biodiversity management. The Radar Replacement Project in Blesberg[5] is one such site, situated in the Cape Nature Reserve in the Swartberg Mountains of the Western Cape.	• ATNS's Environmental Policy and related policies and procedures. • Compliance with the National Environmental Management Act (NEMA) for all projects. • Promoting employee awareness of environmental management.
Airspace quality – noise reduction: Aircraft produce noise during various phases of flight – on the ground while parked (such as auxiliary power units), while taxiing, on run-up from propeller and jet exhaust, during take-off, underneath and lateral to departure and arrival paths, over-flying while en route, or during landing. Air traffic management operations have an opportunity to minimise environmental impacts such as noise and emissions through efficient ATM operations.	• 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.
Enabling integration of environmental aspects in our business	
ATNS recognises that, as a state-owned company, employer and service provider it has the potential to lead in the establishment of a sustainability-oriented business ethos. For this ethos to become part of the Company's cultural roadmap, it needs to be embedded as a mindset and filter through into all aspect of the business. Environmental sustainability is becoming an important feature of ATNS's business landscape as it applies to the responsible management of biodiversity areas during projects, water and energy usage and waste management.	• Sustainable procurement practices and supply chain management compliance. • Integration of sustainability integration into infrastructure project planning. • Sustainability integration guideline and checklist. • Environmental performance forming part of score-card performance monitoring (where applicable). • Dedicated resource for managing CAPEX and the Procurement value chain.

[5] The project has an approved Record of Decision (ROD) of 2002, where the EMP is being monitored as the radar is being replaced.

Key natural capital outputs for 2016/17

CDO (Continuous Departure Operations)	6,203.34 tonnes fuel saved.
CCO (Continuous Climb Operations)	40,749.15 tonnes of fuel saved.
A-CDM (Airport Collaborative Decision Making)	19,589.69 tonnes of fuel saved.
Wake-Categorization	544,538 tonnes fuel saved (high end of range).
Total Electricity Consumption	20 515 469 kWh
Total Consumption for Fuel	89,761 Litres
Total Emissions from Electricity	20,720,62 CO2e
Total Emissions from Fuel	233, 34 CO2e
Overall Total Emissions incl. scope 3 emissions	23 292.01 CO2e
Waste Recycled- Hazardous	• 7,420 kilograms of e-waste • 11,020 kilograms of asbestos • 210 litres of drum of fluorescent tubes
Waste Recycled- General	• 29 bulk bags of paper • 2 bulk bags of plastic

Material natural capital value outcomes

• Reducing CO2 emissions.
• Promoting sound management of natural resources.
• Embedding environmental aspects in our business.

Monitoring the trade-offs in the business

ATNS manages both modern and older aircrafts – particularly on the African continent. The older aircrafts serve a direct purpose on the continent, whether supporting global food programmes or peace endeavours. We need to ensure that our airspace can accommodate these aircrafts even while being cognisant of the fact that they may be inefficient in terms of fuel burn. The CO2 emission contribution by the older aircrafts is weighed against the much-need contribution they are making on the continent.

OUR PERFORMANCE

Ensure long-term financial sustainability

Financial performance

• Despite a zero-tariff increase in air traffic charges, total revenue for the year was R1,557 billion (2016: R1,509 billion), a 3% improvement on the prior year results. A slight increase in revenue generating air traffic movements, and the strength of the Rand against the Dollar, contributed to the increase in revenue.
• Operating costs increased by 4% to R1,300 billion (2016: R1,254 billion) 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.
• Cash generated from operations decreased by 3% to R431 million (2016: R445 million) mainly due to increased operational costs.
• Capital expenditure increased by 38% to R318 million (2016: R230 million) as a direct result of capital infrastructure investment to provide safe operations. Furthermore, ATNS committed R461 million (2016: R491 million) in respect of Property, plant and equipment.
• Our balance sheet remains strong, with our current ratio at 5.2:1 (2016: 6.3:1), and our gearing ratio at 0%, positioning ATNS well for raising the necessary funding for further impending capital expenditure.
• For the year ended 31 March 2017, the Company had no interest-bearing loans and borrowings.

Permission Process

• The permission cycle informs the Company's specified tariffs as well as service standard requirements for the regulated business. ATNS actively collaborates with the Regulating Committee (RC) to ensure favourable and sustainable outcomes for the industry. Due to previous Permission Cycle over-recoveries (less asset capitalisation), the RC levied a claw-back of R454 million, resulting in the year-end tariff adjustment increasing by 1,5% (2017), 7,5% (2018) and 7,0% (2019) respectively. However, in line with the applicable Act, ATNS is currently in the process of submitting the Permission application for the period 2018/19 to 2022/23. This process involves consulting with the industry on all matters related to the permission including (but not limited to) the Company's capital expenditure programme, traffic forecast, the human capital plan as well as tariffs to be levied. The permission process is taking place under challenging economic conditions with South Africa's low economic growth placing pressure on domestic carriers. Furthermore, the recent downgrade of South Africa by rating agencies is likely to negatively impact the already-subdued traffic movements which will adversely affect ATNS's revenue prospects.
• During the year, the RC called for the commencement of the permission application process (23 December 2016). Thereafter, ATNS's Permission Planning Committee [PPC] commenced planning and scheduling for the application process.
• To date, several consultations have transpired, resulting in draft modules that are pending approval and finalisation from EXCO and Board of Directors. The coming financial year will see continued module development and finalisation ahead of the preliminary target date of 30 September 2017.
• ATNS is confident that the RC will grant balanced and sustainable tariff rates that will ensure the Company's financial sustainability and that of the industry as a whole.

Increasing revenue in the non-regulated business

Non-regulated revenue is above budget by R19,5 million (26,1%) due to the fluctuating foreign exchange rates. Satellite communication networks revenue is R49,0 million and R46,0 million for SADC VSAT II and NAFISAT respectively mainly due to the Flight Information Region (FIRs) crossing movements being higher than budgeted.

Table 11: Quarterly performance of SADC VSAT II and NAFISAT revenue

Business objectives	Objective measures	Quarter 1	Quarter 2	Quarter 3	Quarter 4	2016/17 Actual	2016/17 Target
SADC VSAT II Ensure commercial sustainability	Ensure financial sustainability	R13,0 million	R12,4 million	R12,2 million	R11,5 million	R49,0 million	R42,2 million
NAFISAT Ensure commercial sustainability	Ensure financial sustainability	R12,0 million	R10,7 million	R10,7 million	R10,5 million	R42,3 million	R32,7 million

Capital investment

R115 million was budgeted for the reporting year. Capital expenditure for the year under review was R318 million against a budget of R115 million. Quarterly capital expenditure is depicted in the table below:

Table 12: Quarterly Capital Expenditure performance

Objective measures	Quarter 1	Quarter 2	Quarter 3 A	Quarter 4	2016/17 Actuals	2016/17 Target
		Committed		Committed		
Adoption and approval of CAPEX Implementation plan of 2016/17	R6,04 million	R2,14 million	R3,53 million	R116,14 million	R127,86 million	R115 million

Table 13: Historical capital expenditure – 2016/17 comparative view

Description	2014/15	2015/16	2016/17
Communications	54,428, 268	113,376,794	130,084,642
Navigation	2,000,000	13,372,558	38,642,176
Surveillance	17,250,000	21,228,055	22,987,072
Display Systems	210,000,000	27,105,892	49,867,072
Simulator Systems	6,500,000	2,492,209	509,839
Software	3,236,511	25,960,905	9,729,658
General	47,422,882	26,248,842	65,820,664
TOTAL	151,837,660	229,785,254	317,641,761

Abridged Financial Statements

Table 14: Abridged statement of profit and loss and other comprehensive income as at 31 March 2017

	2016	2017
Turnover	1,508,631,339	1,556,447,125
Operating profit	294,656,148	234,618,821
Profit before tax	348,583,236	317,780,117
Income tax expense	(105,441,229)	(89,475,292))
Profit for the year	243,142,007	228,304,825

