



AIR TRAFFIC & NAVIGATION  
SERVICES SOC LIMITED  
SUSTAINABILITY  
REPORT

20  
18

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## Scope and boundary of report

Our approach to this year's report is based on the organisation's identified material issues which matter to us and our stakeholders. The material issues will be further outlined in the report with applicable management approach and performance information relevant to each material focus area.

Our report is compiled in accordance with the Global Reporting Initiative (GRI) Sustainability Reporting Standards and other related global Sustainability objectives including United Nations (UN) Global Compact and the Sustainable Development Goals. The report is also aligned to the shareholder's expectations as outlined in the Shareholder Compact. The information disclosed in this report covers the financial year from 1 April 2017 to 31 March 2018. The report forms part of a suite of reports, the other reports being the Integrated and Financial Reports 2018.



The report includes:

- Key performance highlights
- Our approach to identifying and managing material issues and related performance
- Addressing shareholder development objectives and aligning to global sustainability objectives
- How our sustainability framework enables us to provide value and support the overall business strategy
- How we together with our stakeholders collectively enable sustained economic, social and environmental value.

## Navigating this report

### Icons associated with strategic objectives and material issues







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

-  Ensure long-term financial sustainability
-  Enhance operational efficiencies in line with global ATM standards
-  Deploy and use leading technologies to the benefit of the ATM community
-  Develop leadership capability in Africa ATM space
-  Create a transformative organisation

-  Build a culture of safety
-  Build a skilled and capable employee resource base
-  Manage the organisation's contribution to Climate Change
-  Manage and preserve scarce and vulnerable resources
-  Develop enterprise-wide awareness for accountable environmental impact
-  Maintain an impeccable governance framework
-  Ensure regulatory alignment and compliance
-  Ensure constructive and collaborative stakeholder relationships

### Icons associated with the six capitals as outlined in the Integrated Report

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

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





Icons referencing UN Global Compact and Sustainable Development Goals principles applied



## Referencing content online

This report is available online (<https://www.atns.com/reports.php>), The GRI Content Index is included at the end of this report and also available online.

## Feedback

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

### Contact details:

Head Office

Physical address: Block C, Eastgate Office Park, South Boulevard Road, Bruma, 2198

Postal address: Private Bag X15, Kempton Park, 1620

Email: [marketing@atns.co.za](mailto:marketing@atns.co.za)

Landline: 011 607 1000

## Assurance

Air Traffic & Navigation Services Soc Limited (ATNS) acknowledges that KING IV supports assurance of sustainability reports. Some of the performance information and key performance indicators have been assured as part of the overall organisational assurance process as reported in the Integrated and Financial reports. Details of this can be found on page 2 of the Financial Report and pages 8 and 9 of the Integrated Report.

The Government of the Republic of South Africa is a signatory to multiple global conventions – including the Chicago Convention, which established the International Civil Aviation Organisation (ICAO) as a specialised agency of the United Nations. As a State-Owned Company - and national provider of air traffic management (ATM) services - ATNS has a significant role to play in contributing to South Africa's sustainability agenda. Our Shareholder Compact, 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.

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

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







TABLE 1: 2017/18 PERFORMANCE HIGHLIGHTS

	STRATEGIC OBJECTIVES	INDICATOR	2016/17	2017/18	2018/19 TARGET
	Ensure long-term financial sustainability.	Turnover	R1,557 billion	R1,594 billion	R1,685 billion
		Operating costs	R1,300 billion	R1,353 billion	R1,498 billion
		Net profit	R228,3 million	R180,1 million	R85,1 million
	Enhance operational efficiencies in line with global ATM standards.	Capital expenditure	R318 million	R301 million	R263 million
		Capital Commitment	R460 million	R432 million	
		Average systems availability	Communication	C: 99,80%	C: 99,67%
			Navigation	N: 97,98%	N: 98,65%
			Surveillance	S: 99,99%	S: 99,77%
	Create a transformative organisation.	Overall EE representation	ATS AIC: 70,01% ATS Female: 42,43% ATNS AIC: 75,12% ATNS Female: 44,88 People with disabilities: 3%	ATS AIC: 72,27% ATS Female: 46,55% ATNS AIC: 76,98% ATNS Female: 47,35% People with disabilities: 3,22%	ATS AIC: 70,00% ATS Female: 44,00% ATNS AIC: 76,00% ATNS Female: 48,00% People with disabilities: 3,5%
	Build a culture of safety.	Safety events per 100,000 air traffic movements	2.57 safety events per 100,000 air traffic movements	5.19 safety events per 100,000 air traffic movements	2 safety events per 100,000 air traffic movements
		Risk Safety Index	47	40	44-56
	Build a skilled and capable employee resource base.	Total number of ATS bursars	81	68	60
		Total number of engineering learnerships	6	12	6
		Training investment as percentage of the salary bill	8,13%	6,52%	6%
	Manage the organisation's contribution to climate change.	Total carbon inventory	23 292.01 CO <sub>2</sub> e	23 440.52 tonnes CO <sub>2</sub> e	-
	Manage and preserve scarce and vulnerable resources.	Overall annual electricity usage	20 515 469 kWh	20 358 981 kWh	-
		Overall annual fuel usage	89 761 Litres	81 612 Litres	-
	Ensure constructive and collaborative stakeholder relationships.	CSI Spend	R344,441	R2,5 million	R15,0 million

\* Baselines being developed in 2018/19



Nature of our business

Air Traffic and Navigation Services SOC Limited is a State-Owned Company (SOC), established in 1993 in terms of the ATNS Act (Act 45 of 1993), that provides air navigation services.

- We are responsible for 10% of the world’s airspace.
- Our B-BBEE (Broad Based Black Economic Empowerment) status is level 2.
- 1,220 employees work for us.
- We operate an Air Traffic Academy (ATA) situated in Bonaero Park and provide a range of products and services.
- Women constitute 45% of our employees.

 Our Mandate	Provide air traffic management solutions and associated services in the airspace for the South African public on behalf of the State in a safe and efficient manner.
 Mission	To provide safe, expeditious and efficient air traffic management solutions and associated services, whilst ensuring long-term sustainability.
 Vision	To be the preferred supplier of air traffic management solutions and associated services to the African continent and selected international markets
 Values	<ul style="list-style-type: none"><li>• Accountability</li><li>• Safety and customer service</li><li>• Continuous improvement and innovation</li><li>• Employee engagement and development</li><li>• Fairness and consistency</li><li>• Open and effective communication</li></ul>

ATNS Services

ATNS’s 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 1) is scalable across the total user-demand spectrum in the South African airspace.

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

1. Communications infrastructure, Navigation infrastructure 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.

FIGURE 1: ATNS SERVICE OVERVIEW

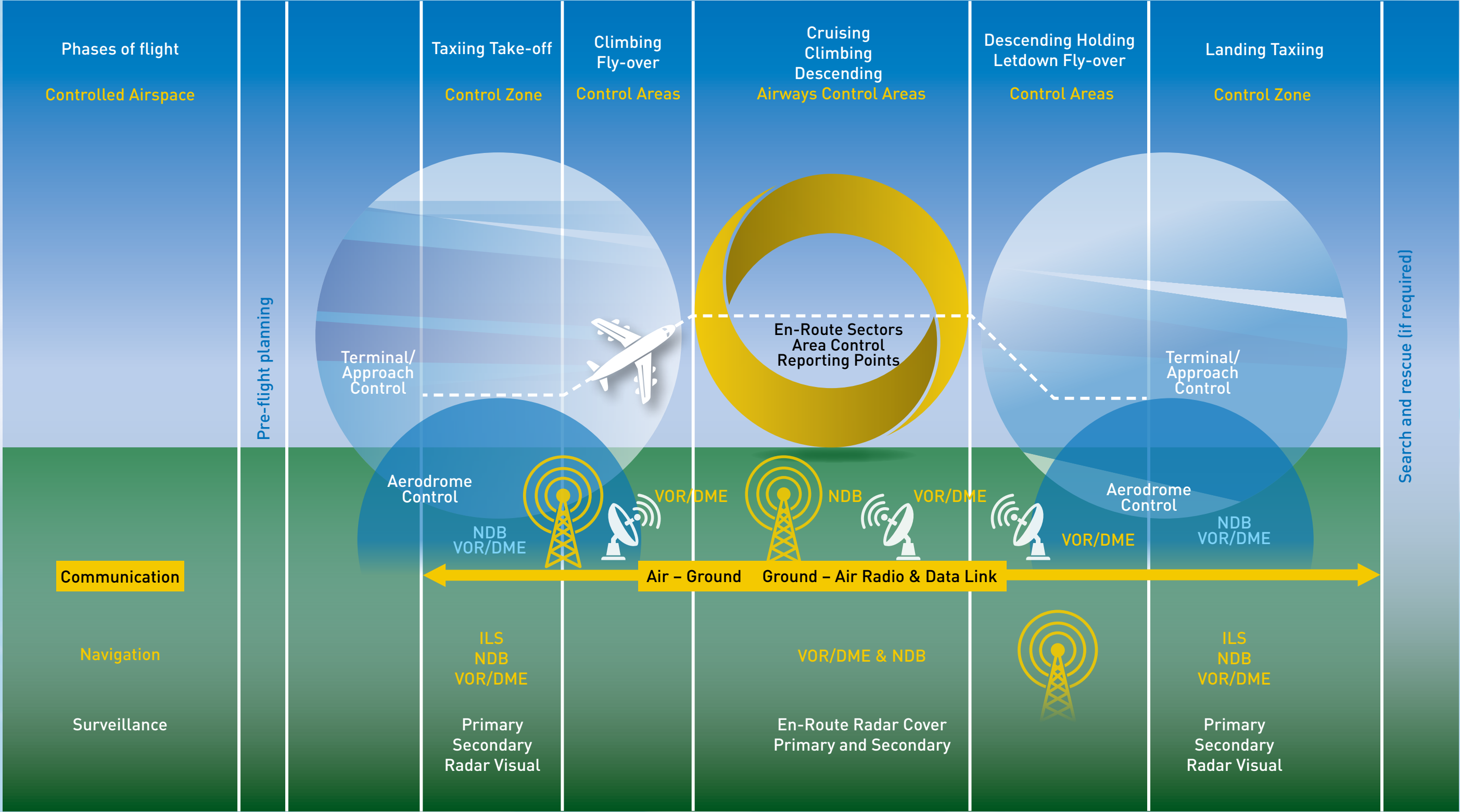


TABLE 2: ATNS PRODUCTS AND SERVICES

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; Core Content distance learning programme
Air Traffic Services (ATS)	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 3: MARKET SEGMENTS AND GEOGRAPHIC MARKETS

CURRENT MARKETS	NEW MARKETS
RSA – Statutory	Selected global ATM markets
RSA – Contractual	
SADC – Prioritised	
Africa and surrounding ocean islands	

ATNS’s presence in Africa

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

FIGURE 2: PRESENCE IN SOUTH AFRICA



- 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



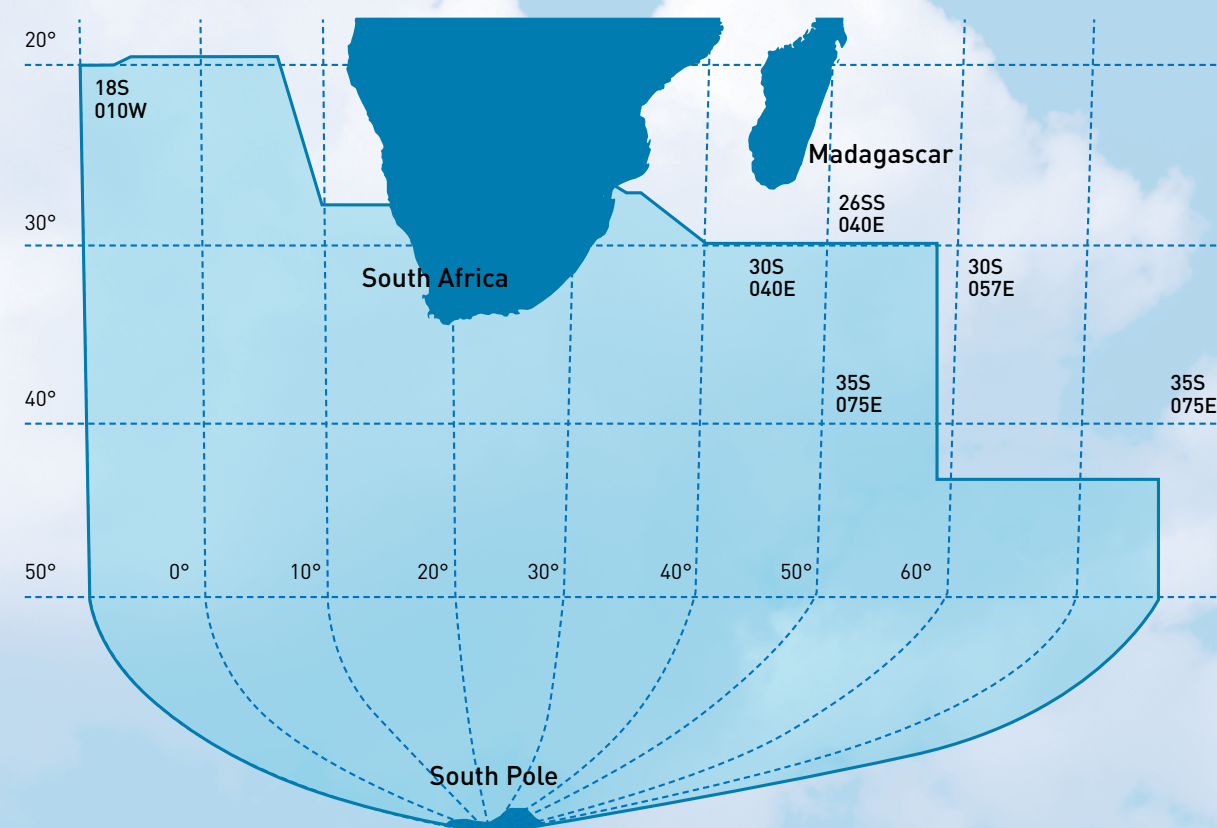
#### ATNS service reach:

- 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.

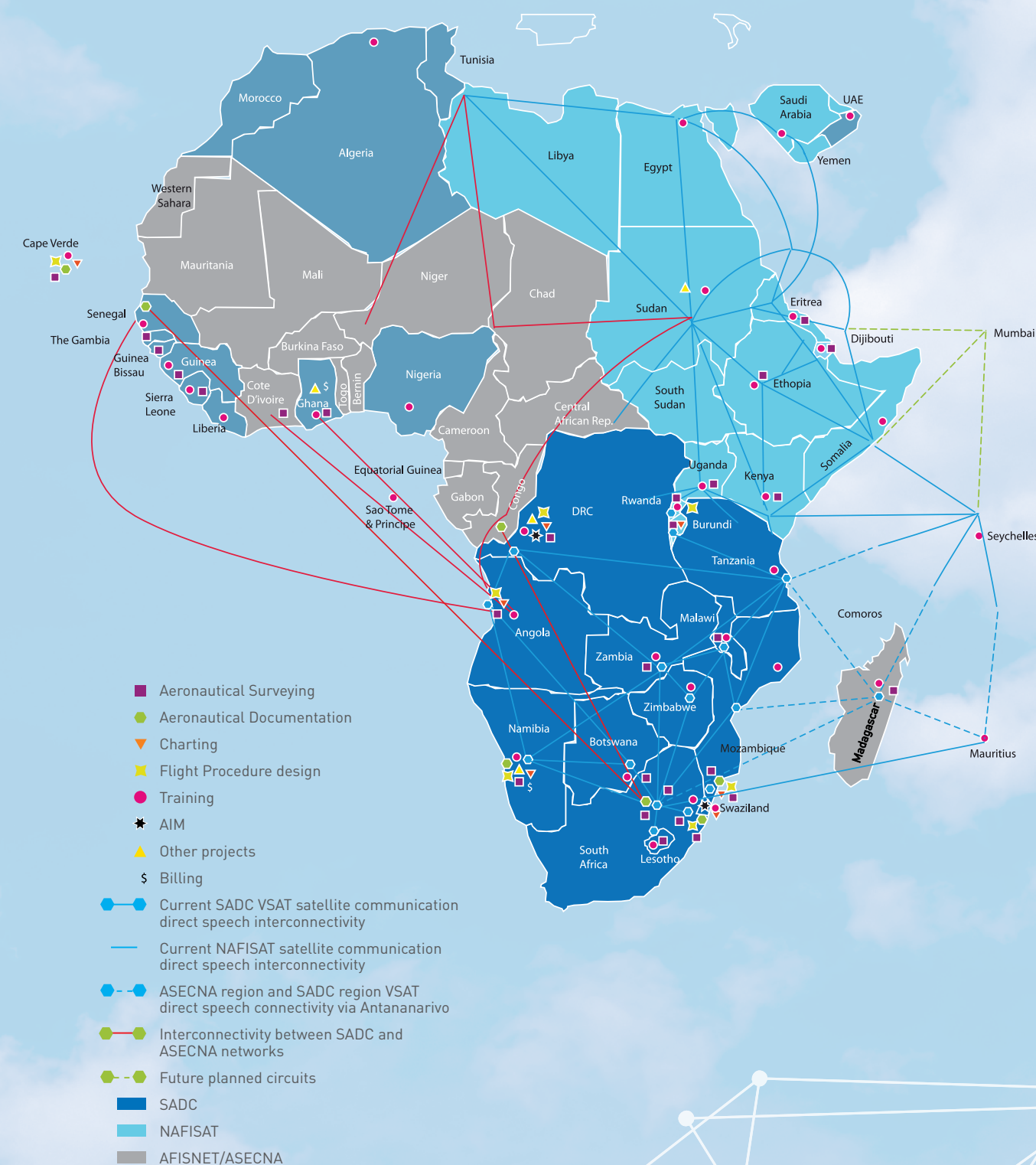
FIGURE 3: ATNS AFRICAN INDIAN OCEAN (AFI) REGIONAL AIRSPACE COVER



Tables 1 and 2 depict 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 4: ATNS'S EXTENDED SERVICES ON THE AFRICAN CONTINENT AND BEYOND





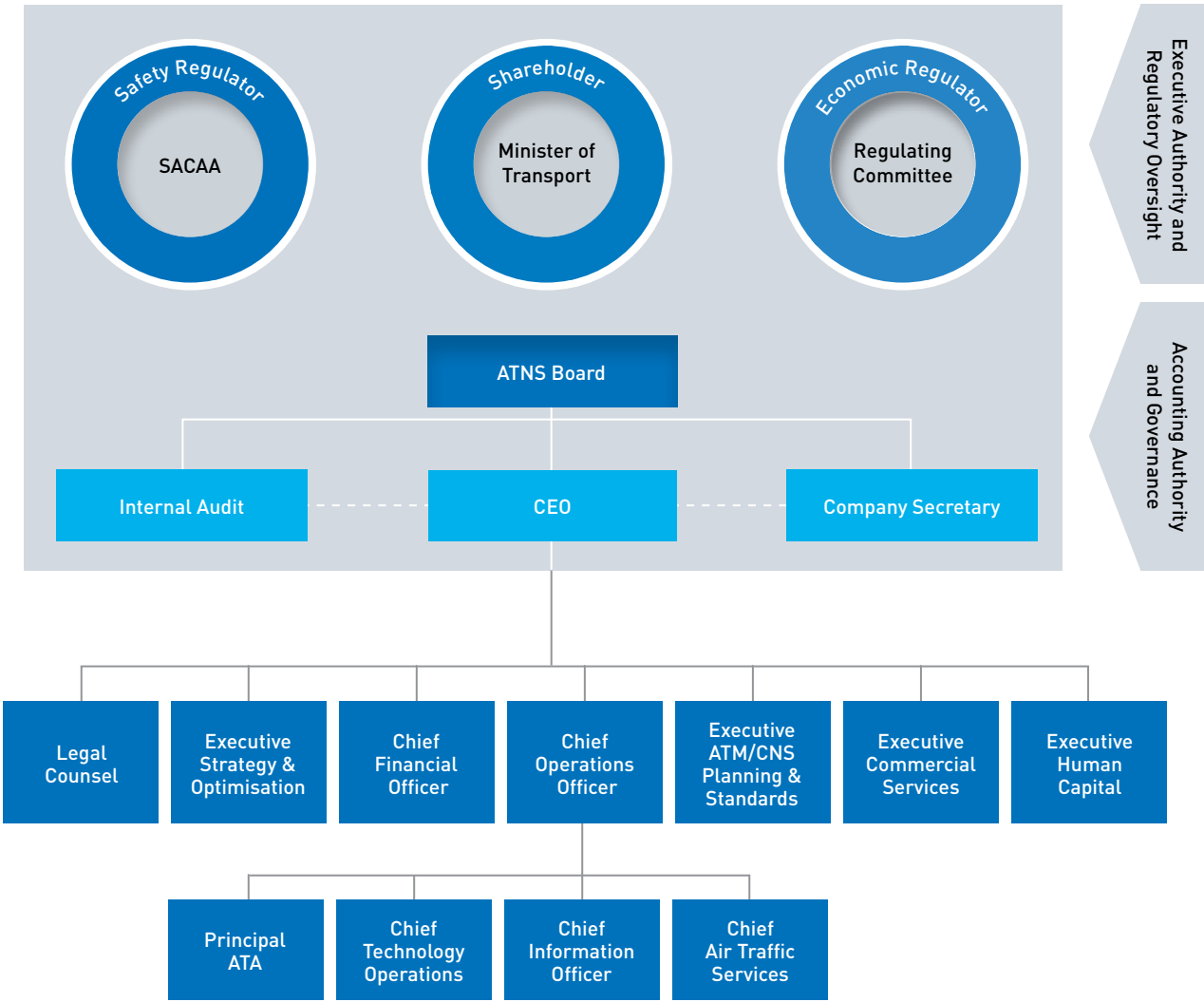
# Our Achievements

ATNS achieved one of the 200 certified Top Employer awards from 33 African countries, which is a milestone for the organisation as it is the first time receiving such a prestigious award since the establishment of ATNS in 1993. The award represents ATNS’s philosophy to create shared accountability for the development of employees. The Top Employers Certification is granted to organisations that achieve the highest standards of excellence in employee conditions.

# Organisational structure and business model

A Board of Directors, appointed by the Minister of Transport, provides leadership oversight and guides the implementation of the ATNS mandate.

FIGURE 5: 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 Corporate Sustainability and Environment, Human Capital (HC), PPMO (Portfolio & Programme Management Office), Finance, Information Technology, Risk and Compliance and Aviation Training Academy (ATA), create an enabling operating environment through governance frameworks, processes and professional practices.

# Business model and Strategy

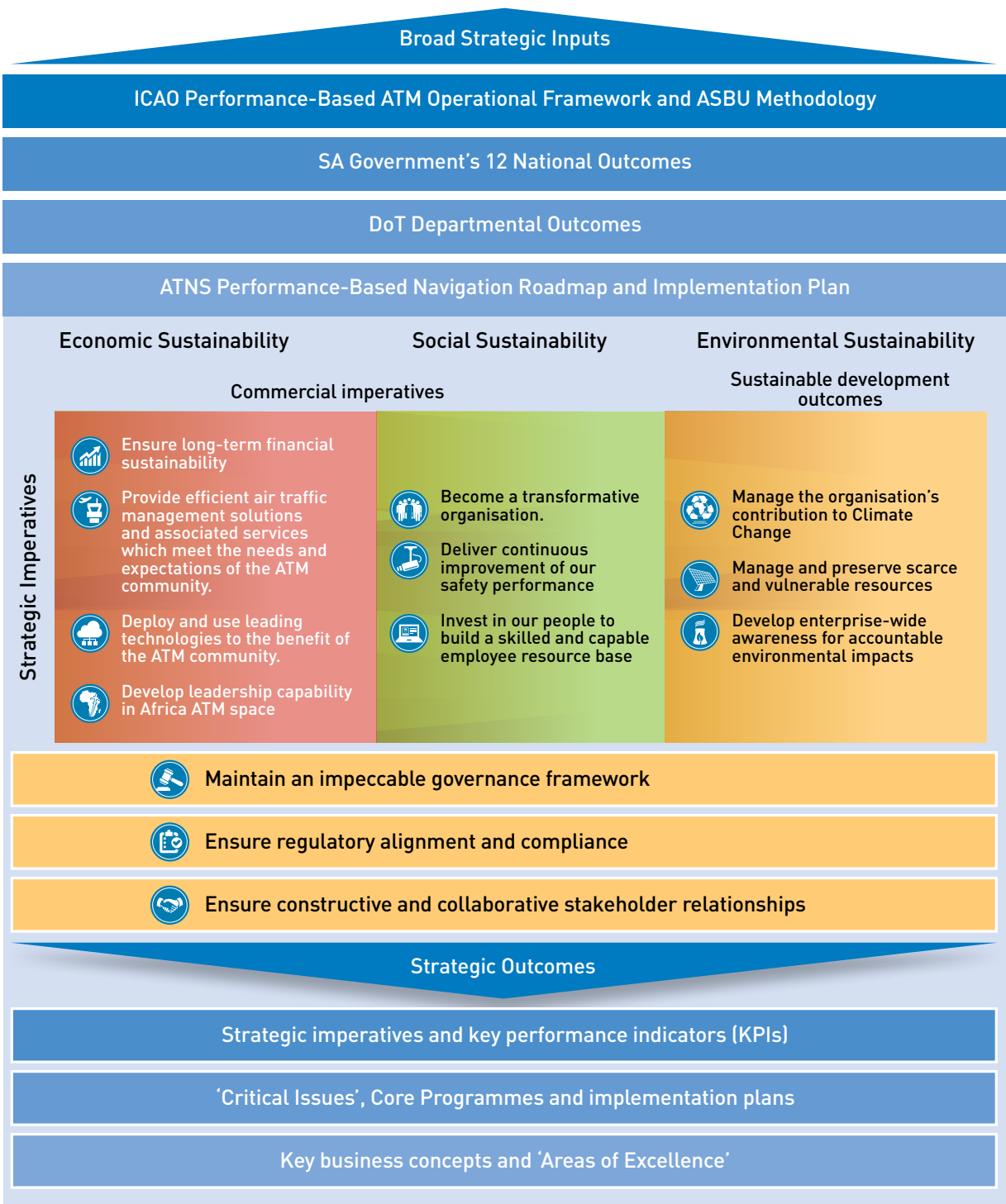
Our strategy of maximising current operations in South Africa whilst establishing itself in new markets is based on the understanding that the aviation industry plays a major role in driving sustainable economic and social development throughout the world. As such, ATNS’s strategy aims to provide safe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

Our strategic model demonstrates the Company’s holistic approach to economic, social and environmental sustainability in that the three sustainability pillars serve as drivers of our strategic intent and operational momentum. The three strategic pillars, in turn, require that the Company ensures impeccable governance oversight, regulatory compliance, and alignment with the needs of our wider stakeholder communities. The model shows the strategic inputs into the business, including (but not limited to) the ICAO performance-based ATM Operational Framework at a global level. ATNS is mandated to support the creation of safe skies whilst the overarching mandate requires the Company to execute activities in a manner that promotes financial, social and environmental sustainability for the organisation and broader South African economy. In 2014, the Company adopted a market driven strategy there-in promoting commercial products and services in the African region.



The Company’s strategic objectives are further refined and directed into strategic imperatives, critical issues, core programmes and key performance indicators (KPIs) to set specific performance targets and guide their practical achievement to support the delivery of the strategy.

FIGURE 6: ATNS STRATEGIC MODEL

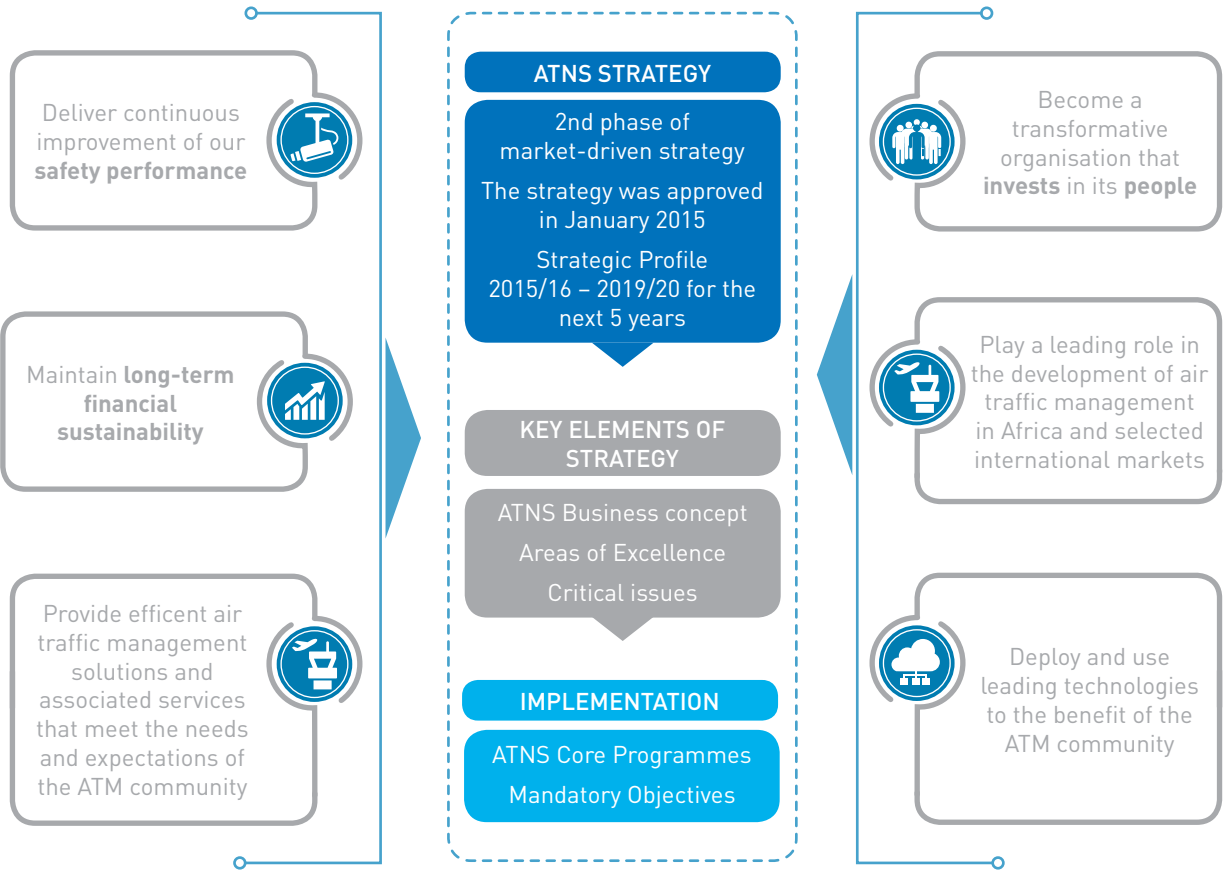


## ATNS Strategic imperatives

Strategic imperatives represent the Company’s broad-based strategic outcomes that ATNS wishes to achieve as a result of its existence and objectives. The following are the six ATNS strategic imperatives:

1. Deliver continuous improvement of our safety performance.
2. Become a transformative organisation which invests in its people.
3. Provide efficient air traffic management solutions and associated services which meet the needs and expectations of the ATM community.
4. Maintain long-term financial sustainability.
5. Deploy and use leading technologies to the benefit of the ATM community.
6. Play a leading role in the development of air traffic management in Africa and selected international markets.

