



*Annual Report 2013/14*



science &  
technology

Department:  
Science and Technology  
**REPUBLIC OF SOUTH AFRICA**



*In Service of Humanity*

# Table of Contents

<b>PART A: GENERAL INFORMATION</b>	<b>4</b>
1. PUBLIC ENTITY'S GENERAL INFORMATION	4
2. LIST OF ABBREVIATIONS/ACRONYMS	5
3. MINISTER'S STATEMENT	9
4. FOREWORD BY THE CHAIRPERSON	11
5. CHIEF EXECUTIVE OFFICER'S OVERVIEW	13
6. STATEMENT OF RESPONSIBILITY AND CONFIRMATION OF ACCURACY FOR THE ANNUAL REPORT	14
7. STRATEGIC OVERVIEW	15
Legislative Mandate	15
Strategic Mandate	15
Vision	15
Mission	15
Values	16
Value Proposition	16
Strategic Goals	16
8. ORGANISATIONAL STRUCTURE	17
<b>PART B: PERFORMANCE INFORMATION</b>	<b>20</b>
1. AUDITOR'S REPORT: PREDETERMINED OBJECTIVES	20
2. SITUATIONAL ANALYSIS	21
Performance and Service Delivery	21
Strategic Outcome Oriented Goals	21
3. PERFORMANCE INFORMATION BY PROGRAMME	22
Corporate Support Programme	22
Earth Observation Programme	24
Space Operations Programme	26
Space Science Programme	29
Space Engineering Programme	32
<b>PART C: GOVERNANCE</b>	<b>36</b>
1. CORPORATE GOVERNANCE	36
Corporate Executive	41
Senior Management	41
2. RISK MANAGEMENT	42
3. INTERNAL AUDIT AND AUDIT COMMITTEES	43
4. COMPLIANCE WITH LAWS AND REGULATIONS	44
5. FRAUD AND CORRUPTION	44
6. MINIMISING CONFLICT OF INTEREST	44
7. HEALTH SAFETY AND ENVIRONMENTAL ISSUES	45
8. SOCIAL RESPONSIBILITY	47
9. AUDIT COMMITTEE REPORT	48
<b>PART D: HUMAN RESOURCE MANAGEMENT</b>	<b>52</b>
<b>PART E: IMPACT REPORT</b>	<b>58</b>
<b>PART F: ANNUAL FINANCIAL STATEMENTS</b>	<b>68</b>
Audit Report	68
Annual Financial Statements	71





**PART A**  
GENERAL INFORMATION

# PUBLIC ENTITY'S GENERAL INFORMATION

## REGISTERED NAME:

South African National Space Agency

## PHYSICAL ADDRESS:

SANSA Corporate Office  
Enterprise Building  
Mark Shuttleworth Street,  
Innovation Hub  
Pretoria 0087

## POSTAL ADDRESS:

P.O Box 484  
Silverton  
0127

## TELEPHONE NUMBER/S:

027 12 844 0500

## FAX NUMBER:

027 12 844 0396

## EMAIL ADDRESS:

information@sansa.org.za

## WEBSITE ADDRESS:

<http://www.sansa.org.za>

## EXTERNAL AUDITORS:

SizweNtsalubaGobodo

## BANKERS:

ABSA Bank

## COMPANY/ BOARD SECRETARY

Ms. Saré Grobler

# LIST OF ABBREVIATIONS/ACRONYMS

AIM	African Ionospheric Map
AIT	Assembly, Integration and Testing
AGU	American Geophysical Union
CEOS	Committee on Earth Observation Satellites
COSPAR	Committee on Space Research
CPUT	Cape Peninsula University of Technology
CSIR	Council for Scientific and Industrial Research
DLR	(German Space Agency) Deutsche Zentrum Für Luft-und Raumfahrt e.v.
DST	Department of Science and Technology
DPSS	Defence, Peace, Safety and Security
EO	Earth Observation
ESA	European Space Agency
FDP	Fundisa Disk Programme
FY	Financial Year
GEO	Group on Earth Observation
GEOSS	Global Earth Observation System of Systems
GIS	Geographic Information System
GPS	Global Positioning System
HCD	Human Capital Development
HEI	Higher Education Institution
HF	High Frequency
IAC	International Astronautical Congress
IBSA	India, Brazil and South Africa
IMDP	Infrastructure Monitoring Demonstrating Project
IOT	In-orbit Testing
IRI	International Reference Ionosphere
ISI	Institute for Scientific Information

ISRO	Indian Space Research Organisation
KSAT	Kongsberg Satellite Services (Norway)
LADEE	Lunar Atmosphere and Dust Environment Explorer
LEOP	Launch and Early Orbit Phase
MOM	Mars Orbiter Mission
MSL	Mars Science Laboratory
MT	Magnetotelluric
MTEF	Medium-term Expenditure Framework
NASA	National Aeronautics and Space Administration
NDMC	National Disaster Management Centre
NRF	National Research Foundation
NSI	National System of Innovation
NSP	National Space Programme
NSS	National Space Strategy
NWISUP	North West Informal Settlement Upgrading Programme
PFMA	Public Finance Management Act
R&D	Research and Development
RF	Radio Frequency

SAEOS	South African Earth Observation System/Strategy
SANDF	South African National Defence Force
SET	Science, Engineering and Technology
SHEQ	Safety, Health, Environment and Quality
SNIGGER	South African Ionospheric Geophysics and Geomagnetic Experimental Resource
SO	Space Operations
SPOT	System for Earth Observation (Système Pour l'Observation de la Terre)
STEM	Science, Technology, Engineering and Mathematics
SUPARCO	Pakistan Space & Upper Atmosphere Research Commission
TOSS	Transfer - Orbit Support Services
TT&C	Telemetry, Tracking and Command
TUT	Tshwane University of Technology
TYIP	Ten-Year Innovation Plan (South Africa)
UCT	University of Cape Town
WRC	Water Research Commission
WSSD	World Summit on Sustainable Development
WMO	World Meteorological Organisation



## MINISTER'S STATEMENT

The South African National Space Agency, established in 2010, has three main functions - to implement a national space program, to advise the Minister of Science and Technology on strategy and programmes, and to acquire, assimilate and distribute space-derived data to various state entities. Space data provides us with important information about food security, water and environmental resource management, and our safety and security. The resulting products and services not only improve the efficiency and effectiveness of many state socio-economic activities, but also provide much of the knowledge and understanding needed to address local and global challenges.

Our combined effort at enhancing South Africa's space capabilities is of immense value to the scientific community in the southern African region. It is also vital in finding solutions to the challenges of health care provision, water resource, agricultural mapping, and urban planning and communications.

Space science is a significant contributor to sustainable development on the African continent and I am pleased that the establishment of the National Space Agency has enabled us to address African challenges.

I wish to thank the Board, management and staff at SANSA for a year of hard work and achievement. More specifically, I would like to thank the inaugural Board of SANSA for laying a good and solid foundation for the Agency. I wish the incoming Board all the success in taking SANSA to another level.

**Mrs Naledi Pandor**  
**Minister of Science and Technology**



# FOREWORD BY THE CHAIRPERSON

On Earth, space matters!

While the competition for advancing technology, pioneering space exploration and discovery is building momentum, the critical role that investment in space plays today is seen in the benefits of these developments for humanity on Earth.

The mandate of SANSA is to coordinate space activity across South Africa for the benefit of its citizens. The Agency has completed its third year of operation with invaluable contributions made to enhancing the service delivery of various government departments, private clients and the citizens of our nation. I believe this entity of the DST has performed to a high standard in the space sector of the country.

Public sector entities face service delivery and performance challenges, of balancing delivery with cost containment in an environment facing varying capacity constraints.

**As the Board of SANSA, which provides strategic direction to the organisation within the national and international space sector, we are confident that the Agency has achieved against its performance objectives and continues to build its profile with key stakeholders despite these challenges.**

The significant achievement of the Agency showcases the strong leadership and dedication of its staff to delivering the objectives set out in the SANSA Annual Performance Plan 2013/14. These included contributions by Earth Observation to address climate change challenges, efficient utilisation and conservation of natural/ mineral resources, improved decision making in land use, national security monitoring, and cost saving and mitigation of natural disasters. The Space Operations programme is a commercially funded arm of SANSA that contributes to service delivery through the downloading of data for government. SANSA Space Science research has contributed to the generation of fundamental knowledge of the space environment through collection and distribution of data for research, knowledge creation and human capital development.

The development of the next satellite for South Africa will definitely be an incredible opportunity for the Agency to demonstrate the importance of investment in space science, engineering and technology while continuing to deliver against its five strategic goals in the next financial year.

The current term of the SANSA Board has sadly come to its conclusion, and I wish to thank the hard-working board members, the DST, staff and stakeholders of the Agency for their commitment and support of the Board and the Agency's mandate.

The Board has made successful strides in the important establishment of governance structures and foundational strategy of the Agency.

We thank the Minister of Science and Technology for the continued support afforded to us and wish the new Board as fulfilling a journey as that experienced by the current board members.

On behalf of my fellow board members, I wish to express our gratitude to the leadership and staff for your industriousness, perseverance and trust in the Board over our four year tenure.

**Mr Maurice Magugumela**

**Chairperson of the SANSA Board**

**Accounting Authority**



# CHIEF EXECUTIVE OFFICER'S OVERVIEW

It is my privilege to present to you the annual report for the South African National Space Agency for the 2013/14 financial year.

SANSA has completed its third year of operation with development and implementation of systems and structures which are fully operational and an exceptional track record of local and international contribution to living "in service of humanity".

## We aim to bring Space down to Earth.

Apart from the challenges faced as a public entity in the current environment of delivering on performance while balancing cost containment with capacity constraints, SANSA has seen many significant achievements over the past year. These include the outstanding research pursued by our team of scientists and researchers in exploring the realms of space weather, space physics and the effects of climate change, to mention a few. This type of research is relevant to the global community and critical to the public, to enable an understanding of the implications of living in our solar system and the impact of the Sun on our daily existence. Power suppliers, communication, navigation and even the aerospace industry rely on such research to ensure the sustainability of our increasing reliance on technology.