Table 15: Abridged statement of financial position as at 31 March 2017

	2017	2016
Assets		
Non-current assets	1,178,776,613	972,490,771
Current assets	1,541,571,616	1,464,181,155
Total assets	2,720,348,229	2,436,671,926
Equity and liabilities		
Total equity	2,381,266,312	2,152,961,487
Non-current liabilities	45,509,008	52,510,815
Current liabilities	293,572,909	231,199,624
Total equity and liabilities	2,720,348,229	2,436,671,926

Table 16: Abridged statement of cash flow as at 31 March 2017

	2017	2016
Net cash flow from operating activities	420,154,723	358,049,377
Net cash flow from investing activities	(317,563,455)	(229,734,836)
Net cash flow from financing activities	9,846,366	–
Net increase in cash and cash equivalents	1,326,732,100	1,228,000,080

Enhance operational efficiencies in line with global ATM standards

South Africa's aviation infrastructure is considered to be one of the best in the world, contributing to the country's aviation safety record. Operational efficiencies play a major role in ensuring air traffic safety. ATNS has two operational efficiency objectives that measure the capability of the organisation's service delivery to the ATM community:

1. Measuring overall traffic delays; and
2. Measuring the system availability performance of our technologies.

Measuring traffic delays

ATNS measures operational efficiency by measuring the overall traffic delays at airports and airspace. Delays are typically expressed as 'average delay per delayed (ADD) flight'. ADD is a metric that measures the severity of delays attributable to ATNS in the event that flights are delayed. The Company has set an ADD flight target of 120 seconds to assess and measure the effectiveness of mitigations and operational improvements. During the period under review, ATNS registered an ADD flight of 33 seconds against the set target of 120 seconds.

Performance-based navigation

During the year, ATNS worked towards achieving the targets stipulated in the National PBN Implementation Plan by adding new RNP approaches, RNAV1/2 Standard Instrument Departures (SID), and Standard Terminal Arrival Routes (STAR). The Company's activities extended to evolving and maintaining flight procedures at airports where these procedures already exist. ATNS has also introduced PBN training courses at the ATNS Training Academy that could benefit African states planning to implement PBN. In line with the DoT KPI's, ATNS designed 35 PBN Procedures, which are currently being validated.

Performance assessment

ATNS compiles an annual performance assessment report to identify efficiencies and environmental benefits from air traffic management initiatives. These are aligned to the PBN roadmap in response to the ASBU roadmap. The following initiatives were targeted for the 2016/17 financial year:

- Continuous climb and descend operations.
- Airport Collaborative Decision Making (A-COM).
- Operational Efficiency Programme.

The table below provides an overview of performance against targets for the 2016/17 financial year as well as planned initiatives for the 2017/18 financial year.

Table 17: Performance against targets for 2016/17

Performance measure	Target for 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	• 9 out of 9 ACSA airports have RNP APCH = 100%	• Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
	• RNAV 1 SID/STAR for 5 (or 80%) international airports (ACSA-owned) by 31 March 2017	• 6 International ACSA airports have RNAV 1 SID/STAR = 100%	
• Performance-based navigation (PBN) • Non-ACSA Airports	• RNAV 1 SID/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 = 70%	• Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
• CDO (Continuous Departure Operations)	• Report impact of CDO on environment	• 6,203.34 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-Categorization	• Report impact of CDO on environment	• 544,538 tonnes fuel saved (high end of range)	• Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme

Develop leadership capability in the Africa ATM space

Operation of the Satellite Communication Networks – SADC VSATII & NAFISAT

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. The SLA performances for both Satellite Communication Systems remain above the target level as indicated in Table 18 below.

Table 18: SLA performances VSAT II and NAFISAT

Business objectives	Objective measures	Quarter 1	Quarter 2	Quarter 3	Quarter4	2016/17 Actual	2016/17 Target
Operational efficiency	Achievement of CNS System Availability	C: 99,94% N: 97,15% S: 99,98%	C: 99,89% N: 97,17% S: 99,98%	C: 99,58% N: 98,99% S: 100%	C: 99,81% N: 98,62% S:100,00%	C: 99,80% N: 97,98% S: 99,99%	C: 99,67% N: 98,65% S: 99,77%

Create a transformative organisation

Economic empowerment

ATNS recognises the importance of an integrated approach to Broad-Based Black Economic Empowerment (B-BBEE) in the transformation of the sector, as well as for the long-term sustainability of South Africa. The Company has, therefore, implemented key structures to assist in growing the economic strength of the country. The Company obtained a B-BBEE level of 2 against the old transport sector codes, as the integrated transport sector code has not yet been promulgated.

Table 19: B-BBEE Contribution

B-BBEE element	Target 2016/17	Actual 2016/17
Management control	10	7,50
Employment Equity	15	16,12
Skills Development	25	24,34
Preferential procurement	30	30,00
Enterprise Development and Supplier Development	15	11,55
Socio-Economic Development	5	5,00
Total points	100	94,51

Table 20: Supplier investment

Supplier category	2014/15	2015/16	2016/17
Total B-BBEE spend of total measurable procurement spend	R367,014,361	R441,724,346.19	R418,037,152,18
% B-BBEE spend of total measurable procurement spend	79%	124,85%	105,04%
% Spend: Black-owned enterprises	21%	54,84%	82,81%
% Spend: Black women-owned enterprises	5%	33,21%	63,38%
% Spend: Exempted micro-enterprises	4,32%	18,69%	9,01%
% Spend: Qualifying small enterprises	Not captured	27,65%	11,09%

Employment equity (EE)

ATS and ATNS EE Targets

- Employment equity remains a business imperative to ensure that our workplace profile is aligned to the national demographics and the Integrated Transport Sector's B-BEE charter.
- In line with the Employment Equity Act, the current ATNS five-year EE plan encompasses the following:
  – Creating a balanced profile of employees within the Company through all occupational categories and levels in the workforce.
  – Eliminating any discriminatory practices in terms of race, gender or disability.
  – Providing for the Company's present and future requirements for skilled staff, in line with our business plans.

Table 21: Comparative view of quarterly ATS EE performance as at 31 March 2017

ATNS EE Targets	Quarter 1	Quarter 2	Quarter 3	Quarter 4
ATS AIC	66,88%	68,53%	68,72%	70,01%
ATS Female	41,60%	40,85%	41,45%	42,43%

ATNS EE Targets

Table 22: Comparative view of quarterly ATNS EE performance as at 31 March 2017

ATNS EE Targets	Quarter 1	Quarter 2	Quarter 3	Quarter 4
ATNS AIC	72,96%	73,88%	74,16%	75,12%
ATNS Female	43,89%	43,77%	44,22%	44,88%
PWD	2,51%	2,48%	3,29%	3,31%

Table 23: Detailed breakdown of the ATS AIC profile

Occupational Levels	Male				Female			
	African	Indian	Coloured	White	African	Indian	Coloured	White
Sub-total	171	35	37	133	183	20	21	59
%	25,64	5,25	5,55	19,94	27,44	3,00	3,15	8,85

Table 24: Detailed breakdown of the ATNS AIC profile

Occupational Levels	Male				Female			
	African	Indian	Coloured	White	African	Indian	Coloured	White
Sub-total	336	49	48	212	340	32	38	87
%	29,04	4,24	4,15	18,32	29,47	2,77	3,28	7,52

Build a culture of safety

- ATNS is committed to building a culture of safety and engaging in activities that continuously improve safety performance and ensure the sustainability of the business. The recent Civil Air Navigation Services Organization (CANSO) Standard of Excellence in Air Navigation Services (SEANS) Review of the Safety Management System (SMS) is one such example.
- ATNS' SMS was reviewed during the year to determine the level of maturity. The levels of maturity are rated from level 'A' to 'E' with Level 'E' being the highest.
- Overall 17 areas were surveyed and 14 were found to either comply with level C maturity, or exceed all specifications as mapped against ICAO Annexure 19. Three (3) 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 Service Provision

Safety provision is critical strategic consideration as it is the core of the ATNS business. Amongst others, this key performance indicator provides information on the following:

- Air traffic movement data.
- Separation standards based on Instrument Flight Rules (IFR) flight hours.
- Risk Safety Index matrix.

Air traffic movement data

Air traffic movement refers to aircraft take-off and landing at an airport. The aircraft movements include all arrivals, departures and training operating at all airports within the ATNS mandate. A cumulative total of 1 089 471 movements were recorded during the year.