FIGURE 7: ATNS STRATEGIC IMPERATIVES AND STRATEGIC PROFILE





## Critical issues and Core programmes

In the reporting year ATNS identified critical issues to realise the ATNS strategic objectives for the financial year. These objectives are outlined below:

TABLE 4: CRITICAL ISSUES

CRITICAL ISSUES	SUMMARY PERFORMANCE FOR 2017/18
<b>Implement safety interventions to improve safety performance</b>	<ul style="list-style-type: none"> <li>*Monitoring of safety performance matrices – RSI and Safety Ratio</li> <li>Safety Leadership and accountability sessions</li> <li>ATS Validation</li> </ul>
<b>Deliver a high-performing Strategic Supply Chain in response to a changing market</b>	<ul style="list-style-type: none"> <li>*Supply chain model implementation (resourcing and policy review)</li> </ul>
<b>IT Infrastructure</b>	<ul style="list-style-type: none"> <li>*Assessment of IT infrastructure requirements</li> </ul>

\* Performance details included in the materiality section

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

TABLE 5: CORE PROGRAMMES

CORE PROGRAMME	SUMMARY OF PERFORMANCE FOR 2017/18
<b>An operating/governance model to align regulated and non-regulated business (resources, tools) in order to achieve the expansion strategy</b>	<ul style="list-style-type: none"> <li>Operating and governance model requirements assessed in response to ATNS expansion strategy</li> </ul>
<b>ISO 9001: 2008 – ISO 9001:2015 Standards Migration</b>	<ul style="list-style-type: none"> <li>Certification of ATNS in accordance with the ISO 9001:2015</li> </ul>
<b>Isando office development</b>	<ul style="list-style-type: none"> <li>Project Stage 3: Design Development completed and approval by management.</li> <li>Stage 4: Documentation and Procurement has commenced</li> </ul>
<b>Remote Service feasibility study</b>	<ul style="list-style-type: none"> <li>Business case for the Remote Service developed and approved by management</li> </ul>
<b>Cyber &amp; site Security</b>	<ul style="list-style-type: none"> <li>*Cyber security policy developed and approved by management.</li> <li>Implementation of security management plan to secure infrastructure.</li> </ul>
<b>CAPEX implementation</b>	<ul style="list-style-type: none"> <li>*Review of the projects in line with the approved permission, institute a CAPEX tracking performance tool to monitor commitment, cashflow and capitalisation.</li> </ul>
<b>Disaster recovery</b>	<ul style="list-style-type: none"> <li>*Development and approval of disaster management plan and roll out plan for OR Tambo centre.</li> </ul>

\* Performance details included in the materiality section

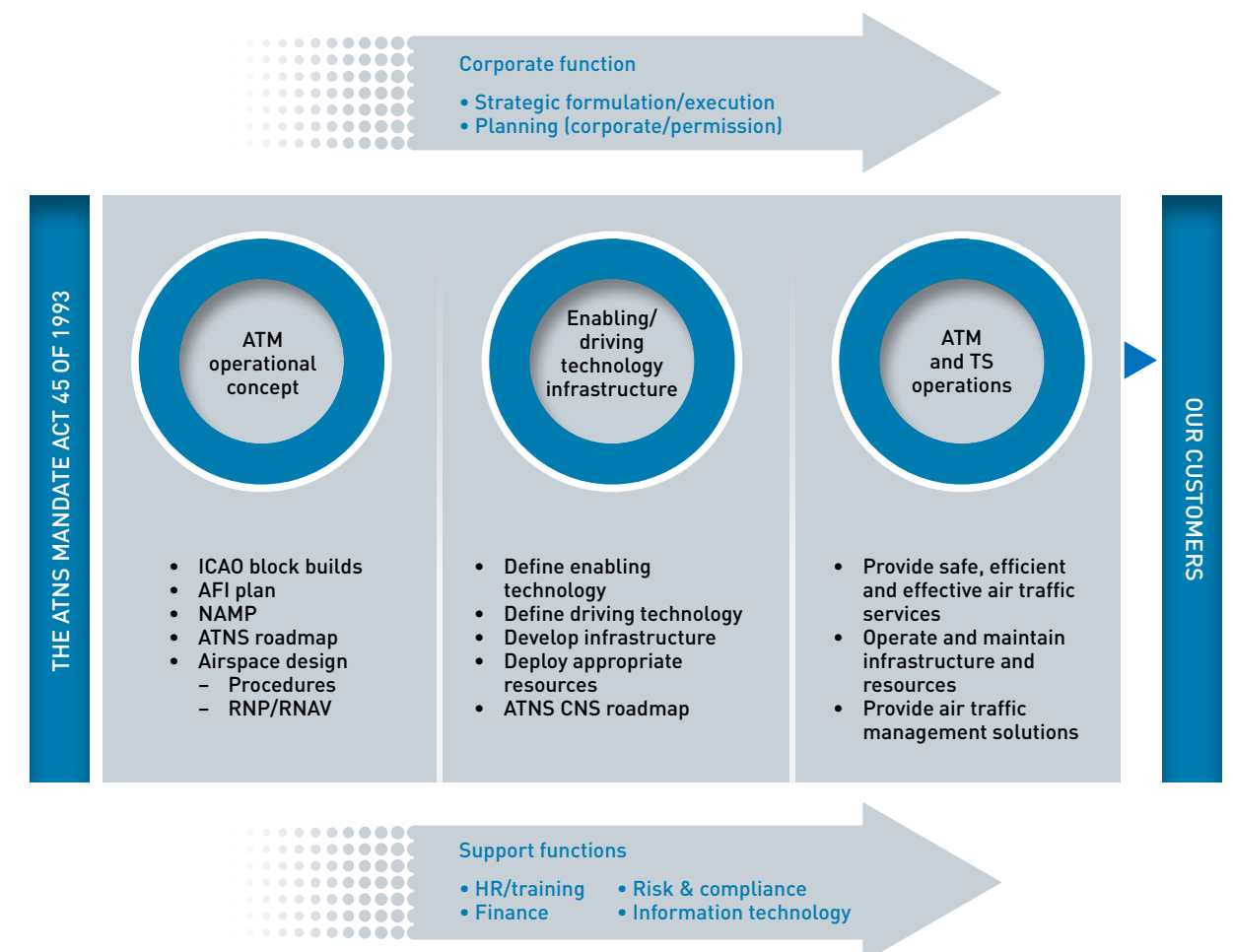
## Regulated Business

At present 88% of ATNS's revenue is facilitated through its regulated business. The principal activities of ATNS's regulated business encompass the planning, operating and maintenance of safe and efficient air traffic management services in sovereign and delegated airspace for which the State is responsible. Air navigation services and infrastructure consist of three main components:

- Communications, Navigation and Surveillance Infrastructure.
- Auxiliary aviation services such as Aeronautical Information Management (AIM), flight procedure design and aeronautical surveys.
- Air Traffic Management.

The business is managed in accordance with the ATNS Act no 45 of 1993. Revenue is generated by charging tariffs as set out in the approved permission plan. In the reporting year, the regulated revenue amounted to R1 402,408,229.

FIGURE 8: ATNS REGULATED BUSINESS MODEL







## Training institution

ATNS runs a training institution as a division within the Company, 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 from South Africa and the broader African continent. The ATA is an ISO9001:2015 accredited institution and has partnership agreements in place enabling it to present international courses in various aviation disciplines.

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.

The ATA holds full ICAO Trainair Plus membership and has been designated by ICAO as a Regional Training Centre of Excellence. The ATA is currently pursuing registration as an academic institute with the Council of Higher Education, which is a key strategic imperative. This pursuit would enable the Academy to enhance the training pathway for potential Air Traffic Controllers as it would allow learners to achieve professional academic qualifications forming part of the NQF.

## Training institution

TABLE 6: TRAINING PERFORMANCE INDICATORS

	2016/17	2017/18	2018/19 TARGET
Training success rate in ATS disciplines	94%	90.3%	78 – 82%
Training success rate in Engineering disciplines	98.5%	98.3%	78 – 82%
International training success rate	97.5%	96.7%	78 – 82%
Engineering Technicians	78	78	74
Engineering Satellite Technicians	5	5	5



FIGURE 9: AVIATION TRAINING ACADEMY EMPOWERING WOMEN

ATNS promotes the development of women through recruiting individuals from previously disadvantaged communities to pursue careers within the air traffic management sector. The Aviation Training Academy trains and empowers students to be high performing air traffic controllers and engineers.

## President Jacob Zuma renames Aviation Training Academy Auditorium

FIGURE 10: OR TAMBO CENTENARY STATUE AT THE AVIATION TRAINING ACADEMY'S AUDITORIUM



FIGURE 11: OR TAMBO AIR TRAFFIC CONTROL TOWER COMMEMORATING OR TAMBO CENTENARY (ABOVE)

ATNS commemorates the late Oliver Reginald Tambo's centenary on the 27th October 2017 by renaming the Aviation Training Academy's Auditorium and Air Traffic Control Tower in honour of the late struggle icon's legacy for South Africa's democracy.



## Non-regulated business

ATNS's non-regulated business currently contributes 12% of the Company's revenue. The non-regulated business encompasses a long-term strategy to facilitate regional expansion through a subsidiary vehicle presently known as "ATNS International". The subsidiary will enable the Company to take a more robust and agile stance in the non-regulated market without posing undue risks to its regulated market and Shareholder. It will also enable ATNS to enter into joint ventures and partnerships with external suppliers to harness more valuable market opportunities while extending its regional influence and reach.

- 10-year bankable plan which is informed by a market-driven strategy.
- Referred to as ATNS International which focuses on ATNS Africa Regional Expansion Strategy.
- Provide services and products to African continent.
- Current revenue generated for 2017/18 is approximately R191 127 119.

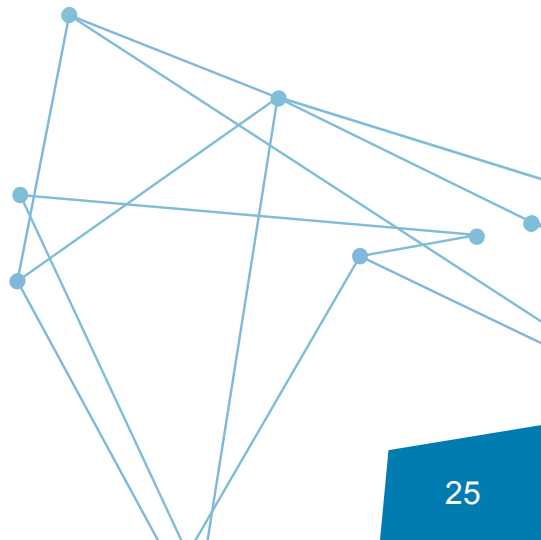
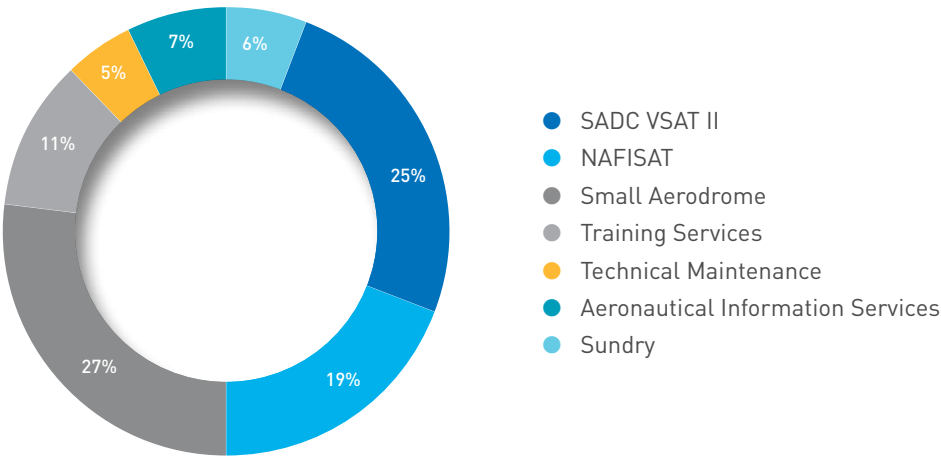




TABLE 7: NON-REGULATED REVENUE

REVENUE	2016/17 (R)	2017/18 (R)	2018/19 TARGET (R)
VSAT	48,739 million	46,5 million	51,1 million
NAFISAT	42,260 million	35,8 million	39,2 million
AIS services	2,539 million	12,2 million	6,5 million
Training	16,108 million	20,9 million	14,9 million
Small aerodrome fees	47,651 million	50,4 million	53,3 million
Technical fees	5,891 million	9,2 million	8,1 million
Sundry	12,429 million	10,464 million	7,9 million
Extended Hours	1,967 million	3,374 million	-
Rental id Site/Beacons	474 thousand	267 thousand	-

FIGURE 12: ATNS NON-REGULATED REVENUE



## Supply Chain Management

ATNS's supply chain management is aligned with our approved supply chain policy which is in line with the national regulatory framework to ensure transparent management of our supply chain and procurement of goods and services at the right time, quality and quantity in accordance with the approved process and governance requirements. ATNS strives, through its supply chain processes to achieve socio-economic objectives in order to contribute to the advancement of the lives of previously disadvantaged people of South Africa and facilitate sustainable development.

The promotion of socio-economic objectives through public procurement is guided by the provisions of the Preferential Procurement Policy Framework Act, the Broad-Based Black Economic Empowerment Act and their associated regulations and codes of good practice.

- Empowerment of Historically Disadvantaged Individuals including women and people with disabilities.
- The development, support and promotion of historically disadvantaged individuals.
- The promotion of SMMEs.

- The promotion of locally manufactured products.
- Supporting the proudly South African campaign.
- The promotion of black-owned enterprises located in rural areas.
- The development of human resources.

Our supply chain process is linked to our enterprise and supplier development programmes which aim to increase and support small, medium and micro enterprises with priority in the aviation sector within the communication, surveillance and navigation areas. In the reporting year, the organisation commenced with the implementation of the approved supply chain model which aims to improve the overall supply chain within ATNS to enable social, economic and environmental value creation to the business. The model focuses on the entire value chain from demand, acquisition, logistics, disposal, risk, and performance management. More details of the model are described on page 63 of the material issues section.

## Collective Bargaining Agreements

ATNS renewed the collective agreement with the recognised Trade Union, Solidarity, on 10 April 2015. The collective agreement regulates the relationship between the Employer and the Union in order to enable fair and equitable employer/employee relations.

ATNS currently has three collective bargaining unit agreements:

- Administrative Bargaining Unit,
- Engineering and Technical Service Bargaining Unit, and
- Air Traffic Services Bargaining Unit.

The abovementioned collective bargaining unit agreement was effective from 1st April 2015 for a period of five years and is binding to both parties for that period.







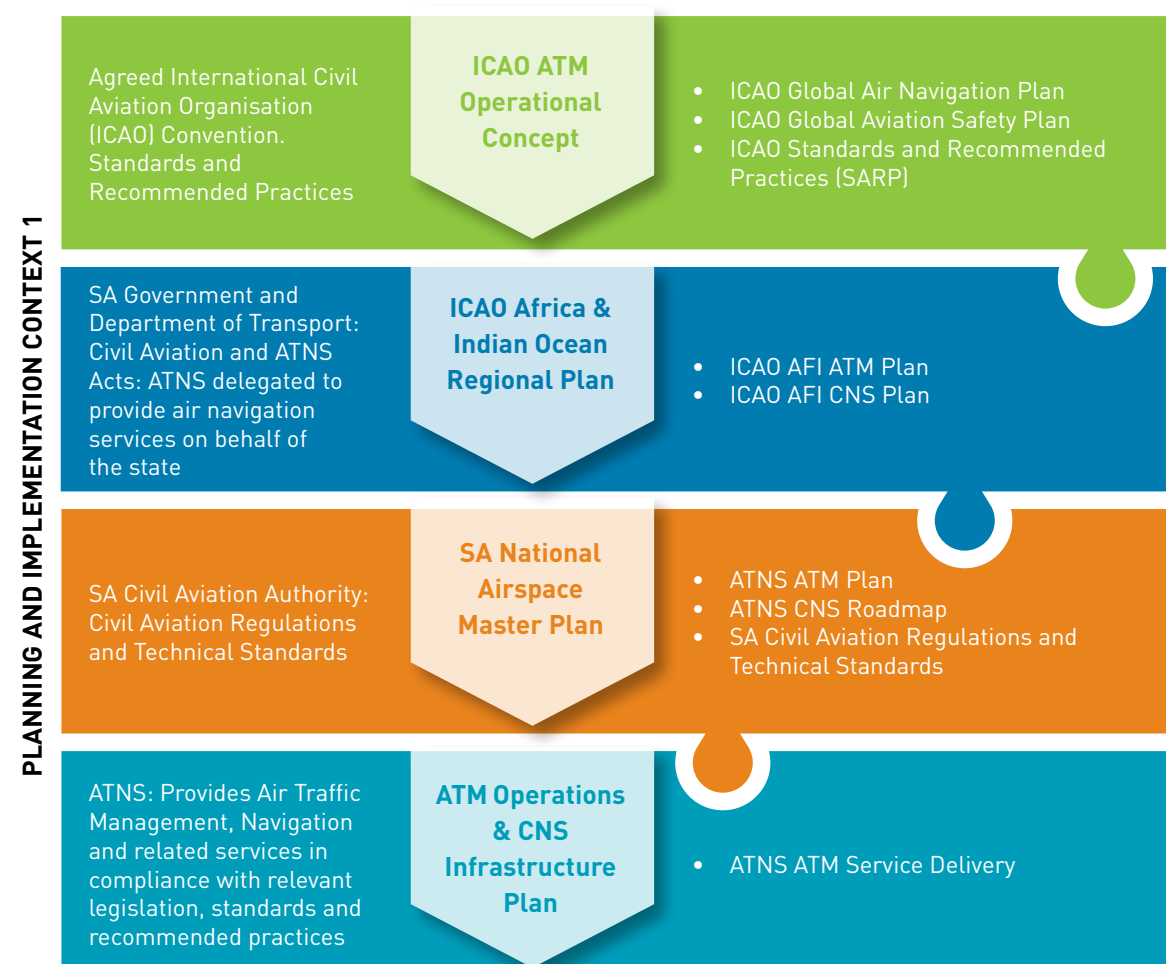
## Global Business Context

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 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.

FIGURE 13: CIVIL AVIATION REGULATORY & SERVICE DELIVERY CONTEXT



## National Context

ATNS's activities are informed by the Minister of Transport's Statement of Strategic Intent as well as our Shareholder' Compact. The Minister of Transport as the sole shareholder of the Company expects the organisation to align the business objectives to the departmental objectives as outlined in the Compact. The Minister and ATNS entered into a Shareholder's Compact in January 2006. The purpose of the Compact is to set out the mandated key performance measures and indicators to be attained by ATNS as agreed with its shareholder.

We are further guided by the Medium-Term Strategic Framework (MTSF), implemented by the South African Government to measure the National Development Plan's (NDP), enabling milestones. ATNS as a state-owned entity is guided by the National objectives as outlined in the National Development Plan 2030. The MTSF constitutes a five-year implementation phase of the NDP, structured into 14 priority outcomes.

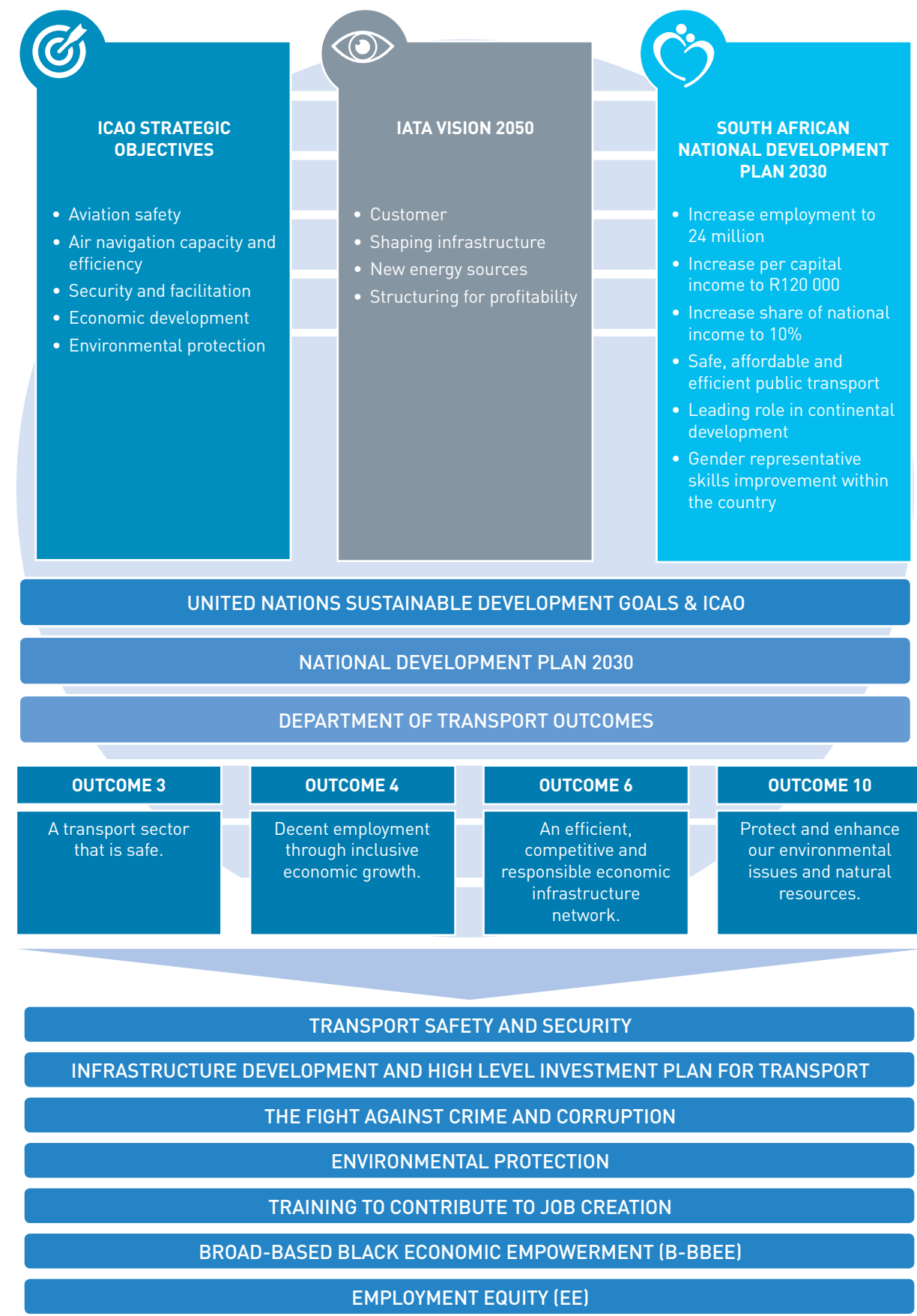
ATNS further acknowledges the importance of Global Sustainable Development Goals (SDGs) which aim to alleviate poverty, protect the environment and ensure prosperity as the leading drivers of the new sustainable development agenda. This ultimately influences our sustainability framework in achieving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

The DoT, and by extension ATNS, focuses on the implementation of four of the 14 outcomes for Government to achieve related MTSF outputs.





FIGURE 14: GLOBAL & NATIONAL GOVERNMENTAL OUTCOMES



# Regulatory Context

The regulatory framework within which ATNS operates, comprises of the Chicago Convention and its 19 annexes, which addresses the broad principles of civil aviation governance and the standards related to various aspects of civil aviation, including safety, personnel licensing, meteorology, air traffic services, aeronautical telecommunications and aeronautical information management, security and environmental protection. Furthermore, a comprehensive supporting documentation database comprises of recommended practices, design manuals and guidance material related to various aspects of civil aviation to meet its obligations in terms of the Chicago Convention. The South African Government has enacted primary legislation addressing various aspects of civil aviation through the Civil Aviation Authority.

The Civil Aviation Act (Act 13 of 2009) as amended, supported by Civil Aviation Regulations and Technical Standards, provides the regulatory framework within which ATNS delivers air navigation services on behalf of the State. In terms of Article 28 of the Chicago Convention, the State is required to provide air navigation services and infrastructure in compliance with the standards and recommended practices as promulgated from time to time by ICAO. The convention makes provision for the State to delegate responsibility for the provision of services. However, the state remains accountable for ensuring compliance with the standards and recommended practices.

# Economic Regulation

ATNS's key mandate is the provision of safe air traffic and associated services on behalf of the State. As a State-Owned Entity, ATNS derives its mandate from the ATNS Act (45 of 1993), which governs its regulated business. ATNS is a monopoly and is economically regulated by the Economic Regulating Committee which is a statutory body appointed by the Shareholder. The Regulating Committee (RC) is empowered by the ATNS Act to issue a permission to ATNS. This regulates the use of air traffic navigation infrastructure and/or the provision of an air traffic services. ATNS can charge levy on these services and prescribe minimum service standard requirements for the regulated business. Each Permission has a cycle of five years. The permission application details ATNS's service provision and standards, including infrastructure, human and financial resources required to realise the plans over the five-year period. These plans are statutorily consulted on with the relevant stakeholders with a view to achieving consensus on all aspects of the permission application.

In 2017, ATNS applied for a new permission in line with the ATNS Act and the RC instruction to commence planning and industry consultation for the 2018/19 – 2022/23 period. The 2018/19 – 2022/23 permission application is still under review by the RC.







## Board Committees and Executive Structures

The ATNS governance structure is derived from the Shareholder's Mandate. The Board of Directors exercises their oversight of ATNS based on objectivity and independence. The Directors are collectively responsible for directing and managing Company affairs. The CEO and his executive team manage the day-to-day activities of the Company to ensure that The Board Strategy, policies and resolutions are implemented and monitored. ATNS has a unitary Board, including non-executive and executive directors, with a sufficient mix of skills to lead the Company effectively and efficiently. To ensure effective execution of the strategy and management of the Company, Executive committees aligned to the core board committees were established in 2016.

The appointment of ATNS Directors is governed by the Company's Memorandum of Incorporation (MOI) and guided by the prescripts of the applicable legislation i.e. the Public Finance and Management Act

(Act No. 1 of 1999) and the Companies Act (Act No. 71 of 2008). Ordinarily, 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. The Board of Directors is tasked with ensuring that the Company is sustainable and capable of delivering on its objectives in line with the strategic mandate. Accordingly, financial, social and environmental sustainability governance rests with the ATNS Board, including its Board Committees.

In the current reporting period, there have been changes on the Board which necessitated more meetings than the ordinary to also perform some of the work that would have been considered at Committee level and thus the Board met 9 times during the year under review. Detailed information regarding governance is included in page 44 of the Integrated Report.

**TABLE 8: ATNS BOARD COMMITTEES AND CORE FUNCTIONS**

BOARD OF DIRECTORS COMMITTEES	AUDIT & RISK COMMITTEE				HUMAN RESOURCE COMMITTEE				SOCIAL AND ETHICS COMMITTEE				PROCUREMENT COMMITTEE				ATNS INTERNATIONAL			
<b>Meeting frequency</b>	Four times per year				Four times per year				Four times per year				Four times per year				Four times per year			
<b>Composition</b>	<b>Female</b>		<b>Male</b>		<b>Female</b>		<b>Male</b>		<b>Female</b>		<b>Male</b>		<b>Female</b>		<b>Male</b>		<b>Female</b>		<b>Male</b>	
	-	3	2	2	-	3	1	2	-	3	2	1	-	3	-	3	-	3	1	3
<b>Demographics</b>																				
B – Black	3		1	2	3		1	2	3		1	1	3			3	3		1	3
C – Coloured			-	-	-		-	-	-		-	-	-			-	-		-	-
I – Indian			1	-	-		-	-	-		1	-	-			-	-		-	-
W – White			-	-	-		-	-	-		-	-	-			-	-		-	-
<b>Oversight Functions</b>	<ul style="list-style-type: none"> <li>Assist the Board in reviewing the risk management process.</li> <li>Ensure alignment to best practice.</li> <li>The committee is continuously apprised on risks facing the business.</li> <li>Ensure that appropriate policies are established and that significant risks are identified, evaluated and managed on an ongoing basis.</li> <li>Assist the Board in fulfilling its responsibilities for the presentation of the Company's financial position in its published financial statements.</li> <li>Ensure that appropriate accounting policies, risk management, internal controls and compliance with relevant legislation are in place within the Company.</li> <li>Approve the annual financial statements and the three-year audit plan.</li> </ul>				<ul style="list-style-type: none"> <li>Review performance in the following areas. <ul style="list-style-type: none"> <li>Human capital development plan.</li> <li>Employment equity reports.</li> <li>Report on attraction, development and retention of talent for the organisation, as well as succession planning in the organisation.</li> </ul> </li> <li>Occupational health and safety audit report.</li> <li>Aviation Training Academy (ATA) quarterly report.</li> <li>Recommend Executive remuneration.</li> <li>Conduct the CEO's and executives performance evaluations.</li> </ul>				<ul style="list-style-type: none"> <li>Monitoring the Company's activities, having regard to any relevant legislation, other legal requirements or prevailing codes of best practice.</li> <li>Good corporate citizenship and Corporate Social Responsibility.</li> <li>The environment, health and public safety, including the impact of the Company's activities and of its products or services.</li> <li>Consumer relationships, including the Company's advertising, public relations and compliance with consumer protection laws, labour and employment related matters.</li> </ul>				<ul style="list-style-type: none"> <li>Oversee the ATNS capital expenditure programme, in line with the Regulating Committee (RC) permission document.</li> <li>It ensures that appropriate procurement and provisioning systems are fair, equitable, transparent, competitive and cost-effective.</li> </ul>				<ul style="list-style-type: none"> <li>Assesses and evaluates the viability of the ATNS international.</li> <li>Established in accordance with applicable legislations.</li> <li>Provide oversight regarding ATNS international strategy.</li> <li>Business opportunities within AFI are assessed and recommended to the Board.</li> </ul>			

(Refer to the IR page 34 for further details)

# Sustainability Governance

The organisation’s approach to sustainability is based on the notion that sustainability objectives of the business support the corporate vision and strategic objectives and ensure long term sustainability of the business. ATNS’s sustainability governance is guided by its sustainability framework which supports the Shareholder Compact and national sustainability and developmental objectives. Sustainability initiatives relating to safety management, environmental protection, corporate social investment and Broad-based Black Economic Empowerment (B-BBEE) are directed through the appropriate governance committees depending on their core areas of accountability. In 2017/18, the organisation’s sustainability governance was reviewed to ensure that sustainability is integrated and represented in all levels of the business to provide value to the business.