South Africa (through SANSA) has taken its place in the global space arena by supporting many significant international space missions, such as the NASA Lunar and Dust Environment Explorer (LADEE) mission to study the Moon and India's Mars Orbiter Mission (MOM). These are just two of the well-known space missions undertaken by key players in the space industry and, should these missions prove successful, SANSA and South Africa will have played a significant role in the making of space history. Our support extends beyond reputable space agencies to include global space entrepreneurs.

The ongoing support of the international space industry, through mission support and proactivity to garner a larger share of an expanding space market, ensures a valuable contribution to the economy of South Africa while encouraging global recognition for the skills and state-of-the-art facilities offered by the Agency. We have a skilled team who have increased the service offering, which now includes deorbit support on the list of other orbit support functionalities that SANSA provides. This makes a significant contribution to ensuring the sustainable use of space.

With the effects of climate change being felt across the planet, space is playing a big part in managing the impact and response to the increasing frequency of natural disasters. One such incident was the recent floods experienced in South Africa where SANSA provided accurate and invaluable Earth observation data to national organisations and government departments to manage disaster recovery.

Space has become an indispensable tool or service on which most people rely.

At the Agency, we have continued to develop and offer clients and Government new and improved data, products and services to enable delivery to address national challenges. The Mosaic, which is an annual contribution by the Earth Observation team, has been enhanced and offers greater clarity and more information for our users based on their growing requirements. SANSA has acquired the licence to download and distribute data from new satellites SPOT 6 and Landsat 8, which provide additional and improved data to our users.

The satellite imagery is used by various government departments to analyse current and past realities in housing and infrastructure delivery, monitoring of natural and mineral resources and even evaluate and address needs arising after natural disasters to name but a few critical uses of satellite data.

As SANSA progresses in the development of South Africa's next Earth observation satellite, we are excited to include our citizenry on this incredible journey with comprehensive plans for developing human capital and the local industry over the next few years. SANSA has embarked on reviewing the Agency's strategy to address current challenges and ensure the sustainability of the organisation with a view of bringing greater impact to the country.

All of these achievements would not be possible without the dedication of our staff, support of the Minister, DST and the Board.

We remain committed to bringing the benefit of space science and technology to each and every citizen of this country as we strive to take South Africa to the world and beyond!

**Dr Sandile Malinga**  
SANSA Chief Executive Officer



# STATEMENT OF RESPONSIBILITY AND CONFIRMATION OF ACCURACY FOR THE ANNUAL REPORT

To the best of my knowledge and belief, I confirm the following:

All information and amounts disclosed in the annual report is consistent with the annual financial statements audited by the Auditor General.

The annual report is complete, accurate and is free from any omissions.

The annual report has been prepared in accordance with the guidelines on the annual report as issued by National Treasury.

The Annual Financial Statements (Part F) have been prepared in accordance with the South African Standards of Generally Recognised Accounting Practice (SA Standards of GRAP) applicable to the public entity.

The accounting authority is responsible for the preparation of the annual financial statements and for the judgements made in this information.

The accounting authority is responsible for establishing, and implementing a system of internal control, which has been designed to provide reasonable assurance as to the integrity and reliability of the performance information, the human resources information and the annual financial statements.

The external auditors are engaged to express an independent opinion on the annual financial statements.

In our opinion, the annual report fairly reflects the operations, the performance information, the human resources information and the financial affairs of the public entity for the financial year ended 31 March 2014



**Dr Sandile Malinga**

**Chief Executive Officer**



**Mr Maurice Magugumela**

**Chairperson of the Board**

# STRATEGIC OVERVIEW

## Legislative Mandate

SANSA derives its legislative mandate from the South African National Space Agency Act (SANSA Act No. 36 of 2008). The objective of SANSA is to:

1. Promote the peaceful use of space;
2. Support the creation of an environment conducive to industrial development in space technology;
3. Foster research in space science, communications, navigation and space physics;
4. Advance scientific, engineering and technological competencies and capabilities through human capital development (HCD), outreach programmes and infrastructure development; and
5. Foster international cooperation in space-related activities.

## Strategic Mandate

SANSA primarily derives its strategic mandate from the:

1. Ten-Year Innovation Plan (TYIP);
2. National Space Strategy (NSS); and
3. South African Earth Observation Strategy (SAEOS).

## Vision

To be the leader in ensuring that space science and technology benefits society, the environment, the economy and the global community through products and services; research and development; and human capital development.

## Mission

To use space science and technology to:

1. Deliver space-related services and products to the citizens of South Africa and the region;
2. Support, guide and conduct research and development in space science and engineering and the practical application of the innovations they generate;
3. Stimulate interest in science and develop human capacity in space science and technologies in South Africa;
4. Create an environment that promotes industrial development; and
5. Nurture space-related partnerships to enhance South Africa's standing in the community of nations.

SANSA's mission is succinctly captured in the Agency's motto:

**In service of humanity**

## Values

1. Service
2. Teamwork
3. Respect
4. Integrity
5. Personal growth
6. Excellence

## Value Proposition

Towards the realisation of its mission, SANSA has defined a five-point value proposition to create:

1. Societal Capital;
2. Intellectual Capital;
3. Human Capital;
4. Economic Capital; and
5. Global Capital.

Figure 1: SANSA's Value Proposition

### Societal Capital

- Food Security
- Resource Management
- Disaster Management
- Environmental Management
- Health, safety & Security
- Planning & Land Management



### Economic Capital

- Space Applications
- Space Technology Interchange Platform
- Know-how Interchange Platform
- Public-private partnerships
- Backbone of Space Services & infrastructure
- Local Market Facilitation
- Global Market Facilitation



### Global Capital



### Intellectual & Technology Capital

- Basic Research
- Applied Research
- Satellite Technology
- Space Operations Services
- Research & Technology Platform Provision
- Knowledge Creation & Dissemination

### Human Capital

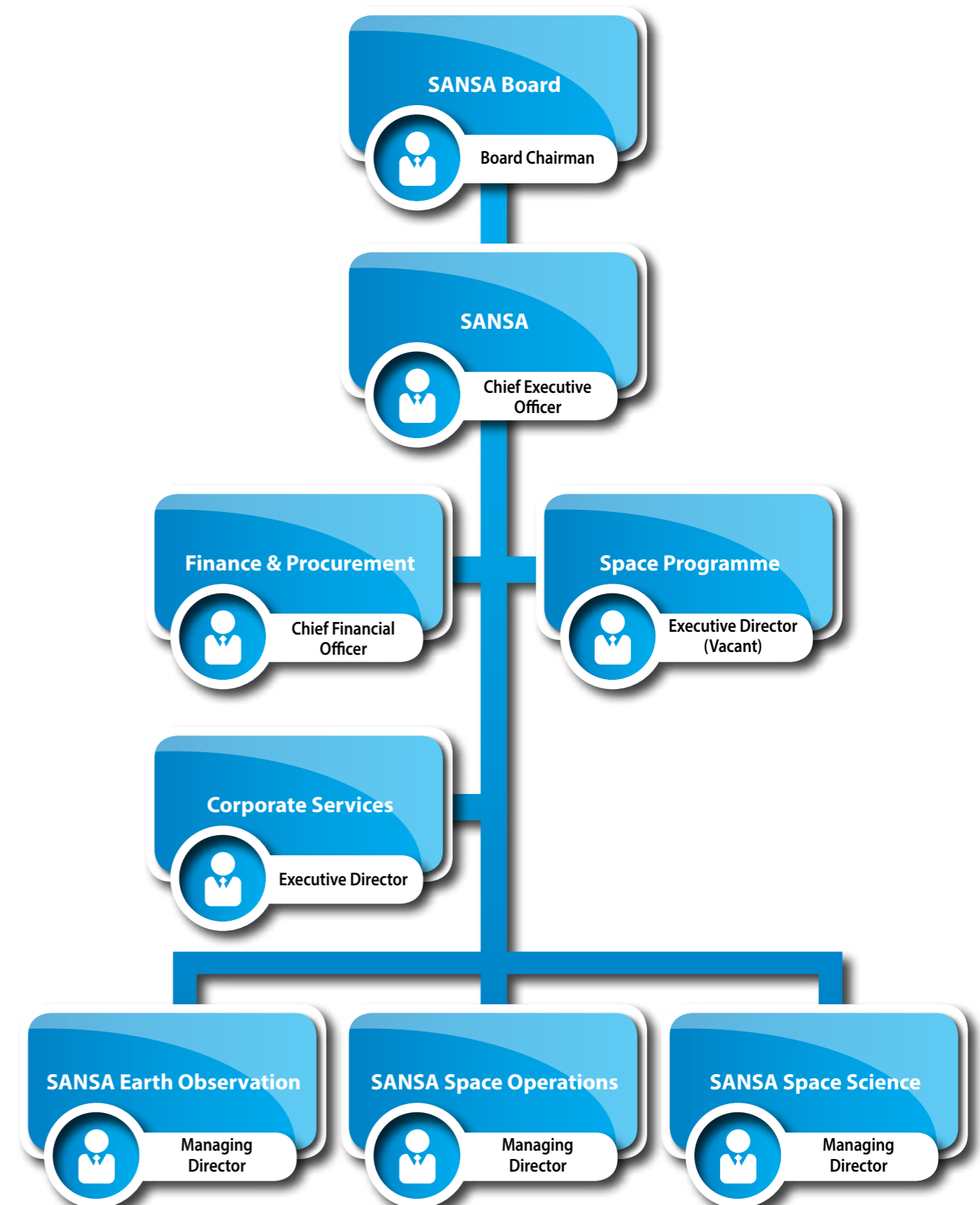
- Internship
- Post-graduate Training
- Post-doc Training
- In-service Training
- Professional Training
- Science Advancement
- School/Learner Programmes
- Educator Programmes

## Strategic Goals

The 2013–2014 SANSA Annual Performance Plan was an indication of how the respective business units within SANSA intended to contribute towards achieving the following strategic goals:

1. World-class and efficient services and societal benefits (**Societal Capital**);
2. Cutting-edge research, development, innovation, technology and applications (**Intellectual Capital**);
3. Effective development of human capital, transformation, science advancement and engagement of the citizenry (**Human Capital**);
4. Globally competitive national space industry (**Economic Capital**); and
5. Make South Africa a recognised global space citizen (**Global Capital**).