Table 25: All air traffic movements including Arrival, departures and training for 2016/17

	April 2016	May 2015	June 2015	July 2015	August 2015	September 2015
Movements 2016	97,868	98,939	94,300	95,067	99,356	91,242
Cumulative movements	97,868	196,807	291,107	386,174	485,530	576,772

	October 2015	November 2015	December 2015	January 2016	February 2016	March 2016
Movements 2015/16	93,548	90,229	79,592	75,587	74,745	98,998
Cumulative movements	670,320	760,549	840,141	915,728	990,473	1,089,471

Separation standards based on IFR hours

In air traffic control, separation is the concept of keeping aircrafts outside a minimum distance from each other to reduce the risk of colliding as well as prevent accidents. ATNS controls flights that are predominantly operated under IFR. Instrument Flight Rules (IFR) flight hours are also used as a basis for global benchmarking and safety metrics.

During the 4th quarter, ATNS experienced 3 IFR/IFR losses of separation (LoS). These LoS occurred to those aircraft which were airborne and on IFR flight plans. This equated to a safe operation and application of separation standards of 99,995% based on 292,506 IFR flight hours against the target of 99,995%.

Risk safety index (RSI)

- The safety performance attained as at the end of the 2016/17 financial year 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 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.

Graph 8: RSI comparison for the past three years

RSI historical comparative view
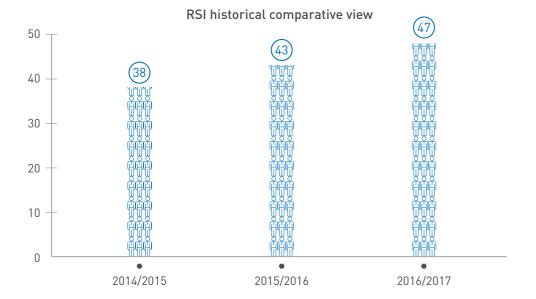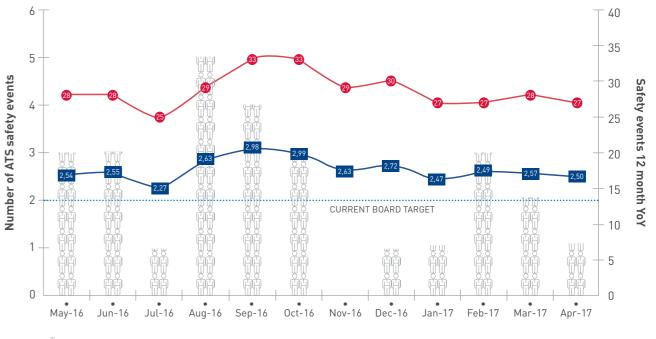
Figure 19: ATNS detailed RSI for 2016/17

Frequency		Catastrophic	Hazardous	Major	Minor	Negligible
		A	B	C	D	E
Frequent	5	5A (4)	5B (12)	5C (24)	5D (40)	5E (56)
Occasional	4	4A (8)	4B (20)	4C (36)	4D (52)	4E (68)
Remote	3	3A (16)	3B (32)	3C (48)	3D (64)	3E (88)
Improbable	2	2A (28)	2B (44)	2C (60)	2D (84)	2E (96)
Extremely Improbable	1	1A (72)	1B (76)	1C (80)	1D (92)	1E (100)

■ Between 4-24 = intolerable region   ■ Between 28-68=manageable region   ■ Between 72-100 = acceptable region

Graph 9: ATNS safety events per 100 000 movements
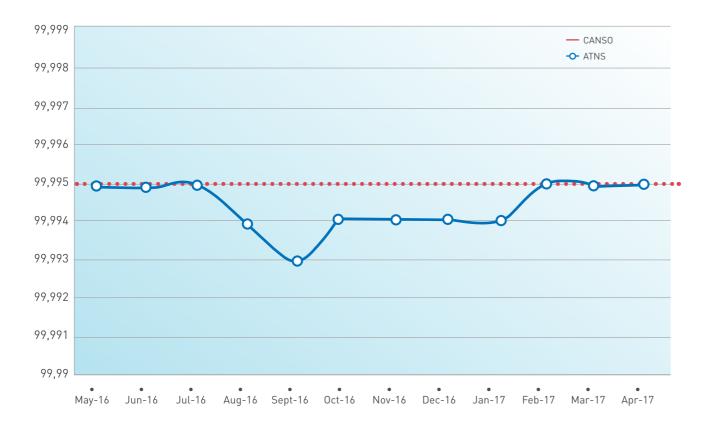
👤 Number of Safety Events

●— Safety ratio Safety events per 100 000 movements

■— Safety events/12 months YoY

The ATNS safe operations benchmark versus CANSO benchmark was achieved at the end of the financial year, with the error rate at 0.005 and the percentage of safe operations achieved at 99,995% as per the target set. These are indicated in graph 10.

Graph 10: ATNS safety performance – safety ratio versus the safety risk index

Graph 11: ATNS safe operations versus CANSO Benchmark (2012 average)

 Build a skilled and capable employee resource base

Training and development

- The Company invested 8,13% of the Rand value of personnel costs in training.
- ATNS is exploring the opportunity to transit from the conventional face-to-face training approach to a more interactive e-learning methodology. The organisation has appointed a service provider to convert the current training content to an e-leaning format. This is aligned to the broader objective to offer e-learning training to ATA clients to enable greater agility, flexibility and competitive advantage across the continent.
- For the 2016/2017 financial year, ATNS committed to train 25% employees and this target was achieved and an additional 24 bursars were trained resulting in 27% of employees trained.

Manage the training pipeline for ATS and Technical staff

ATNS manages the training pipeline for ATS and technical staff at its aviation training academy. This is in line with the budget and Human Capital plan. For the quarter under review, the number of ATS and technical staff is as follows:

Table 26: ATS and Technical staff numbers

Staff	Quarter 1 Actual	Quarter 2 Actual	Quarter 3 Actual	Quarter 4 Actual	2016/17 Actual	2016/17 Target
ATCO1	120	122	128	136	136	119
ATCO2 (Senior ATCs)	31	31	31	30	30	37
ATCO3 (Principal ATCs)	209	210	211	210	210	226
Eng. Technicians	78	78	78	78	78	74
Satellite Technicians	5	5	5	5	5	5
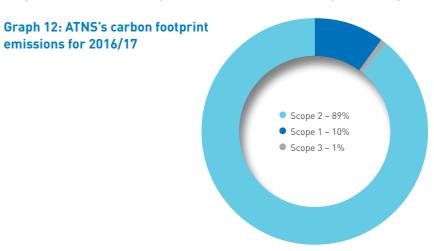
 Manage the organisation's contribution to Climate Change

Managing carbon emissions

- Carbon emissions[6] resulting from ATNS's operations amounted to 23 292.01 CO_2e, of which 89% was due to electricity consumption, 1% due to fuel usage, and 10% due to business travel.
- The Company consumed 89,761 litres of fuel and 20,515,469.56 kWh of electricity.

Graphs 12 and 13 below represents ATNS's Carbon Footprint CO_2e performance for 2016/17.

Graph 12: ATNS's carbon footprint emissions for 2016/17

- Scope 2 – 89%
- Scope 1 – 10%
- Scope 3 – 1%

[6] Emission intensity is a metric to evaluate emissions 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 CO_2-e per intensity metric produced.