FIGURE 15: SUSTAINABILITY GOVERNANCE



TABLE 9: SUSTAINABILITY GOVERNANCE

Sustainability Project Committee	Focus on operational day-to-day matters pertaining to sustainability which includes environmental protection, safety related issues, social corporate responsibility, B-BBEE.
Executive Sustainability Steercom	Operates at executive level to ensure that the organisational sustainability strategy is executed in line with ATNS strategic objectives.
MANCOM	Reviews sustainability performance at management level to ensure that sustainability initiatives are effectively executed.
EXCO	Approves the sustainability strategy and provides resources including budget for execution of sustainability programmes.
Social and Ethics Committee	This board committee directly provides oversight on sustainability matters which includes environmental protection, health and safety, B-BBEE, labour, corruption, and employment related issues. It also approves the annual sustainability report.
ATNS Board and other Board committees (Procurement, Human Resource, Audit and Risk)	Ensure integration of sustainability in the various functions to ensure that overall organisational sustainability objectives are achieved, through streamlined processes to manage sustainability related risks and opportunities.

# ATNS Remuneration Philosophy

ATNS’s remuneration philosophy reflects the dynamics of the market and context in which it operates. It is our aim to align always with the strategic direction and specific value drivers of the industry within which ATNS operates.

ATNS recognises the fundamental value of a highly engaged and committed team and strongly believes that the attraction and retention of high-performing employees is critical for achieving our objectives. During 2017/18 ATNS attained Top Employer Certification which presents a unique opportunity to positively profile ATNS as a leading company to work for. The certification provides a platform to speak to a tough talent market, those we want to attract and those we want to retain. Our remuneration philosophy is at the core of reinforcing, encouraging and promoting superior performance that supports the vision, mission and values as well as achieving the strategic objectives of ATNS.

FIGURE 16: STAFF COSTS DISTRIBUTION

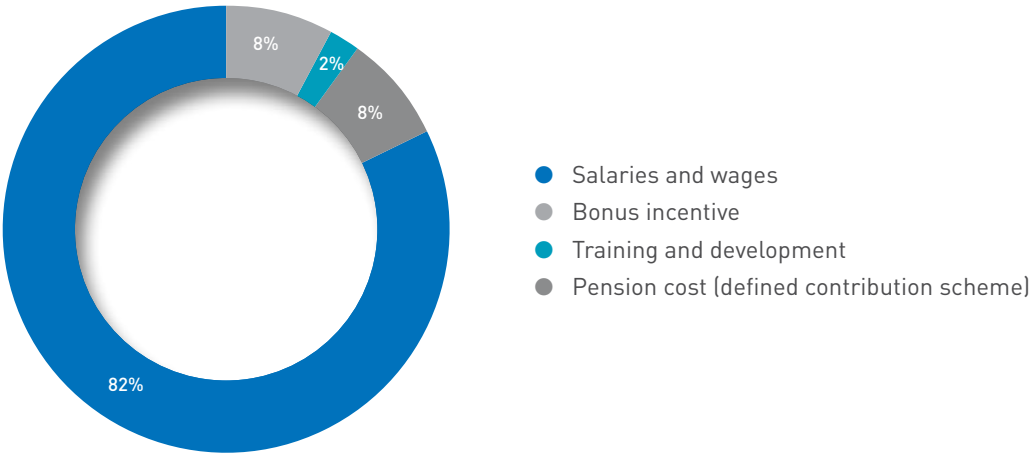


TABLE 10: STAFF COSTS PERFORMANCE

	SALARIES & WAGES (R)	BONUS INCENTIVES (R)	TRAINING & DEVELOPMENT (R)	PENSION COST (DEFINED CONTRIBUTION SCHEME) (R)
2015/16	600,434,082	68,833,745	13,961,358	59,983,454
2016/17	656,669,940	68,068,238	13,395,475	64,853,005
2017/18	708,871,677	73,382,720	15,034,765	71,175,100



## Executive Remuneration

Executive remuneration is aligned with the ATNS remuneration policy to ensure fairness and consistency across the organisation. Benchmarking of executive positions in the South African labour market faces many challenges in making logical and fair comparisons between different jobs. Executive positions are benchmarked annually, using a top executive survey administered by an external survey house. This benchmark informs projected salary movement in the external market.

Executive management are afforded the opportunity to structure their 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. Executives are evaluated against annually set routine objectives, which encompass the scope and nature of the role and job content. More detail is included in the Integrated Report.

FIGURE 17: EXECUTIVE REMUNERATION (2016/17)

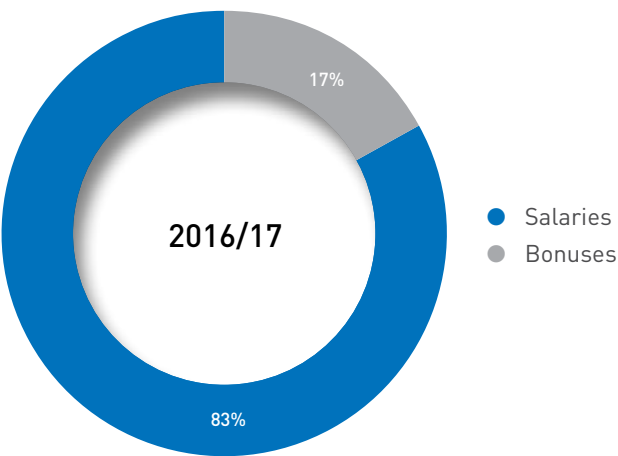


FIGURE 18: EXECUTIVE REMUNERATION (2016/17)

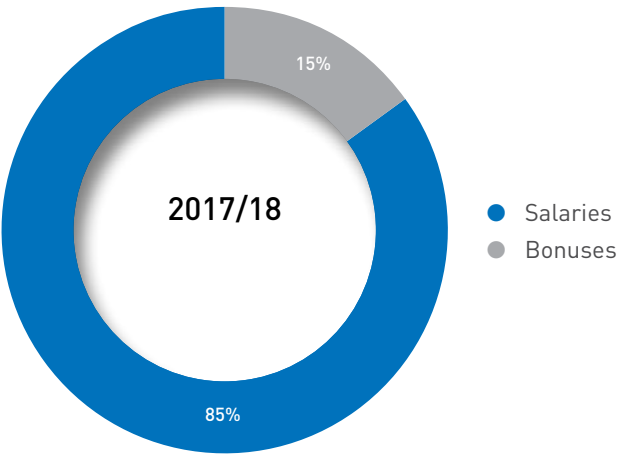


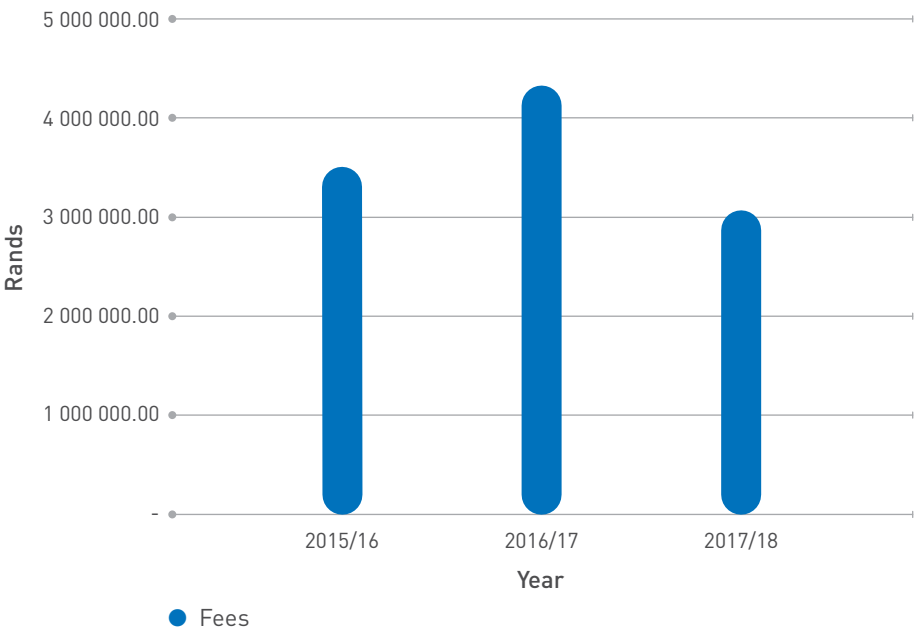
TABLE 11: EXECUTIVE REMUNERATION

	EXECUTIVE REMUNERATION 2016/17 (R)	EXECUTIVE REMUNERATION 2017/18 (R)
Salaries	27,268,265.00	28,831,697.00
Bonus	5,447,369.00	5,172,286.00

## Non-executive directors' remuneration

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

FIGURE 19: CONSOLIDATED NON-EXECUTIVE REMUNERATION







## Ethical leadership and corporate citizenship

The Board of Director – 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.

On a quarterly basis, the Company actively solicits from its directors details regarding external shareholdings, directorships, contractual relationships, and any form of relationship that have the potential to create conflicts of interests while they serve as directors on the Board. 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 meeting. At every meeting of the Board, Board committee, Executive committee and other Management committee, every member is required to declare or confirm absence of any potential conflict of interest before deliberations. Where a conflict arises, directors are required to recuse themselves from the discussions.

## 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's 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 also informs fraud and corruption awareness training and is accessible to all ATNS employees on the Company's intranet.

## Fraud and Corruption Plan

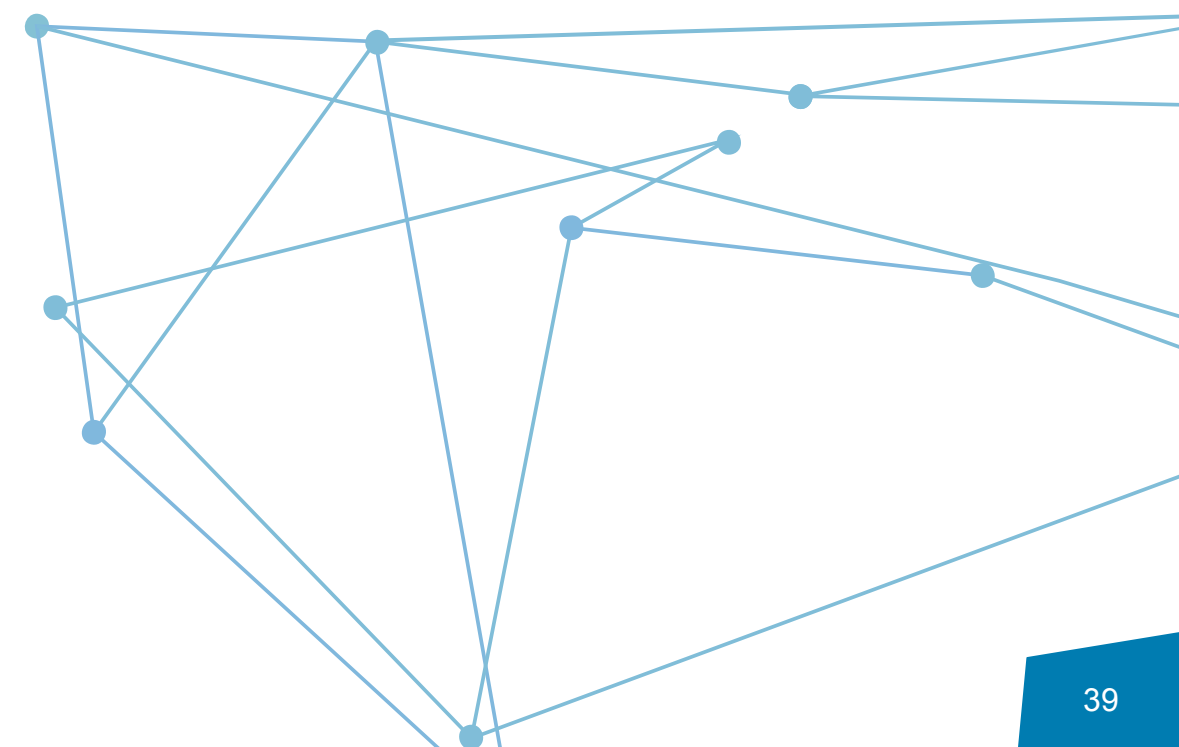
ATNS has a zero-tolerance approach to fraud and corruption. A fraud prevention plan is annually approved by the Board and monitored throughout the year. ATNS fraud and corruption methodology enables the Company to identify and mitigate the occurrence of fraud and corruption through risk assessment and compliance checks. These are performed Company-wide on an annual basis. These assessments help to identify potential high-risk areas for fraud and corruption.

Most incidences of fraud activities that are reported by means of the whistle blowing hotline and via line management occur in the following areas: Financial Control, Supply Chain Management and Human Resources. Management has put more controls in place to prevent, detect, and mitigate the fraud risk in these areas.

The ATNS strategic imperatives represent the overarching themes of the Fraud Risk Management Plan in that they not only embrace the fraud risk management initiatives undertaken in previous years, but also emphasise the related root causes of fraud and corruption emanating from the areas of governance, people, methods and practices. Fraud and Corruption awareness education encompasses formal annual training with all employees, including both bargaining and non-bargaining council employees.

ATNS's anonymous Whistle Blowing Hotline is in place for reporting of suspected fraudulent or unethical behaviour via an outsourced toll-free hotline. Reports are relayed to the Chief Audit Executive, the Chief Executive Officer, as well as to the Chairman of the Audit and Risk Committee. Staff awareness of this facility is promoted through posters, the intranet and the training programme undertaken with all staff.

The hotline is available 24 hours a day, seven days a week and call centre agents are able to converse in all official languages.





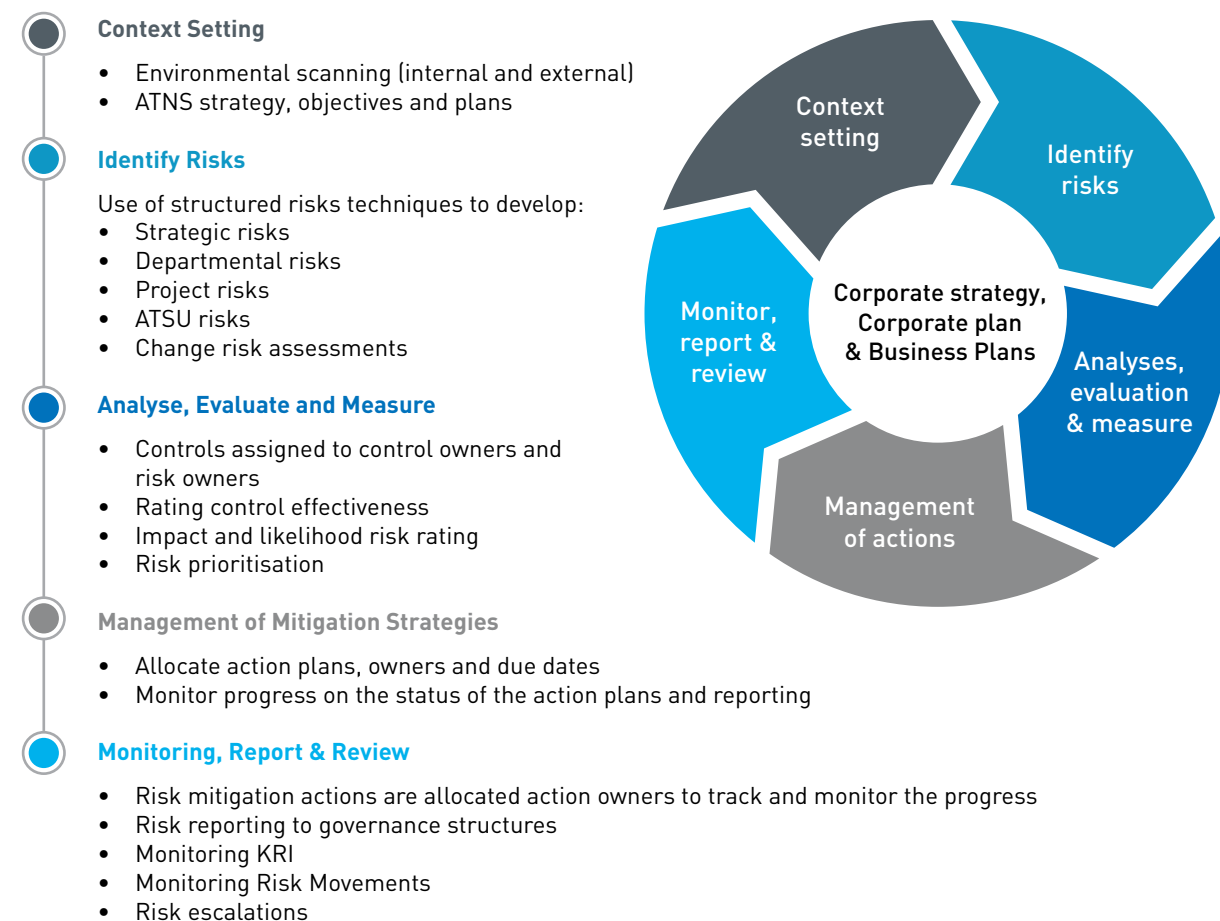


Enterprise Risk Management (ERM) aims to achieve an appropriate balance between opportunities realised for gain, while minimising adverse impact. To achieve best-practice levels, ATNS considers the requirements of the guidelines of the King Report on Corporate Governance for South Africa, 2016 (King IV), and the ISO 31000: 2009 Risk Management Standard. The strategic risk profile is based on the Six Strategic Imperatives of ATNS.

The strategic risks of ATNS are reassessed on an annual basis. Risks are identified, evaluated and assessed on an inherent risk basis, whilst existing controls are also considered. The control effectiveness of the risk is rated by the ATNS Executive team. This results in a calculated residual risk rating per risk identified. Therefore, mitigation strategies are developed to mitigate the risks based on their level of priority ranking.

To ensure continuous improvement in the risk management process, the risk ownership has been enhanced by the Senior Management team by formally appointing departmental and Air Traffic Service Unit (ATSU) risk champions to embed risk management within their area of operations. Formal risk management training was conducted for all the risk champions to build capacity within the risk department. This enhances risk advisory at an operational and departmental level.

**FIGURE 20: ATNS ENTERPRISE RISK MANAGEMENT PROCESS FLOW**



During the year our enhanced ERM process as per Figure 20 was applied across the organisation to the strategic risk profile derived within departments, projects, and Air Traffic Service Units. Risk workshops for the top 10 risks (including departmental risks, ATSU risks and projects risks) were coordinated by the Risk department and formally evaluated on a quarterly basis by the Audit and Risk Committee. The quarterly risk committee meetings enable management to rate and re-rate risk(s) depending on the control effectiveness and the level of the residual risk exposure.

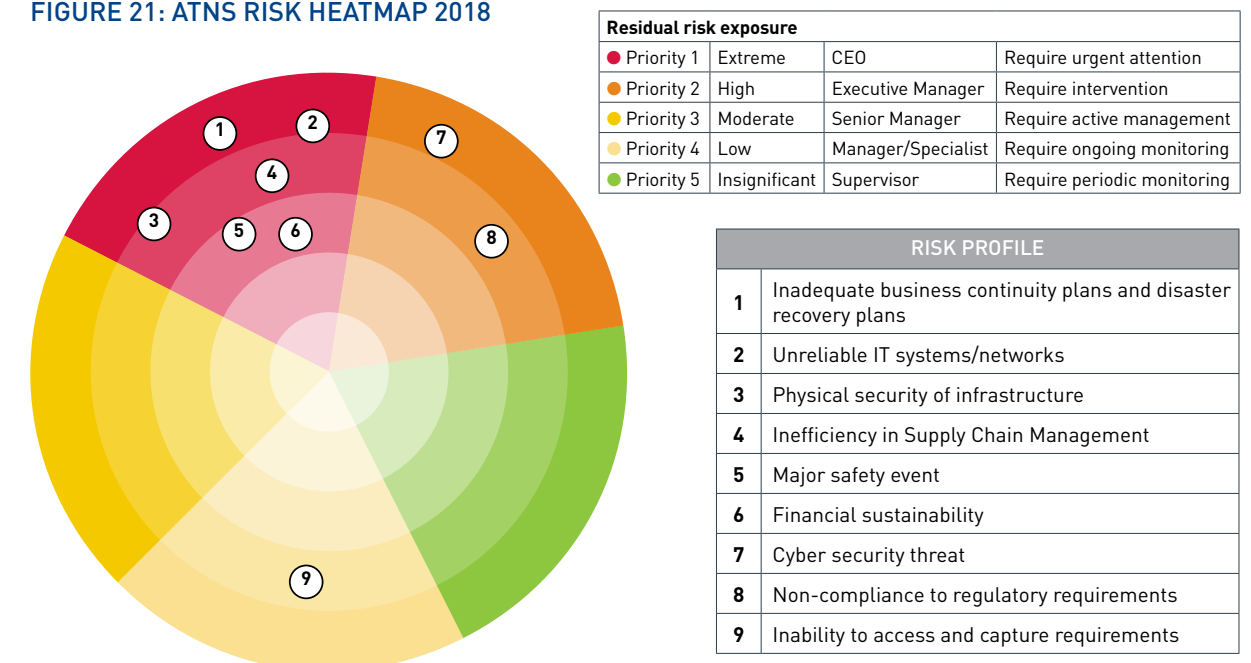
**TABLE 12: COMPARISON OF THE TOP 10 ATNS STRATEGIC RISKS FOR THE PAST THREE YEARS (RED REPRESENTING THE HIGHEST LEVEL OF RISK)**

NO.	2015/2016	2016/2017	2017/2018
1	Inadequate business continuity plans and disaster recovery plans	Inadequate business continuity plans and disaster recovery plans	Inadequate business continuity plans and disaster recovery plans
2	Political instability in certain African countries	Cyber Security Threat	Unreliable IT systems/networks
3	Major safety event	Unreliable IT systems/networks	Physical security of infrastructure
4	Cyber Security Threat	Physical security of infrastructure	Inefficiency in Supply Chain Management
5	Reliance on third party service providers	Major safety event	Major safety event
6	Financial sustainability	Financial sustainability	Financial sustainability
7	Unavailability of deployed CNS technology	Reliance on third party service providers	Cyber Security Threat
8	Physical security of infrastructure	Critical skills in global demand	Noncompliance to regulatory requirements
9	Critical skills in global demand	Unavailability of deployed CNS technology	Inability to access and capture the market
10		Political instability in certain African countries	

## Strategic Risk Heatmap

Risks have been plotted on a risk heatmap in the form of residual risk exposures as shown in the figure below. This is shown by applying the risk management framework using likelihood/probability and impact/consequence ratings.

**FIGURE 21: ATNS RISK HEATMAP 2018**

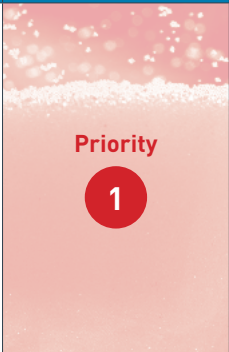





The above heatmap indicates the top 10 risks for ATNS. Six of these are rated Priority 1 which means they needed urgent attention. Management have implemented control measures based on the below interventions in the form of critical issues and core programmes to mitigate these risks to an acceptable level. These programmes are assigned to dedicated team leads to manage the implementation process. The CEO is kept abreast on the progress of the programmes and the risks movements. Two of the nine are Priority 2, where action plans are managed and monitored by the relevant executives and reported accordingly.

TABLE 13: ATNS CORPORATE RISK REGISTER

NO	RISKS DESCRIPTION	ROOT CAUSE OF THE RISK	CURRENT CONTROL PROCESSES IN PLACE TO MITIGATE THE RISK EXPOSURE	RESIDUAL RISK EXPOSURE	ACTION PLANS	ALIGNMENT TO MATERIAL ISSUES
1	<b>Inadequate business continuity plans and disaster recovery plans</b>	<ul style="list-style-type: none"> <li>Lack of definition of operational business continuity levels/requirements of business continuity.</li> <li>No site-to-site replication for the head office IT</li> <li>Lack of IT disaster recovery plans</li> <li>Inconsistent back-up processes</li> <li>Configuration of the System Support Suite (SSS) (size and equipment)</li> </ul>	<ul style="list-style-type: none"> <li>Business Continuity Plans</li> <li>Information technology (IT) contingency plans</li> <li>IT back up system</li> <li>System Support Suite(SSS)</li> <li>Disaster recovery plans/Emergency evacuation plans</li> <li>Business continuity directive</li> </ul>	Priority 1	<ul style="list-style-type: none"> <li>Conduct integrated Disaster Recovery (DR) tests for critical Departments (Human Capital and Finance)</li> <li>Develop comprehensive IT disaster recovery plans</li> <li>Conduct regular back-up restore test</li> <li>Complete and implement the project for disaster recovery at FAOR and the national contingency plan to cater for Business Continuity Management (BCM)</li> <li>Conduct simulation for operational disaster recovery plans</li> </ul>	Page 72 of the material issues section
2	<b>Unreliable IT systems/networks</b>	<ul style="list-style-type: none"> <li>Obsolete systems</li> <li>Misaligned business processes</li> </ul>	<ul style="list-style-type: none"> <li>Current IT systems</li> <li>Business process mapping</li> </ul>	Priority 1	<ul style="list-style-type: none"> <li>Develop Enterprise architecture</li> <li>Implementation of new Enterprise Resource Planning (ERP)</li> <li>Revise Information Communication Technology (ICT) strategy</li> <li>Capacitate IT department</li> </ul>	Page 68 of the material issues section
3	<b>Physical security of Infrastructure</b>	<ul style="list-style-type: none"> <li>Ineffective security systems and procedures</li> <li>Lack of mitigation on security</li> <li>Lack of integration/alignment of the security structure</li> <li>Socio- economic related theft</li> <li>Inadequate security assessment</li> </ul>	<ul style="list-style-type: none"> <li>Security Policy and Directive.</li> <li>Deployment of security measures</li> <li>Security assessments conducted with action plans.</li> </ul>	Priority 1	<ul style="list-style-type: none"> <li>Finalise the integrated security strategy, policy and framework</li> <li>Develop a security plan/strategy and program</li> <li>Roll out the site security project.</li> </ul>	Page 72 of the material issues section
4	<b>Inefficiency in Supply Chain Management (SCM)</b>	<ul style="list-style-type: none"> <li>Non-adherence to ATNS Procurement policy &amp; directives</li> <li>Poor communication on ATNS Procurement policy e.g. only electronic emails</li> <li>Restrictive Mandate matrix/ Inadequate delegation of authority</li> <li>Inadequate capacity for SCM</li> <li>Lack of SCM policy</li> <li>Inadequate systems to support SCM</li> <li>Lack of coordinated processes between HO and Centers</li> </ul>	<ul style="list-style-type: none"> <li>Procurement policies and procedures</li> <li>Electronic email communication.</li> <li>Annual review of Mandate matrix</li> <li>Current procurement structure</li> <li>Great Plains (Finance data management software)</li> </ul>	Priority 1	<ul style="list-style-type: none"> <li>Conduct Brown bags (information sharing sessions) and roadshows at centers</li> <li>Review Mandate matrix to devolve powers to the centers/units</li> <li>Implement the new SCM model</li> <li>Update the current procurement policy</li> </ul>	Page 69 of the material issues section
5	<b>Major safety event</b>	<ul style="list-style-type: none"> <li>Human error and human factors</li> <li>Noncompliance with standard operating procedures e.g. pilot / Air Traffic Control (ATC)</li> <li>Equipment failure</li> <li>Terrorist attacks/sabotage</li> <li>Non-conductive working environment</li> <li>Inadequate business continuity</li> </ul>	<ul style="list-style-type: none"> <li>Team resource management</li> <li>Safety Management System (SMS)</li> <li>Training and management</li> <li>Deployment, maintenance and monitoring of infrastructure and equipment.</li> <li>Compliance with the security policy</li> <li>Facility maintenance</li> <li>Contingency and emergency plans</li> </ul>	Priority 1	<ul style="list-style-type: none"> <li>Finalise the integrated security strategy, policy and framework</li> <li>Enhancements of the Business Recovery Plan and Disaster Recovery Plan.</li> <li>Implement the work improvement project</li> </ul>	Page 91 of the material issues section








NO	RISKS DESCRIPTION	ROOT CAUSE OF THE RISK	CURRENT CONTROL PROCESSES IN PLACE TO MITIGATE THE RISK EXPOSURE	RESIDUAL RISK EXPOSURE	ACTION PLANS	ALIGNMENT TO MATERIAL ISSUES
6	<b>Financial sustainability</b>	<ul style="list-style-type: none"> <li>Subdued growth in the airline industry due to lack of economic growth</li> <li>Noncompliance with internal financial controls</li> <li>Failure to bill due to an inefficient and ineffective billing system</li> <li>Lack of expansion on revenue lines (Non-regulated business)</li> <li>Duplication of roles due to misalignment of business processes</li> <li>People management capability, skills and succession planning on the billing system</li> </ul>	<ul style="list-style-type: none"> <li>Financial Policies and Procedures</li> <li>Billing system</li> <li>ATNS International initiative as a legal entity</li> <li>Training programs</li> </ul>	 <p>Priority 1</p>	<ul style="list-style-type: none"> <li>Implement the SCM model</li> <li>Develop a new billing system</li> <li>Skills assessment for financial personnel</li> <li>Develop a training plan based on skills audits results</li> </ul>	Page 62 of the material issues section
7	<b>Cyber security threats</b>	<ul style="list-style-type: none"> <li>Inadequate IT security controls</li> <li>Lack of regular penetration testing</li> <li>Delaying in approval process and lack of understanding for Cyber Security initiatives/ interventions</li> <li>Inadequate access controls on IT facilities</li> <li>Poor cyber security awareness amongst users</li> <li>Immature process on the management of cyber security threats</li> <li>Lack of IT cyber security induction.</li> <li>Lack of monitoring and alerts on unusual events and activities</li> </ul>	<ul style="list-style-type: none"> <li>Firewalls</li> <li>Anti-Virus software</li> <li>Annual IT audits</li> <li>IT governance policies and procedures</li> <li>ATNS security access control</li> <li>Restricted physical access to servers.</li> <li>Information Security Framework</li> </ul>	 <p>Priority 2</p>	<ul style="list-style-type: none"> <li>Develop Cyber Security Policy Framework</li> <li>Conduct independent vulnerability assessment and penetrating testing</li> <li>Develop IT Security Strategy</li> <li>Introduction of Security Information Event Management system (SIEM) to monitor unusual event and activities</li> <li>Include cyber awareness as part of employee induction</li> <li>Conduct regular cyber awareness sessions</li> </ul>	Page 73 of the material issues section
8	<b>Non-compliance with regulatory requirements (Legislation, Regulations, Policies, Directives etc.)</b>	<ul style="list-style-type: none"> <li>Not fully understanding the regulatory requirements and the impact of noncompliance</li> <li>Inadequate capacity on the Compliance function to be able to assist the business in discharging its compliance responsibilities</li> <li>Non-adherence to ATNS policies &amp; directives</li> <li>Poor communication on ATNS policies e.g. only electronical emails</li> <li>Intentional breach of internal controls</li> </ul>	<ul style="list-style-type: none"> <li>Legal Compliance Framework (policy, charter, manual and programs)</li> <li>Compliance Officer</li> <li>Quality Management System (ISO 9001)</li> <li>Fraud Prevention plan</li> </ul>	 <p>Priority 2</p>	<ul style="list-style-type: none"> <li>Implement Compliance Risk Management Plans</li> <li>Monitor and report compliance and noncompliance with regulatory requirements</li> <li>Disclose compliance on the integrated report annually</li> <li>Capacitate the compliance function as per approved structure</li> <li>Integrated governance approach (combined assurance)</li> <li>Map actions to the KPIs to integrate in corporate performance</li> </ul>	
9	<b>Inability to access and capture the market due to political, economic dynamics and internal constrains to deliver.</b>	<ul style="list-style-type: none"> <li>Political/socio instability in selected markets</li> <li>Country-to-country relations</li> <li>Internal resource constraints</li> <li>Governance and business practices</li> <li>Change in government (decision making and strategy)</li> <li>Credibility of the legal environment</li> <li>Ineffective implementation of consequence management for non-achievement of growth strategy for all senior management</li> <li>Regional economic factors (economy performance)</li> </ul>	<ul style="list-style-type: none"> <li>Memorandums of Understanding (MOUs) with respective organisations</li> <li>Government-to-Government relationships with other countries</li> <li>Continuous and regular engagement with SA embassies / Department of International relations and Cooperation (DIRCO)/ State Security Agency/ Department of Transport (DoT)/ Department of Trade and Industry (DTI) offices in relation to the respective countries</li> <li>Government bilateral</li> <li>Resource sharing model</li> <li>Corporate Balance Score Card (BSC)</li> <li>Legal System / Independent Arbitration</li> </ul>	 <p>Priority 4</p>	<ul style="list-style-type: none"> <li>Review expired MOUs and develop new MOUs where there is none</li> <li>Develop periodic political barometers and environmental scan to keep abreast with developments in each country</li> <li>Build strong relations with senior government officials by using existing government-to-government channels, i.e. bilateral</li> <li>Improve on building relations with internal and external clients</li> <li>Implement and improve on the resource sharing model</li> <li>Ensure the impact of growth is understood by all senior management</li> <li>Manage outcomes not processes</li> </ul>	



ATNS is committed to understanding and continuously improving the relationship with our stakeholders and we believe in continuous engagement using platforms such as industry stakeholder engagement focus (e.g., OPSCOM) and user consultation forums. We believe that our stakeholders are an integral part of improving our sustainability journey. When identifying issues that “Matter” to us as business we also consider issues that matter to our stakeholders. The process of determining our material issues is also influenced by inputs from our stakeholders.