# ORGANISATIONAL STRUCTURE





SANSA achieved 2.79 Institute for Scientific Information (ISI) publications per SANSA researcher in space science and technology research. This is well above the national average of 1.5 publications per researcher



The Agency provided 13 EO and space science end-user services and products to industry clients and partners, against the annual target of seven products and services



Satellite imagery is increasingly being used to address challenges in agriculture; water resource monitoring; mapping of natural disaster areas; the effects of climate change over time; and the planning of human settlements.



In this financial year, the full target of achieving 24 mission launches and IOT services was achieved.

**PART B**  
PERFORMANCE INFORMATION

# AUDITOR'S REPORT: PREDETERMINED OBJECTIVES

The External auditor currently performs the necessary audit procedures on the performance information to provide reasonable assurance in the form of an audit conclusion. The audit conclusion on the performance against predetermined objectives is included in the report to management, with material findings being reported under the Predetermined Objectives heading in the Report on other legal and regulatory requirements section of the auditor's report.

Refer to page 68-70 of the Auditors Report, published as Part F: Financial Information.

# SITUATIONAL ANALYSIS

## Strategic Outcome Oriented Goals

SANSA made great progress towards the strategic outcome oriented goals as reflected in the Strategic Plan and the progress made towards the achievement of the goals is reflected in the table below.

For the year under review, SANSA had a total of 33 key performance indicators (KPIs) in the core programmes of Earth Observation, Space Operations, Space Science and Space Engineering. Of the 33 KPIs, 27 were achieved by the end of the fourth quarter 2013/14, translating to an 82% success rate.

It is worth noting the following (refer to the accompanying table):

- **Goal 1: World-class & efficient services and societal benefits (Societal Capital)** was achieved at 83%. Performance of this goal was negatively impacted by challenges experienced in the acquisition of science data. However, data is subsequently being acquired from several new instruments and also on-site in Antarctica.
- **Goal 2: Cutting-edge research, development, innovation, technology & applications (Intellectual Capital)** was achieved at 86%. Achievement of full performance was adversely impacted by the IBSA1 implementation project not being secured.
- **Goal 3: Effective development of human capital, transformation and engagement of citizenry (Human Capital)**. Two performance indicators out of the 12 indicators were not achieved, resulting in

an achievement of 83%. Underperformance was due to challenges in meeting the diversity targets at management level. Management is exploring ways to attract and retain skilled staff to mitigate these challenges.

- **Goal 4: Globally competitive national space industry (Economic Capital)** was achieved at 75%. Full performance was adversely impacted by delays in the implementation of space industry cluster competitiveness initiatives.
- **Goal 5: Make South Africa a recognised global space citizen (Global Capital)** was achieved at 75%. Performance of this goal was adversely impacted by SANSA not having secured an additional multi-national project.

	SANSA			
	Goal	Achieved	Target	%
Goal 1: Societal Capital	World-class & efficient services & societal benefits.	5	6	83%
Goal 2: Intellectual Capital	Cutting-edge research, development, innovation, technology & applications.	6	7	86%
Goal 3: Human Capital	Effective development of human capital, transformation, science advancement and engagement of the citizenry.	10	12	83%
Goal 4: Economic Capital	Globally competitive national space industry.	3	4	75%
Goal 5: Global Capital	Make South Africa a recognised global space citizen.	3	4	75%
		27	33	82%

Table 1: SANSA performance overview

# PERFORMANCE INFORMATION BY PROGRAMME

## Corporate Support Programme

The overall strategic purpose of the programme aligned to the five SANSA goals are to ensure that SANSA is:

- Operationally efficient;
- Managed cost-effectively;
- Compliant with good corporate governance principles;
- Enabling seamless integration; and
- Collaboration among all SANSA directorates and external stakeholders.

The programme is comprised of the CEO's Office, Finance & Procurement Business division as well as the Corporate Services division.

## Strategic Objectives and Measurement

To achieve institutional excellence and accountability, the Corporate Office will ensure that SANSA has:

- Leadership Excellence;
- Management Excellence; and
- Operational Excellence.



CORPORATE SUPPORT PROGRAMME							
Strategic Objective	Outputs	Activities	Key Performance Indicators	Baseline 2012/13	Target 2013/14	Actual 2013/14	Reason for Variance
1 Leadership Excellence	Effective & efficient leadership	Strategic leadership Corporate governance Internal & external relations	Leadership Excellence Index	68% management satisfaction 61% leadership satisfaction (1CS1)	Leadership Excellence Index (LEI) score of 7 out of 10 (2CS1)	All leadership structures are in place and functioning, resulting in a score of 7.1 (2CS1).	Target achieved. Good governance practices are in place.
2 Management Excellence	Effective & efficient management	Business planning Strategic implementation Resource management Performance management	Management Excellence Index (MEI)	68% management satisfaction 61% leadership satisfaction (1CS1)	Management Excellence Index (MEI) score of 7 out of 10 (2CS2)	All management practices are in place and functioning, resulting in a score of 7.1 (2CS2)	Target achieved. Business planning and performance management practices are developed and implemented.
3 Operational Excellence	Operational efficiency and cost effectiveness	Development of procedures Process analysis and improvement System implementation & management	Operational Excellence Index (OEI)		Operational Excellence Index (OEI) score of 7 out of 10 (2CS3)	All operational practices are in place resulting in a score of 7.0 (2CS3)	Target achieved. Policies and procedures that are governed by SANSA frameworks have been developed and implemented.

Table 2: SANSA performance overview

## Programme Performance Highlights

Both the Management and Leadership Excellence strategic objectives were achieved at a satisfactory 7.1 out of 10, largely as a result of all leadership structures and management practices being in place and fully functioning.

Operational Excellence as it relates to strategic objectives achieved a score of 7 out of 10. This is attributed to SANSA having fully functional procedures and processes in place.

All Legislative Compliance plans, such as the development of the strategic plan, annual performance plan, quarterly reports and annual report, were developed and delivered within the required timeframes. Effective performance monitoring and evaluation is an ongoing process, which is monitored through performance reports with a stronger emphasis on the oversight role of management.

Progress was made in achieving the strategic objective of Excellence in Communication and Staff & Stakeholder Relations. Internal and external communications plans, the institutional cohesion plan as well as the external stakeholder engagement plan were implemented.

Finally, a risk assessment was conducted and audited corrective actions were successfully undertaken in the fulfilment of the strategic objective of good corporate governance.

## Earth Observation Programme

### Functional Scope

**SANSA** distributes images, under a multi-user licence, to Government. By doing so, it ensures the supply of cost-effective data to Government in support of various national imperatives. Additionally, through making processed imagery available to various stakeholders, such as research councils and academic institutions, it enables these organisations to utilise the multi-user licensed imagery at no additional cost. Higher Education Institutions (HEIs) are provided with geospatial resources for student training through its Fundisa Disk Programme (FDP). This, in turn, promotes the use of spatial information at a tertiary level.

Earth Observation (EO), when used as a source for geo-information, contributes to the management, sustained utilisation, preservation and understanding of natural resources. It also aids in improved health, safety and security, as well as disaster forecasting, monitoring and mitigation: increased R&D data stock and value-added data products and information. SANSA also plays a role in the provision of decision-making, policy-making and planning instruments for Government and other stakeholders. Collectively, these elements contribute to a vast array of socio-economic benefits and improved livelihoods.

The impact of EO lies in providing:

- Essential services for socio-economic benefit, including water, environmental and other resources management, disaster management, and health, safety and security management;
- Data and value-added remote sensing services for research and development in EO applications; and
- Human capital development and science advancement in geo-informatics, image and data processing and remote sensing.

### Programme Performance Highlights

SANSA is seeing a huge growth in demand for its products and services, as there is an increase in awareness and appreciation of the efficiency and productivity gains to be derived from the use and application of satellite imagery for Government service delivery.

Satellite imagery is increasingly being used to address challenges in agriculture; water resource monitoring; mapping of natural disaster areas; the effects of climate change over time; and the planning of human settlements.

SANSA has distributed more than 100 000 scenes of processed satellite data to Government and educational institutions in order to meet this demand. Approximately 56 000 scenes were distributed for research purposes. This was done in order to enhance research and development in space science and engineering.

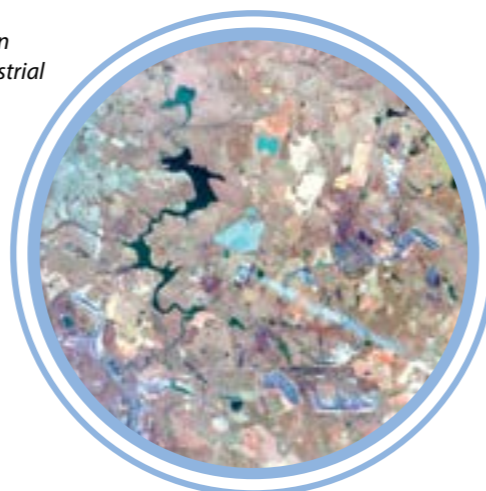


### Core Functions

The core functions of the programme include:

- Contributing to the implementation of the South African Earth Observation Strategy (SAEOS);
- Data acquisition from South African and global EO satellites;
- Coordinated procurement of satellite data and distribution of data/images to government departments, national research and development institutions and HEIs;
- The long-term archiving of all acquired satellite data;
- The processing and production of value-added satellite image products and services for various geo-information applications;
- Continuous improvement of in-house reference data-sets to higher geometrical accuracies using improved digital surface and elevation models;
- The development and maintenance of easily accessible and efficient distribution channels of value-added image products through catalogue systems;
- Development of human capital to advance the above and meet the skills needs of the country;
- The advancement of science among the youth and the public;
- The development and maintenance of international partnerships for the advancement of the above objectives;
- Contribute to the development of innovative EO sensors; and
- Development of EO applications as per stakeholder needs.

Earth Observation image of an industrial development in the mining area of eMalahleni, Mpumalanga



The delivery achievements of the Programme are depicted below.