Graph 13: Historically comparative view of ATNS's annual carbon footprint inventory

	2011/12	2012/13 (Baseline)	2013/14	2014/15	2015/16	2016/17
◯ Scope 3 (Business travel)	0	0	0	0	4504,36	2338,05
◯ Scope 2 (Electricity)	7523	10144	16101,59	18870,23	20759,36	20720,62
◯ Scope 1 (Fuel)	334	325	255,35	265,24	247,24	233,34

Manage and preserve scarce and vulnerable resources
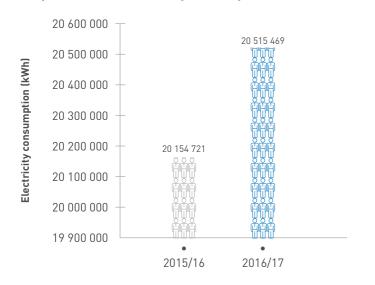
Energy efficiency

ATNS initiated a smart energy-metering project in the 2016/17 financial year in response to the energy audit conducted in 2015/16. The metering system aims to measure and analyse ATNS's energy consumption trends; and to determine a baseline for the Company's major energy users to help track ATNS's energy footprint. The project's first phase is being deployed at ATNS business units located at nine ACSA airports and six equipment sites, with the second phase expanding to the remaining ATNS locations. Energy consumption is measured on a monthly basis.
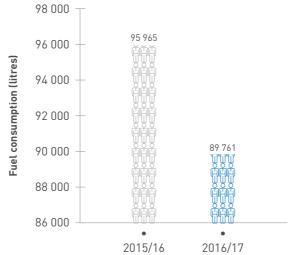
Short and long-term energy efficiency management objectives include:

- Determining current consumption trends;
- Setting energy reduction targets for each site;
- Supporting long-term energy efficiency planning and implementation; and
- Integrating energy objectives in core organisational plans.
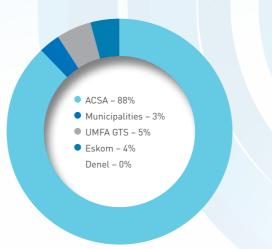
Graph 14: ATNS's electricity consumption

Graph 15: ATNS fuel consumption

Graph 16: Electricity consumption per site

- ● ACSA – 88%
- ● Municipalities – 3%
- ● UMFA GTS – 5%
- ● Eskom – 4%
- Denel – 0%
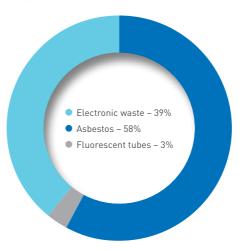
Waste management

The waste inventory for the 2016/2017 financial year resulted in the following:

- 7 420 Kgs of electronic waste being recycled;
- 11 020 Kgs of Asbestos;
- 210 litre drum of fluorescent tubes being disposed of in accordance to legislation at a licenced facilities;
- 29 bulk bags of paper; and
- 2 bulk bags of plastic being recycled.

Graph 17: 2016/17 ATNS Hazardous waste

- ● Electronic waste – 39%
- ● Asbestos – 58%
- ● Fluorescent tubes – 3%

Biodiversity management

- For the period under review, the Bapsfontein High Frequency Receiver site building refurbishment project was compliant with Heritage permit conditions as well as the ISANDO development project.
- Projects are audited to ensure compliance and minimise negative environmental impacts.

Develop enterprise-wide awareness for environmental impacts

Embedding environmental sustainability awareness

- During the year, the Company commenced a process of transitioning sustainability and environmental training within ATNS from a class-room training model to an e-learning model. Going forward, the new e-learning model will accelerate the practical assessments of participants' understanding of training material and simplify learner feedback. The e-learning mode of training is being phased in over time to refine and enhance training programmes.
- A target of 316 (25%) of 1 258 ATNS employees and 24 bursars received environmental sustainability training during the year.
- ATNS is investigating an Environmental Management System (EMS), which will enable ATNS to integrate environmental sustainability into various business operations to enhance the Company's overall environmental performance. The EMS will ensure that all the necessary structures, processes and procedures are integrated into the Company in a manner that will enhance ATNS's overall Sustainability and Environmental (S&E) Strategy.

Ensure constructive and collaborative stakeholder relationships

Address societal challenges

- One of ATNS's business objectives is to implement interventions to address key societal challenges, thereby building a meaningful legacy for ATNS in the Communities in which we operate. In this context, ATNS runs the ATS Bursars, Engineering Learnership programmes at its Aviation Training Academy.
- For the period under review, 81 ATS bursars were enrolled in the ATS Bursar Programme.

The table below describes the 81 ATS Bursars enrolled as at 31 March 2017.

Table 27: Description of ATS bursars enrolled in learnership programmes

Province	Female				Female Total	Male				Male Total	Total
	African	Coloured	Indian	White		African	Coloured	Indian	White		
Eastern Cape	5	0	0	0	5	0	0	0	0	0	5
Free State	3	0	0	0	3	4	0	0	0	4	7
Gauteng	19	0	1	2	22	18	1	2	0	21	43
KZN	2	0	2	0	4	2	1	2	1	6	10
Limpopo	4	0	0	0	4	6	0	0	1	7	11
Mpumalanga	1	0	0	0	1	2	0	0	0	2	3
W-Cape	1	0	0	0	1	0	1	0	0	1	2
N-Cape	0	0	0	0	0	0	0	0	0	0	0
Total	35	0	3	2	40	32	3	4	2	41	81

- ATNS continues to facilitate the development of engineers by offering experiential learning opportunities in the form of learnerships and graduate development programmes. As at 31 March 2017, a total of eleven (11), six (6) Engineering Learners and five (5) Engineering Graduates participated in learnership programmes.
- ATNS has also enrolled twelve (12) unemployed graduates in a development programme in different disciplines across the business.
- ATNS's CSI investment continues to support underprivileged communities through various projects.

The table below outlines the CSI programme investment for the 2016/17 financial year.

Table 28: ATNS CSI programmes for 2016/17

CSI PROJECT NAME	Investment
SOWISO Tutorial programme	R273,000.00
Bray ICT and Science Labs	R502,771.54
Ebenezer Laundry Equipment	R137,333.35
Rev Mapheto Primary and Setumo Khabi Secondary, Mabopane – ICT and personal hygiene care	R495,249.81
Go-Maths Winter School	R489,500.00
Child headed House hold – Blankets and Groceries	R965,200.90
Informal Settlement affected by fire	R76,380.00
Mgezeni Science laboratory	R506,006.17
TOTAL	R3,445,441.77

Maintain an impeccable governance framework

ATNS continues to comply with relevant legislation, regulations and standards. ATNS achieved a qualified audit report for 2016/17.

Ensure regulatory alignment and compliance

As part of ATNS's plan to comply with Treasury Regulation and the PFMA, it has undertaken the development of a Fraud Prevention Plan. ATNS has a fraud and whistle blowing policy and fraud prevention plan to assist the fight against fraud and corruption to promote good governance.

Matters are being investigated as and when reported. During the year, eight (8) whistle blowing issues were reported for the year. Four (4) were completed within 90 days and the other four is still under investigation as it was reported in the last quarter of the year.

Performance against our Shareholder Compact

ATNS has generally performed well in achieving most of the set targets in 2016/17 financial year. As at 31 March 2017, 71,8% of the KPIs were fully achieved, 15,4% were partially achieved and 12,8% of KPIs were not achieved. However, ATNS will continue to implement measures to ensure that the set targets that were not achieved in 2016/17 financial year are addressed in 2017/18.