FIGURE 22: OUR STAKEHOLDER GROUPS

				
<ul style="list-style-type: none"> <li>• ATNS is responsible for fulfilling the mandate of providing ATM solutions &amp; associated services for the Department of Transport.</li> <li>• Furthermore, as our activities affect the natural environment, the Department of Environmental Affairs influences the decisions taken by the business.</li> <li>• Operations are conducted in line with the National Treasury guidelines and regulations.</li> <li>• The engagements with the South African Air Force ensure flexible use of airspace as well as the collaboration of delivering engineering and technical services.</li> <li>• Department of International Relations and Cooperation engagements ensure that our continental objectives are aligned to the department in order to develop and maintain good relationships with embassies within Africa and secure funding for infrastructure development within the African community.</li> </ul>	<ul style="list-style-type: none"> <li>• The maintenance of solid relations within the aviation industry impacts on the sustainability, economic, social and environmental, of our services and products. We adhere to the governance requirements, as well as the expectations of our customers to ensure efficient service delivery and consistent customer satisfaction.</li> <li>• The participation in various forums provides a platform to engage with other industry stakeholders in order to facilitate continuous improvement and innovation that will achieve the desired level of customer satisfaction through the provision of efficient and effective services and products, thus ultimately improving our economic sustainability.</li> </ul>	<ul style="list-style-type: none"> <li>• Employee engagement ensures that our internal stakeholders are given the platform to be empowered and developed. We realise that to enhance performance, the satisfaction of our employees plays a critical role in the overall business.</li> <li>• Programmes to contribute to employee satisfaction include constant training on both soft and technical skills to improve on the delivery of services and good employee relations.</li> <li>• Our Rewards and Recognition initiative rewards our employees on their services rendered.</li> </ul>	<ul style="list-style-type: none"> <li>• Our contractors adhere to our internal policies and procedures to ensure good services rendered that influences a positive business reputation and stakeholder expectations being achieve.</li> <li>• We require our contractors to be conscious of all three pillars of sustainability to achieve the ultimate maturity of our sustainability goals.</li> </ul>	<ul style="list-style-type: none"> <li>• ATNS is committed to contributing towards the national socio-economic development objectives by addressing community empowerment and development when conducting business and aims towards transferring skills to develop local businesses and communities.</li> <li>• CSI initiatives support the development of critical skills to aid in meeting the industry’s objectives for providing Air Traffic Management solutions from a well skilled and efficient workforce.</li> </ul>
GOVERNMENT	INDUSTRIES & CUSTOMERS	EMPLOYEES	CONTRACTORS	SOCIETY

For the 2017/18 financial year, we have maintained positive relations with our long-term stakeholders and have developed new stakeholder engagements that will impact on the business growth. One of these being a standing member of CANSO’s (Civil Air Navigation Services Organisation) Environmental Working Group to align our business processes to environmental sustainability best practices together with other global Air Traffic Navigation Services (ANSPs). This will facilitate the process of benchmarking and sharing knowledge to influence the development of ANSPs within the African continent to be able to compete on the global scale and implement best practice, thus ultimately contributing to the development of African states.

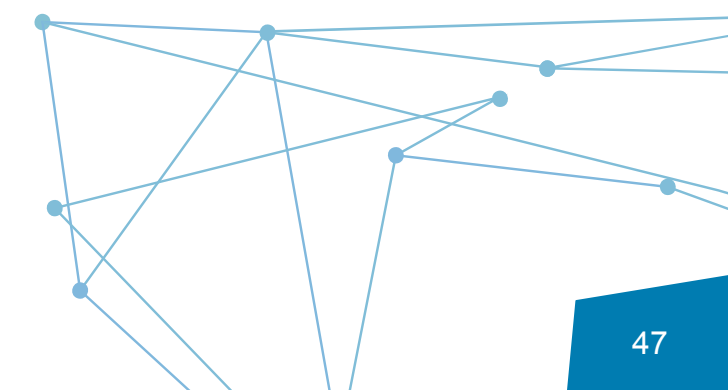
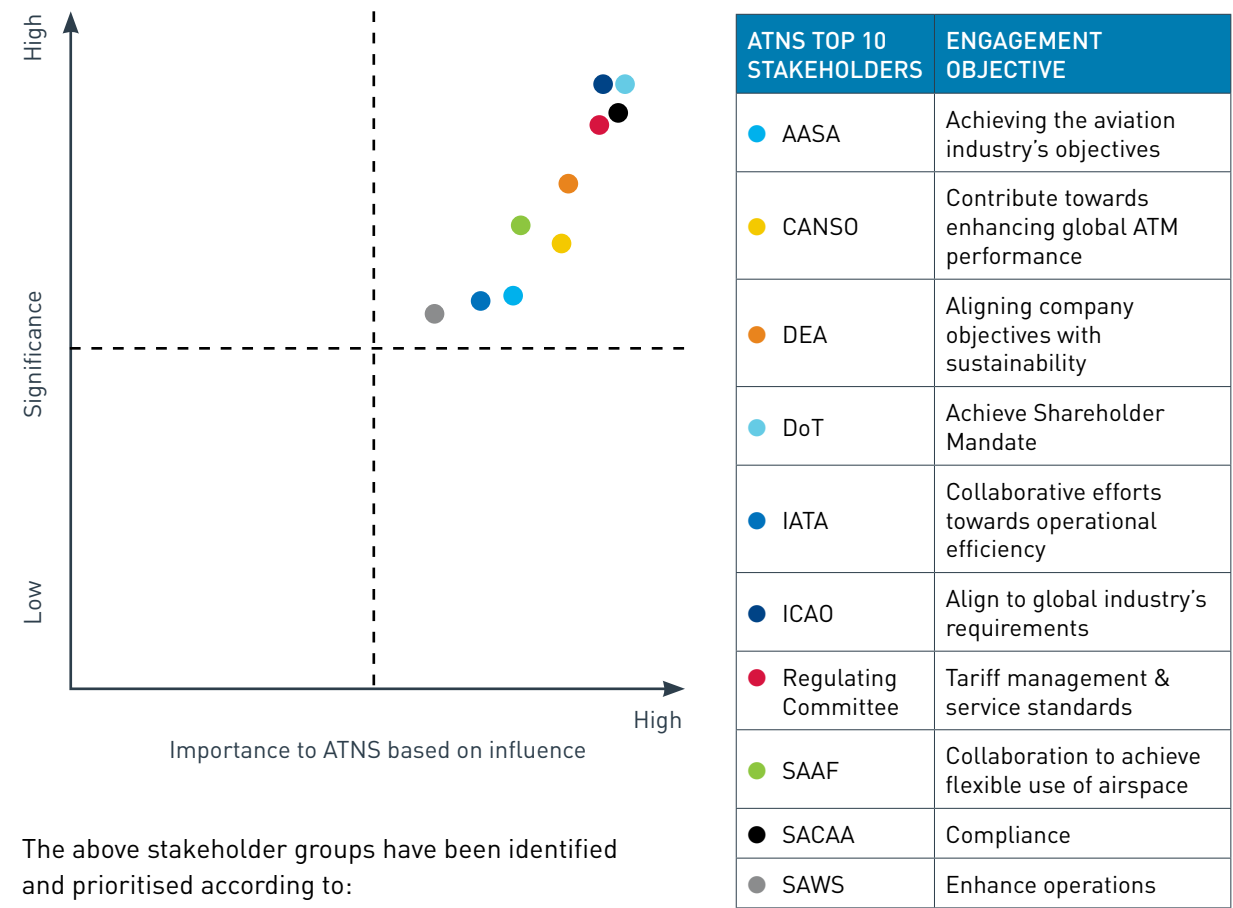




FIGURE 23: ATNS STAKEHOLDERS BASED ON INFLUENCE



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

- High influence and significance group;
- Low influence and significance group

## Commitment to External partnerships

### Stakeholder Events

**OPSCOM 27:** Operations Committee (OPSCOM) remains a relevant platform to ensure that a collaborative decision-making process is undertaken. It is during OPSCOM that the industry may hold ATNS accountable to certain initiatives that have been agreed upon. ATNS always welcomes open and valuable inputs from the industry to improve ATM.

**IFATSEA:** ATNS hosted the 7th International Federation of Air Traffic Safety Electronic Association (IFATSEA) Africa Region meeting and Air Traffic Safety Electronics Personnel (ATSEP) workshop on 22-24 August 2017. Please visit [www.ifatseaarm17.org](http://www.ifatseaarm17.org) for more information.

**ASHFAS (African Symposium on Human Factors & Aviation Safety):** ATNS, in partnership with the University of Witwatersrand, University of Pretoria, Rhodes University and the Ergonomic Society of South Africa organised three conferences in one i.e. 13th Ergonomics Society of South Africa Conference, Third African Symposium on Human Factors and Aviation Safety, and the First Ergonomic Africa Conference. For more information visit [www.atns.co.za/symposium](http://www.atns.co.za/symposium).

**AVI Afrique Innovation Summit 2017:** AVI Afrique is one of the few Aviation Innovation Summits which is held in the African continent. The concept was born from ATNS's desire to contribute to the Aviation Industry by taking a lead in collaborating, networking and demonstrating thought-leadership designed for the African aviation industry to engage on innovation related research and development. This was the sixth year ATNS successfully hosted this event with the theme "In Africa, by Africa: Enhancing aviation sustainability of the African market within the global space". Please visit [www.aviafrique.co.za](http://www.aviafrique.co.za) for more information.

### ATNS and CSIR collaborate on industrialisation

ATNS and the South African Council for Scientific and Industrial Research (CSIR) signed a Memorandum of Understanding (MoU) on 9 May 2017 to collaborate on a national multi-static passive radar facility. The CSIR and ATNS will join forces to establish a technology base that will be utilised to establish solutions in partnership with local industry.

ATNS and CSIR want to foster relationships that enhance technology innovation and excellence within the air traffic management sector. ATNS will have the opportunity to provide guidance and leadership for the development of solutions that are suited for the civil aviation environment that will ultimately further promote safety in the African airspace.



FIGURE 24: IN THE PHOTO FROM LEFT TO RIGHT- ATNS CEO, THABANI MTHIYANE & CSIR CEO, DR THULANI DLAMINI

### ATNS Joins Hands with ASECNA

ATNS and L'Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar (ASECNA) signed a ground-breaking Memorandum of Understanding, paving the way for South-West co-operation in airspace management in Africa. The MoU formalises the interconnectivity between the ATNS SADC Very Small Terminal (VSAT) and the NAFISAT network managed by ATNS in Southern, Eastern and North Africa.



FIGURE 25: ATNS & ASECNA DELEGATES





## Monitoring sustainability outcomes

ATNS's sustainability objectives respond to national, international and industry environmental goals. As the Shareholder, the Department of Transport informs environmental sustainability outcomes that ATNS must address. The aviation industry has growing commitment towards a collaborative effort for meeting the global sustainability agenda. ATNS's Sustainability and Environmental Strategy enables the Company to contribute to the United Nations Sustainable Development Goals from a global perspective, the South African National Development Plan 2030, from a national perspective, and ICAO, CAA and other industry related environmental requirements.

ATNS, as one of the leading ANSPs, is committed towards addressing socio-economic transformation within national boundaries, but also within the continent, whilst enhancing environmental protection to ensure carbon neutral growth of the industry. Various programmes are implemented, and research initiatives enhance the sustainability maturity level which informs the strategic direction of the Company.

The Sustainability and Environmental Strategy aims to align business operations to the requirements of the various legislative and policy frameworks governing sustainability which will enable the Company to support the global agenda. In responding to these frameworks, ATNS is able to monitor and measure sustainability performance and make informed decisions regarding business growth, socio-economic needs and delivering on environmental objectives. ATNS recognises that in order to achieve these goals, positive stakeholder relations play a critical role, in conjunction with addressing global challenges and inter-related risks associated with rapid economic, environmental, geo-political, social and technological advancements.

**FIGURE 26: ATNS SUSTAINABILITY FRAMEWORK ALIGNMENT TO THE BROADER SUSTAINABILITY CONTEXT**

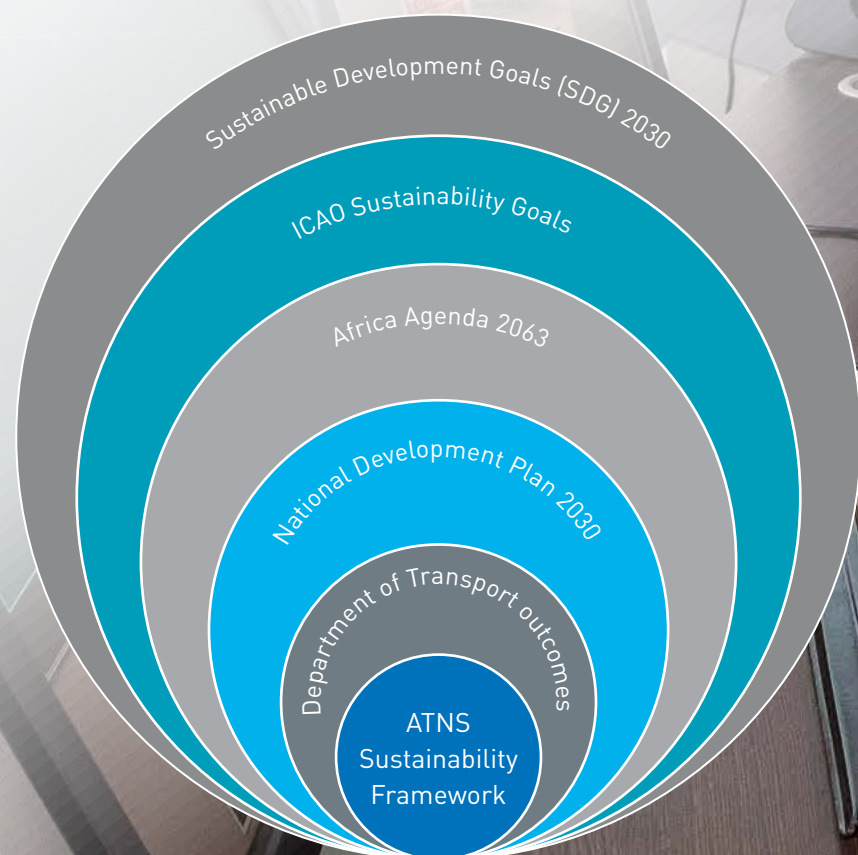
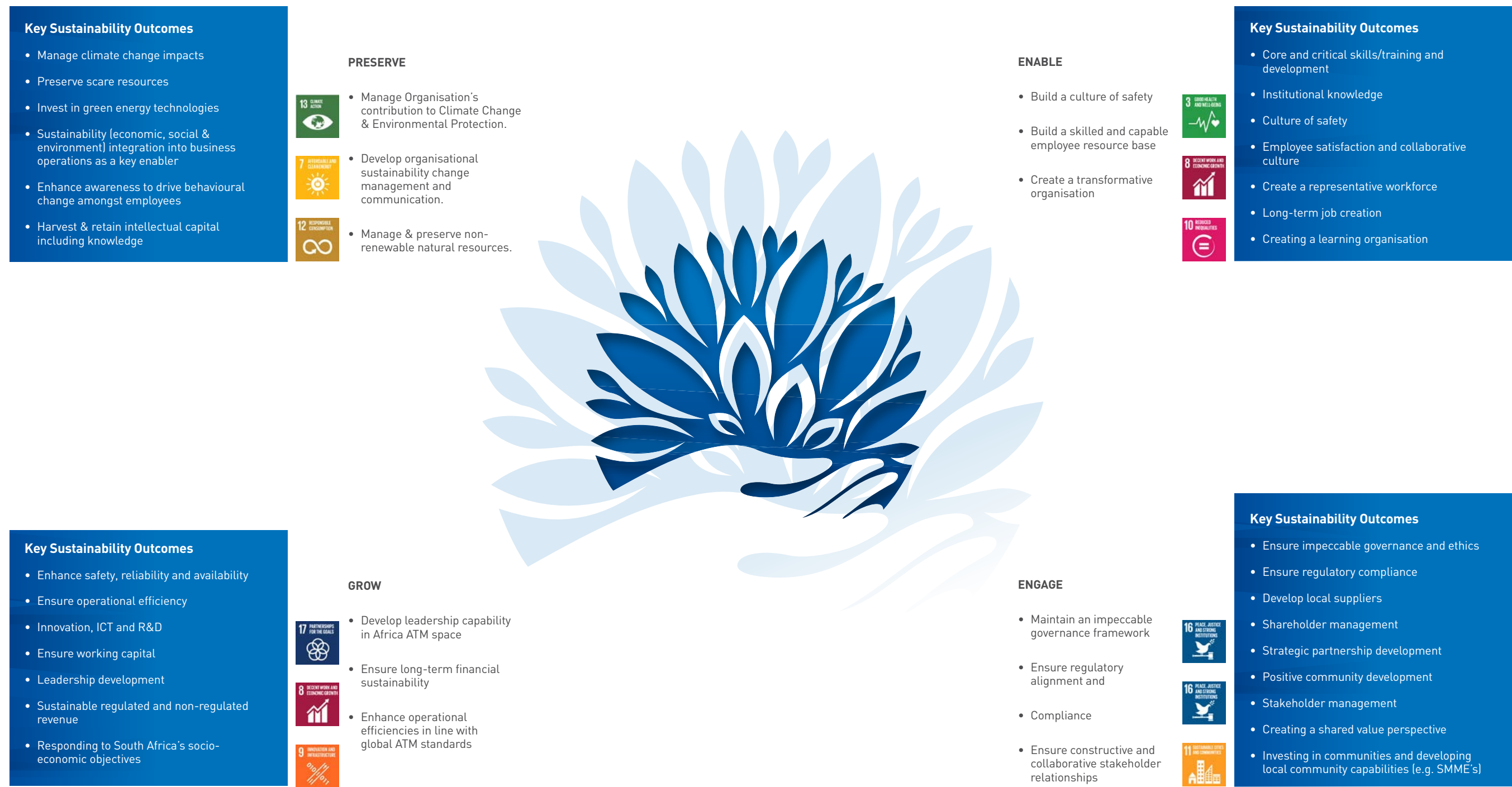




FIGURE 27: ATNS SUSTAINABILITY FRAMEWORK





The ATNS Board and Executive management through a process of extensive consultation within the organisation and with ATNS’s stakeholders have determined material issues for the organisation in the context of stakeholder inclusiveness, boundaries and alignment to organisational key risks. The process has further considered ATNS’s strategic objectives, whilst also considering the Company’s strategic opportunities and the ATNS value chain. Where appropriate in the Sustainability Report, we reference relevant sections in the 2018 Integrated Report to provide greater depth and continuation to our annual performance reporting.

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

To determine significant material issues, the following process was followed:

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

FIGURE 28: CRITERIA FOR DETERMINING MATERIALITY





FIGURE 29: INTEGRATED REPORTING PROCESS FOR DETERMINING MATERIAL ISSUES

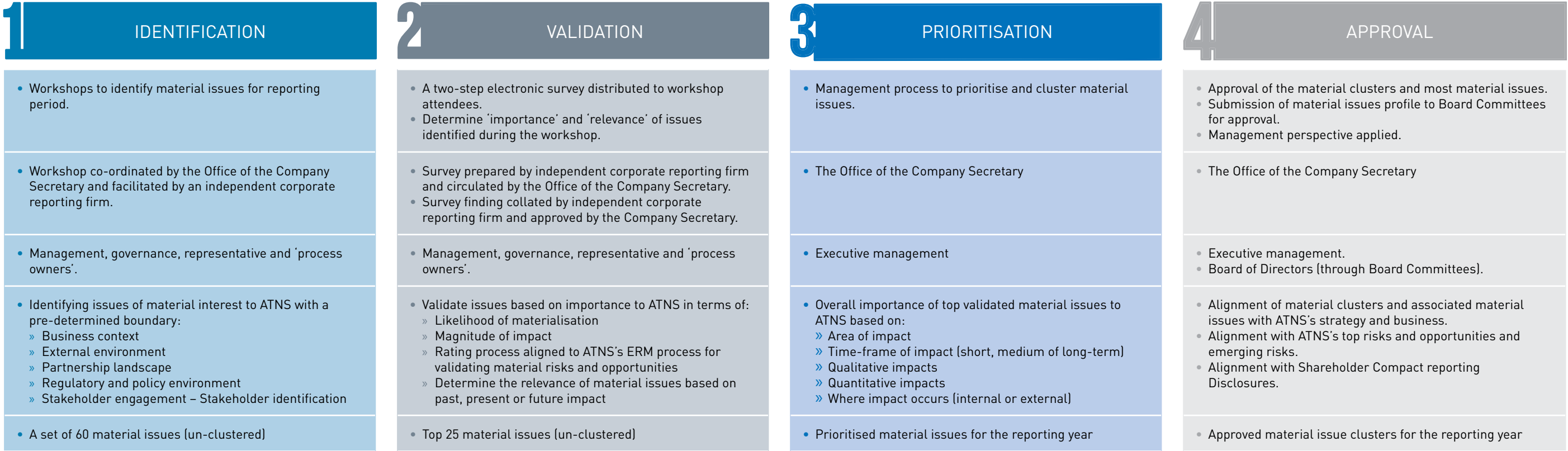
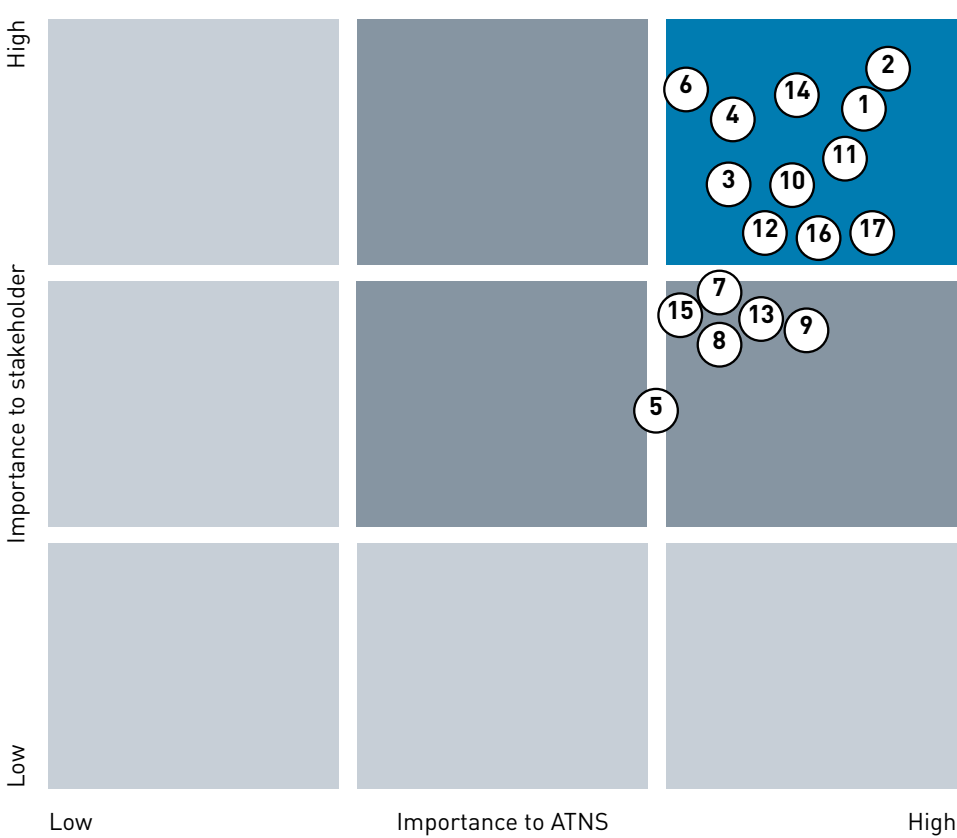


FIGURE 30: MATERIALITY SIGNIFICANCE TO STAKEHOLDERS



1	Capital infrastructure and reliable technology
2	Maintaining financial stability within a regulated environment
3	Increased operating costs including employment cost and delayed payments from regional airports
4	Regulatory uncertainty in the Permission application
5	IT network performance
6	Unavailability of CNS (Communication, Navigation & Surveillance) and Reliance on 3rd party service providers
7	Physical security of our operation, assets and people
8	Inability to create and retain institutional knowledge
9	Improved supply chain management
10	Disaster recovery and business continuity plan
11	Cyber security
12	Critical skills in global demand
13	Training and skills development in the sector
14	Safety culture and performance to address safety events
15	Broad communication including long term planning and issues that matter
16	Ethical leadership
17	Employee morale





TABLE 14: ATNS MATERIAL ISSUES

	MATERIAL ISSUE	FOCUS AREA	ORGANISATION PRIORITY	PAGE
1	Capital infrastructure and reliable technology	Enabling Growth of Sustainable Investments	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	52
2	Maintaining financial stability within a regulated environment	Enabling Growth of Sustainable Investments	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	54
3	Increased operating costs including employment cost and delayed payments from regional airports	Enabling Growth of Sustainable Investments	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	57
4	Regulatory uncertainty in the Permission application	Enabling Growth of Sustainable Investments	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	58
5	IT network performance	Enabling Growth of Sustainable Investments	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	60
6	Unavailability of CNS (Communication, Navigation & Surveillance) and Reliance on 3rd party service providers	Enabling Growth of Sustainable Investments	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	59
7	Physical security of our operation, assets and people	Enabling Growth of Sustainable Investments	Shareholder compact and strategic intent, industry requirement	63
8	Inability to create and retain institutional knowledge	Developing Human Capital	Shareholder compact and strategic intent, industry requirement	76
9	Improved supply chain management	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	61
10	Disaster recovery and business continuity plan	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	62
11	Cyber security threat	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	64
12	Critical skills in global demand	Developing Human Capital	Shareholder compact and strategic intent, industry requirement	76
13	Training and skills development in the sector	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	76
14	Safety culture and performance	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	82
15	Broad communication including long term planning and issues that matters,	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement	67
16	Ethical leadership	Developing Human Capital	Shareholder compact and strategic intent, industry requirement	34
17	Employee morale	Developing Human Capital	Shareholder compact and strategic intent, industry requirement	67

Other Sustainability Business Imperatives

TABLE 15: OTHER SUSTAINABILITY BUSINESS IMPERATIVES

		FOCUS AREA	ORGANISATION PRIORITY
Developing Human Capital			
1	General employee information, including information on numbers, composition and equity	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement
2	Employee wellness	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement
3	Broad-Based Black Economic Empowerment within ATNS	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement
4	Enterprise and Supplier Development	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement
5	Corporate Social Investment	Developing Human Capital	Organisation's top 10 risk, Shareholder compact and strategic intent, industry requirement
Environmental Stewardship			
6	Responding to climate change impacts	Business Enabling Environmental Stewardship	Shareholder compact and strategic intent, industry requirement
7	Improved natural resource efficiency	Business Enabling Environmental Stewardship	Shareholder compact and strategic intent, industry requirement
8	Promoting employee awareness of environmental management	Business Enabling Environmental Stewardship	Shareholder compact and strategic intent, industry requirement
9	Enabling integration of environmental aspects to our business	Business Enabling Environmental Stewardship	Shareholder compact and strategic intent, industry requirement





Capital infrastructure and reliable technology

WHY IT MATTERS TO US

ATNS is responsible for the acquisition, establishment, development, provision, maintenance and operation of air navigation infrastructures to provide safe and reliable services and to support the national development goals aligned with stakeholder expectations. These infrastructure investments represent the necessary baseline upon which the operational improvements and their associated benefits can be achieved. The main drivers of the ATNS CAPEX investment plans are executed in line with the CAPEX module which is one of the modules within the permission application. The CAPEX modules along with the projects are primarily driven by the ATM road map, Aviation System Block Upgrades (ASBU) implementation and ICAO technical standards and guidelines.