Earth Observations					
Strategic goal	Indicator description	Baseline 2012/13	Target 2013/14	Actual 2013/14	Reasons for Variance
Strategic Objective 1: Offer efficient EO services for national and international benefit and a sustained environment					
	Number of images acquired and archived (2EO1)	4000	4000	39928	Over performance due to data acquired from additional sensors.
	Number of images distributed(2EO2)	42000	44000	100574	Over performance caused by major spikes during the distribution of the Mosaic.
Strategic Objective 2: Conduct cutting-edge research, development and innovation to continually improve SANSA's offering					
	Number of images distributed for research (2EO4)	16000	17000	56008	Over performance caused by major spike during distribution of Fundisa Disks.
	Number of technical reports and research publications (EO6)	10	10	20	Over performance due to additional reports coming from the EO-Sat 1 project and the Human Settlements project.
Strategic Objective 3: Development of human capital in EO related science & engineering and advance science among the youth and the public)					
	Number of students/ interns supported/trained (2EO7)	6	6	31	Additional funding for bursaries was allocated.
	Number of short courses conducted (2EO9)	2	2	7	Target exceeded due to higher demand for EO related courses.
	Proportion (%) of permanent staff from designated groups in the top two management levels (manager, senior manager) (2EO12)	40%	50%	89%	Target achieved, even though one PDI manager resigned.
	Number of learners reached through direct & specific engagement (2EO15)	n/a	2000	4870	Target exceeded due to additional outreach work undertaken.
Strategic Objective 4: Provide services that stimulate industry growth and participation in EO					
	Number of joint and outsourced projects with industry (2EO13)	2	2	4	The Directorate continues to work with SME Earth Observation companies in South Africa. There are active engagements with companies on Landsat processing chains and completion of the Earth Observation online catalogue.
Strategic Objective 5: Establish and maintain effective and mutually beneficial international partnerships in line with national strategic alignment					
	Number of multi-national projects (2EO14)	2	2	3	

Table 3: Earth Observation Performance


## Space Operations Programme

### Functional Scope

SANSA operates state-of-the-art ground station facilities and provides services to both the local and international space industry and governments. These services include launch and early-orbit support (LEOP), in-orbit testing (IOT), satellite life-cycle support and mission control.

The aspiration is to be the leading ground station on the continent by focusing on:

- Satellite ground services through telemetry, tracking and command (TT&C) for the various launcher and satellite support services, as well as hosting satellite ground infrastructure for various international and local clients.
- Space applications in collaboration with government departments and private industry, specifically:
  - Downloading EO data from various LEO satellites (SPOT, Landsat and others), an application in which SANSA is the leader in Africa
  - Downloading data-sets from space science payloads
  - Communications and data transmission, with the Department of Communications and industry
  - Positioning, navigation and timing with National Geo-spatial Information, the Department of Transport and industry



Core Functions

The core functions of the Programme are to provide:

- Rendering of satellite launches and early orbit services;
- Satellite in-orbit testing (IOT);
- Satellite mission and life support;
- Hosting of mission support infrastructure;
- Satellite mission control services e.g. SumbandilaSat;
- Remote sensing and satellite data reception;
- Space-based navigation augmentation, positioning and timing; and
- Develop HCD and advance science.

SANSA is uniquely positioned as the primary ground-receiving station and TT&C service provider on the African continent. It has the competitive advantage of covering the necessary geographical footprint, full coverage of the entire frequency range (L, S, C, ext C, X, Ku and Ka), and the operational and technical excellence to serve both local and international markets.



Construction of the new antenna

Presently SANSA operates, maintains and hosts 22 antennas for services rendered to local and international clients. Table 4 shows the TT&C clients and their associated market segment:

Customer	LEOP	IOT	Routine support	Monitoring	Launch support	Network providers	Hosting services	% workload per annum for client (based on income and service required from client)
SAS European satellite services							X	1%
Boeing Launch Services					X			0%
Boeing Satellite Services	X							0%
CNES	X		X			X	X	12%
Eutelsat		X		X			X	2%
Intelsat	X	X		X		X	X	28%
SES Astra	X	X						1%
Telesat	X							1%
USN						X		1%
SANSA EO			X					21%
Orbcomm							X	1%
KSAT							X	13%
Skytrax							X	9%
HartRao							X	3%

Table 4: TT&C clients and market segments

In addition to its commercial (private) customers, SANSA has additional public and institutional stakeholders. These include, but are not limited to, the European Commission, European Space Agency and Directorate for Geospatial Information.

Over the years, SANSA has made an impact on Government and the satellite industry through quality and reliable services as well as participation in many international forums.

Space Operations activities include the offering of:

- Globally competitive space operations and applications, with services provided to satellite operators around the globe on a daily basis;
- Launch support, TT&C services, for example, the LEOP services to Hughes Space and Communications;
- Hosting and managing ground stations for international clients, for example, the Orbcomm Gateway Station;
- Applied research, development and innovation in key space operations and applications, for example, the EGNOS project, which improves the accuracy, integrity and availability of existing GPS signals; and

- Human capital development and science advancement in space operations and applications, with many African countries regularly sending students for training and practical experience at SANSA.



SANSA Space Operations in Hartebeesthoek, Gauteng, South Africa.

The delivery achievements of the Programme are depicted below:

Space Operations					
Strategic goal	Indicator description	Baseline 2012/13	Target 2013/14	Actual 2013/14	Reasons for Variance
Strategic Objective 1: Offer efficient, cost effective & globally competitive space operations and applications for societal benefit and global market					
	Success rate of 95% of all passes taken for Earth Observation (2SO1)	95%	95%	99%	
	Number of mission launches supported and in-orbit tests undertaken (2SO2)	24	24	24	
Strategic Objective 2: Focused and needs driven applied research, development and innovation in key space operations and application areas.					
	Number of formal R&D reports and publications (2SO4)	3	3	4	
Strategic Objective 3: Focused HCD in space operations and space application and active science advancement.					
	Number of students/interns supported/trained (2SO5)	6	7	14	Target exceeded due to additional funding received during the financial year.
	Proportion (%) of permanent staff from designated groups in the top two management levels (manager, senior manager) (2SO9)	40%	50%	45%	Underperformance due to no vacancies arising at management level
	Number of learners reached through direct & specific engagement (2SO10)	1200	1000	1007	
Strategic Objective 4: Maintain a strong commercial service for industry					
	Global launch, spacecraft, IOT, support market share (%) (2SO12)	new	20%	28%	This target was exceeded due to demand in launch support services
Strategic Objective 5: Establish and maintain effective and mutually beneficial international partnerships and customer relations in line with national strategic alignment					
	Client performance rating (%) (2SO13)	98%	98%	98%	

Table 5: Space Operations Performance

## Programme Performance Highlights

Satellite communication and broadcasting represents a substantial market for the space industry and is largely driven by satellite television. The increasing growth in the launch of communication satellites is primarily driven by the increasing number of households around the world that are direct satellite broadcast subscribers.

SANSA offers globally competitive space operations and applications; with daily services provided to satellite operators around the globe for launch support services. In this financial year, the full target of achieving 24 mission launches and IOT services was achieved.

## Space Science Programme

### Functional Scope

South Africa's geographic position is essential to SANSA's leadership position within the space science programme in two areas in particular.

Firstly, South Africa is the only African country with a scientific base in Antarctica. Secondly, South Africa's ideal location is essential for the study of the South Atlantic Magnetic Anomaly, an area over the South Atlantic Ocean where aircraft, ships and satellites are exposed to increased radiation from space. This leads to the interruption of, and damage to, communication systems.

SANSA also forms part of the worldwide network of magnetic observatories. It is responsible for research, infrastructure and data for monitoring the near-Earth space environment. The scope of activities include fundamental and applied space physics research; post-graduate student training; science advancement; space weather monitoring; and the provision of magnetic technology services on a commercial and private basis.

Space Science research and services are managed by means of various programmes. The impact of the programme lies in:

- Offering a state-of-the-art research platform and applied science/technology service platforms;
- Conducting cutting-edge research, development and innovation;
- Developing human capital in space science, technology and engineering;
- Driving science advancement initiatives aimed at learners, educators and general public;
- Contributing to the South African aerospace industry by means of applied science and technology; and
- Establishing and maintaining effective and mutually beneficial international partnerships in line with national strategic alignment.



## Core Functions

The core functions of the programme are the:

- Collection and distribution of data for research, knowledge-creation and human capital development;
- Provision of geo-space information and value-added data products and services for various stakeholders within, for example, the defence force and navigation sectors;
- Training of students and personnel in scientific research, data processing, data management, electronics and satellite technology;
- Science advancement programmes and activities; and
- Mutually beneficial international partnerships.

## Programme Performance Highlights

### Pushing the frontiers of knowledge in the geo-space environment

South Africa is making progress in improving its position in international science rankings through continually contributing to more high impact research outputs in support of the National System of Innovation (NSI). SANSA achieved 2.79 Institute for Scientific Information (ISI) publications per SANSA researcher in space science and technology research. This is well above the national average of 1.5 publications per researcher, and a clear indicator of the Agency's continual drive toward the development of emerging researchers, as well as its continual contribution to the country's World Share in ISI publications record.

Space science research is critical to the efforts to gain a deeper understanding of the space environment and building a knowledge economy for the advancement of society and the protection of technology both on Earth and in space.



## Exploring Space through the National Equipment Programme

In support of the TYIP and the National Research and Development Strategy, SANSA is undertaking world-class research on understanding the link between the magnetosphere, the ionosphere and the Earth's surface. This research is conducted through a network of space monitoring equipment known as the South African Ionospheric, Geophysics and Geomagnetic Experimental Resource (SNIGGER). In order to conduct cutting-edge research on the space environment

*SANSA has positioned itself to collect data by turning South Africa its neighbouring countries and the South Atlantic Ocean into a giant geophysical laboratory.*

This project is a collaborative effort with partner universities and the National Research Foundation (NRF).

Participating in this research will enable SANSA to contribute to capacity development in space science and technology and empower scientists to answer long-standing questions about the space environment and the effects it has on technology. Other questions to be answered through this groundbreaking research relate to a greater understanding of how the Earth's magnetic field shields and consequently preserves life on Earth.



HF Radar in Antarctica

## Pioneering Africa's own ionospheric map.

Aviation and communication companies study the ionosphere because conditions in this region of the Earth's atmosphere can disrupt radio transmissions and communication with satellites. However, Africa has a scarcity of instruments with which to study the ionosphere. This has contributed to inaccuracies in data resulting in problems within the communication sector.

But that's all about to change. A SANSA PhD student has completed an ambitious project set to make ionospheric information not only more accessible to African users, but also more accurate. It's called AIM – the African Ionospheric Map.