	Business objectives	Objective measures	Annual performance indicators	Actual 2015/16	Target 2016/17	Actual 2016/17
1.	**Outcome 3: 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	2,73 safety events per 100 000 air traffic movements	RSI equal to or greater than 48	47
1.2	Safety service provision	Increase successful safe operations	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%	99,993% successful safe operation and an error margin of 0,007%	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 (off block time)	13 seconds	120 seconds	33 seconds
1.4	Operational efficiency	Achievement of CNS Systems Availability	Average CNS Systems Availability	C: 99,61% N: 96,15% S: 100%	C: 99,67% N: 98,65% S: 99,77%	C: 99,80% N: 97,98% S: 99,99%
1.5	Ensure commercial Sustainability	Ensure financial sustainability	Meeting financial target as per Budget	D/E: 0% C/A: 6.3:1 ROCE: 24,1%	D/E =10-45% C/A =2.5:1 ROCE =12,6%	D/E =0% C/A =5.2:1 ROCE =9,6%
1.6	Performance Based Navigation (PBN) ACSA Airports	Implement ICAO PBN concept in South Africa Mid-term implementation targets in line with South African PBN Roadmap	4 Design Reports for submission to SACAA (RNP APCH – FAOR)	4 Design Reports or submission to SACAA (RNP)	RNP APCH in 100% of instrument runways located at ACSA airports by 31 March 2017	3 Design Reports for submission to SACAA (RNP APCH) RNP APCH in 100% of instrument runways located at ACSA airports
			10 Design Reports for submission to SACAA (RNAV 1 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	10 Design Reports for submission to SACAA (RNAV 1 SID/STAR)
		Independent Parallel Runway operations at FAOR	8 Design Reports for submission to SACAA (RNAV 1SID/STAR)	8 Design Reports for submission to SACAA (RNAV 1SID/STAR)	RNAV 1SID/STAR for 1 ACSA Domestic airport where there are operational benefits by 31 March 2017	8 Design Reports for submission to SACAA (RNAV 1 SID/STAR)
2.	**Outcome 6: 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	R637,5 million	R115 million	R318 million
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 – 99,97%	SLA – 98,5%	SLA – 99,94
				Revenue: R47,5 million	Revenue: R42, million	Revenue: R49,0 million
2.3	Operation of the satellite communication networks NAFISAT	Optimize revenue and ensure network availability	Achievement of the revenue and network availability as per SLA targets	SLA – 99,93%	SLA – 98,5%	SLA – 99,94
				Revenue: R39,01 million	Revenue: R32,7 million	Revenue: R42,3 million
3.	**Outcome 9: The fight against fraud and corruption**					
3.1	Comply with relevant legislation, regulation and standards	Full compliance (100% compliance)	Reports with no material findings from auditors	Unqualified audit	Unqualified audit report to be achieved for 2016/17	Qualified audit report was achieved for 2016/17
			Sound internal control systems	Zero material non-compliance findings	Zero material non-compliance findings	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 of AFS
3.2	Fraud and whistle-blowing policy	Fighting corruption and promoting good governance	Matters investigated as per policy timelines	Seven whistle blowing matters were reported for the year. Four were finalised. Three were reported during the last quarter of the year and were under investigation at the end of the financial year	Investigation of matters reported through the Whistle Blowing to be completed within 90 days	Eight (8) whistle blowing matters were reported for the year. Four (4) were completed within 90 days. Remaining four were under investigation at the time of writing this report
4.	**Outcome 10: Environmental protection**					
4.1	Implementation of environmental plan	Measure ATNS Carbon footprint	ATNS 2015/16 Carbon footprint inventory report	Calculated and reported on ATNS Carbon Footprint quarterly	Calculate and report on ATNS Carbon Footprint quarterly	ATNS carbon footprint calculated and reported on quarterly in 2016/17
		Human resources/ training	Trained ATNS employees on Sustainability and climate change matters	Environmental awareness training delivered to 50% of ATNS employees	Develop e-learning platform and Deliver Environmental awareness training to 25% of ATNS employees	Environmental awareness training delivered to 27% of ATNS employees (incl. 24 bursars)
		Performance assessment	Environmental performance assessments	Environmental performance assessments	Environmental assessment report compiled	Environmental Assessment Report compiled (1 Annual Report at year-end	Annual ATM Environmental performance report compiled for 2016/17

● Fully achieved　● Partially achieved　● Not achieved

	Business objectives	Objective measures	Annual performance indicators	Actual 2015/16	Target 2016/17	Actual 2016/17
5.	**Outcome 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: 74	ATS – 80	ATS – 81
				Engineering Learnerships: 6	Engineering Learnership 6	Engineering Learnership: 6
				ETS – GEDP: 10	ETS – GEDP 10	ETS – GEDP: 10
				Unemployed Graduates: 8	Unemployed Graduates 8	Unemployed Graduates: 12
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: 211	ATCO 3 – 226	ATCO 3: 210
				ATCO 2: 29	ATCO 2 – 37	ATCO 2: 30
				ATCO 1: 115	ATCO 1 – 119	ATCO 1: 136
				Eng. Techs: 74	Eng. Techs – 74	Eng. Techs – 78
				Eng. Satellite Technicians – 5	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 all employees, with emphasis on AIC and women	Training investment as percentage of salary bill	7,57% Rand value of personnel cost to Company invested in training	3% Rand value of personnel cost to Company invested in training	8,13% Rand value of personnel cost to Company invested in training
6.	**Outcome 4: Broad-based black economic empowerment**					
6.1	Achieve BBBEE targets. Achieve preferential procurement targets as set by the Transport Charter	Percentage of discretionary spend on BBBEE Total discretionary OPEX budgeted Total CAPEX budgeted	Achievement of BBBEE targets as per the Transport Charter	B-BBEE level: 2	BBBEE Level 3	BBBEE Level 2
7.	**Outcome 4: 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	Achievement of AIC Target	66,67% ATS AIC	Achieve a target of 65% ATS AIC	70,01% ATS AIC
			Achievement of ATS female target	ATS female representation: 41,38%	Achieve a female target of 42% ATS	42,43% ATS female
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	Achievement of ATNS AIC targets	73,15% AIC	Achieve a target 74% AIC	75,12% AIC
			Achievement of ATNS Female targets	45,55% female representation	Achieve a company target of 47% female	44,88% female representation
			Achievement of ATNS PwD targets	2,79% people with disabilities	Achieve a company target of 3% for people with disabilities	3,31% people with disabilities

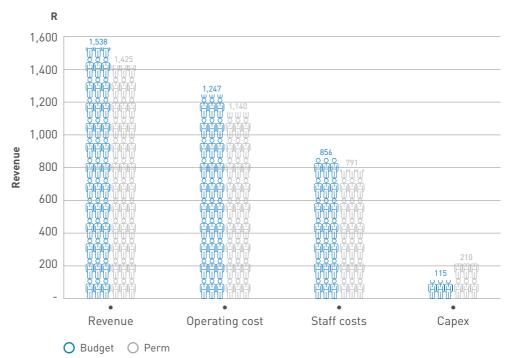● Fully achieved   ● Partially achieved   ● Not achieved

OUTLOOK

Ensure long term financial stability

The Permission has a five-year life-cycle. It is issued in the third year of a current Permission, replacing the current Permission from the fourth year onwards. Permissions, therefore, overlap by two years to encourage predictable plans.

ATNS is currently consulting with the Industry on the new permission application. The permission will be effective 01 April 2019 to 31 March 2023.

Projections for 2017/18

Graph 18: Projections for 2017/18

For 2017/18, as shown in the graph above, it is projected that revenue will be 5,5% higher than Permission at R1,6 billion. This is attributable to the anticipated increase in traffic movements and the aircraft service mix.

Operating costs are projected to be 15,9% above Permission. This is due to increased administration costs. Network Management Fees paid to IATA as a result of the profit share agreement between ATNS and IATA in respect of SADC VSAT II and NAFISAT networks. The agreement was reached post permission.

Staff costs are projected to be 12,4% higher than Permission due to increased number of personnel as the Company attempts to ensure a strong pipeline of Air Traffic Controllers. Further, ATNS continues to invest in its employees by affording them study and training opportunities.

Enhance operational efficiency and reduce emissions in line with global ATM standards

ATNS strives to be the preferred supplier of air traffic management solutions and associated services to the African continent and selected international markets. Through the implementation of leading technologies and with a high focus on safety, efficiency and reliability, ATNS continues to develop its products and services to respond to the needs of our customers and to continue delivering a world-class service to the industry into the future. ATNS continues to prioritise the review and development of environmentally-sustainable and efficient Instrument Flight Procedures, Air Traffic Service routes and associated airspaces, in line with ICAO Standard Recommended Practices and Civil Aviation Regulations, to minimise the carbon footprint of ATNS and industry's operations on the environment. These ATM initiatives include, but are not limited to the following:

- Kruger Mpumalanga International Airport (FAKN) is currently a procedural station, where separation is maintained by allowing only one aircraft to make an approach at a time. This leads to delays and inefficiencies in air traffic management. Transitioning to a surveillance ATM service will reduce number of holds and delays as the controller will be able to vector the aircraft for the approach. With high terrains in the FAKN vicinity are also not conducive to seamless navigation, the provision of surveillance will assist the controller to determine traffic disposition independently of aircraft position reported by radio. This will permit a reduction in the existing procedural separation standards and, in turn, increase efficiency and overall safety of the air traffic control system.