HOW WE MANAGE THE ISSUE

The nature of the CAPEX projects is influenced by various economic factors. With the current economic challenges nationally, airlines are facing even greater pressures on financial performance. As a result, ATNS has adopted the approach of developing business cases for future CAPEX projects. The business case approach has aided the process of project prioritisation – in line with industry requirements. Various capital investment projects have been identified and presented as part of the 2018/19 – 2022/23 Permission Application process. These are reviewed and considered for approval by the Regulating Committee.

In the current reporting period, Capital expenditure in line with the permission was identified as a core programme due to significant under-expenditure. Non-delivery of the CAPEX programme has a negative impact on the long term financial sustainability and ability of the Company to support the overall economic objectives of the broader transport sector. The following interventions were completed to enable ATNS to implement the organisation’s CAPEX commitments as approved in the permission.

- Overall assessment of the approved 2014 permission CAPEX projects was conducted to determine impact to business from a financial and a resource allocation perspective.
- Implementation of a periodic tracking in line with the ATNS approved project management framework to monitor project commitment, cashflow and capitalisation including risk assessments and mitigations.
- Comprehensive reporting and governance structure to provide oversight over the CAPEX performance. As a result of permission monitoring a committee was established to provide oversight on implementation of the permission. This includes capital expenditure oversight.

The 2017/18 financial year marked the third year of the 2014/15 – 2019/20 permission. The capital commitment as approved by the regulating committee was R131 million; ATNS CAPEX expenditure was R301 million.

TABLE 16: CAPEX EXPENDITURE (R)

KPI	2016/17 ACTUAL	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET	2019/20 TARGET
Capital Commitment	460 million	36.56	432 million	XXX	XXX
Capital Expenditure	318 million	329 million	301 million	263 million	371 million

Surveillance infrastructure roll out at Blesberg

ATNS continues to operate in an environment where it is required to lead the demand for air traffic services as articulated by the stakeholders within the aviation sector. For this reason, ATNS ensures that it deploys ATM infrastructure as part of its capital investments initiatives. ATNS is in the process of introducing new infrastructure and replacing the old technology systems with the latest technologies to ensure latest functionalities for the benefit of the aviation community. Other initiatives include but are not limited to initiatives such as Space Bases ADS-B infrastructure and GNSS Receivers Infrastructure deployment being investigated.

FIGURE 31: NEW SURVEILLANCE INFRASTRUCTURE DEPLOYED AT BLESBERG RADAR SITE



FIGURE 32: TRANSITIONING OF THE SOUTHERN FIR FROM THE OLD ATM SYSTEM-EUROCAT PLATFORM (LEFT) TO THE NEW ATM SYSTEM-TOPSKY PLATFORM (RIGHT)



## Ground-based augmentation system (GBAS)

Navigation and Approach Aids (NAVAIDs) must meet the requirements of accuracy, continuity, availability and integrity specific to each phase of flight. As the traffic flow increased, the conventional NAVAIDs were not able to provide the flexibility in airspace to absorb the growth fitting the needs of these requirements. As the development of new concepts and systems occurred, ICAO introduced the Global Navigation Satellite System (GNSS), which allows navigation in all phases of flight and precision approach.

The largest deployment of a GBAS system is by the FAA in the United States of America where it is referred to as a Local Area Augmentation System (LAAS). The advantages of GBAS include reduction of critical and sensitive areas; curved approach; positioning service; provision of service in several runways in the same airport; provision of several approach glide angles and displaced threshold and guided missed approach. ATNS is still in the early stages and investigating the feasibility of GBAS deployment.

FIGURE 33: GROUND-BASED AUGMENTATION SYSTEM



GPS Reference Receivers calculate position



## Maintaining financial stability within a regulated environment

### WHY IT MATTERS TO US

ATNS's business driver or strategic imperative is to ensure that we operate optimally, including being financially sustainable to enable the Company to meet its shareholder objectives and growing demands of the business. ATNS creates financial value 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. ATNS projects its revenue based on the expected growth in air traffic movement. The air traffic movement has a high correlation with Gross Domestic Product (GDP) at approximately 80%. With ATNS being a regulated entity, the regulatory environment limits revenue growth potential within the South African market by strictly applying tariff adjustments.

TABLE 17: ATM MOVEMENTS AND REVENUE

INDICATOR	2016/17 ACTUAL	2017/18 ACTUAL	2018/19 (PROJECTED)	2019/20 (PROJECTED)	2020/2021 (PROJECTED)
Revenue (R)	1,556,447,125	1,593,535,348			
ATM	1,115,346	1,121,891	1,134,317	1,146,378	1,158,325
AAGR	-0.66%	0.59%	1.11%	1.06%	1.04%

## HOW WE MANAGE THE ISSUE

### Continuous monitoring of our financial performance

ATNS financial statements are prepared annually and form part of the sustainability and integrated reports. The financial statements are prepared in accordance with the International Financial Reporting Standards, and requirements of the Companies Act, (No. 71 of 2008) and the Public Finance Management Act, (No. 1 of 1999). The major share of ATNS's revenues is generated from the monthly billings for air traffic control services rendered. Expenditures are mostly monthly, except for CAPEX of which the cash outflow depends on the requirements of specific projects.

Between April – December 2016, the Company had a zero-tariff increase in air traffic charges which had a negative impact on overall Company profits. Subsequently, the new tariffs were published on the 30th December 2016, which superseded the zero-permission. The Company effected a tariff increase of 1,5 % which increased the tariff revenue to R1,3 billion.

The increase in air traffic movements and the strength of the Rand against the Dollar contributed to an increase in revenue. However cash generated from operations decreased by 18% to R355 million (2017: R431 million) mainly due to the financial challenges experienced by the major customers and increased operational costs.

Turnover increased by 2% to R 1,594 billion (2017: R 1,557 billion) partly due to increase in air traffic movements and the non-regulated revenue i.e. training, AIS etc. The operating costs increased by 4% to R1,353 billion (2017: R1,383 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.

ATNS balance sheet is still strong with current ratio being at 4.6:1 (2017: 5.2:1) and our gearing ratio is at 0.5% (2017: 0%). This puts the Company in a better position to raise funding for the imminent capital expenditure.

### Our strategic direction and other revenue streams

ATNS revenue is distributed as outlined below. The en-route and approach fees account for the majority (88%) of revenue generation. This is regulated as per the ATNS Act and as required by the shareholder. ATNS is in the process of reviewing the current 2014-18 Corporate strategy. This strategy was a market driven strategy to enable ATNS to leverage its area of excellence to increasing revenue by identifying opportunities available within the continent to improve its offerings and increase revenue for the business. Therefore, ATNS's long term strategy, as outlined in the 10 year Bankable Plan, is to form a subsidiary, in order to expand its services into the African continent. The new Corporate Strategy, covering the period 2019/20 to 2023/24 will focus to growing and expanding our continental footprint beyond the current products and services. This includes creating sustainable partnerships and business linkages between local manufacturing enterprises and global Original Equipment Manufacturers (OEMs). Our enterprise development strategy is key in enabling financial sustainability and business growth.



## Revenue

TABLE 18: REVENUE (R)

REVENUE	2016/17 ACTUAL	2017/18 ACTUAL
En-route and approach fees	1,376,490,388	1,402,408,229
SADC VSAT 11	48,739,100	46,469,170
NAFISAT	42,260,049	35,778,835
Small aerodrome fees	47,651,893	50,420,819
Other	41,305,641	58,458,296
<b>Total</b>	<b>1,556,447,071</b>	<b>1,593,535,348</b>

FIGURE 34: ATNS REVENUE 2016/17

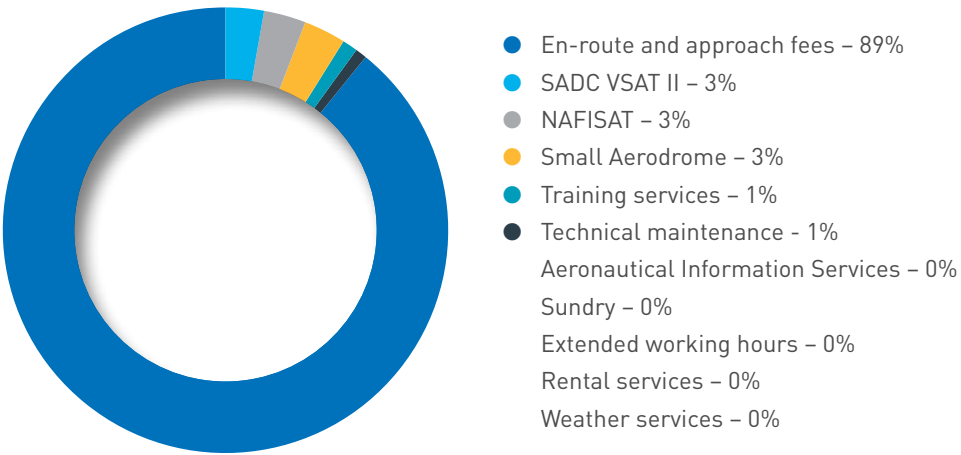


FIGURE 35: ATNS REVENUE 2017/18

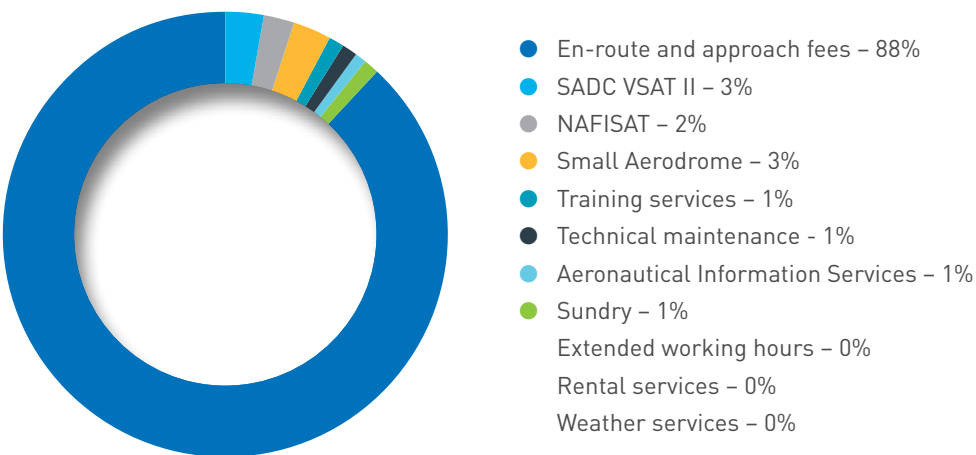


TABLE 19: ATNS NON-REGULATED REVENUE (R)

REVENUE SOURCE	2016/17 ACTUAL	2017/18 ACTUAL	2018/19 TARGET
En-route and approach fees	1,3 billion	1,4 billion	xxxx
SADC VSAT II	48,8 million	46,5 million	51,1 million
NAFISAT	45,7 million	35,8 million	39,2 million
Small aerodrome fees	47,7 million	50,4 million	53,3 million
AIS services	2,5 million	12,2 million	6,5 million
Training	16,1 million	20,9 million	14,9 million
Technical maintenance	5,9 million	9,2 million	8,1 million
Sundry	12,8 million	15,1 million	7,9 million
Rental id Site/Beacons	474 thousand	0,3 million	-
<b>Total</b>	<b>186, 674 million</b>	<b>197 million</b>	<b>187.5 million</b>

TABLE 20: FINANCIAL KEY PERFORMANCE INDICATORS (KPIs)

KPI	2016/17 ACTUAL	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET	2019/20 TARGET
ROCE	20.1%	22.7%	22.7%	6.6%	4.4%
Current Ratio	5.2:1	3.72:1	4.6:1	4.65:1	4.34:1
Gearing	0%	0.2%	0.5%	5.3%	11.3%



## Increased operating costs and delayed payments from regional airports

### WHY IT MATTERS TO US

The current situation of the South African economy poses a challenge for both local tourism and aviation sectors. Together with the weakening, fluctuating Rand impacting on the traffic movement growth this has an impact on revenue and operational costs. The tough market conditions resulted in some airlines discontinuing operations altogether, adding further pressure on increased operational costs. This directly impacts on ATNS's financial performance and whether ATNS has adequate resources to continue operating for the foreseeable future. The delayed payments from the regional airport where ATNS provides services has also resulted in challenges. However, ATNS cannot withdraw or suspend services for these operators due to contractual obligations and as a result collection targets cannot be achieved.

### HOW WE MANAGE THE ISSUE

The management of operational costs requires commitment from all internal stakeholders to adhere to implemented interventions to maintain costs. Furthermore, the organisation is continuously improving communication pertaining to this and reports performance to the relevant committees to track performance and assess effectiveness of the implemented interventions. This includes adherence to the approved

Permission, Corporate plan and Budget and the implementation of the cost cutting measures that were approved by the Board in line with the National Treasury directive on cost containment. Adoption of these is implemented at all levels of the business.

These interventions are still in the early stages of implementation and include cutting spending on business travel and cost conscious departmental budgeting. Despite these measures operating costs increased by 2% to R1,353 billion and R1,383 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. ATNS will continually monitor the impacts of the above-mentioned interventions to maintain or minimise costs, through stricter service level agreements with third party providers and adhering to the permission human capital numbers as outlined in the permission to manage staff costs.

ATNS continued to monitor bad debts and where appropriate had to impose interest in case an operator delayed payments rather than discontinue the service. This is also monitored in line with the annual financial performance. According to ATNS policy, trade receivables generally have 30 days terms, after which the Company reserves the right to charge interest on overdue accounts from the date the indebtedness was incurred. The rate of interest charged is prime rate plus two percentage basis points.

TABLE 21: OPERATING COSTS

KPI	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET	2019/20 TARGET
Operating Cost	R1,386 billion	R1,353 billion	R1,497 billion	R1,570 billion

## Regulatory uncertainty in the Permission application

### WHY IT MATTERS TO US

As a monopoly, ATNS is regulated economically by the Regulating Committee (RC) – a statutory body appointed by the Shareholder, the DoT. The RC is empowered by the ATNS Company Act (45 of 1993) to issue a Permission to ATNS, which regulates the increase in specified tariffs that ATNS can issue and prescribes minimum service standard requirements for the regulated business. ATNS is, through the Permission, authorised to levy air traffic service charges on users (aircraft operators) for the use of air navigation infrastructure and/or the provision of an air traffic service. The permission has a five (5) year life span.

### HOW WE MANAGE THE ISSUE

#### Current Permission status 2015/16 – 2019/20

The current Permission (2015/16 – 2019/20) was approved by the Minister of Transport in terms of Section 11 of ATNS Act on 21 December 2016. The approval by the Minister authorised ATNS to levy air traffic services charges for the 2015/16 – 2019/20 period. Subsequent to the issuance of the final Permission, ATNS published the amended charges in the Government Gazette of 30 December 2016 to become effective from 1 April 2017 to 31 March 2020. The amended changes in the Government Gazette, published on 30 December 2016 superseded the Zero Tariff Increase Permission.

#### 2017 Permission status 2018/19 – 2022/23

In December 2016 the RC instructed ATNS to commence with the planning and industry consultation process towards a Permission Application for the financial year 2018/19 to 2022/23. The process of consultation with the industry stakeholders culminated in a Joint Consultation Report from ATNS and the Industry, which reflected the constructive and positive nature of the consultation meetings. Consensus was reached on most issues, although some issues still remain unresolved due to differences of opinion. ATNS and the Industry will continue to engage to build consensus in areas where the parties could not agree. ATNS's Permission application for the 2018/19 – 2022/23 Permission cycle was submitted to the Regulating Committee in November 2017.

In monitoring the implementation and performance of the permission, ATNS has established an executive committee, the Permission Planning Committee (PPC). The responsibility of this Committee is to ensure that ATNS operates within the ambit of the permission and that business operations are in support of the permission. As part of the governance process, ATNS has also established a Module Managers' Committee comprised of Senior Managers responsible for the different permission modules. It is this committee that is tasked with the implementation of the Permission as issued by the RC. The organisation continuously engages and reports performance to its key stakeholders such as the Shareholder, RC, and Users.



## Unavailability of the deployed CNS technology and reliance on 3rd party service providers

### WHY IT MATTERS TO US

ATNS Communications and Surveillance systems performance is critical to enable ATNS to provide readily available performance to airline operators. The communication, navigation and surveillance systems need to perform in line with the service level agreement and as such the Company needs to meet the set targets. The challenge experienced is that ATNS relies on third parties to meet these agreement targets. In some cases, the network availability is impacted by third party service providers, due to unreliable data and voice communication links.

### HOW WE MANAGE THE ISSUE

- Monitoring, tracking and reporting actual systems availabilities versus contracted Service Level Agreements.
- Where required, SLAs are accompanied by disaster recovery plans and mitigation strategies.
- To minimise the impact of poor-quality services from a third-party service provider, where feasible, ATNS uses.
- At least two providers, to introduce redundancy for 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.
- ATNS has back up electricity generation systems at all remote sites to enable operation continuity.



TABLE 22: CNS NETWORK AVAILABILITY

KPI	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET	2019/20 TARGET
Communications Systems Availability	99.67%	99.78%	99.67%	99.67%
Navigation Aid Systems Availability	98.65%	96.30 %	98.65%	98.65%
Surveillance Systems Availability	99.77%	99.97%	99.77%	99.77%



## IT Network Performance

### WHY IT MATTERS TO US

ATNS recognises that it is crucial to have adequate and optimal IT network infrastructure to ensure continuous business operations and high-quality customer service. Network performance is important to the service that IT provides to the business. ATNS's geographic location in relation to the main IT location, which is at Head Office, influences the response time in addressing some of the network performance issues. As a result, solutions that continuously monitor network performance revolve around the need to establish or adopt methods to monitor the network to ensure the successful protection of the business' information. The IT department is accountable for ensuring that the IT network is stable and reliable to ensure that business applications are operational. IT business applications rely on a stable network. If the network is unstable, business applications will not be reliable and efficient in providing real-time data for good decision-making.

### HOW WE MANAGE THE ISSUE

- Wide Area Network upgrade project has been initiated to address network issues. The project is in the initial stage where an as-is analysis of the network has commenced so that the real issue can be identified before a solution can be implemented. An RFP process to acquire fibre infrastructure (core sites) & fibre and wireless (other sites) is currently underway with the objective to provide an upgrade across all stations to enhance the network performance.
- Monitor infrastructure performance in line with SLA
- Real time and predictable performance monitoring of IT network
- Review and analyse IT network usage on a daily basis.

TABLE 23: ICT NETWORK AVAILABILITY

KPI	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET
Network availability	Not less than 98%	96.4%	Not less than 98%
Network utilisation	Not more than 80%	29.98%	Not more than 80%
Network Saturation	Not more than 1 hour	0.45 hours	Not more than 1 hour



## Improved supply chain management

### WHY IT MATTERS TO US

Supply chain encircles the activities beginning from purchasing, procurement, manufacturing operations, production scheduling, inventory control, material management, and facility location planning and information technology by coordinating between supplier, manufacturer, retailers and end-users. ATNS's approach to supply chain has been reviewed to increase the focus beyond procurement and focus on a complete supply chain management. The organisation developed the supply chain model which is aimed at improving supply chain management issues within the business and increase efficiency and monitor legal requirements.

### HOW WE MANAGE THE ISSUE

ATNS actively promotes increased procurement from B-BBEE enterprises and SMMEs. This is achieved through various interventions such as:

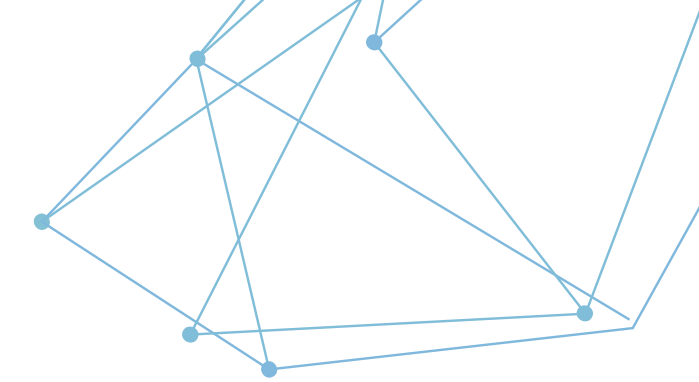
- Developing a database for B-BBEE enterprises which is updated regularly
- Setting of B-BBEE development plans with vendors where appropriate
- Demanding B-BBEE accreditation of vendors. Only certified B-BBEE certificates with SANAS logo are accepted
- Encouraging partnering arrangements with relevant vendors where required
- Set aside projects targeting designated groups or vendors
- Identifying projects/goods, works and services within the organisational value chain that can be carried out by Black Owned vendors.

Vendors are selected in accordance with the requirements of the organisation's B-BBEE score card to ensure that the organisation achieves the targeted B-BBEE level. It is further required that vendors are responsible for ensuring the implementation of this code within their organisation. ATNS requires that vendors must maintain effective management systems that are based on sound business and scientific principles, which include establishing appropriate objectives and targets, regularly assessing performance, and practicing continual improvement.

ATNS continues to consider supply chain management as one of the key business enablers and more specifically the implementation of CAPEX projects. A supply chain model was developed to ensure implementation of acquisition of goods and services at the right price, time and quantity within approved procurement processes. The model was approved by EXCO and Board for implementation in the 2017/18-2018/19 financial years. In addition, the supply chain policy and structure will be reviewed to ensure alignment with National Treasury recommendations.

In the reporting period, various areas of the model were implemented including:

- Development of business processes to support implementation
- Finalisation and approval of the supply chain departmental structure
- Approval of the supply chain policy
- Business workshops and communication programmes to communicate changes and embed these in the organisation



Furthermore, ATNS facilitated national roadshows to source service providers that meet the Company's Preferential Procurement requirements (≥51% black owned and/or ≥30% black female owned). Our Enterprise and Supplier Development strategy and implementation enables ATNS to successfully deliver on the shareholder mandate.

FIGURE 36: SUPPLY CHAIN MODEL

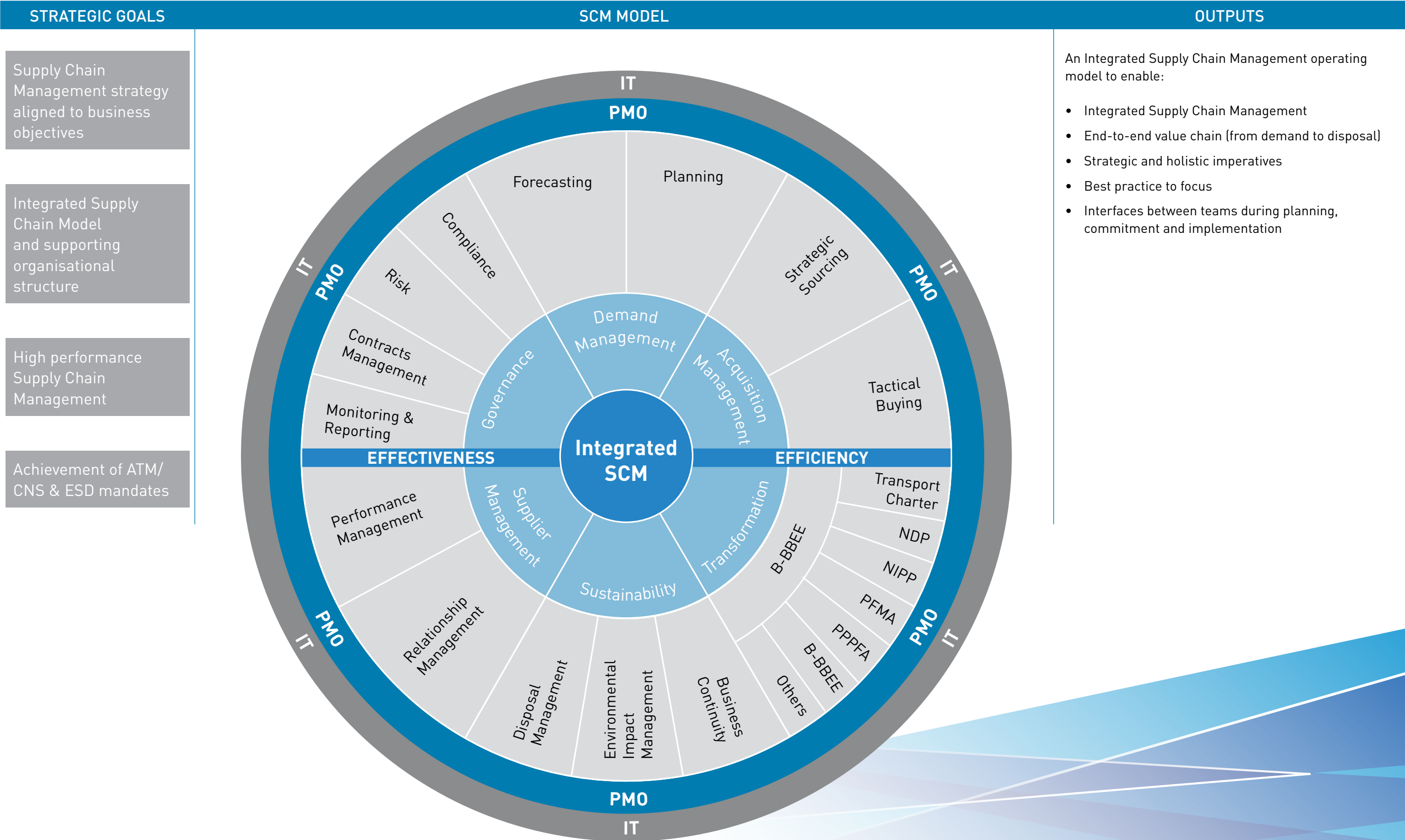




TABLE 24: SUPPLY CHAIN PERFORMANCE

KPI	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET
Spent on EME or QSE as a percentage of total procurement spent	21.70	21,70	21.70
Spent EME or QSE ≥ 50% Black Woman Owned Vendors	9%	67,15%	9%
Spent EME or QSE ≥ 50% Black Woman Youth Owned Vendors	6%	51,90%	6%
Spent EME or QSE ≥ 51% Black Owned Supplier with Disabilities	1%	0%	1%

## Disaster recovery and business continuity plan

### WHY IT MATTERS TO US

Business Continuity Management is a process that enables ATNS to proactively identify and plan to minimise the impact of risks that could affect its objectives, operations and infrastructure. Should the business be unable to respond in a disaster it could have serious consequences and impact ATNS critical mission activities. The economy of the country will be severely impacted should the organisation be unable to respond to a disaster. ATNS could suffer severe operational disruptions, major safety incidents, loss in revenue, and damage to the organisation's reputation should a large-scale disaster materialise and ATNS not be able to respond or continue to operate. Hence a BCP (Business Continuity Plan) and DRP (Disaster Recovery Plan) need to be in place. The issue can originate internally as well as externally, e.g., due to cyber threats, terrorism and force majeure. Affected stakeholders include employees, customers, suppliers, shareholder, regulator, business, and users.

### HOW WE MANAGE THE ISSUE

To mitigate this risk, ATNS has developed a Business Continuity Directive approved by EXCO. Business impact assessments for all mission critical activities for the department and regional airports are reviewed annually, as these are the inputs for developing a disaster recovery plan and business continuity plan. Simulations are conducted yearly to ensure that the plan remains relevant and improves on the lessons learned. The key performance indicators are monitored by the number of disaster incidents that have taken place within the organisation and trends from external sources. Continuous monitoring of performance is conducted. No disasters occurred during the reporting period.

## Physical security of our operation, assets and people

### WHY IT MATTERS TO US

ATNS understands that air traffic control is a significant component of the air transport system and a critical national priority, therefore, the safety and security of all resources within our operations is a key focus area. The emerging risk of physical security requires ATNS, as a significant aviation role player, to

ensure that services provided have minimal safety implications. This implies that we need to continuously keep abreast of new technology as well as threats that may impact on our ability to provide safe and reliable operations.

The enhancement of physical security of the Company's remote CNS sites, which are vulnerable to vandalism and theft which lead to subsequent loss or disruption in service, is one of the critical focus areas. The maintenance and equipment replacement costs have financial implications and it affects the business operations. The reported vandalism and theft cases have increased substantially over the years, impacting negatively on the service level agreement (SLA) that ATNS has with its clients and customers, increased risk and safety occurrences and company reputation.

ATNS's non-regulated business strategy encompasses the ability to provide services and products to external markets within the African continent which exposes internal stakeholders to security risks outside the country. Therefore, as part of the security strategy, measures are implemented to ensure that employees conducting business in various countries are fully secure. Furthermore, the joint ventures and partnerships with global external suppliers, which is critical for sustainable growth, adheres to the security strategy.

### HOW WE MANAGE THE ISSUE

ATNS's physical security management interventions are aimed at securing our communication, navigation and surveillance systems and employees on duty. Policies and procedures are in place to ensure implementation of the measures identified.

#### Asset Management

ATNS implements systems and processes to safeguard assets, which include the verification of fixed assets to ensure security. In the reporting period, a consultant was appointed to assist in the physical verification and barcoding of assets. Access control for all ATNS sites is practiced to minimise loss and security events resulting from hijacking and theft. Furthermore, to ensure compliance an insurance policy is available and implemented, with the insurance claims statistics being analysed, quarterly, in order to implement interventions.

#### Awareness Programmes

Education and awareness has been identified as one of the interventions from an internal security perspective. The programme includes implementing the following awareness interventions to staff to ensure all stakeholders are aware of precautions to take while on duty.

## Cyber Security Threat

### WHY IT MATTERS TO US

The ANSP environment collectively forms part of an integrated system to provide a comprehensive coverage for national airspace. Sharing of air traffic management information holds many benefits but there is also an emerging risk such as cyber security which is on the increase globally. This implies that we need to continuously keep abreast of new technology as well as threats that may impact on our ability to provide safe and reliable operations.



CNS systems together with the ATMS system provide the ATC with the capacity to provide services and data to the system users such as airlines. The risk of these services being interrupted, or the data integrity being compromised can lead to a loss of life and could prejudice airlines due to compromised system data.