AIM, a virtual data map, combines data from sources across Africa such as ionosondes and Global Positioning Systems (GPS), and uses new techniques with which to improve accuracy of modelling despite the lack of instruments.

Using all of this information, a comprehensive map of the ionosphere is formed, and the end result is a user-friendly, virtual map with a graphic user interface.

*AIM will change the way information from the African ionosphere is used and will give industry users access to data which is more accurate and reliable than ever before.*

The delivery achievements of the Programme are depicted below:

Space Science					
Strategic goal	Indicator description	Baseline 2012/13	Target 2013/14	Actual 2013/14	Reasons for Variance
Strategic Objective 1: Offer state-of-the-art research platform and applied science/technology service platforms					
	Amount (Tb) of science data acquired and archived (2SS1)	1TB	1.5TB	1.14TB	Underperformance due to data acquisition challenges at the different stations.
Strategic Objective 2: Conduct cutting-edge research, development and innovation					
	Number of ISI publications per researcher (2SS4)	2	2	2.79	This target has been exceeded. A number of publications were written in the previous year but published this FY. Publication rate is sporadic and hard to estimate accurately.
Strategic Objective 3: Development of human capital in space science and science advancement					
	Number of students/interns supported/trained (2SS6)	25	25	51	The actual achievement for the year includes number of students supported in the last semester of 2012/13, and the first semester of 2013/14. However, care is taken to ensure that students are not double counted.
	Number of short courses conducted (2SS9)	8	8	13	The South African Air Force (SAAF) requested that SANSA provide more than the usual number of short courses for them. This means that this target was exceeded as 10 SAAF courses and 3 SRA courses were held during the year.
	Proportion (%) of permanent staff from designated groups in the top two management levels (manager, senior manager) (2SS12)	new	55%	44%	Underperformance is due to no vacancies arising at management level.
	Number of learners reached through direct & specific engagement (2SS13)	4000	4000	5306	Target was exceeded due to highly successful activities conducted during National Science Week and World Space Week as well as other learner activities conducted during the year.
Strategic Objective 4: Active contribution to South Africa aerospace industry					
	Number of industrial/commercial sector services/products (2SS15)	5	5	9	A previously dormant product has been reactivated due to demand, while a new product has been developed. Effort has been made to develop new products for industry.
Strategic Objective 5: Establish and maintain effective and mutually beneficial international partnerships in line with national strategic alignment					
	Number of multi-national projects (2SS16)	5	6	6	

Table 6: Space Science Performance

## Space Engineering Programme

### Functional Scope

Space science, technology and innovation is globally recognised as an essential and strategic instrument to meet social, technological, economic, and foreign policy objectives. Accordingly, many governments around the world are increasing their investments in space activities with the intention of advancing their space capabilities and subsequently benefitting from space operations.

SANSA manages and leads the technical coordination of space system and sub-system development.

The satellite development programme has the following objectives:

- Develop a South African indigenous capability in space systems and hence create a certain level of self-reliance in satellite technology;
- Use satellite development as a vehicle to develop technologies that will have a wider impact on the economy, for example, control technology;
- The development of scarce skills and innovative capability, associated with technology development; and
- Stimulate the local industry through the development of new technologies and skills, contracting opportunities, and increased export and import channels through SANSA partnerships.

### Programme Performance Highlights

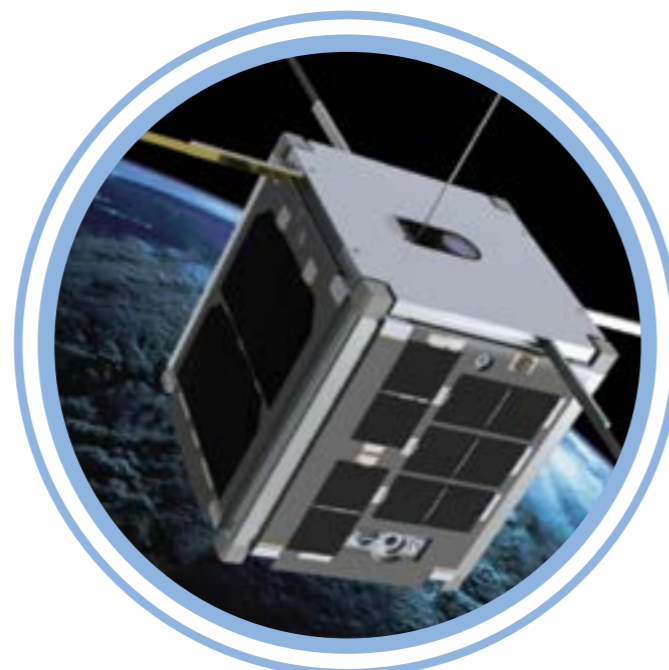
SANSA made an active contribution to the South African space industry through local technology development; the advancement of know-how and technology transfer. The Agency provided 13 EO and space science end-user services and products to industry clients and partners, against the annual target of seven products and services. Thirty-four jobs were preserved through the support of the satellite-engineering programme. This clearly demonstrates the value and impact of the satellite engineering programme in supporting job creation.



Core Functions

The core functions of the programme are to:

- Drive the South African satellite development programme;
- Lead the development and commercialisation of new technologies;
- Develop skills;
- Interface with industry;
- Form global partnerships; and
- Collect and distribute data for research, knowledge-creation and human capital development.

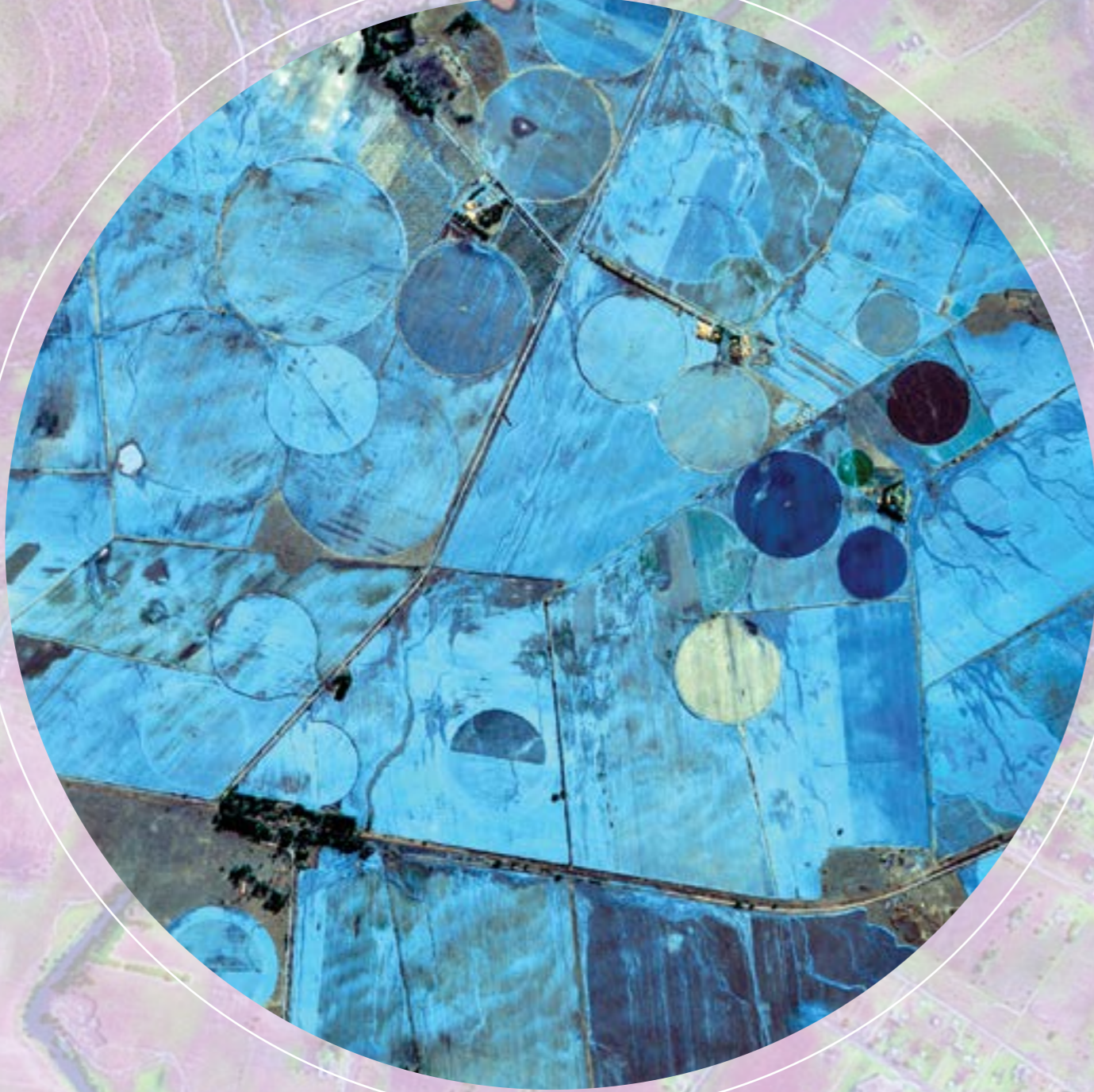


*TshepisoSat launched in November 2013*

The delivery achievements of the Programme are depicted below.

Space Engineering					
Strategic goal	Indicator description	Estimate 2012/13	Target 2013/14	Actual 2013/14	Reasons for Variance
Strategic Objective 1: Offer state-of-the-art satellite assembly, integration and testing (AIT) platform and services					
	Number of jobs directly supported by the satellite engineering programme (2SE1)	N/A	30	34	Target has been achieved due to successfully preserving jobs throughout the year.
Strategic Objective 2: Technical coordination of satellite system and sub-system development on behalf of SANSA					
	Number of national satellite projects (2SE2)	1	1	1	EO-SAT1 project continues.
	Satellite engineering project implementation (2SE3)	4%	24%	25%	Target was exceeded due to additional funding received towards end of March 2014.
	IBSA1 project implementation (2SE4)	Position papers	Project approved	Project not approved	Target was not achieved as the project was not secured.
Strategic Objective 3: Focused HCD in space engineering in partnership with space industry, universities and other partners					
	Number of students/interns supported/trained (2SE5)	N/A	5	9	
Strategic Objective 4: Promotion of a conducive environment for industrial/private involvement in satellite system and sub-system development					
	Number of space industry cluster competitiveness programmes (2SE6)	N/A	1	0	Target not achieved due to funding constraints.
Strategic Objective 5: Establish and maintain effective and mutually beneficial international partnerships and customer relations in line with national strategic alignment					
	Number of multi-national projects (2SE7)	1	2	1	Target not achieved due to lack of progress on the India, Brazil and South Africa (IBSA) satellite project.