- The much-awaited Gauteng airspace review project is at an advanced stage. The project aims to re-organise the Gauteng airspace, thereby introducing more efficient Performance Based Navigation (PBN) Procedures, including Continuous Climb Operations (CCO) and Continuous Decent Operations (CDOs). The current O R Tambo International Airport (ORTIAFAOR) airspace configuration has been identified as being inefficient and likely to present scenarios that may infringe on safety performance. The introduction of relevant PBN procedures will enable ATNS to realise a Simultaneous Operation on Independent Parallel Runway (SOIR) at ORTIA, thereby addressing the identified safety efficiency gaps within the FAOR operations by introducing mitigating safety and efficiency initiatives.

- Our current surveillance does not provide for sufficient coverage within South Africa. Accordingly, ATNS is deploying Wide Area Multilateration (WAM) in the Lowveld and the Northern- Cape areas to supplement the current surveillance infrastructure. This initiative also promises improved situational awareness as it will provide flight crew and controllers with a more accurate traffic picture, especially at lower levels, which will, in turn, result in improved safety

- Performance-Based Navigation (PBN) is increasingly seen as the most practical solution for regulating the expanding domain of navigation systems. ATNS has been implementing PBN in South Africa over several years, achieving the ICAO near- and medium-term targets as articulated in the South African PBN Roadmap. The Company has placed a special emphasis on human factors, especially on training and procedures, as operations increased reliance on appropriate use of flight deck systems.

ATNS will be reviewing the entire FAOR international instrument flight procedures and replacing them with PBN procedures. The project was resumed in the first quarter of 2016 and is expected to be completed in the last quarter of 2017.

- ATNS will be one of the key stakeholders in the FACT runway realignment project, which is planned to commence in the 2017/18 financial year. The commissioning and transition into operations of the new national air traffic management system, CAATS (Collaborative Advanced Air Traffic System) in both the Johannesburg and Cape Town Flight Information Regions is currently underway and will be completed in the 2017/18 financial year. This new and advanced ATM technology will enable ATNS, to meet the demands of high-level airspace management, operational efficiency as well as future capacity and scalability requirements.

- ATNS will continue to prioritise the continued delivery of its mandated air navigation infrastructure investments and air traffic management services. The infrastructure and services will continue to comply with South African Civil Aviation Legislation and Regulations as well as with ICAO Standards and Recommended Practices. ATNS will further pursue the implementation of the ICAO Aviation System Block Upgrades as required in our environment and in synchronism with the ICAO Global Air Navigation Plan to ensure that regional air navigation services improvement is coordinated and consistent in the Southern African region.

- The Company continues to renew and maintain existing services as well as extend and supplement current capabilities. Capital infrastructure-renewal initiatives will continue through to the next financial year. Notably the following capital investment programmes are underway:

  – The national VHF ground- air radio communication system, which is the primary air traffic services communications tool is in various stages of implementation throughout the flight information regions of Cape Town, Johannesburg , Bloemfontein, and Kimberley.

  – The national air traffic services communication infrastructure is also renewed with the replacement of the current voice communication and control system (VCCS) at Johannesburg, Cape Town, Bloemfontein, Lanseria, Port Elizabeth, East London, George and Durban airports.

  – The national surveillance infrastructure will continue into the year ahead with the replacement of radar systems at O R Tambo, Cape Town, Durban and Blesberg.

  – In the context extending and supplementing current capabilities, new surveillance technology is introduced through a Wide Area Multilateration (WAM) system currently being deployed across large parts of the Northern and Eastern Border areas of the country. This new system will extend cooperative surveillance capabilities into areas that currently do not have surveillance coverage.

  – The national navigational infrastructure will be supplemented by the establishment of a DME/DME positioning network currently being deployed in the terminal areas of OR Tambo, Cape Town, King Shaka, East London, Port Elizabeth and George airports. This new navigational aid system will support Performance Based Navigation procedures in the event of an outage of or interference with Global Navigation Satellite System signals in the future.

- ATNS will commence with the renovation and refurbishment of our Johannesburg Area Control Centre and Aviation Training Academy facilities to ensure that that the Company continues to meet the expectations of employees and clients in respect of our working and training environments. ATNS will also proceed with the initial development of office accommodation for our corporate office and ATA at our Spartan site, with a view to this accommodation being ready for occupation in 2020.

Develop leadership capability in the ATM space

- In the regional arena, ATNS has completed – in all material respects – the programme for the upgrade of the SADC and NAFISAT VSAT network infrastructure, which provides data and voice communications services across 29 African states. The seamless transfer of services to the renewed VSAT platform was achieved in March 2017. Contingencies are in place to ensure that services continue to be provided in states such as Yemen and Saudu Arabia, where challenges of access persist. The International Civil Aviation Organisation (ICAO) and other strategic partners continuing to provide the support required to ensure that these challenges are overcome in the foreseeable future.

> ATNS strives to be the preferred supplier of air traffic management solutions and associated services to the African continent and selected international markets.

- ATNS values its leading position in the region, and as such, the Company continually seeks to adopt innovative technologies to support our own and regional operations. In this context ATNS has entered into a 12-year agreement with Aireon LLC for the deployment and provision of a space-based ADS-B service that will supplement and extend the Company's terrestrial surveillance services in continental South Africa and the oceanic airspace under ATNS's control. To date 20 of the 66 satellites are in orbit. The Site Acceptance of the South African Service Delivery Point will be concluded in August 2017, after which actual data will be used to commence evaluation processes associated with the introduction of the new service.
- In terms of regional services, ATNS will commence with the provision of ATS under the terms of a ten-year contract at the new airport on the island of Saint Helena in the Atlantic ocean. This includes the provision of air traffic controllers and an aerodrome simulator on site at the airport to provide ATS services. ATNS will maintain the proficiency of its controllers to deliver the services to the standards required by the United Kingdom Regulating Authority.

Create a transformative organisation

Our Employment Equity and Skills Development Committee has been formed and capacitated. The EE plan was developed in line with current workforce and alignment to the BBBEE scorecard and Economically Active Population (EAP). The policy and practice barrier analysis was done with the EE and SD Committee.
In line with the Employment Equity Act, the current ATNS five-year EE plan April 2015 – March 2020 encompasses the following objectives:

- Working towards creating a balanced profile of employees within the Company through all occupational categories and levels in the workforce.
- Eliminating any discriminatory practices in terms of race, gender or disability.
- Providing for the Company's present and future requirements for skilled staff, in line with its business plan.
- Implementing, monitoring and evaluating appropriate measures to redress the effects of the past imbalances created by discriminatory employment policies and practices.
- Our plan is also to ensure equal representation of employees (designated and non-designated) across all occupational levels in a sustainable manner in the long- term, free of unfair discrimination; and which enjoys the support of all.

Our employee equity targets for the last 4 years and for 2017/18 year ahead are as follows:

	2013/14	2014/15	2015/16	2016/17	2017/18
AIC (%)	63,37	67,06	69,56	73,15	75,12
Females (%)	38,52	40,92	44,05	44,50	44,88
PWD (%)	0	2,85	2,76	2,79	3,31
Head Count (%)*	983	1 033	1 076	1 112	1 157

*Excluding bursars and learners

Employee category	2017/18 targets	Actuals for 2016/17
Air traffic service – AIC	65%	70,01%
Air traffic service – Female	42%	42,43%
Organisation-wide – AIC	74%	75,12%
Organisation-wide – Female	47%	44,88%
PWD	3%	3,31%

Build a culture of safety

	Safety Ratio		Risk Safety Index
	Actual	Target	
2014/15	3,10	2	38
2015/16	2,73	2	43
2016/17	2,57	2	47

ATNS' safety performance has varied marginally over the last three years and has not shown a consistent positive trend. However, to ensure ATNS remains within defined safety targets, the Company continues to assess the efficacy of its safety training and operational activities to enhance safety performance, which includes the review of training interventions, especially in the Aerodrome domain, as well as human factors interventions, and safety awareness campaigns. Going forward, these efforts will extend to a complete overhaul of the safety management system and associated processes. More emphasis will be placed on safety events with higher severity, such as runway incursions. With air traffic set to grow during the next seven years, ATNS remains confident that our safety performance will continue to improve accordingly.