HOW WE MANAGE THE ISSUE

ATNS is aware that this issue is broader than ATNS boundaries, therefore, our approach as an organisation includes understanding what programmes and policies have been adopted globally and nationally in order to develop appropriate interventions. Our management interventions are aimed at information technology.

Cyber security policy and framework

In the current year, we developed a cyber security policy and framework which entails the ATNS approach in managing cyber threats and pro-active interventions to enhance the position of the organisation against threats. Ongoing collaboration with internal and external stakeholders is key to successfully implementing such interventions. The outlook for the next two years includes developing a cyber security implementation plan and develop key performance indicators to help us track success of our interventions.

Awareness Programmes

We also embarked on a cyber security internal awareness programme which is aimed at ensuring that ATNS users are aware of information security threats and concerns and are equipped to support company security policy and the overall cyber framework.

Education and awareness has been identified as one of the interventions from an internal security perspective. The programme includes implementing the following awareness interventions:

- Web-based sessions (Intranet)
- Posters, 'do and don't lists', and checklists
- Screensavers and warning banners/messages
- Newsletters
- Computer-based sessions
- In-person, instructor-led sessions
- 'Brown bag' sessions

FOCUS AREA:  
DEVELOPING OUR HUMAN CAPITAL



General employee numbers, composition and equity

WHY IT MATTERS TO US

Human Resource staff planning is considered a major focus area for the organisation as it provides the resources required to drive organisational strategy and service delivery. The alignment of departmental strategies to implement the organisational strategy, alignment to King IV, corporate governance, advancement in technology, peak traffic demand and peak capacity requirements define the number of human resources required.

HOW WE MANAGE THE ISSUE

ATNS strives to achieve its staff compliment as per the Human Capital Plan, which is agreed upon by the ATNS Board and the Executive Management Committee. Factors taken into consideration when developing the Human Capital Plan are:

- Building capacity – To provide the skills and capacity required to support current and future technology and services;
- Diversifying the workforce - To become a transformative organisation which invests in its people;
- Provision of safe and efficient air traffic management services;
- Levels of traffic growth and associated increase in demand for services;
- Retaining front line human resources in the face of an international skills shortage;
- Advancement in technology and the increased levels in automation;
- Implementation of the HR Business Partner Model to enhance HR's efficiency in delivery service excellence within the organisation.

The implementation of the Human Capital Plan is supported by key Human Capital policies and processes, including Recruitment and Selection, Talent Management, Performance Management, General Staff Incentive Scheme, Remuneration and Reward & Recognition.

TABLE 25: HUMAN CAPITAL PERFORMANCE

KPI	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET	2019/20 TARGET	%
Headcount	1148	1220	1290	1291	
Males	608	666	671	665	54%
Female	540	554	619	626	45%
People with Disability	35	47	45	45	3.3%



TABLE 26: EMPLOYEE DEMOGRAPHICS

EMPLOYEE DEMOGRAPHICS													
Occupational Levels	MALE					FEMALE					Total	AIC %	Female %
	African	Indian	Coloured	White	Foreign Nationals	African	Indian	Coloured	White	Foreign Nationals			
Top Management	2	0	0	0	0	0	0	0	0	0	2	100	0
Senior Management	7	0	0	1	0	2	0	0	0	0	10	90	20
Professionally Qualified and Experienced Specialist	16	2	0	6	0	13	0	2	3	0	42	78.57	42.86
Skilled Technical Workers Junior Managers	308	44	47	194	10	351	35	37	80	5	1111	73.99	45.27
Semi-skilled and Discretionary Decision	18	0	4	1	0	3	0	0	0	0	26	96.15	11.54
Unskilled and Defined Decision Making	6	0	0	0	0	23	0	0	0	0	29	100	79.31
Sub-total	<b>357</b>	<b>46</b>	<b>51</b>	<b>202</b>	<b>10</b>	<b>392</b>	<b>35</b>	<b>39</b>	<b>83</b>	<b>5</b>	<b>1220</b>	<b>75.41</b>	<b>45</b>
%	29.26	3.77	4.18	16.56	0.82	32.13	2.87	3.2	6.8	0.41			



## Enabling employee wellness, improving morale and enabling effective communications with our employees



### WHY IT MATTERS TO US

ATNS has an explicit role to play in contributing to employee development through various programmes. ATNS, as a leading ANSP in Africa, can only maintain this standing if we continue to employ and foster capable and knowledgeable people, who are aligned with the company's culture of safety, sustainability, and professional excellence. The Company's wellness programme aims at enabling a work life balance. This includes the following:

- ATNS leadership to lead and encourage the health and wellness strategy to all employees
- To improve health outcomes
- To create an enabling working culture
- ATNS employees to own and sustain their wellness through opportunities created by ATNS

Areas such as keeping our employees motivated and creating an environment that enables open and honest engagement amongst all staff and between leadership is key in successfully delivering our objectives. Therefore, communication with impact is key in improving staff morale, low staff morale has an impact on individuals as well as organisational performance, thus is one of the key focus areas.

### HOW WE MANAGE THE ISSUE

#### Employee engagement and communication

In 2017, ATNS conducted the Barrett Survey across the organisation as part of embedding ATNS values amongst employees. The survey results indicated that there were certain behavioural issues such as inadequate communication and working in silos and does not leverage on creating a shared vision and

integration across the business. Leadership interventions are being implemented to address matters relating to communication of the organisational strategic direction and position across all levels of the business. In line with the ATNS marketing and communication strategy, a detailed roll out plan will be implemented in the next financial year which includes communicating issues that have an impact on our employees and the business long term strategic direction and position. Ongoing interventions such as embedding the ATNS values programme, improvement of performance management and continuous engagement survey will be monitored to assess effectiveness.

#### ATNS Values Day Leadership Meeting

ATNS hosted its second Values Day leadership meeting on 17 July 2017 as part of an endeavour to embed common and shared values that drive organisational culture and performance. Results of the Barrett Survey were analysed and areas and process for performance coaching were deliberated on. Leadership was identified as key in improving entropy score to enable improved employee morale and participation. An action plan for the next financial year will be developed to address the results. The engagement amongst leadership and staff is paramount and the entropy score in itself is a measure of disconnect that may exist at various levels within an organisation and part of understanding results and crafting an action plan is also about taking accountability for corporate efforts.

#### Health and wellness programmes implemented by ATNS

- ICAS - Employee Assistance Programme
- Discovery Health and Bonitas
- NMG
- ATNS HR and Wellness Team

### Employee wellness Strategic areas

FIGURE 37: EMPLOYEE WELLNESS STRATEGIC AREAS

	ESTABLISHMENT OF HEALTH AND WELLNESS COMMITTEE	<ul style="list-style-type: none"> <li>To drive the strategy and implement initiatives</li> </ul>
	PROACTIVELY IDENTIFY AT-RISK INDIVIDUALS	<ul style="list-style-type: none"> <li>Via wellness days, entry medicals and surveys</li> </ul>
	PROACTIVELY GET PEOPLE TO ACCESS CARE/ONWARD REFERRAL	<ul style="list-style-type: none"> <li>Discovery managed care programme, ICAS, additional pathology tests</li> </ul>
	PROACTIVE MEMBER INTERVENTION	<ul style="list-style-type: none"> <li>Ensure proactive interventions are put into place for high-risk employees</li> </ul>
	TARGETED INFORMATION AND EDUCATION	<ul style="list-style-type: none"> <li>Ensure employees are effectively communicated to receive relevant information</li> </ul>
	HEALTHY ACTIVITIES	<ul style="list-style-type: none"> <li>Fun, sports activities, healthy vending machines, fruit drops, Vitality assessments</li> </ul>
	EXECUTIVE AND LEADERSHIP INVOLVEMENT	<ul style="list-style-type: none"> <li>Ensure participation of executives at all ATNS wellness initiatives</li> </ul>
	SUPPORT FOR EMPLOYEES	<ul style="list-style-type: none"> <li>Create time for employee participation</li> </ul>
	EMPLOYEE REWARDS	<ul style="list-style-type: none"> <li>Reward employees to ensure motivation and sustainability</li> </ul>

### ATNS Celebrates Africa Day

ATNS commemorated Africa Day at the Aviation Training Academy which emphasises the organisation's commitment to achieving not only national socio-economic development, but also contributing to Africa as a whole.

FIGURE 38: ATNS AVIATION TRAINING ACADEMY STAFF AND ITS PRINCIPAL, MS TENDAI NDOU (FAR RIGHT)



### Broad-Based Black Economic Empowerment with ATNS

#### WHY IT MATTERS TO US

ATNS is committed to Broad-Based Black Economic Empowerment (B-BBEE). ATNS recognises the importance of an integrated approach to B-BBEE in the transformation of the Aviation sector, as well as for the long-term sustainability of South Africa thereby, addressing change and inclusiveness at all elements of the B-BBEE scorecard in the organisation and ensuring continued stability and prosperity. In this context, ATNS transformation strategy is based on the following principles:

An inclusive approach to B-BBEE, which is broad-based and deliberately advances previously disadvantaged communities, ensuring that the benefits are spread as widely as possible. ATNS as a company has a role to play in the empowerment, economic development and social upliftment of the broader society. However, the empowerment of ATNS staff, and remote rural areas are a priority.

#### HOW WE MANAGE THE ISSUE

ATNS's approach to B-BBEE is intended to strike a balance in performance of all the elements of the B-BBEE scorecard. The approach is supported by EXCO and the Board. At the beginning of the financial year a target is set to be achieved at the end of the financial year, while every quarter, an internal assessment is conducted to measure performance in all elements against the set overall B-BBEE target for resources to be channeled to elements where ATNS is underperforming. This exercise plays a pivotal role in enabling ATNS to meet its set target.

ATNS, as a Public Entity, is not measured against the ownership component. ATNS is measured against the Generic Scorecard and the old Public Sector Codes mainly because the draft Transport Sub Sector Codes have not yet been approved by the Minister and Parliament. ATNS have been pro-active to align with the draft Codes. The Codes measure performance in respect of Management Control, Employment Equity, Skills Development, Preferential Procurement, Enterprise Development and Socio-Economic Development. According to the external verification assessment, as at 31 March 2018, ATNS obtained a score of 85.42 points which translates into a Level 2 B-BBEE Contributor which a good improvement as compared to the previous years, where ATNS obtained a level 3 rating. The Company is in the process of developing a Transformation strategy which will inform ATNS improve the current B-BBEE rating and create sustainability value in the economy and society.



TABLE 27: B-BBEE PERFORMANCE SCORECARD

B-BBEE SCORECARD PERFORMANCE		
SCORECARD ELEMENT	2017/18 TARGET	2017/18 ACTUAL
Management Control	10	7.36
Employment Equity	15	13.51
Skills Development	25	16.09
Preferential Procurement	30	30.00
Enterprise Development	15	13.47
Socio Economic Development	5	5
<b>Total</b>	<b>100</b>	<b>85.42</b>

## Enterprise Development

### WHY IT MATTERS TO US

The South African Broad Based Black Economic Empowerment legislation requires organisations to contribute 3% of the net profit after tax to support Enterprise and Supplier Development, ATNS believes that supplier development in the main stream should go beyond compliance and focus on creating economic value and social upliftment and overall sustainability. ATNS Enterprise and Supplier Development approach is intended to develop black owned service providers to participate in the Communication Navigation and Surveillance (CNS) domain which forms part of ATNS's core business.

### HOW WE MANAGE THE ISSUE

ATNS is aware that there is minimal participation of black owned service providers in the aviation sector and more especially in the CNS domain, as a result the organisation is currently taking a proactive step to empower emerging suppliers through supplier incubation programmes intended to upskill and enable suppliers to participate in the main stream of the core business. The organisation has identified areas of training and capacitation for the incubation programme. The programme entails identifying potential suppliers who are interested in the sector. These suppliers will undergo training and development including technical and business management skills to enable them to efficiently operate and ultimately be ready to participate in the main stream.

The main objective of developing these suppliers amongst others, is to prepare them for partnerships with multinationals in future projects to acquire the skills for the installation and maintenance of the equipment procured from Original Equipment Manufacturers. The ATNS supply chain policy is structured to support the organisation's Enterprise Development objectives.

As part of the annual B-BBEE score card, ATNS enterprise Development performance was assessed. The organisation scored 13.47 points out of 15, based on the score card verification outcome. The Company is currently in the process of reviewing the Enterprise Development Plan and allocation resources to enhance performance in these area.

TABLE 28: ENTERPRISE DEVELOPMENT PERFORMANCE

ENTERPRISE DEVELOPMENT	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET
Expenditure on supplier development initiative as a % of NPAT	3%	2,69%	3%



## Corporate Social Investment

### WHY IT MATTERS TO US

Community empowerment forms part of ATNS's goal to contribute to the DoT's departmental outcomes through the roll-out of Information and Communication Technology (ICT) at schools nationally. By providing schools with ICT infrastructure, the Company contributes to the Department of Basic Education mandate to develop and empower learners from disadvantaged communities, by enabling them to gain access to ICT resources for advanced teaching and learning.

### HOW WE MANAGE THE ISSUE

ATNS aims to participate in uplifting the previously disadvantaged communities through education related programs. This is done through the provision of the ICT and Science laboratory equipment at various identified schools in the country.

The selected schools have been identified as schools that required urgent assistance in terms of school infrastructure and facilities and, shall empower learners in a conducive environment fit for quality education. Furthermore, to expose learners to careers in the science and technology fields, a career exhibition that focuses on grade 7-12 learners will form an integral part of the handing over ceremony. Aviation being an industry that is forever growing, the goal of the career exhibition is to promote the industry as a career of choice amongst learners.

In the past year, ATNS signed a Memorandum of Agreement with the South African Agency for Science and Technology Advancement (SAASTA) and Lasec SA (Pty) Ltd. The aim of this collaborative project is to establish a sustainable model for Learner and Educator Development and Support in the Science Technology Engineering and Mathematics (STEM) subjects. In the current reporting year, ATNS scored full points on CSI mainly because the resources are channeled towards black schools in rural disadvantaged areas.

### 2017/18 Corporate Social Investment projects

TABLE 29: CSI EXPENDITURE

PROJECT NAME	COSTS (R)
Free State Winter School project	307 583,63
Oliver & Adelaide Tambo Foundation	100 000.00
Partnership with ACSA – Teacher and Learner Development Programme	500 000.00
Khalushi Secondary School Winter School	45 000.00
Computer Desks	106 025.00
Donation of Groceries	126 727.55
Artwork for computer lab and Physical Science lab	60 450.00
Oliver Tambo Centenary	254 795.19
Branding and collateral	261 400. 00
Mfundo Development Foundation	240 000.00
Nyetsi Holdings	442 323.48
Olwande Communications	77 400.00
<b>TOTAL</b>	<b>2 521 704.85</b>

ATNS CSI spend was above the required spend of 1% net profit after tax and resulted in the B-BBEE score of 5% in the overall score card.

## ATNS's Winter School Project

ATNS, in conjunction with the Free State Department of Education, sponsored a winter school camp in Ventersburg- to help enhance learner performance in Mathematics, Physical Science and English. This programme was conducted from 3 to 14 July 2017. The winter school camp was also hosted at Ventersburg Intermediate High School and catered for 162 Grade 12 learners from sixteen schools from the surrounding villages.

As part of the programme, Human capital delivered presentations to learners on the ATNS bursary programme, teenage pregnancy and abuse of female learners. At the official launch, ATNS donated branded schools bags, recycle pen and pencil sets, scarfs and beanies to all learners.

ATNS has embarked on a 3D Mobile Simulator which is aimed at driving career awareness campaigns nationwide for learners to have an idea of what the ATC role really entails for them to make an informed decision in making ATC a career of choice.

**FIGURE 39: ATNS WINTER SCHOOL PROJECT, VENTERSBERG, FREE STATE**



**FIGURE 40: ATNS WINTER SCHOOL PROJECT, VENTERSBERG, FREE STATE**

## Mandela Month project

Nelson Mandela devoted his life to children, fighting for their right to freedom during apartheid and afterwards. He wanted them to feel loved and to give them the best possible future, saying they are our country's asset,' and for this reason, ATNS contributed in Nelson Mandela day by donating resources to an orphanage in Mdantsane. This includes installing new doors, new desks and new curtains.

**FIGURE 41: EAST LONDON (FAEL) ATCs PARTICIPATING IN NELSON MANDELA DAY AT MASIZAKHE ORPHANAGE, MDANTSANE, EASTERN CAPE**



**FIGURE 42: EKURHULENI AFTER CARE PROGRAMME AT MAYIBUYE PRIMARY SCHOOL ON MANDELA DAY**

As part of community investment, ATNS visited the Ekurhuleni After Care Programme at Mayibuye Primary School on Mandela Day. The programme targets the poorest segment of society to provide a secure environment for children to play, get assistance with homework and receive cooked meals. The programme was created because there were many orphans and vulnerable children who did not have any adults to supervise them after school for a variety of reasons, and there was no food at their homes. The children were, therefore, roaming the streets exposing themselves to risky situations.



**FIGURE 43: DEPUTY MINISTER OF TRANSPORT, HON SINDI CHIKUNGA AND ATNS CEO, THABANI MTHIYANE**

The Deputy Minister of Transport, Hon. Sindisiwe Chikunga, and ATNS CEO, Thabane Mthiyane, spent Mandela Day hosting learners from all high schools in Barberton, Mpumalanga. Pupils were oriented about the career and bursary opportunities made available in the transport sector by the Department of Transport and its agencies. They were taken on a tour to the Aviation Training Academy. The aim of the tour was to equip learners with a thorough knowledge of the aviation industry, particularly Air Traffic Management (ATM). Approximately twenty-five learners were flown from the Kruger International Airport in Mpumalanga to OR Tambo International Airport to experience travelling via air transport.



## Youth Month & OR Tambo Centenary Celebration

June is celebrated as Youth Month in South Africa, paying tribute to the school pupils and ordinary citizens who lost their lives during the 16 June 1976 uprisings in Soweto. The 2017 theme was "The year of OR Tambo: Advancing Youth Economic Empowerment." In celebration of OR Tambo's vision, ATNS continues to roll out Information and Communication Technology and Science laboratories in impoverished communities across the country. This involves the supply of ICT equipment and relevant furniture, and training workshops related to computer literacy for teachers. The science programme includes the supply of physical and life science equipment as well as training workshops for science educators. ATNS also sponsored Mathematics, Science and English vacation camps for both educators and learners. The camps were aimed at enhancing the performance of learners in the Science, Technology, Engineering and Mathematics subjects. ATNS has also invested in Teacher Development programs to ensure that Educators are properly skilled with various teaching techniques and understanding of STEM (Science Technology Engineering & Mathematics).



FIGURE 44: OR TAMBO TOWER,  
OR TAMBO AIRPORT – JOHANNESBURG



FIGURE 45: IN CELEBRATION OF YOUTH  
MONTH, THE VARIOUS STATIONS HOSTED  
HIGH SCHOOL STUDENTS ACROSS THE  
COUNTRY.



## Developing and retaining critical skills and institutional knowledge

### WHY IT MATTERS TO US

Investment in training and development continues to remain a high priority for ATNS. This also entrenches ATNS's commitment to the National Skills Development Strategy addressing historic inequalities. ATNS capability in leading sector specific training is key to enabling industry leadership within the African continent and beyond. Our ATA academy is well recognised globally and has won awards including IAIA recognition. The sector specific skills training provided by the ATA strengthens the Company's ATM intellectual capital and aligns to industry trends to enable long-term sustainability of the institution, to support the overall strategic goals of the Company and international expansion strategy. Furthermore, our contribution to enhancing skills in the Maths, Science and Engineering fields in the communities we operate in is key to our performance as a state-owned entity and supports the Shareholder's developmental mandate to address societal challenges and leave a meaningful positive legacy in society.

Intellectual Knowledge has been identified as a critical asset for ATNS. ATNS has a critical and unique set of knowledge acquired and developed over many years. ATNS faces challenges in retaining critical skills mainly in its core business. These are individuals in whom the Company has invested significant time and funding to develop the skills base. As result the organisation can leverage such experienced individuals to meet the current and long-term objectives. In line with the talent management programme adopted, there must be a consistent pipeline feed to meet the demands of our organisation. Business continuity and stability becomes challenging as we are constantly in the process of recruiting and developing employees.

### HOW WE MANAGE THE ISSUE

#### Skills Development

The process of tracking employees' training and feedback from line management on how they experience the impact/ROI from training budget expenditure is hampered by the manual system which is currently used. Although design work has been completed, there is still limited functionality to deal with the demands of capturing ROI for training. The group-based training from the corporate training calendar and specific department requests are easier to track and will be reported on soon.

The corporate competency library has been completed and is being designed into the Individual Development Plan template that will be managed online with a reporting capability as well as allowing managers to view and manage employee development and the departmental skills gaps. This facility is ERP dependent.

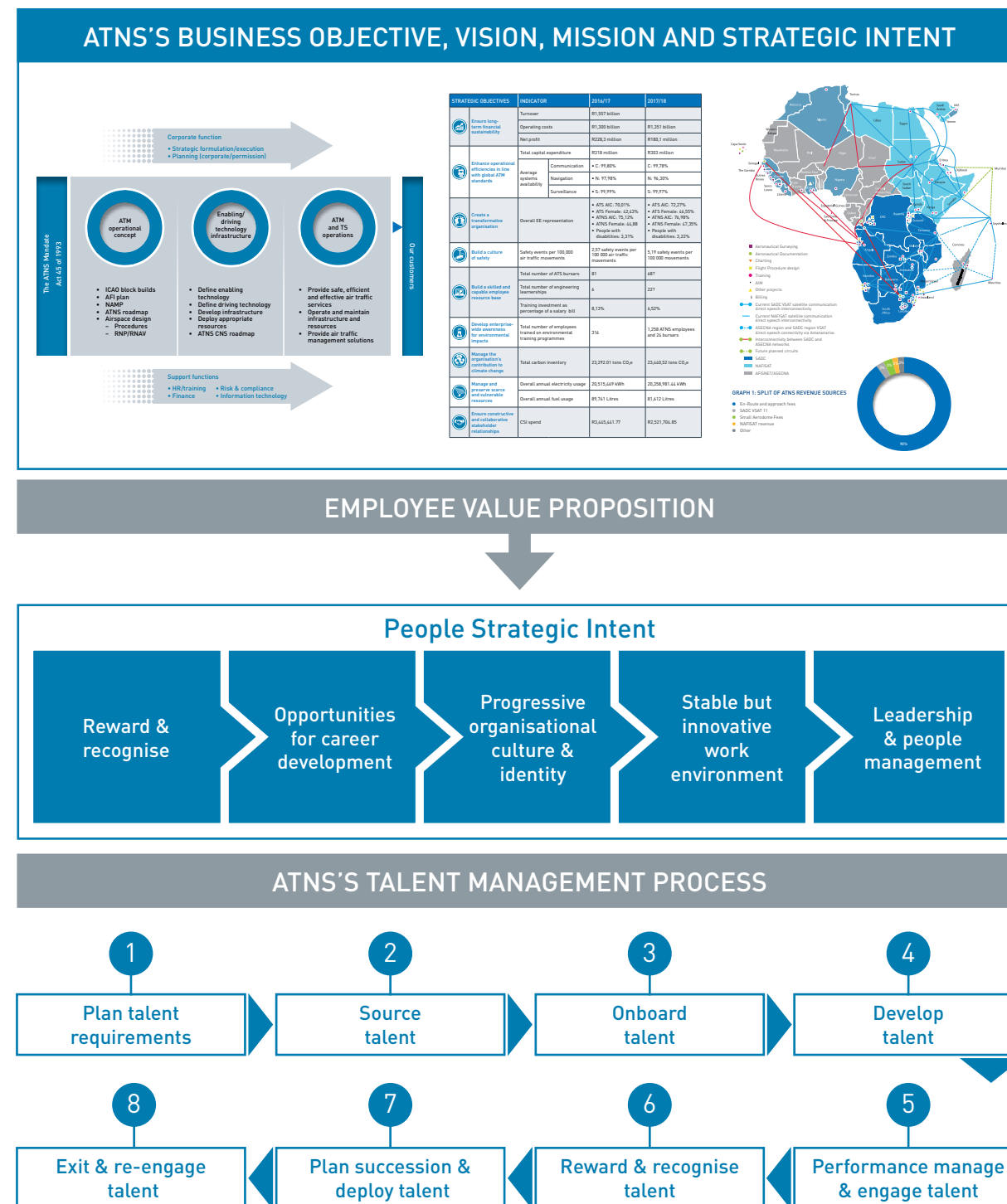
- Coaching for performance is rolled out as part of the values embedding capacitation for all managers across organisational levels. The kick off meeting was hosted on 17 July 2017 and the next milestone is checking the entropy score shifts in March 2018.
- ABET (Adult Basic Education & Development) expanded to a regional level (FAOR, ATA, KZN and Free State). 2 ABET learners will be placed on retirement in the 2018 fiscal period. However, an addendum has been extended to allow them to write their final exams in May 2018.
- The Corporate Training Calendar (divided into courses for all staff, existing managers and WDP). Staff can book training slots online for the following courses offered: EQ, assertiveness, conflict to collaboration, business writing skills, minute taking, and finance for non-financial managers plus effective presentation design and delivery skills.
- The Women and Youth Development Programme Framework has been completed and initiatives towards streamlining the curriculum and the development of the programmes have commenced. Quarterly reviews on the integration of the programme into the business is being communicated to the relevant forums.

#### Retaining and Development of critical skills

ATNS's talent management framework is based on three tools: being business objective orientated, people or employee orientated and actual processes and practices. The talent management process is closed linked to the succession planning and future desired leaderships attributes to support organisational goals. The process is set out below. The talent process is distinctly aligned to the organisation's strategic need to drive performance and results to meet future requirements. In understanding this, we need to consider employees' needs and expectations which means that issues regarding reward and recognition, career development as well as enabling environment and culture is central to retaining talent. ATNS's approach and process to plan, identify and retain talent is outlined below.



**FIGURE 46: ATNS TALENT MANAGEMENT FRAMEWORK**



## Knowledge management

During the reporting period, ATNS developed a knowledge management strategy which forms part of the overall organisational information technology strategy, which includes focus areas to ensure that:

- Knowledge capture, sharing and retention is centralised, and it is not viewed as part of day-to-day work. Understanding the science of knowledge management and exploitation of the available tools and technologies is critical to ensuring knowledge retention.
- Capacitating of departments to enable a stretched approach to all departments and stations within the organisation.

Furthermore, various initiatives have been undertaken internally in support of our strategic objectives. These include:

- Brown Bag Sessions – knowledge sharing forum
- Legacy Project – targeting key employees with critical knowledge to share knowledge with identified employees (beneficiaries). The project includes both retiring employees and Subject Matter Experts.
- Project Lessons Learned – harvesting knowledge in key projects, identifying key lessons from projects with the objective of sharing in future project implementation.
- Knowledge Banks – a central repository for documents and knowledge shared by teams and/or projects, that is created on SharePoint.



TABLE 30: SKILLS DEVELOPMENT STATISTICS

SKILLS DEVELOPMENT STATISTICS													
	MALE					FEMALE							
Occupational Levels	African	Indian	Coloured	White	Foreign Nationals	African	Indian	Coloured	White	Foreign Nationals	Total Female & Male	AIC %	Female %
Eng. Learner/ Graduates	7	2	0	0		12	0	1	0		22	100	59
Graduate Support	1	0	0	0		6	0	0	0		7	100	85.71
ATCO Bursars/ Trainee	0	0	0	0		2	0	1	0		3	100	100
ATSO Bursars/ Trainee	2	0	0	0		41	0	0	0		43	100	95.35
PWD Learnerships	4	0	0	0		6	0	0	0		8	100	62.5
AIMO Bursars/ Trainee	0	0	0	0		0	0	0	0		0		
<b>Sub-total</b>	<b>13</b>	<b>2</b>	<b>0</b>	<b>0</b>		<b>66</b>	<b>0</b>	<b>2</b>	<b>0</b>		<b>83</b>	<b>100</b>	<b>81.93</b>
% of total skills development beneficiaries	15.66	2.41	0	0		79.52	0	2.41	0				
ATS	39	2	4	0		44	2	1	1				
<b>No. of employees</b>	<b>370</b>	<b>48</b>	<b>51</b>	<b>202</b>	<b>10</b>	<b>458</b>	<b>35</b>	<b>41</b>	<b>83</b>	<b>5</b>	<b>1303</b>	<b>76.98</b>	<b>47.35</b>
% of employees	28.4	3.68	3.01	15.5	0.77	35.15	2.69	3.15	6.37	0.38			

### Air Traffic Control programme

ATNS continues to train and develop this scarce resource at its Aviation Training Academy in Johannesburg. This includes training of a fully qualified Air Traffic Controller (ATC) stretching over a period of 3 to 5 years depending on the operational requirements at the time. On average, the organisation incorporates approximately 60 individuals from the ATS Bursar Programme into the organisation annually who later progress into becoming Air Traffic Controllers.

Overall 2017/18 has been a very progressive year during which 68 bursars commenced the bursar training programme against a target of 60 (51 females and 17 males). The bursar group consisted 100% of individuals from the AIC group and 75% female.

### Engineering programmes

Engineering Learnership programme - the group consists of six Engineering Learners annually. The demographic composition of the group on the Engineering Learnership Programme is five African females and one Coloured females.

Engineering Graduate Development Programme - the group consists of five Engineering Graduates annually. The demographic composition of the group is four African males and one African female. The programme runs for a period of 24 months. The group which commenced during 2016 completed the 24 month programme on 31 March 2018 and have been permanently absorbed into the business.

### Graduate Development programme

- Graduate Programme for Support functions – the group consist of eight graduates consisting of seven African females and one African male.
- Tertiary Bursary Programme (Thusanani Foundation) – for the 2017/18 year, the group consisted of ten tertiary learners and the demographic composition was six females and four males.
- People with Disabilities Learnership programme - the group consists of 10 learners who are at NQF4 level with the aim of exposing them to the aviation industry and absorbing them permanently into the business. The demographic composition is five African females and three African males.

### Child of employee Bursary Programme

- Child of employee Bursary Programme. The beneficiaries of this programme are the children of the ATNS employees who are at an unskilled and defined decision-making level. For 2017/2018 ATNS funded 30 beneficiaries comprised of twelve African females, seven African males, nine white females, and two white males.

# Techno Girl Programme

Techno-Girl Programme exposed 10 African female learners to the aviation industry and work environment across 5 regions.