Table 7: Space Engineering Performance



**PART C**  
GOVERNANCE

# 1. CORPORATE GOVERNANCE

## Governing Board

The Board is the accounting authority of SANSA in terms of the Public Finance Management Act (PFMA Act No. 1 of 1999), and therefore it is the responsibility of the Board to provide strategic direction and leadership to SANSA, as well as to ensure good corporate governance. The Board places a strong emphasis on achieving the highest standards of adherence to the code of conduct as well as reporting, financial and risk management.

## Role of the Board

Within the powers conferred upon the Board by legislation, and in particular as stipulated in Section 9 of the SANSA Act (No. 36 of 2008), the Board has determined its main function and responsibility as adding significant value to SANSA, to:

1. Perform any function imposed upon it in accordance with the policy direction issued by the Minister and in terms of the SANSA Act (No. 36 of 2008);
2. Oversee the functions of the Agency;
3. Monitor the research priorities and programmes of the Agency;
4. Give effect to the strategy of the Agency, in the performance of its functions;
5. Notify the Minister immediately of any matter that may prevent or materially affect the achievement of the objectives of the Agency; and
6. Establish or disestablish organisational divisions of the Agency, as appropriate, after consultation with the Minister.

## Board Charter

The Board Charter outlines the other responsibilities of the Board as follows:

1. Providing effective leadership based on an ethical foundation and to ensure that the Agency is seen to be a responsible citizen
2. Acting as the focal point for the custodian of corporate governance
3. Setting SANSA's directions, strategies and financial objectives and ensuring that the necessary resources are in place for the Agency to meet its objectives

4. Identifying and regularly monitoring key risk areas and key performance indicators of SANSA
5. Ensuring that SANSA has an effective and independent Audit Committee
6. Ensuring that SANSA complies with the relevant law, regulations and codes of business practice
7. Providing overarching oversight on the strategy and adoption of best practices in the rollout and utilisation of ICT systems/procedures
8. Providing oversight to ensure the effective management of stakeholder relations and the performance of the Agency are managed and measured to enhance SANSA's reputation
9. Considering business rescue measures or other turnaround mechanisms as soon as the Agency is financially distressed as defined in the PFMA
10. Ensure that the performance of the Executive Management is regularly assessed and monitored
11. Support programmes or projects relating to scientific space research

## Composition of the Board

The SANSA Board had 16 members as at end of 2013/14 FY as appointed by the Minister of Science and Technology. All the current members of the Board are non-executive and the CEO is an ex officio member of the Board. All non-executive Board members have been assessed as being independent during the year under review.

The Board is assisted in discharging its duties through the following committees:

- Audit and Risk;
- Strategy and Investment; and
- Human Resources, Social and Ethics.

The roles and responsibilities of the Committees are reflected in the charter for each committee.

The Minister of Science and Technology appointed five additional members during the financial year under review (bringing the total to 16 members) to support the Board to execute its fiduciary responsibilities. As a result thereof, the constitution and membership of the Board Committees had to be reviewed.

Board Member	Designation	Date of Board appointment	Date of Board term end	Highest qualification
Mr Maurice Magugumela	Board Chairperson	01 June 2010 Extended from 01 June 2014	31 May 2014 To 31 August 2014	MSc (Physics)
Mr Leeandran Annamalai	Chairperson: Strategy and Investment Committee	01 June 2010 Extended from 01 June 2014	31 May 2014 To 31 August 2014	MEng (Electronics)
Mr Potlaki Maine	Member: Audit and Risk Committee	01 June 2010 Extended from 01 June 2014	31 May 2014 To 31 August 2014	MSc (Information Science)
Ms Louisa Mogudi	Chairperson: HR, Social and Ethics Committee	01 June 2010	31 May 2014	MA (Sociology)
Dr Robert Scholes	Member: Strategy and Investment Committee	01 June 2010 Extended from 01 June 2014	31 May 2014 To 31 August 2014	PhD (Botany)
Ms Joy-Marie Lawrence	Member: Strategy and Investment Committee	01 June 2010 Extended from 01 June 2014	31 May 2014 To 31 August 2014	LLM (Masters in Law)
Mr Vincent Gore	Member: Audit and Risk Committee	01 June 2010 Extended from 01 June 2014	31 May 2014 To 31 August 2014	BSc Eng (Elec)
Capt Mpho Mamashela	Member: HR, Social and Ethics Committee	01 June 2010 Extended from 01 June 2014	31 May 2014 To 31 August 2014	German Commercial Pilots Licence and Flight Operations Management
Mr Mthobisi Zondi	Member: Audit and Risk Committee	01 June 2010 Extended from 01 June 2014	31 May 2014 To 31 August 2014	MSc (Mechanical)
Dr Elizabeth Gavin	Member: Strategy and Investment Committee	01 June 2010 Extended from 01 June 2014	31 May 2014 To 31 August 2014	PhD (Physics)
Adv. Tshoko Ratsheko	Member: HR, Social and Ethics Committee	01 June 2010 Extended from 01 June 2014	31 May 2014 To 31 August 2014	LLB (BURIS)
Mr Marius Rezelman	Chairperson: Audit and Risk Committee	01 May 2013 Extended from 01 June 2014	31 May 2014 To 31 August 2014	B.Com (Honours)
Prof David Walker	Member: Strategy and Investment Committee	01 May 2013 Extended from 01 June 2014	31 May 2014 To 31 August 2014	PhD (Physics)
Dr Daphney Mayindi	Member: HR, Social and Ethics Committee	01 May 2013 Extended from 01 June 2014	31 May 2014 To 31 August 2014	PhD (Aerospace Technology)
Dr Jonas Mphepya	Member: Strategy and Investment Committee	01 May 2013 Extended from 01 June 2014	31 May 2014 To 31 August 2014	PhD (Atmospheric Chemistry)
Mrs Gaborekwe Khambule	Member: Audit and Risk Committee	01 May 2013 Extended from 01 June 2014	31 May 2014 To 31 August 2014	DMS, MAP, NHD (Meteorology)

**Table 8: Board Membership**

During the financial year under review, the Board appointed two lead independent non-executive members to the Audit and Risk as well as the HR, Social and Ethics Committees.

As part of the induction programme, the newly appointed Board members attended all Committee meetings up until confirmation of their membership.

The Board attendance record in the 2013/14 financial year is reflected in Table 9.

Board Member	18/04/13	29/07/13	31/11/13	27/02/14
Mr Maurice Magugumela (Chairperson)	✓	x	✓	✓
Mr Leeandran Annamalai	✓	✓	✓	✓
Mr Potlaki Maine	✓	✓	✓	✓
Ms Louisa Mogudi	✓	✓	✓	✓
Dr Robert Scholes	x	✓	✓	✓
Ms Joy-Marie Lawrence	✓	✓	✓	x
Mr Vincent Gore	x	x	x	✓
Capt Mpho Mamashela	x	✓	x	x
Mr Mthobisi Zondi	x	x	x	x
Dr Elizabeth Gavin	✓	✓	x	✓
Adv Tsheko Ratsheko	✓	✓	x	x
♦ Mr Marius Rezelman	-	✓	✓	✓
♦ Prof David Walker	-	✓	✓	✓
♦ Dr Daphney Mayindi	-	✓	✓	✓
♦ Dr Jonas Mphepya	-	x	✓	✓
♦ Mrs Gaborekwe Khambule	-	✓	✓	✓
Dr Sandile Malinga (Chief Executive Officer and ex-officio Board Member)	✓	✓	✓	✓

✓ Attendance x Apology ♦ Additional Board Members appointed 1 May 2013

**Table 9: Attendance record of the governing Board Strategy and Investment Committee (formerly the Business, Planning and Governance Committee)**

The Strategy and Investment Committee is responsible for assisting the Board in fulfilling its oversight responsibilities in respect of all matters pertaining to the following:

- Facilitation and oversight of the strategic planning process by taking into account the mandate of SANSA and the strategic direction by the Shareholder in fulfilling Government's key priorities;
- Ensure that the Strategic Plan and Annual Performance Plan are set on baseline and broad market information;

- Ensure that the Strategic Plan sets out performance priorities, programmes and project plans for a five-year period in conjunction with the Shareholder;
- Ensure that the Annual Performance Plan is aligned to the Strategic Plan that will ensure that SANSA achieves its five-year targets; and
- Ensure that the strategic planning framework adheres to the planning cycle and timelines as set out in the Governance Framework for Public Entities reporting to the Minister of Science and Technology.

The membership of the committee and its attendance record in 2013/14 is reflected in the table below. However, it must be noted that the membership of the Committee has been re-configured during the financial year under review as a result of the appointment of additional Board members.

Board Member	23/05/13	18/07/13	17/10/13	12/02/14
Mr Leeandran Annamalai (Chairperson)	✓	✓	✓	✓
Ms Joy-Marie Lawrence	✓	x	✓	✓
Dr Robert Scholes	✓	x	x	✓
Dr Elizabeth Gavin	x	✓	x	✓
♦ Prof David Walker	-	✓	✓	✓
♦ Dr Jonas Mphepya	-	✓	✓	x
♦ Mr Marius Rezelman	-	✓	-	-

□ ♦ Mrs Gaborekwe Khambule	-	✓	-	-
Dr Sandile Malinga (Chief Executive Officer and ex-officio Committee Member)	✓	✓	✓	✓
Ms Bulelwa Pono (Chief Financial Officer and ex-officio Committee Member)	-	-	✓	✓

✓ Attendance x Apology

♦ Additional Board Members appointed 1 May 2013

□ Committee Membership changed

**Table 10: Membership and attendance record of the Strategy and Investment Committee**

### Human Resources, Social and Ethics Committee (formerly the Human Resources Committee)

The Human Resources, Social and Ethics Committee is responsible for assisting the Board in fulfilling its oversight responsibilities in respect of the following matters:

- Ensure that the Human Resources strategy supports the Agency's vision, mission and associated activities;
- Ensure that the organisational structure supports the activities to be undertaken by the Agency;
- Promote and guide Human Resources' initiatives and policies relevant to SANSA, within a framework of best practice and governance;
- Determine specific remuneration packages for executive management of the organisation, including but not limited to basic salary, benefits, any annual bonuses, performance-based incentives, pension and other benefits;

- Determine any criteria necessary to measure the performance of executive management in discharging their functions and responsibilities;
- The Committee undertakes to periodically review the Agency's practices on diversity in the workplace to ensure adherence to Employment Equity plans;
- The Committee shall review the Conditions of Service, the HR policies and procedures of SANSA and make recommendations to the Board for approval;
- The Committee will provide guidance to ensure that SANSA's social and ethics obligations are managed effectively; and
- The Committee will have due regard for the principles of governance and code of best practice.