Build a skilled and capable employee resource base

- ATNS will target an employee-base of 1 148 employees for the 2017/18 financial year.
- The Company will target 652 ATCs and 295 engineers to be trained by ATA.
- Labour relations are expected to be harmonious with relative stability given that we concluded a further four-year salary agreement with the representative trade union for our air traffic services, technical services and administrative bargaining units in 2015. Included in the agreement – where appropriate – is a performance-based pay increase scheme that will serve to support a high performance culture within the Company.

Manage the organisation's contribution to climate change

- ATNS continues to review airspace design and to implement Performance-Based Navigation procedures at various ACSA airports, including Port Elizabeth International Airport, George Airport and OR Tambo International Airport. This will include Radar Navigation (RNAV) 1, Standard Instrument Departures (SIDs) and Standard Terminal Arrival Route (STARs). Every effort will be made to ensure that we achieve full utilisation of Continuous Descent and Continuous Climb Operations.
- Energy efficiency initiatives will continue to be implemented in various CAPEX projects through detailed energy-efficiency specifications to reduce ATNS's carbon footprint resulting from Scope 2 emissions.

Manage and preserve scarce and vulnerable resources

- ATNS will continue to ensure compliance with NEMA requirements in the business activities and continue to engage stakeholders around natural resources. This includes the continued "greening" of ATNS's offices. "Greening" programmes include responsible waste and energy management.
- The Company will review its Sustainability and Environment Strategy programmes to align with evolving staffing and technology requirements. All staff will be required to participate in the Company's sustainability training programmes.

Develop enterprise-wide awareness for environmental impacts

- The Company will target environmental awareness training on an e-learning platform for 25% of ATNS employees.
- ATNS will continue to update the legal and regulatory register in terms of operational compliance to "green practices".
- ATNS plans to finalise the Environmental Management System (EMS) feasibility study. This includes aligning the proposed management system with the current ATNS Quality Management System (ISO 19001) and other emerging standards to be adopted by ATNS in the near future. The project entails identifying appropriate resources, structures, integration with existing management systems, benchmarking with other ANSPs and piloting for approval by ATNS management. Once the study is completed, management will provide guidance for adoption in line with 2015 EMS standard.
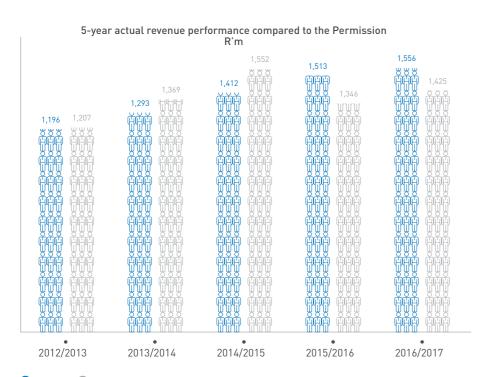
CONSOLIDATED 5-YEAR REVIEW

This section reviews ATNS's financial performance for the regulated business over a five-year period, commencing in the 2012/13 financial year and culminating in 2016/17.

ATNS's operations are funded from revenue and debt from external markets. Revenue is used to fund operating costs, while debt funds capital expenditure. A debt/equity ratio of 45% is the maximum target to maintain a balance between external and internal funding.

The year-on-year performance of revenue, operating costs, staff costs and capital expenditure compared to the Permission is outlined below:

Graph 19: Overview of performance of permission against actual revenue for the period 2012/13 to 2016/17

5-year actual revenue performance compared to the Permission
R'm
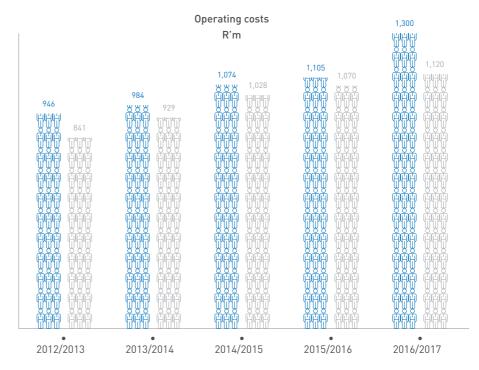
○ Actual   ○ Permission

The permission process has been facilitated under challenging economic conditions over the past five years, with South Africa's low economic growth placing pressure on domestic carriers. Furthermore, the recent downgrade of South Africa by rating agencies is likely to negatively impact the already-subdued traffic movements, which could adversely affect ATNS's revenue prospects going forward.

Due to previous Permission Cycle over-recoveries (less asset capitalisation), the RC levied a claw-back of R454 million, resulting in the year-end tariff adjustment increasing by 1,5% (2017), 7,5% (2018) and 7,0% (2019) respectively. However, in line with the applicable Act, ATNS is currently in the process of submitting the Permission application for the period 2018/19 to 2022/23.
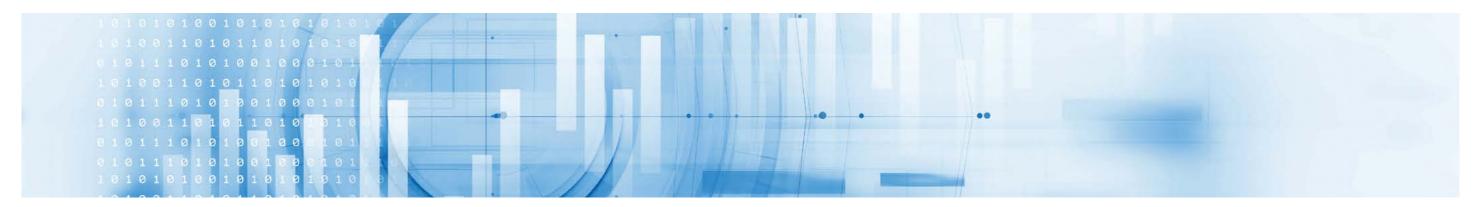
Non-regulated revenue is above budget by R19,5 million (26,1%) due to fluctuating foreign exchange rates.

Graph 20: Overview of operating costs for 5-year period 2012/13 to 2016/17
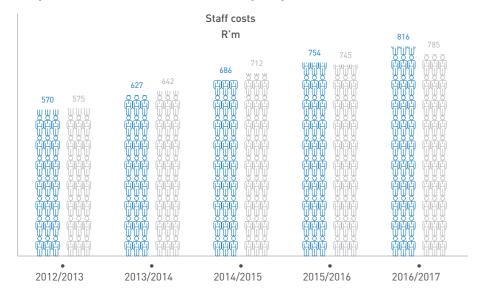

Operating costs
R'm

○ Actual   ○ Permission

The actual CAGR on operating costs from 2012/13 to 2016/17 was slightly above the expected 5,59% at 6,56%. Costs remained high at around 76% of revenue and this is expected to continue into the future. A significant portion of this relates to staff costs at 64%, while around 10% of operating costs have a foreign currency component. The latter exposes the Company to foreign exchange fluctuations risk. Different options to counter this risk exposure have been considered, including obtaining foreign exchange contracts to cover material exposure.

With ATNS competing globally to attract and retain critical ATM skills, it often pays a premium for employees due to the scarcity of their skills (intellectual capital value) in the market and their value to the business. During the year, operating costs increased by 4% to R1,300 billion, and was partially due to ATNS' staff cost of R816,220,292 (2016: R754,329,324).
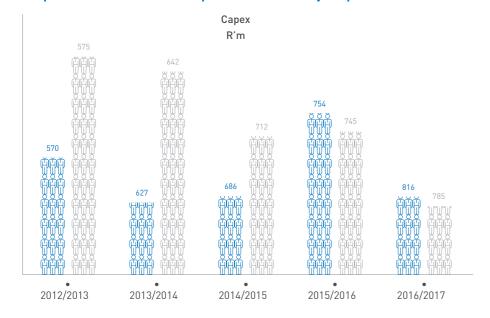
Graph 21: Overview of staff costs for 5-year period 2012/13 to 2016/17

Staff costs
R'm

○ Actual   ○ Permission

Approximately 60% of staff costs are for air traffic control related services. The Company competes with its international peers for air traffic controllers, resulting in high salaries offered to retain these skills. The Company has considered other mitigating options, including clearing the congestion in the training pipeline to have a sufficient pool of air traffic controllers. This will remain high for a foreseeable future irrespective of the significant anticipated investment in technology.