TABLE 31: TRAINING KEY PERFORMANCE INDICATORS

KPI	2017/18 TARGET	2017/18 ACTUALS	2018/19 TARGET	2019/20 TARGET
ATS Bursaries and Engineering Learnerships	<ul style="list-style-type: none"> <li>ATS – 60</li> <li>Engineering Learnerships – 6</li> <li>ETS – GEDP – 10</li> <li>Unemployed Graduates – 0</li> </ul>	<ul style="list-style-type: none"> <li>ATS – 68</li> <li>Engineering Learnerships – 6</li> <li>ETS – GEDP – 10</li> <li>Unemployed Graduates – 7</li> </ul>	<ul style="list-style-type: none"> <li>ATS – 60</li> <li>Engineering Learnerships – 6</li> <li>ETS – GEDP – 5</li> <li>Unemployed Graduates – 10</li> </ul>	<ul style="list-style-type: none"> <li>ATS – 60</li> <li>Engineering Learnerships – 6</li> <li>ETS – GEDP – 4</li> <li>Unemployed Graduates – 10</li> </ul>
Manage training pipeline for ATS and technical staff	<ul style="list-style-type: none"> <li>ATCO 3 – 226</li> <li>ATCO2 – 37</li> <li>ATCO1 – 121</li> <li>ATSO – 138</li> <li>AIMO – 55</li> <li>Engineering Technicians – 74</li> <li>Engineering Satellite Technicians – 5</li> </ul>	<ul style="list-style-type: none"> <li>ATCO 3 – 221</li> <li>ATCO2 – 37</li> <li>ATCO1 – 134</li> <li>ATSO – 197</li> <li>AIMO – 61</li> <li>Engineering Technicians – 78</li> <li>Engineering Satellite Technicians – 5</li> </ul>	<ul style="list-style-type: none"> <li>ATCO 3 – 226</li> <li>ATCO2 – 37</li> <li>ATCO1 – 121</li> <li>ATSO – 138</li> <li>AIMO – 55</li> <li>Engineering Technicians – 74</li> <li>Engineering Satellite Technicians – 5</li> </ul>	<ul style="list-style-type: none"> <li>ATCO 3 – 226</li> <li>ATCO2 – 37</li> <li>ATCO1 – 121</li> <li>ATSO – 138</li> <li>AIMO – 55</li> <li>Engineering Technicians – 74</li> <li>Engineering Satellite Technicians – 5</li> </ul>
Offer Engineering graduates	<ul style="list-style-type: none"> <li>Engineering graduates – 16</li> </ul>	<ul style="list-style-type: none"> <li>Engineering graduates – 16</li> </ul>	<ul style="list-style-type: none"> <li>Engineering graduates – 16</li> </ul>	<ul style="list-style-type: none"> <li>Engineering graduates – 16</li> </ul>
Engineering learnership	<ul style="list-style-type: none"> <li>6 Engineering Learnerships</li> </ul>	<ul style="list-style-type: none"> <li>6 Engineering Learnerships</li> </ul>	<ul style="list-style-type: none"> <li>6 Engineering Learnerships</li> </ul>	<ul style="list-style-type: none"> <li>6 Engineering Learnerships</li> </ul>
Train People living with disability on a learnership programme	<ul style="list-style-type: none"> <li>PWD's – 10</li> </ul>	<ul style="list-style-type: none"> <li>PWD's – 10</li> </ul>	<ul style="list-style-type: none"> <li>PWD's – 10</li> </ul>	<ul style="list-style-type: none"> <li>PWD's – 10</li> </ul>
Offer Bursary Programme Thusanani	<ul style="list-style-type: none"> <li>Thusanani – 10</li> </ul>	<ul style="list-style-type: none"> <li>Thusanani – 10</li> </ul>	<ul style="list-style-type: none"> <li>Thusanani – 10</li> </ul>	<ul style="list-style-type: none"> <li>Thusanani – 10</li> </ul>
Offer Funding for Techno girl programme	<ul style="list-style-type: none"> <li>Techno-girls 10</li> </ul>	<ul style="list-style-type: none"> <li>Techno-girls 10</li> </ul>	<ul style="list-style-type: none"> <li>Techno-girls 10</li> </ul>	<ul style="list-style-type: none"> <li>Techno-girls 10</li> </ul>
Offer Bursary to Child of the employee	<ul style="list-style-type: none"> <li>Child of employee – 30</li> </ul>	<ul style="list-style-type: none"> <li>Child of employee – 30</li> </ul>	<ul style="list-style-type: none"> <li>Child of employee – 30</li> </ul>	<ul style="list-style-type: none"> <li>Child of employee – 30</li> </ul>
Adult Basic Education and Development (ABET)	<ul style="list-style-type: none"> <li>20 Employees</li> </ul>	<ul style="list-style-type: none"> <li>20 Employees</li> </ul>	<ul style="list-style-type: none"> <li>20 Employees</li> </ul>	<ul style="list-style-type: none"> <li>20 Employees</li> </ul>
Conduct Short Courses to employees	<ul style="list-style-type: none"> <li>Short Courses – 116</li> </ul>	<ul style="list-style-type: none"> <li>Short Courses – 116</li> </ul>	<ul style="list-style-type: none"> <li>Short Courses – 116</li> </ul>	<ul style="list-style-type: none"> <li>Short Courses – 116</li> </ul>

# ATNS continues to empower women through its air navigation courses

The Air Traffic Academy (ATA) boasts of an exceptionally women empowering intake for their 2018 Air Traffic Controller course which talks to the Company's policy. The current course will last for 17 weeks, with a total of 19 exams that the trainees will need to write and achieve an average pass rate of at least 70%. Throughout the duration of the course, all trainees will be exposed to the simulated ATNS towers. This will be followed by one-week Aviation English Course and then placement in one of the ATNS towers at the airports where they will work closely with qualified ATCOs who will assist with on-the-job training. After the training is completed, trainees will be fully licensed and may move on to become on-the-job facilitators.

ATA trains Air Traffic Controllers of the highest caliber and there are often attempts to recruit them to work in other countries around the world.

FIGURE 47: FEMALE AIR TRAFFIC CONTROL TRAINEES



# Safety culture and performance

## WHY IT MATTERS TO US

Safety is the cornerstone of our operation and a business imperative not only for our direct customers, but also for the public at large. The public relies on ATNS to provide a safe and efficient transportation service to get to their destinations. We, as an organisation, acknowledge the significance of providing a safe service to the aviation industry to support long term economic and social sustainability of the business and the country. This aligns to our vision and motto of providing safer skies for all. Safety remains the overriding priority in the ATM environment. We ensure that all our activities are undertaken in a manner that complies with aviation legal requirements. We acknowledge that the environment we operate in is prone to incidents due to human, technical and other related errors. ATNS strongly forbids behaviour that deviates from our safety policies. We continuously investigate and report safety incidents using industry processes and matrices. In implementing remedial and mitigation measures, we implement programmes and initiatives to enhance safety culture within the business.



## HOW WE MANAGE THE ISSUE

### Risk safety index

ATNS utilises the Risk Safety Index (RSI) matrix to measure the various levels of risk in terms of probability and severity categories. This is a mechanism to increase visibility of risks and assist management decision making. ATNS's performance target is set between 44-56, which will place it in the "mid-manageable" range.

To be able to determine which safety events fall within the acceptable, manageable and intolerable regions, the safety risk tolerability matrix from the ICAO Safety Management Manual (DOC 9859) Chapter 5 was utilised to determine these regions. Based on the scoring system, calculations using the Risk Analysis Tool adopted from Eurocontrol, were conducted which determined which values would fall into the acceptable, tolerable and intolerable regions.

- Between 4 and 24 (RED) – Intolerable region
- Between 28 and 68 (YELLOW) – Manageable region
- Between 72 and 100 (GREEN) – Acceptable region

The figure below depicts the RSI classification for the period 1 January 2018 to 31 March 2018.

TABLE 32: RSI CLASSIFICATION TABLE FROM JANUARY -MARCH 2018

		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)

Thirteen safety events in the intolerable range were recorded in the period under review;

- seven (7) losses of separation,
- three (3) runway incursion and
- two (2) ATC operational events and
- one (1) AIRPROX event

Out of the total events recorded, two events were classified to be above the set target of a range between 44 and 56 (ranging from 64-76) which puts them in the Manageable and Acceptable region of the RSI matrix respectively. Three events fell inside the target range and were at RSI's between the values of 44 and 48. Five events fell below the target range and were at RSI's of between 32 and 36 although they are still within the manageable region. The last three events were also below the target; however, these fell in the region of 8-20 of the RSI matrix indicating a high.

### Safety Ratio

Air Traffic Service (ATS) related safety events per 100 000 movements (Safety Ratio) for the twelve months ending March 2018 was calculated at 5.19 safety events per 100 000 movements. The graph below outlines performance with thirteen (13) ATS related safety events being recorded in the last quarter. The number of events for the rolling year ending March 2018 was recorded at 55 events.

The investigation pertaining to these events are ongoing, including comprehensive root-cause analysis. Continuous analysis of investigation reports has highlighted key (internal) contributing factors (high-level) as the following prevalent during 2017/2018 calendar year with the majority human factor related:

- Decision errors – incorrect/late decision/plan and judgement errors
- Training and experience – training gaps/OJTI technique/experience issues
- Documentation and Procedures – SOP's
- Perception errors – see identification/detection errors and accuracy of perceived information
- Memory errors – forgot to monitor or check/act and previous action forgotten
- Action errors – record no information (essential traffic information not being passed) and select/position manually
- Pilot/controller communications – non-standard R/T & ATC transmission – clarity/interpretation
- Team factors - coordination/unclear work practises & roles/responsibilities
- Event occurred within 30 minutes of taking control of the position
- Non-conformance – team non-conformance (routine behaviour)
- Loss of separation with instructor (safety net) and student on duty

TABLE 33: SAFETY EVENT KEY PERFORMANCE INDICATORS

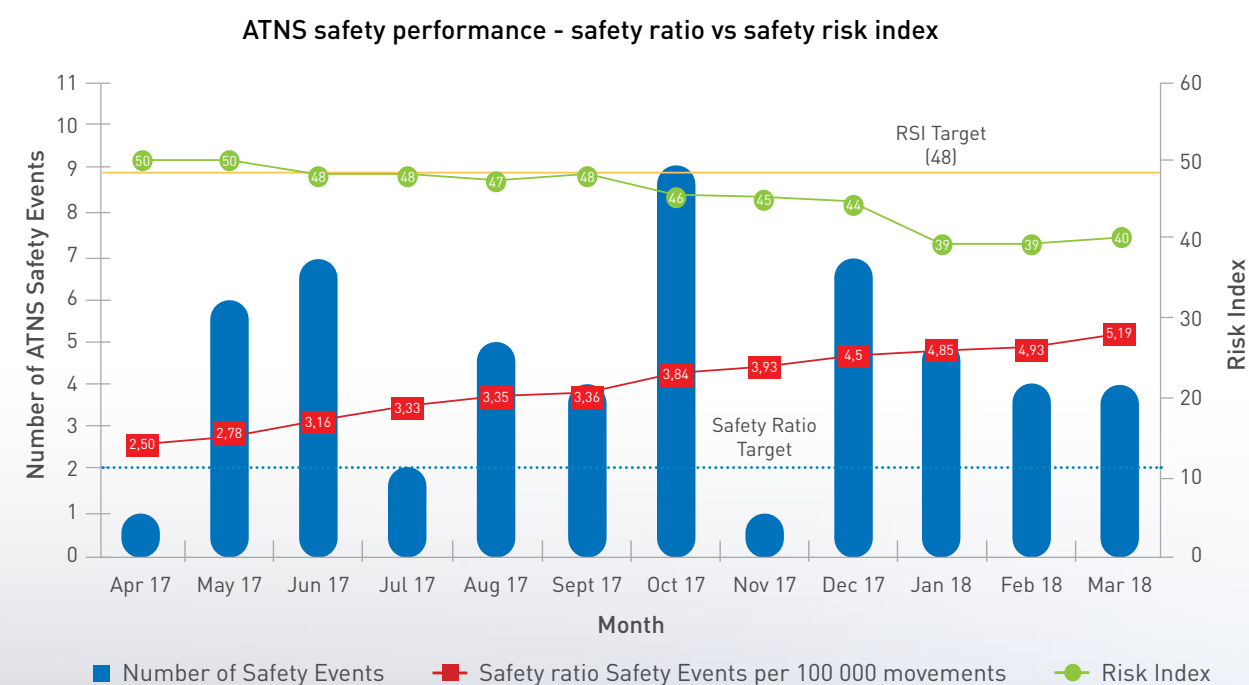
SAFETY EVENT INTENSITY	2016/17 ACTUAL	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET
Safety events per 100,000 air traffic movements	2.57 safety events per 100 000 air traffic movements	2 safety events per 100 000 air traffic movements	5.19 safety events per 100 000 air traffic movements	2 safety events per 100 000 air traffic movements
Risk Safety Index	47	44-56	40	44-56



## Outlook

- Alignment/integration of Risk and SMS processes.
- Conduct study of safety events in the period 2013-2017 to identify gaps in training and propose recommendations for inclusion into ATA and ATS operational training.
- Continue SMS improvement activities (safety metric review, continue with alignment of OT processes with SMS, review safety investigation and safety audit methodology-Safety II principles, develop safety promotion strategy).

FIGURE 48: SAFETY RATIO AND RISK SAFETY INDEX (RSI) FOR 2017-18



## Responding to climate change impacts

### WHY IT MATTERS TO US

South Africa is a signatory member of the UNFCCC's Paris Agreement and is, therefore, committed to the reduction of greenhouse gases and to combating climate change. South Africa, as a developing state, is still reliant on fossil based fuel and as a result is one of the world's most carbon-intensive economies. Therefore, climate change impacts are evident, which has resulted in national objectives focusing on a low carbon economy to ensure that economic and social efforts contribute to the reduction of the burning of fossil fuels.

ATNS's response to climate change is aligned to various industry requirements and the legislative framework. As an ANSP, the Company is guided by the International Civil Aviation Organisation's (ICAO) standards and recommended practices (SARPs) which address environmental protection. The International Civil Aviation Organisation has three environmental goals for ANSPs that guides the aviation community: to consider the impact of aircraft emissions on local air quality, the reduction of noise pollution and the reduction of emissions resulting from the industry's activities. The industry focuses on integrating environmental sustainability into business practices by focusing on technological improvements, operational efficiency, infrastructure development and global market-based measures. Hence, ATNS must address environmental issues.

International and national legislation influenced the development of the ATNS Sustainability and Environmental Strategy which effectively guides the implementation of identified sustainability objectives aimed at integrating environmental sustainability into the Company wide strategy in both regulated and non-regulated business operations.

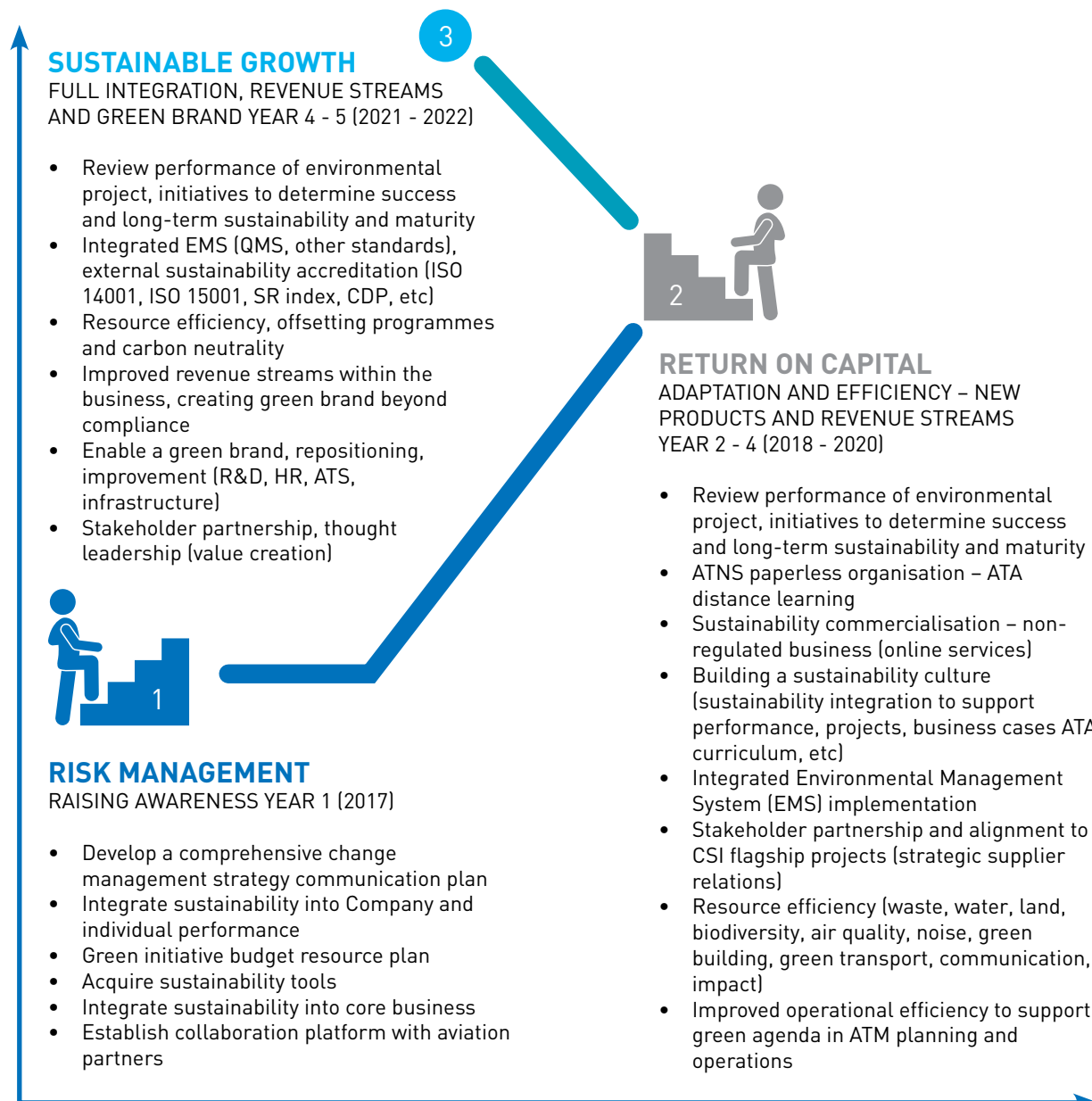
ATNS's Board approved the Sustainability and Environment Strategy which aims at contributing to sustainable growth of the aviation industry and creating an ATNS green brand that supports the organisation's strategic goals. As an Air Navigation Services Provider and a state entity, ATNS, has a significant role to play towards South Africa achieving its sustainability objectives. The Department of Transport has mandated the organisation to enable safe development of civil aviation with the responsible consideration of our impacts on the economy, society and the environment. In managing climate change impacts, ATNS implements operational efficiency programmes which will enable offsetting initiatives to reduce emissions from business operations.

The Sustainability governance committees are responsible for supporting and enabling an environment where stakeholders are constantly educated and made aware of requirements that contribute to the Sustainability and Environmental Strategy objectives. The ATNS Environmental Policy Statement and associated policies and procedures ensure implementation.

For the reporting period, Year 1 initiatives of the Sustainability and Environmental Strategy were implemented, which resulted in the achievement of the six objectives (detailed below):



FIGURE 49: SUSTAINABILITY AND ENVIRONMENTAL STRATEGY ROADMAP



## HOW WE MANAGE THE ISSUE

### Managing Carbon Emissions

ATNS's carbon footprint inventory is completed quarterly, guided by the Greenhouse Gas Protocol and compared to the baseline year (2013/14). The calculation is based on Defra emission factors (UK Department for Environment, Food, Rural Affairs), which provide internationally used conversion factors that enable businesses to determine emissions from business activities, products and services.

Carbon footprint reporting has enabled ATNS to recognise the environmental impacts resulting from the business operations which contribute directly or indirectly to greenhouse gas emissions. The understanding of emissions released can ensure that measures are introduced to reduce the overall carbon footprint. Furthermore, ATNS reports on Scope 1, 2 and 3, with electricity being the major contributor to the

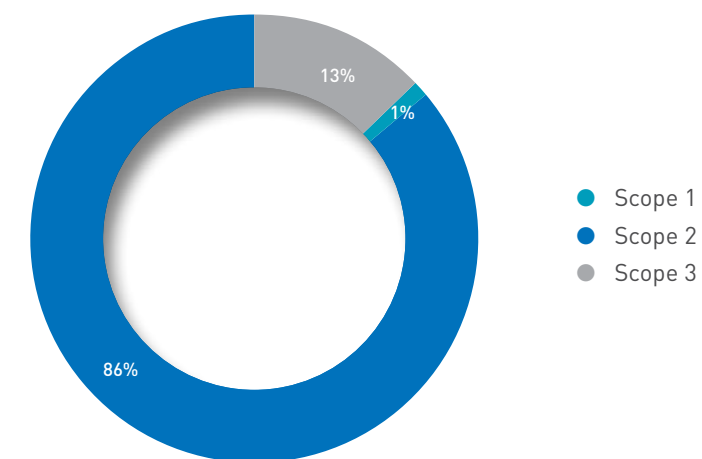
Company's carbon footprint inventory. Therefore, efforts to invest in renewable energy need to be promoted as well as energy efficiency.

The following facilities have been included in the carbon inventory:

- ATNS operations at regulated airports;
- ATNS's head office and training academy; and
- ATNS's remote sites (Communication, Surveillance and Navigational (CNS) equipment.

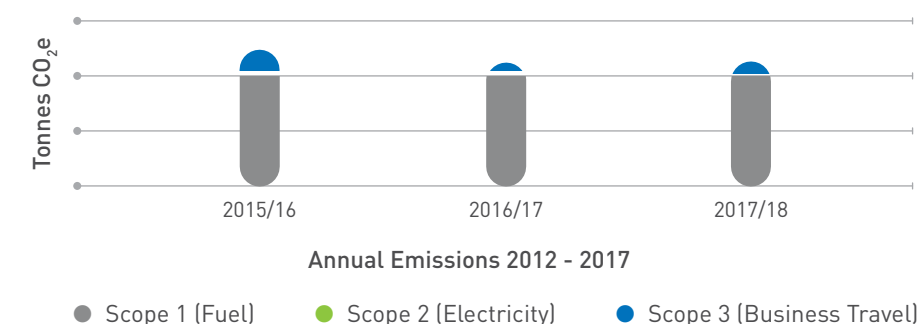
In the 2017/18 financial year, 23 440.52 tonnes CO<sub>2</sub>e resulted from ATNS operations. The emission distribution resulted in 86% CO<sub>2</sub>e from scope 2 (electricity), 13% from scope 3 and 1% from scope 1 (Figure 49 below).

FIGURE 50: ATNS ANNUAL CARBON FOOTPRINT 2017/18



The graph below illustrates the annual carbon footprint in relation to the baseline year of 2013/14 when the Company first started reporting on all the scopes i.e. Scope 1, 2 and 3. The total emissions for Scope 1 amounted to 251.62 tonnes CO<sub>2</sub>e, for Scope 2 the amount was 20 092.17 tonnes CO<sub>2</sub>e and for Scope 3 it was 3 097.73 tonnes CO<sub>2</sub>e.

FIGURE 51: ATNS ANNUAL CARBON FOOTPRINT INVENTORY



## Performance

TABLE 34: CARBON EMISSIONS KEY PERFORMANCE INDICATORS

KPI	2017/18 ACTUAL	2018/19 TARGET
Total Emissions from Scope 1	251.62 tonnes CO <sub>2</sub> e	*
Total Emissions from Scope 2	20 092.17 tonnes CO <sub>2</sub> e	*
Total Emissions from Scope 3	3 096.73 tonnes CO <sub>2</sub> e	*
Overall Emissions, including Scope 3	23 440.52 tonnes CO <sub>2</sub> e	*

\*Establishment of baselines

### Emission Intensity:

TABLE 35: EMISSION INTENSITY KEY PERFORMANCE INDICATORS

EMISSION INTENSITY	UNIT MEASURE	2015/16 ACTUAL	2016/17 ACTUAL	2017/18 ACTUAL
Per Air Traffic Movement (ATM)	CO <sub>2</sub> e /ATM	0.02	0.03	0.02
Per Revenue	CO <sub>2</sub> e /R million	16.9	13.15	14.7
Per Employee	CO <sub>2</sub> e /Employee	20.9	16.46	19.2

FIGURE 52: EMISSION INTENSITY PER EMPLOYEE & REVENUE

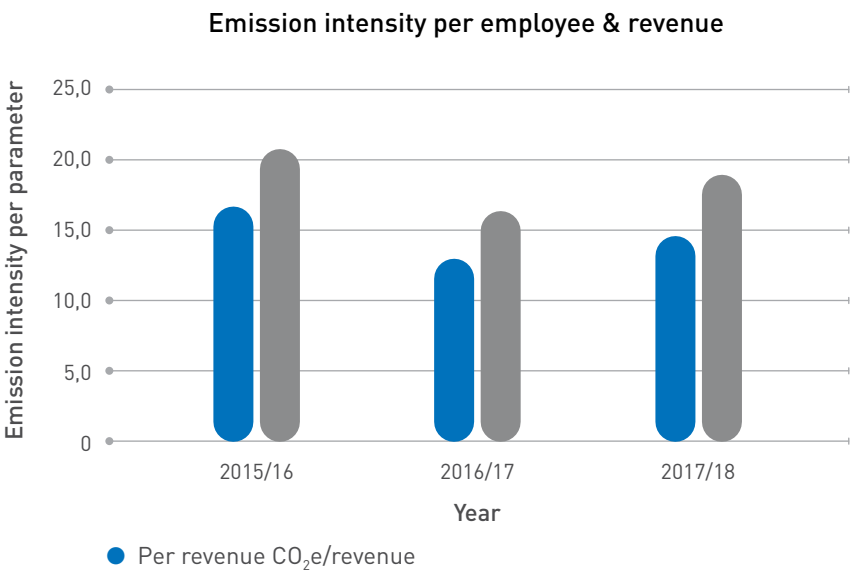
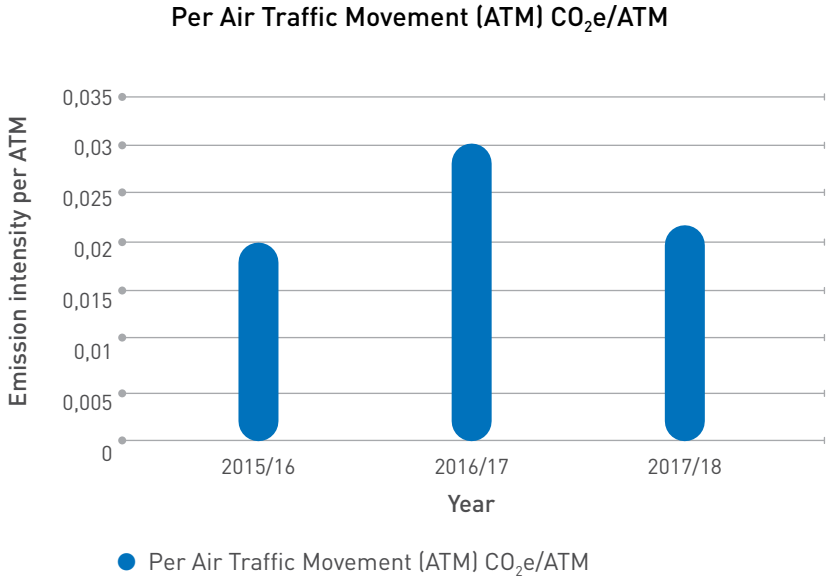


FIGURE 53: EMISSION INTENSITY PER ATM



## Environmental Performance- Air Traffic Management Operations

ATNS is committed to implementing more efficient measures in designing procedures which will ensure that aircraft optimise the airspace to gain not only fuel savings, but also cost savings and ultimately emission reductions. The Company aims to ensure that the deployment of aviation infrastructure has minimal environmental impacts and that alternative energy sources contribute to the industry goal.

Furthermore, ATNS compiles an annual performance report which aims to provide information regarding the environmental performance as a result of air traffic management service provision in support of the ICAO global environmental sustainability goals. The report further outlines environmental benefits as a result of implementation of operational efficiency and air traffic management planning processes such as Performance Based Navigation in line with ICAO standards.

Various programmes enhance the efficiency of air traffic management operations and address overall environmental performance. These include:

- **Performance-Based Navigation (PBN) procedures:** guided by the PBN Roadmap which provides a high-level strategy for the evolution of navigation capabilities to be implemented in three timeframes: near term (2008-2012), mid-term (2013-2016), and long term (2017 and beyond). Furthermore, the implementation rests upon two key navigation concepts; RNAV and RNP, which encompasses instrument approaches, Standard Instrument Departure (SID) and Standard Terminal Arrival (STAR) operations, as well as en-route continental, oceanic and remote operations.
- **Airport – Collaborative Decision Making (A-CDM):** is a process which aims to improve the operational efficiency of all airport operators by reducing delays, increasing the predictability of events during the progress of a flight and optimising the utilisation of resources.
- **Wake Turbulence Re-Categorization – WAKE RECAT:** is the safe decrease in separation standards between certain aircraft.



### Performance:

TABLE 36: ATM PERFORMANCE

KPI	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET
RNP APCH (APV Baro-VNAV or Augmented GNSS)	27 RNP APCH	27 Instrument Runways at 15 airports= 16 RNP APCH at 8 airports 10 RNP APCH at 5 Air Force Bases Total: 53 RNP APCH	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
Continuous Descent Operations (CDO)	Report impact of CDO on environment	8 843 tonnes of fuel saved *27 944 tonnes of CO <sub>2</sub> e	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
Continuous Climb Operations (CCO)	Report impact of CCO on environment	40 749 tonnes of fuel saved *128 767 tonnes of CO <sub>2</sub> e	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
Airport – Collaborative Decision Making (A-CDM)	Report impact of A-CDM on environment	14 237 tonnes of fuel saved *44 989 tonnes of CO <sub>2</sub> e	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
Wake – RECAT (arrivals)	Report impact of Wake-RECAT on environment	544.53 tonnes fuel saved *1 721 tonnes CO <sub>2</sub> e	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
Gauteng Area PBN Plan (GAPP) RNP FAOR	Approved 4 design report for submission to SACAA	Approved 4 design report for submission to SACAA	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
Gauteng Area PBN Plan (GAPP) SID/STAR FAOR	Approved 12 design report for submission to SACAA (RNAV 1 SID/STAR)	Approved 12 design report for submission to SACAA (RNAV 1 SID/STAR)	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme
Independent Parallel Runway operations (GAPP) FAOR	Approved 4 ILS design report for submission to SACAA	Approved 4 ILS design report for submission to SACAA	Implementation of Gauteng Airspace PBN Plan and Operational Efficiency programme

\*Calculations based on ICAO rule of thumb guidance document

The outlook for enhancing environmental performance of air traffic management operations will include the acquisition of an emission reporting tool to measure the efficiency of published procedures with regards to implementation of Continuous Climb Operations and Continuous Descent Operations from upper airspace and terminal areas. This will enable ATNS together with the aviation stakeholders to improve flight efficiency, capacity as well as to reduce the environmental impact in the terminal areas.