The membership of the committee and its attendance record in 2013/14 is reflected in the table below. However, it must be noted that the membership of the Committee has been re-configured during the financial year under review as a result of the appointment of additional Board members.

Board Member	04/04/13	10/07/13	26/09/13	17/02/14
Ms Louisa Mogudi (Chairperson)	✓	✓	✓	✓
Adv Tsheko Ratsheko	x	x	x	✓
Dr Daphney Mayindi	-	✓	x	✓
Capt Mpho Mamashela	-	x	✓	x
□ Mr Potlaki Maine	✓	-	-	-
Mr Sindile Faku (Lead Independent Non-Executive member appointed 1 January 2014)	-	-	-	✓
♦ □ Prof David Walker	-	✓	-	-
♦ □ Mr Marius Rezelman	-	✓	-	-
♦ □ Mrs Gaborekwe Khambule	-	✓	-	-
Mr Zweli Ndziba (Executive Director: Corporate Services and ex-officio Committee member)	✓	✓	✓	✓

✓ Attendance x Apology ♦ Additional Board Members appointed 1 May 2013 □ Committee Membership changed

**Table 11: Membership and attendance record of the Human Resources, Social and Ethics Committee**

# SANSA Board Members



Mr Maurice Magugumela  
(Board Chairperson)



Dr Sandile Malinga  
(CEO)



Ms Joy-Marie Lawrence  
Board Member



Dr Robert Scholes  
Board Member



Mr Leeandran Annamalai  
Board Member



Captain Mpho Mamashela  
Board Member



Adv Tsheko Ratsheko  
Board Member



Mr Vincent Gore  
Board Member



Dr Elizabeth Gavin  
Board Member



Mr Mthobisi Zondi  
Board Member



Ms Louisa Mogudi  
Board Member



Mr Potlaki Maine  
Board Member



Mr Marius Rezelman  
Board Member



Prof David Walker  
Board Member



Dr Daphney Mayindi  
Board Member



Dr Jonas Mphepya  
Board Member



Mrs Gaborekwe Khambule  
Board Member

## Remuneration of Board members

Remuneration of Board members is set out in Note 18 of the Annual Financial Statements. The remuneration of the SANSA Board is determined in line with the National Treasury guidelines. The SANSA Board was categorised as a level A2 for the financial year under review. Board members are only paid for the meeting attendance and not for any preparatory time. Board members are not paid a daily allowance when attending to SANSA business but paid per hour for the actual event. However, all travel costs (e.g. airfares, car hire, etc.) are covered by SANSA. Other reimbursements include monthly cellphone and data allowance in line with the SANSA

cellphone and 3G policy as well as for actual costs incurred by Board members who elected to receive remuneration against incidental expenses such as airport parking costs, Gautrain fares and use of personal vehicles (reimbursed per kilometre as per SANSA travel policy).

It should be noted that Board members who represent other government departments or institutions are not remunerated unless proof of permission to do remunerative work outside their normal official duties are submitted. Furthermore there are Board members who opted not to receive any remuneration to serve on the SANSA Board.

## Corporate Management

### Corporate Executive

The Corporate Executive Management, under the Chief Executive Officer (CEO), is the executive committee of SANSA and is responsible for the executive leadership and day-to-day operational management of SANSA. It consists of:

- Dr Sandile Malinga, Chief Executive Officer (CEO);
- Ms Bulelwa Pono, Chief Financial Officer (CFO);
- Mr Zweli Ndziba, Executive Director (ED): Corporate Services; and
- Ms Saré Grobler, Board Secretary.

### Senior Management

The Corporate Senior Management under the CEO is the second highest management committee of SANSA and is responsible for the operational management of SANSA. It consists of:

- Dr Sandile Malinga, CEO;
- Ms Bulelwa Pono, CFO;
- Mr Zweli Ndziba, ED;
- Dr Lee-Anne McKinnell, Managing Director (MD): SANSA Space Science;
- Mr Raoul Hodges, MD: SANSA Space Operations; and
- Dr Jane Olwoch MD: SANSA Earth Observations.



Mr Zweli Ndziba



Ms Saré Grobler



Mr Raoul Hodges



Dr Lee-Anne Mckinnell



Dr Sandile Malinga



Ms Bulelwa Pono



Dr Jane Olwoch

## 2. RISK MANAGEMENT

SANSA has adopted enterprise risk management (ERM) as an integral part of business strategy and planning. This is applied across the organisation with an implemented ERM Policy and Framework.

Regular risk assessments are conducted as part of the implementation of the ERM framework to determine the effectiveness of the control environment. This process also assists the organisation to identify any new and emerging risks that might impact on the achievement of its objectives. The organisation also conducts risk awareness and training sessions with management responsible for the implementation of the risk management plan.

The implementation of the risk management framework and plan is monitored through the Audit and Risk Committee of the Board on a quarterly basis. This committee also monitors the effectiveness of internal controls and any mitigation plans provided by management to ensure that they are acceptable. The Committee has also approved the risk appetite for SANSA as part of the Risk Framework and monitors the effectiveness of the risk management process with recommendations for further actions by management.

SANSA is also in the process of implementing the risk indicators and setting the tolerance limits to be used as part of monitoring of these identified risks.

The Board and the Audit & Risk Committee have overall responsibility for the governance and oversight of risk management in SANSA.

The management of SANSA identified and assessed organisational strategic risks.

Prioritisation of the strategic risks is based on the potential and impact level assessed in relation to SANSA's statutory mandate, reputation, image, brand and integrity. The management of these risks also covers the mitigation of reputational risks.

The management of reputational risks ensures that SANSA's mandate is not compromised and will not have an impact on the achievement of the determined strategic objectives.

The Board reviewed the prevailing risks of SANSA quarterly and took necessary action.

## 3. INTERNAL AUDIT AND AUDIT COMMITTEES

The SANSA Internal Audit division was established in terms of Section 51(1)(a)(ii) of the PFMA, which requires the Accounting Authority (the Board) to ensure that SANSA has and maintains a system of internal audit.

The Audit and Risk Committee has the authority to independently determine the scope and extent of work performed by the Internal Audit function.

In accordance with the overriding requirement of independence and objectivity, the Internal Audit function reports functionally to the Chairperson of the Audit and Risk Committee and administratively to the Chief Executive Officer.

The purpose, authority and responsibility of the Internal Audit function are formally defined in its Charter, which is reviewed on an annual basis and approved by the Audit and Risk Committee and the SANSA Board.

As a critical assurance provider within the combined assurance framework of the business, internal and external audit co-ordinate efforts and ensure that there is an optimal level of overlap between these assurance providers. The Internal Audit function is tasked with compiling an annual audit plan approved by the Audit & Risk committee that will:

- Test the internal controls across the business;
- Audit specific areas based on the outcome of a risk assessment;
- Provide advisory service to the organisation as necessary; and
- Provide ad hoc audit services.

During the 2013/14 financial year, the Internal Audit unit successfully conducted internal audit assignments based

on a "risk-based audit approach", which is outlined in the approved internal audit plan.

The SANSA internal audit unit has adopted a co-sourced model whereby the organisation makes use of an internal audit service provider as well as an in-house audit to meet the mandate and responsibilities of the unit.

### Audit and Risk Committee (formerly the Finance, Audit and Risk Committee)

The Audit and Risk Committee has been established in compliance with Sections 76(4) (d) and 77 of the PFMA (Act No. 1 of 1999) and Section 3 of National Treasury Regulations.

The objective of the Committee is to provide independent oversight on the:

- Effectiveness of the internal control systems;
- Effectiveness of the internal audit function;
- Risk areas of the Agency's operations to be covered in the scope of internal and external audits;
- Adequacy, reliability and accuracy of the financial information; and
- Any accounting and auditing concerns identified as a result of internal and external audits and compliance with law and regulatory provisions.

The accompanying tables disclose relevant information on the audit committee membership and its attendance record in 2013/14. However, it must be noted that the membership of the Committee has been re-configured during the financial year under review as a result of the appointment of additional Board members.

Board Member	15/04/13	23/05/13	18/07/13	17/10/13	13/02/14
♦ Mr Marius Rezelman (Chairperson)	-	-	✓	✓	✓
Mr Mthobisi Zondi	x	✓	x	✓	x
♦ Mrs Gaborekwe Khambule	-	-	✓	✓	✓
Mr Vincent Gore	x	x	x	✓	✓
☐ Mr Potlaki Maine	-	-	-	-	✓
Mr Nick Nicholls (Lead Independent Non-Executive Committee member appointed on 1 January 2014)	-	-	-	✓	✓
♦ ☐ Dr Jonas Mphepya	-	-	✓	-	-
♦ ☐ Prof David Walker	-	-	✓	-	-
☐ Ms Joy-Marie Lawrence	✓	-	-	-	-
☐ Mr Leeandran Annamalai	✓	-	-	-	-
☐ Adv Tsheko Ratsheko	x	✓	-	-	-
Dr Sandile Malinga (Chief Executive Officer and Standing invited Member)	✓	✓	✓	✓	✓
Ms Bulelwa Pono (Chief Financial Officer and Standing invited Member)	✓	✓	✓	✓	✓

✓ Attendance x Apology ♦ Additional Board Members appointed 1 May 2013 ☐ Committee Membership changed

Table 12: Attendance record of the Audit and Risk Committee

## COMPLIANCE WITH LAWS AND REGULATIONS

Assurance on compliance with systems of internal control and on their effectiveness is obtained through regular management reviews, internal audit reviews and testing of certain aspects of the internal financial control systems by the external auditors during the course of their statutory examinations.