Graph 22: Overview of CAPEX performance for 5-year period 2012/13 to 2016/17

Capex
R'm

○ Actual   ○ Permission

The 2012/13 and 2013/14 CAPEX figures fall within the previous Permission period. The period under review (2014/15 to 2016/17) actuals are 9% lower than Permission which is in line with the Permission.

APPENDICES

Annexure A: Stakeholder engagement framework142

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	• Maintain strong relationships with DoT – important in paving the way for difficult customer interactions. • ATNS provides air traffic and navigation expertise and support in local and international forums. • Keep DoT informed of strategic plans and Company performance.	• Quarterly meetings to engage on areas for support. • Join in bilateral negotiations with targeted states. • Support the DoT on regional, continental and global ATM issues (CAC, APIRG, AFCAC, etc.). • Support DoT to deliver on departmental outcomes.	• Align DoT's continental objectives to that of ATNS. • Close cooperation with the DoT. • Increased transparency and effective communication.
DIRCO (Department of International Relations and Cooperation)	Involve and consult	Quarterly/ When need arises	• Inform DIRCO of ATNS initiatives in specific countries. • Work closely with DIRCO (Africa Desk) to obtain insight on various country environments. • Solicit support to provide services to specific states i.e. provision of UAC services to R. South Sudan, Angola, DRC etc. • Gain insight on available international and regional funding.	• Bi-annual meetings with DIRCO (Africa) to solicit support when required. • Embassy in-country visits – engage with the trade missions/ embassies of targeted states. • Stay abreast of continental and international funding available for targeted states.	• Align the department's continental objectives to that of ATNS. • Develop good relationships with Africa embassies. • Solicit international funding for ATM infrastructure development for targeted states (which ATNS can implement).
Department of Environmental Affairs	Involve and Consult	When need arises	• Comply with environmental legislation to enhance overall operational and environmental performance.	• Consultation to promote environmental sustainability.	• Comply with the National Environmental Management Act and associated legislation.
South African Civil Aviation Authority (SACAA)	EXCO meetings: ATNS Bruma and SACAA Campus	Quarterly	• Regulatory compliance and enabling regulations.	• Critical Stakeholder workshops. • Sharing of information and collaborations on safety training and ATM.	• Improved working relationships and synergy.

Left table

Stakeholder	Type of Engagement	Frequency of Engagement	Engagement Objective	Proposed activities to address stakeholder objectives	Outcomes
Industry and Customers					
CANSO (Civil Aviation Navigation Service Organisation)	Collaborate/ Empower	Quarterly/ When need arises	• Optimise the ATNS/ CANSO partnership for ATNS commercial benefit as elaborated in the CANSO strategic document.	• Build a strong CANSO Africa to the benefit of ATNS and member states. • Active participation in their programme. • Identify areas of cooperation and commercial partnerships.	• Strong partnerships. • Achieve ATNS strategic imperatives. • Identify areas of cooperation for ATNS commercial benefits (e.g. training).
IATA (International Air Transport Association)	Collaborate and Empower – Some issues involve and consult	Quarterly/ When need arises	• Optimise ATNS/IATA collaboration for commercial and safety benefits.	• Quarterly meetings with IATA to determine areas of improvement. • Continue to collaborate and partner in the provision of VSAT, training, and other services.	• Collaborate and manage strategic projects on the continent.
ICAO (International Civil Aviation organisation)	Collaborate/ Empower	Quarterly/ When need arises	• Understand GANP and GASP requirements and comply with Regional implementation plans. • Influence Regional plans to benefit South Africa and ATNS.	• Active ICAO participation.	• Effective collaboration. • Active engagement in the provision of the RSS UAC.
Strategic Suppliers	Collaborate/ Empower	Quarterly/ When need arises	• Forge strategic alliances for commercial purposes (joint tendering, joint ventures and partnerships) • Provide training and technical support.	• Identify and compile data on strategic partners to identify areas for mutual benefit • Negotiate and conclude strategic JVs or strategic cooperation agreements.	• Identify partnerships and cooperative services. • Sign MoUs or strategic partnerships with select companies.
ASECNA	Collaborate/ Empower	Quarterly/ When need arises	• Interact and Collaborate with ASECNA at a strategic level to determine long-term ATM implementation objectives.	• Share ideas on ATM implementation programmes, e.g. ASBU.	• Workshop to be arranged.
ANSPs (Clients)	Involve/ consult	Quarterly/ When need arises	• Position ATNS as an African service provider that understands the needs of the continent.	• Facilitate cooperation for the advancement of integration and harmonisation to achieve safe skies i.e. UAC in R. South Sudan, Lesotho, Angola and DRC.	• Position ATNS as a preferred service provider.

Right table

Stakeholder	Type of Engagement	Frequency of Engagement	Engagement Objective	Proposed activities to address stakeholder objectives	Outcomes
Regional economic Group i.e. (SADC)	Involve/ consult	Quarterly/ When need arises	• Influence the speedy implementation of the UACC.	• Actively participate in the SADC steering committee to influence rapid implementation of the UACC. • Actively participate in the CAC meeting to influence UACC project implementation.	• Implement the UAM project.
NAVISAT	Collaborate /Empower	Quarterly/ When need arises	• Cooperate with the Egyptian organisation to provide consulting services for future opportunities.	• Engage with NAVISAT management to identify areas of collaboration and partnership.	• Sign a MoU.
South African Air Force (SAAF)	Involve/ consult	Quarterly	• Flexible use of airspace, UACC, Training. • Engineering and technical services. • Delivery of ATNS products and services.	• Engage with SAAF to identify areas of collaboration and partnership.	• Sign an MoU and the requisite SLAs.
Airlines Association of South Africa (AASA)	Business meetings: AASA	Quarterly	• Meeting industry ATM needs.	• Forum to be used to provide customer feedback (i.e. OPSCOM Forum, with ATM Stakeholders and users).	• Align services with user expectations.
Economic Regulator	Meetings	Bi-Annual	• Report on tariff management and service standards.	• Support lobbying and reporting.	• Maintain open lines of communication leading to sustainable relationships.
ANPS Continental	Call schedules and market visits	Quarterly	• Promote ATNS products and services.	• Procure ATNS services and products.	• Sign contract.
Media	PR and sound media management	Quarterly/ When need arises	• Promote ATNS as credible, open and accessible.	• Share product and service information through sound media relations.	• Improve media relations.
Regional aerodrome owners	Scheduled meetings	Quarterly/ When need arises	• ATNS is a partner in safety and growth.	• Share plans and information on ATNS's future growth and service offerings.	• Improve business and working relations.
CAASA	Scheduled meetings	Bi-Annually	• Promote ATNS as a partner in safety and growth.	• Share plans and information on ATNS's future growth and service offerings	• No audit findings related to aviation safety, and the ATM, Environment.
Strategic partnerships with ANSPs outside the continent	Scheduled meetings	Quarterly/ When need arises	• Improved relations lead to better collaborations in ATM.	• ATNS signing an MOU.	• Improve working relations.

Stakeholder	Type of Engagement	Frequency of Engagement	Engagement Objective	Proposed activities to address stakeholder objectives	Outcomes
Internal Stakeholders					
ATNS Staff	Direct staff engagement	Monthly	• Engage individual employees on their concerns within the work environment.	• Source talent, reward and develop people.	• Promote employee satisfaction. • Retain critical skills.
Contractors	Direct engagement	Monthly	• Expected service delivery in-line with ATNS's expectations as per industry requirements.	• Align contractor engagement protocols with ATNS policies and procedures for efficient service delivery.	• Provide effective communication, navigation and surveillance infrastructure and supporting services through sound contractor relationships.
Students	Social media and road-shows	Quarterly/ When need arises	• The sky is not the limit – it is where it all begins!	• Brochures to schools and 'activations' through social media. • Bursary and learnership scheme	• Improved learner registration at the ATA. • Subsequent recruitment of students into the ATNS workforce.
Job Seekers	PR / Media	Quarterly/ When need arises	• ATNS is an employer of choice.	• Advertising through the ATNS website.	• Trained individuals accessing the job market.