### Energy Management

ATNS aims to manage energy by ensuring that fuel and electricity consumption is reduced through efficient planning and operation of equipment and vehicles. This effort is in response to resource conservation, climate protection and cost savings.

In the reporting period, ATNS initiated a smart metering project in response to the electricity audit conducted in 2015. The objective of the metering system is as follows:

- Measure and analyse the current electricity consumption trends
- Determine a baseline for the major electricity users to assist in implementing interventions to lower the Company's energy footprint
- Monitoring and tracking electricity consumption for an efficient electricity saving plan

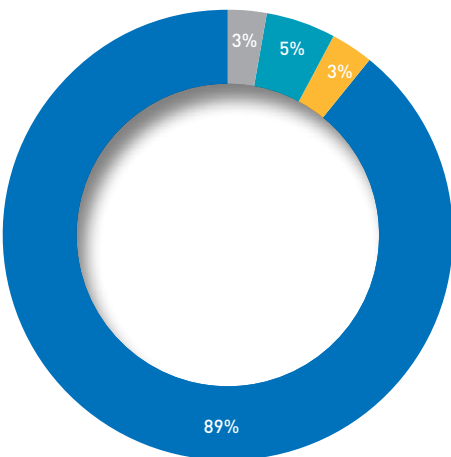
The first phase of the project involved the deployment of smart meters at selected ATNS business units and sites; the second phase will include the rest of ATNS locations. Data from the selected centres and equipment sites will enable reporting of monthly power consumption. This will ensure that electricity usage is monitored and makes provision for opportunities to implement energy efficiency measures.

### Performance

TABLE 37: ELECTRICITY CONSUMPTION PERFORMANCE

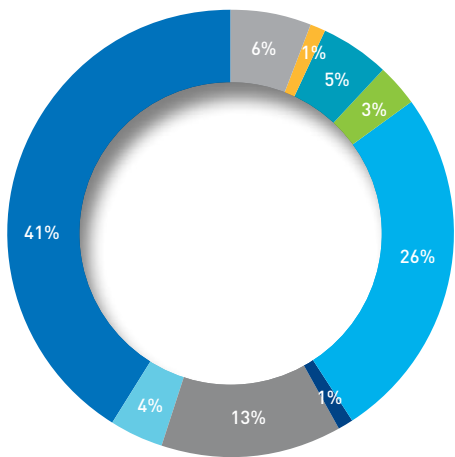
KPI	2016/17 ACTUAL	2017/18 ACTUAL
Total Electricity Consumption (kWh)	20,154,721.16	20 358 981.44
Total Fuel Consumption (litres)	95 965	81 612

FIGURE 54: SUPPLIER ELECTRICITY CONSUMPTION



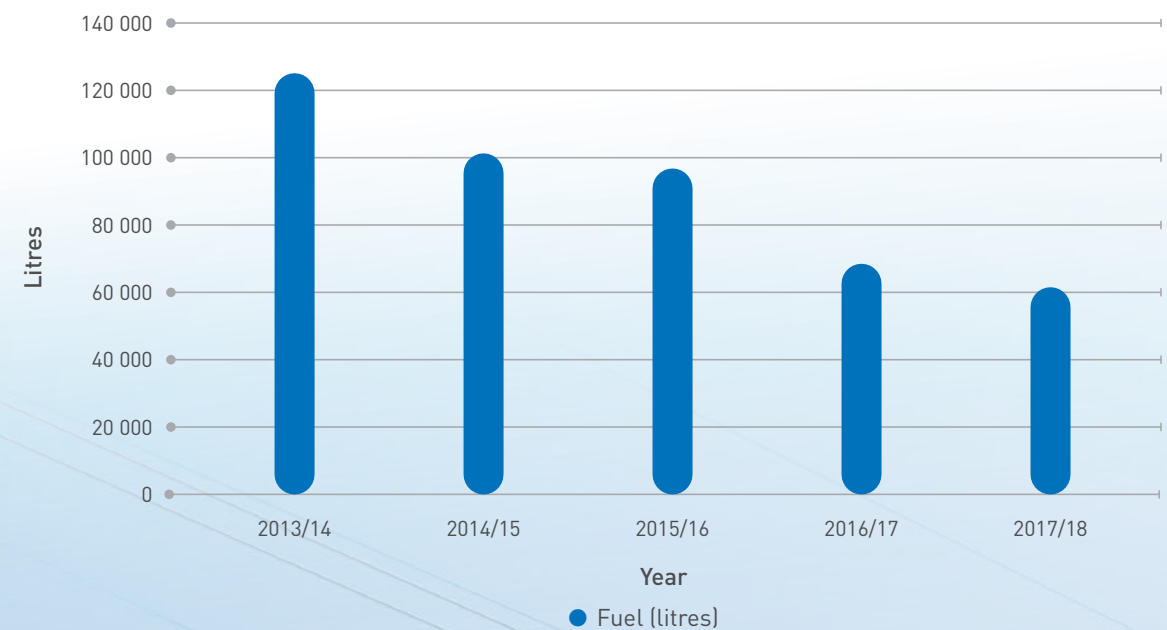
- ACSA
- Municipalities
- UMFA GTS
- Eskom
- Denel 0%

FIGURE 55: ACSA ELECTRICITY CONSUMPTION



- OR Tambo Airport
- Kimberly Airport
- East London Airport
- Bloemfontein Airport
- George Airport
- ATA
- Port Elizabeth Airport
- Durban Airport
- Cape Town Airport
- Upington Airport 0%

FIGURE 56: ATNS ANNUAL FUEL CONSUMPTION



ATNS’s fuel consumption is reported for all leased and owned vehicles and stationery generators within ATNS’s control. A baseline with reduction targets will be set in the 2018/19 financial year.

Energy Intensity

Performance

TABLE 38: ENERGY INTENSITY

KPI	2016/17 ACTUAL	2017/18 ACTUAL
Per employee (Employee/MWh)	0.06	0.06
Per revenue (R million/MWh)	0.08	0.08
Per Air Traffic Movement (ATM/MWh)	52.1	52.1
Per Air Traffic Movement (ATM/L)	13	12.9

FIGURE 57: ELECTRICITY INTENSITY

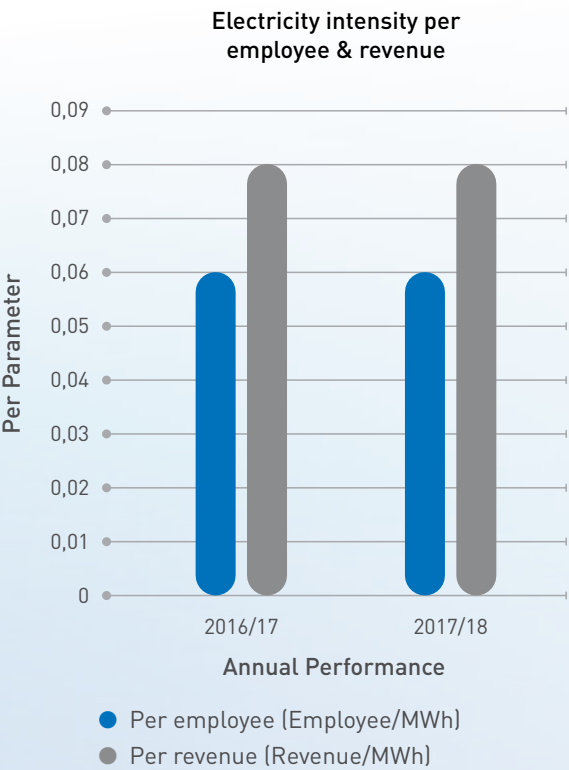
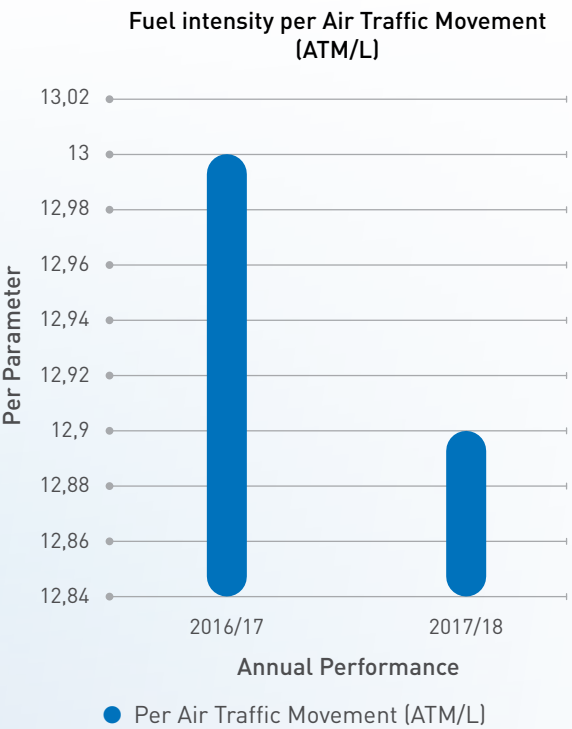


FIGURE 58: FUEL INTENSITY



Outlook

ATNS is committed to ensuring energy efficiency measures are investigated and implemented to address overall energy efficiency, including fuel and electricity. Electricity forms the majority of the Company’s carbon footprint inventory. Therefore, priority has been given to implementing reduction measures specifically to reduce electricity consumption. Thus, the long-term electricity efficiency management of the smart metering project’s objectives are summarized as follows:

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

In a continued effort to contribute towards reducing emissions, the Operational Efficiency Programme (OEP) is an initiative to identify airspace design and tactical improvements, which will enable ATNS together with its stakeholders to improve flight efficiency, capacity as well as reduce the environmental impact in the terminal areas. Improving flight efficiency in our service delivery will become critical going forward in line with environmental objectives and efficiencies required to support the airline cost reduction and environmental efficiency programs.





# Improved natural resource efficiency

## WHY IT MATTERS TO US

The Department of Transport is the Shareholder for ATNS and Outcome 6 of the Shareholder compact refers to an “Increased contribution of transport to environmental sustainability,” which is in response to the National Development Plan’s Outcome 10: “Protect and enhance our environmental assets and natural resources.”

ATNS operations do impact on natural resources. Therefore, improving operations to address these impacts remains a key focus for the Company. ATNS is a member of CANSO , which is part of ICAO’s CAEP (Committee on Aviation’s Environmental Protection) and is represented in the Environmental Working Group (ENVWG). The Working Group forms a platform where environmental topics related to efficient air traffic management solutions are initiated and communicated to improve emissions reduction and noise management, and to enhance overall environmental protection.

ATNS addresses community concerns around noise pollution through a collaborative community engagement process, together with Airport Company of South Africa and local authorities. Furthermore, adherence to the National Environmental Management: Protected Areas Act (NEMPA) is being investigated to ensure that there is minimal impact on surrounding protected fauna at the identified areas. Therefore, the design of air traffic management procedures takes into cognisance sensitive, high conservation areas as well as the maintenance and introduction of infrastructure equipment. Current biodiversity is considered during the planning, design, implementation, operational and decommissioning phases of all projects.

## HOW WE MANAGE THE ISSUE

### Water Management

As a state-owned entity, ATNS recognises the national drive to conserve water in the midst of the national water crisis, particularly in the Western Cape province. Even though the Company’s water consumption is mainly for domestic use, water conservation is prioritised in overall management of water at all our sites and aims to implement various interventions to manage water accordingly. ATNS integrates water efficiency in projects that require building refurbishments and promotes green building principles such as flow regulating taps and toilets as well as rainwater harvesting. Furthermore, initiatives to implement water meters are currently being investigated as well as the installation of water tanks as alternative water sources.

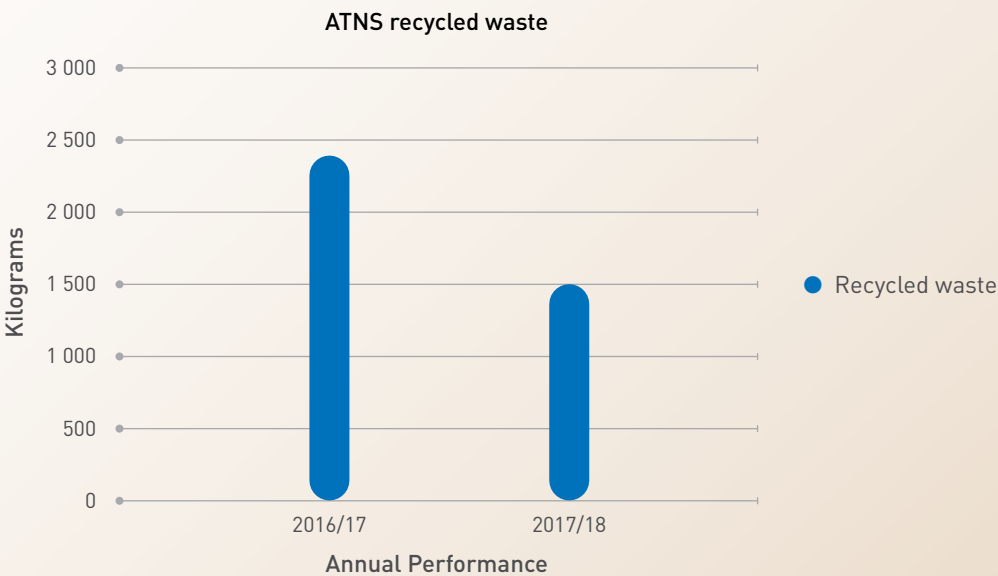
### Waste Management

ATNS’s waste management approach is aligned to the Waste Hierarchy principles and our Integrated Waste Management Policy aims to enforce proper waste management practices at our buildings and project sites. Both general and hazardous waste are addressed to ensure compliance and achieving the business sustainability objectives.

TABLE 39: TOTAL WASTE RECYCLED

KPI	2016/17 ACTUAL	2017/18 ACTUAL
Recycled Waste	2 399 Kgs	1 519.37 Kgs

FIGURE 59: TOTAL WASTE RECYCLED



ATNS’s waste management is yet to be fully implemented and thus, the data reflected above is for the inception phases.

### Biodiversity Management

ATNS recognises that biodiversity management is crucial for promoting sustainable use of the natural environment, as outlined in the NEM: Biodiversity Act (Act 10 of 2004). ATNS project and infrastructure sites promote conservation of the environment during operations.

In addition to route and procedure design which must consider the NEM: Protected Areas Act, the installation of Communication, Navigation and Surveillance (CNS) equipment considers the natural environment and mitigation measures to reduce potential negative environmental impacts. Environmental compliance is addressed through the implementation of ATNS’s Environmental Policy as well as related policies and procedures. The National Environmental Management Act (NEMA) is considered for all projects.

FIGURE 60: VHF TRANSMITTER SITE AT CAPE TOWN INTERNATIONAL AIRPORT



## Environmental Management Impact Assessments for key strategic projects

For the period under review, environmental assessments were conducted for the applications for authorisations for the ATNS ISANDO Property Development project and the Decommissioning of the masts located the ISANDO site. The ISANDO Property Development projects forms part of the Company's strategic projects as not only will the development enhance the current office facilities, it will also be a Green Star rated building aligned to ATNS's commitment to sustainability objectives, with a certification from the Green Building Council South Africa.

The key environmental aspects that will be included in the development are:

- Office management in-line with the Green Star SA accreditation
- Building management system
- Implementation in accordance with the approved environmental authorisation
- Water management
- Waste management
- Emissions management
- Materials management
- Land use management
- Energy management

A service provider will be appointed to develop and implement the Environmental Management Plan (EMP) and Waste Management Plan (WMP) to monitor site activity and construction. As part of the specialist studies, protected flora species were identified and a Search and Rescue project to relocate the species will be conducted as part of the Environmental Authorisation requirements.

FIGURE 61: AFRICAN WILD POTATO, HYPOXIS HEMEROCALLIDE



In addition, ATNS's DME-DME Network project conducted environmental screening and initial assessments to determine compliance obligations and specialist inputs at selected sites. Therefore, ATNS is committed to ensuring that biodiversity is preserved for operations that impact or have potential to impact on the environment.

## Environmental Compliance

In the period under review, ATNS conducted a compliance assessment for CNS equipment sites to ascertain the compliance level in accordance with the National Environmental Management Act and associated legislation and regulations. For the Company to ensure adherence to legislation, it is of fundamental importance to measure and monitor the impacts of various activities.

In an effort to fully address ATNS's environmental impacts from its activities, an ISO 14001:2015 Environmental Management System (EMS) readiness exercise was conducted in preparation for the implementation of an EMS which will enable ATNS to manage its environmental risks, achieve and control the expected level of environmental performance and provide a structured process for achievement of continual improvement. ATNS has certification for an ISO 9001:2015 and thus an integrated management system is being investigated, integrating standards that can enhance overall business operations.

For the upcoming financial year, environmental assessments of proposed projects from the planning stage will be enhanced through the introduction of procedures and processes for assessment of all projects to minimise the actual and potential environmental impacts. Furthermore, environmental compliance auditing will be conducted. Compliance audits conducted for the ATNS legal register will enable an "aspects and impacts register" which will contribute to the Environmental Management System (ISO 14001:2015) implementation plan that is currently being developed.

FIGURE 62: RADAR SITE AT ATNS CAPE TOWN INTERNATIONAL AIRPORT

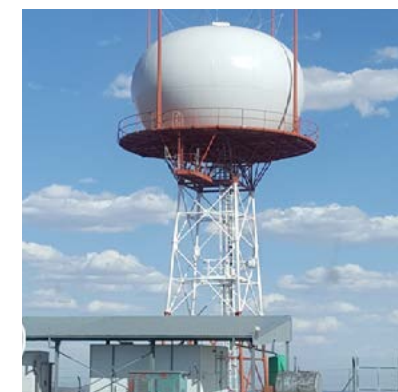


FIGURE 63: DVOR SITE AT ATNS CERES SITE



## Promoting employee awareness of environmental management

### WHY IT MATTERS TO US

Embedding a culture of sustainability within ATNS requires employee engagement around environmental sustainability. Promoting awareness and education enables the organisation to be conscious of the importance of aligning practices and decisions to environmental preservation. The Company's key environmental focus areas are: the reduction of carbon dioxide emissions; the management of natural resources and embedding a culture of sustainability. Therefore, educating employees and relevant stakeholders is crucial to reach the overall Sustainability and Environment objectives.

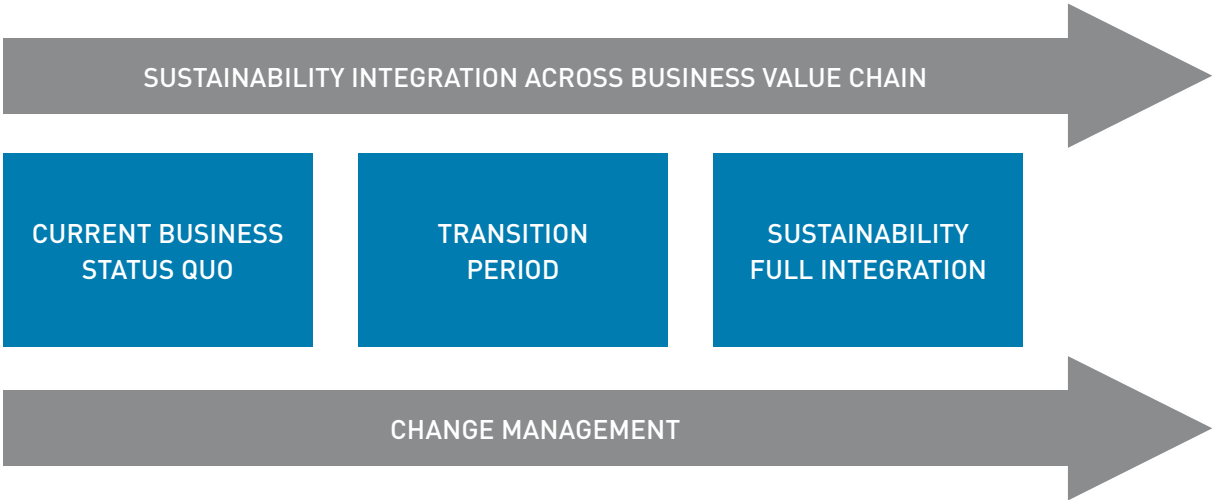


FIGURE 64: ATNS ECO-AVIATOR WORKSHOP 2017



Change management is of critical importance to enable a change in organisational culture and, therefore, environmental awareness initiatives communicate the necessary environmental education goals and promote participation of staff, to increase changing behaviour towards environmental sustainability in work and personal activities. The implementation of the Sustainability and Environmental Strategy requires change management to achieve its objectives. Therefore, a Change Management Communication Plan has been developed to ensure its success. Communication is an important enabler to implement activities to gain optimal organisation support from management cascading down to the rest of the business.

FIGURE 65: SUSTAINABILITY INTEGRATION IN VALUE CHAIN



## HOW WE MANAGE THE ISSUE

For the period under review, four customised e-learning courses i.e. Management, Engineering and Technical Services, Air Traffic Services and Support, have been developed and will be rolled out in 2018/19 financial year.

### Outlook

- E-learning courses implementation
- Implementation of environmental communication plan
- Environmental knowledge bank

TABLE 40: AWARENESS PERFORMANCE

KPI	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET
E-learning courses for environmental awareness	E-learning courses implementation	E-learning courses development	Continuous awareness



## Enabling integration of environmental aspects in our business

### WHY IT MATTERS TO US

ATNS continues to implement measures to integrate environmental sustainability into the core business. With the implementation of the reviewed Sustainability and Environmental Strategy's key programmes, the environmental performance of the Company is expected to increase toward the desired maturity level.

ATNS aims to ensure that sustainability forms part and parcel of the whole business value chain and addresses the reduction of actual and potential environmental impacts resulting from the business operations.

### HOW WE MANAGE THE ISSUE

ATNS continues to align projects to sustainability through screening of projects from the planning stage to the implementation, maintenance and decommissioning phases. Furthermore, initiatives within air traffic management operations are monitored for emission reduction. Therefore, all stakeholders within the value chain continue to contribute to a collaborative effort to enhance environmental protection.

### Supply chain management compliance

Sustainable procurement practices enable an organisation to ensure that its products and services have minimal environmental impacts. The assessment of ATNS's suppliers during the procurement phase of projects is being investigated and will enhance the environmental performance for the Company. This will include assessment from the perspective of manufacturing processes, transportation, operational phases as well as end of life. Therefore, the integration of environmental sustainability into the overall supply chain model is of critical importance to truly enhance environmental performance.

### CAPEX value chain

Environmental sustainability is integrated in infrastructure project planning to ensure that all projects have minimal environmental impacts. Currently, projects are assessed from the planning phase onwards in order to plan towards minimising the associated impacts. Furthermore, the actual implementation and maintenance is monitored through environmental management plans. The decommissioning phase is also aligned to environmental objectives.



Outlook

- Performance monitoring scorecard
- Sustainability policy
- Enhancement of Sustainability and Environment Strategy Implementation
- Environmental Management System ISO 14001:2015 implementation plan
- Development of sustainability guideline
- Measure operational efficiency to support green agenda (noise, emissions) in ATM planning and operations

Performance

TABLE 41: SUSTAINABILITY INTEGRATION INTO CORE BUSINESS

KPI	2017/18 TARGET	2017/18 ACTUAL	2018/19 TARGET	2019/20 TARGET
Sustainability integration into Core Business	Development of approach towards integrating environmental sustainability into business operations	Development of approach towards integrating environmental sustainability into business operations	Development of an Implementation Plan that will result in all business facets being aligned to environmental sustainability.  Set baselines for targets and evaluation of performance against set targets.	Monitor performance from baselines set for targets and evaluation of performance against set targets.







ACRONYM	FULL NAME
4D	4 Dimensional
AAGR	Average Annual Growth Rate
AASA	Airlines Association of Southern Africa
ABET	Adult Basic Education and Development
A-CAD	African Centralized Aeronautical Database
A-CDM	Airport – Collaborative Decision Making
ACSA	Airports Company of South Africa
ADS-B	Automatic Dependent Surveillance-Broadcast
AFI	African Indian Ocean
AFS	Annual Financial Statements
AIC	African, Indian, or Coloured
AIM	Aeronautical Information Management
AIMO	Aeronautical Information Management Office
AIRPROX	Aircraft Proximity
AIS	Aeronautical Information Service
ANSP	Air Navigation Service Provider
APCH	Approach
APV	Approach with Vertical guidance
ASBU	Aviation System Block Upgrades
ASECNA	L'Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar
ASHFAS	African Symposium on Human Factors and Aviation Safety
A-SMGCS	Advanced Surface Movement Guidance & Control System
ATA	Air Traffic Academy
ATC	Air Traffic Control or Air Traffic Controller
ATCO	Air Traffic Controller
ATFM	Air Traffic Flow Management
ATM	Air Traffic Management or Air Traffic Movement
ATNS	Air Traffic and Navigation Services SOC Limited
ATS	Air Traffic Services
ATSO	Air Traffic Service Officer
ATSEP	Air Traffic Safety Electronics Personnel
ATSU	Air Traffic Service Unit
B-BBEE	Broad-Based Black Economic Empowerment
BCM	Business Continuity Management
BCP	Business Continuity Plan
BSC	Balance Score Card
CAA	Civil Aviation Authority
CAD	Centralized Aeronautical Database
CAEP	Committee on Aviation Environmental Protection
CANSO	Civil Air Navigation Services Organisation
CAPEX	Capital Expenditure
CCO	Continuous Climb Operations
CDO	Continuous Descent Operations
CEO	Chief Executive Officer
CDM	Collaborative Decision Making

ACRONYM	FULL NAME
CNS	Communications, Navigation and Surveillance
CO2	Carbon di-oxide
CO <sub>2</sub> e	Carbon di-oxide equivalent
CSI	Corporate Social Investment
CSIR	Council for Scientific and Industrial Research
DEA	Department of Environmental Affairs
DEFRA	UK Department for Environment, Food, Rural Affairs
DG	Director General
DIRCO	Department of International Relations and Cooperation
DME-DME	Distance Measuring Equipment
DoT	Department of Transport
DR	Disaster Recovery
DRP	Disaster Recovery Plan
DTI	Department of Trade and Industry
DVOR	Doppler Very High Frequency Omni-Directional Range
EE	Employment equity
EQ	Emotional Intelligence
ERM	Enterprise Risk Management
ERP	Enterprise Resource Planning
ESD	Enterprise Supplier Development
EME	Exempted Micro Enterprise
EMP	Environmental Management Plan
EMS	Environmental Management System
ENVWG	Environmental Working Group
ETS	Engineering Training Services
EXCO	Executive Committee
FAA	Federal Aviation Administration
FAEL	ICAO Code for East London International Airport
FAOR	ICAO code for OR Tambo International Airport
FIR	Flight Information Region
FY	Financial Year
GANP	Global Air Navigation Plan
GAPP	Gauteng Area PBN Plan
GBAS	Ground-based augmentation system
GDP	Gross Domestic Product
GEDP	Graduate Engineers Development Programme
GNSS	Global Navigation Satellite System
GRI	Global Reporting Initiative
GASP	Global Aviation Safety Plan
HC	Human Capital
HR	Human Resources
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
ICAS	Independent Counselling and Advisory Services
ICT	Information Communication Technology

ACRONYM	FULL NAME
id site	Identification Site
IFATSEA	International Federation of Air Traffic Safety Electronic Association
IFRS	International Financial Reporting Standard
IIRC	International Integrated Reporting Council
ILS	Instrument Landing System
ISO	International Standards Organisation
IT	Information Technology
Kg	Kilogram
KPI	Key Performance Indicator
kWh	Kilo Watt Hour
KZN	KwaZulu-Natal
L	Litre
LAAS	Local Area Augmentation System
MANCOM	Management Committee
MC	Management Control
MHZ	Mega Hertz
MOU	Memorandum of Understanding
MTSF	Medium-Term Strategic Framework
MWh	Mega Watt Hour
NAFISAT	North Eastern African-Indian Ocean VSAT Network
NAMP	National Airspace Master Plan
NAVAIDS	Navigation and Approach Aids
NDP	National Development Plan
NEM	National Environmental Management
NEMA	National Environmental Management Act
NEM:PA	National Environmental Management: Protected Areas Act
NGO	Non-Governmental Organisation
NMG	
NQF	National Qualification Framework
OEM	Original Equipment Manufacturer
OEP	Operational Efficiency Programme
OJTI	On-the-Job Training Instructor
OPSCOM	Operations Committee
OT	Operations Technology
PBN	Performance-Based Navigation
PFMA	Public Finance Management Act
PMO	Project Management Office
PP	Preferential Procurement
PPMO	Portfolio and Programme Management Office
PWD	People with Disabilities
QSE	Qualifying Small Enterprise
RANP	Regional Air Navigation Plan
RC	Regulating Committee
R&D	Research and Development
RNAV	Area Navigation

ACRONYM	FULL NAME
RNP	Required Navigation Performance
ROCE	Return on Capital Employed
RSA	Republic of South Africa
RSI	Risk Safety Index
R/T	Radio Telephone
SACAA	South African Civil Aviation Authority
SAAF	South African Air Force
SAAST	South African Agency for Science and Technology Advancement
SADC	Southern African Development Community
SANAS	South African National Accreditation System
SANS	Saudi Air Navigation Services
SARP	Standards and Recommended Practice
SAWS	South African Weather Service
SCM	Supply Chain Management
SDG	Sustainable Development Goal
SEC	Social and Ethics Committee
S-ED	Socio-economic Development
SID	Standard Instrument Departure
SIEM	Security Information Event Management
SLA	Service Level Agreement
SMME	Small, Medium and Micro Enterprise
SMS	Safety Management System
SOP	Standard Operating Procedure
SSS	System Support Suite (SSS)
STAR	Standard Terminal Arrival
Steercom	Steering Committee
STEM	Science Technology Engineering and Mathematics
TECD	Top Employers Certification Dinner
TETA	Transport Education Training Authority
TIRA	??
TS	Technical Services
UMFA GTS	Utility Management for Africa
UNFCCC	United Nations Framework Convention on Climate Change
UNGC	United Nations Global Compact
VHF	Very High Frequency
VNAV	Vertical Navigation
VSAT	Very Small Aperture Terminal
Wake RECAT	Wake Turbulence Re-Categorization
WAN	Wide Area Network
PWD	People with Disabilities
WGS-84	World Geodetic System 1984
WMP	Waste Management Plan
XTRAX	ATNS internal safety incidents reporting system
ZAR	South African Rand