## FRAUD AND CORRUPTION

SANSA has a Fraud Prevention Policy and Plan in place to ensure all staff and stakeholders strive toward the prevention and detection of fraud. The Fraud Policy and Prevention plan is currently under review to include other mechanisms that have been identified for fraud prevention. SANSA has a culture of zero tolerance to fraud, which is also stated in the SANSA risk appetite. There was fraud training to raise awareness on fraud, corruption and theft within SANSA.

The entity has a fraud whistleblowing hotline which is used as a mechanism to report fraud, corruption and theft within the organisation. The calls made through the hotline are kept confidential and staff can therefore report any acts of fraud and corruption without fear of victimisation, penalty or retribution. All information relating to irregularities reported through the hotline is handled in a confidential manner and progress of such investigations is reported to the Audit and Risk Committee.

## MINIMISING CONFLICT OF INTEREST

SANSA's procurement process requires that all staff conduct annual declarations of outside interests through Human Resources. All Supply Chain Management staff and other staff who are involved in supply chain activities sign the declaration form (declare if they do have interests or not) at each meeting (Bid Specification Committee [BSC], Bid Evaluation Committee [BEC] and Bid Adjudication Committee [BAC]). Care is taken to ensure that conflict of interest is avoided within the procurement unit. If any conflict exists, the affected employee is recused from the process. Suppliers and service providers also declare their interest by completing the necessary documentation.

## HEALTH SAFETY AND ENVIRONMENTAL ISSUES

SANSA is committed to achieving environmental, health and safety excellence. The organisation strives to provide a safe and healthy working environment and to avoid harming the environment and the communities in which it operates.

All employees contribute in this regard by:

- Complying to environmental, health and safety laws;
- Taking measures to prevent workplace injuries and illnesses and providing a healthy and safe working environment;
- Reducing the use and release of toxic and hazardous materials; and
- Cooperating with the public, the Government and other interested parties to develop regulatory and public policies to protect public health and the environment.

### SHEQ Meetings

- SHEQ committee meetings are held once every two months at all Directorates (although the legal requirement is quarterly). Minutes are recorded at every meeting.
- The SHEQ committee meetings for SANSA Corporate and Earth Observation units have been combined and meetings were scheduled for the rest of the year. SHE inspections are conducted monthly and the inspection reports are signed by the SHEQ Manager and the Managing Directors/Senior Managers.
- A SHEQ Forum committee was established and three meetings were held, two at the Corporate office and the third one at SANSA Space Operations (Hartebeesthoek).
- Legal appointments for senior managers, first aiders, SHEQ representatives and emergency coordinators have been concluded in all Directorates.

## SHEQ Training

- Managers, supervisors and SHEQ Committee members have attended SHE legal training at most of SANSA units with remaining delegates expected to attend training during the next financial year.
- 14 staff members attended First Aid Training Level 1 and 20 attended firefighting courses as this is critical in the event of an emergency.

### Firefighting and first aid training



A scene from the firefighting training

Hartebeesthoek is situated a long distance from hospitals and clinics and it is therefore important that personnel are well trained to attend to injured staff. The first aiders are trained to help with minor injuries. In the case of serious injuries, external help such as ambulances and helicopters have to be acquired.

14 staff members attended this year's training and each received a certificate that is valid for two years.

During the firefighting training, the different classes of fire were explained as well as the various types of extinguishers and how to use them. 22 staff members attended the training and each attendee received a certificate valid for two years.



## SANSA has embarked on the removal of invasive species

As part of SANSA Space Operations' targets and objectives, the SHEQ office embarked on a three-year project to eradicate invader/alien plants and weeds from the Hartebeesthoek (HBK) and Hermanus site.

SANSA has to adhere to the Conservation of Agricultural Resources Act, 1983 which is an act of the National Department of Agriculture and makes provision for the conservation of the natural agricultural resources of South Africa through:

- The maintenance of the production potential of the land;
- The control and prevention of soil erosion and depletion of the water sources; and
- The protection of the vegetation and clearing of weeds and invader plants.



*The colourful Amaranth is one of HBK's most common weeds*

## Audits

- The internal and external audits were conducted on ISO 14001: 2004, OHSAS 18001: 2007 and ISO 9001:2008.

## Non-Conformances, Corrective & Preventive Actions

- ISO 14001: 2004 and OHSAS 18001: 2007. 13 minor non-conformances were raised by SABS during the audit. The audit findings have been corrected and cleared by the SABS.
- ISO 9001:2008. Six minor non-conformances were raised by the SABS during the audit. The findings have been corrected and have been cleared by the SABS.

## SHEQ Challenges

- SHEQ risk assessments need to be conducted at SANSA Corporate Office, Space Science and Earth Observations directorates and a risk register needs to be compiled.
- Waste needs to be segregated and disposed of safely by reputable companies.
- SANSA needs to be accredited or certified on ISO 14001:2007, ISO 9001:2008 and OHSAS 18001:2007.

## Incidents

Three non-disabling injuries have been reported.

## Disabling Injury Frequency Rate (DIFR)

Disabling Injury Frequency Rate (DIFR) for SANSA is 0

# SOCIAL RESPONSIBILITY

As a public entity of the Department of Science and Technology, SANSA recognises the importance of performing ethically in the interests of all stakeholders within the regulatory frameworks of the societies in which it operates. The Agency's Corporate Social Responsibility indicates a responsibility to people, the communities in which it operates, and to the environment.

During 2013/14 SANSA focused on supporting skills development among the youth specifically targeting the areas of scarce and necessary skills for the space industry through bursaries and internships. The national focus on encouraging the uptake of mathematics and science among learners was also driven through the science centre, mobile lab, workshops, events and exhibitions around the country.

The public and schools situated in the vicinity of SANSA facilities have benefitted from school visits, educator workshops and outreach activities to enhance an awareness and appreciation for space science and technology.

The natural environment of the space operations and space science facilities are home to many species of fauna and flora which are protected and sustained through regular removal of alien vegetation by staff while bringing no harm to the wildlife habiting the land.

Data provided by SANSA to government departments are also critical to evaluation and monitoring of natural resources of South Africa and used in water resource and pollution management, as an example.

# AUDIT COMMITTEE REPORT

The Committee is pleased to present its report for the financial year ended 31 March 2014.

The Audit and Risk Committee consists of six members, and met five times during the year under review. Schedule of attendance is shown on page 44 of this report

## Audit Committee Responsibility

The Audit Committee reported that it has complied with its responsibilities arising from Section 3.1 of the Public Finance Management Act and Treasury Regulation 3.1.13. The Audit Committee also reported that it has adopted appropriate formal terms of reference as its Audit Committee Charter, has regulated its affairs in compliance with this charter, and has discharged all its responsibilities as contained therein, except that changes in accounting policies and practices have been reviewed.

## The Effectiveness of Internal Control

Through the review of the internal audit activity, the Committee is satisfied that an adequate system of internal control is in place to mitigate risks to an acceptable level. These controls have been effective during the financial year under review. The system is designed to manage, rather than eliminate, the risk of failure and to maximise opportunities to achieve business objectives. This can provide only reasonable, but not absolute assurance.

Our review of the findings of the Internal Audit work, which was based on the risk assessments conducted in the public entity, revealed certain weaknesses, which were then raised with the public entity.

The following internal audit work was completed during the year under review:

- During the 2013/14 financial year, the internal audit unit successfully conducted internal audit assignments based on a "risk-based audit approach", which is outlined in the approved internal audit plan.
- The SANSA internal audit unit has adopted a co-sourced model whereby the organisation makes use of an internal audit service provider as well as an in-house audit to meet the mandate and responsibilities of the unit.

## Risk Management

The Committee is satisfied that SANSA has an ongoing risk management process, focused on identifying, assessing, managing and monitoring all known forms of significant risks across all operations. This has been in place for the year under review and up to the date of approval of the annual financial statements.

SANSA has a legal mandate to develop and implement effective and efficient systems of risk management and internal control. Treasury Regulation 27.2.1 requires SANSA to conduct risk assessments regularly and develop a risk management strategy that includes a fraud prevention plan and management capacity required to manage the identified risks.

The Public Finance Management Act (PFMA) of 1999, supported by the Treasury Regulations, has legislated some key governance requirements that must be adhered to and also be implemented. The compliance requirements in accordance with the PFMA Section 51(1)(a)(i) stipulate that:

"An accounting authority for a public entity must ensure that the public entity has and maintains: effective, efficient and transparent systems of financial and risk management and internal control."

SANSA has adopted a principle of implementing an enterprise-wide risk management approach to manage all its business risks. Risk management methodologies are applied in strategy setting, planning, projects, decision-making and all other business processes. SANSA strives to be a sustainable and performance-driven entity.

The aim of implementing risk management initiatives is to ensure that SANSA's strategic objectives are met, as well as effectively protecting the company and its brands against reputational and financial damage.

The Audit and Risk Committee of the Board is kept abreast of developments within SANSA through formal scheduled meetings held in accordance with the approved Board year plan.

An annual risk assessment is conducted on a strategic level, and is aligned with the strategic planning process of SANSA.

The risks are captured and documented in a risk register, and monitored on an ongoing basis in relation to risk mitigation strategies

## Internal Audit

The Committee has evaluated the internal control environment and has assessed the internal controls as effective to mitigate related risks (based on the information provided). In line with the PFMA (Act No. 1 of 1999), the internal audit coverage plan was informed by the risk management process. The Committee met with the internal auditors as often as necessary to discuss issues of concern arising from internal audit reviews.

## In-Year Management and Monthly/Quarterly Report

The public entity has submitted monthly and quarterly reports to management and the Executive Authority, respectively.

## Evaluation of Financial Statements

In respect of the SANSA Annual Financial Statements, the Committee has:

- Reviewed and discussed the audited annual financial statements to be included in the annual report, with the external auditors;
- Reviewed the Agency's management letter and management's response to it;
- Reviewed changes in accounting policies and practices;
- Considered the applicability of the going concern assumption;
- Reviewed the Agency's compliance with legal and regulatory provisions; and
- Reviewed significant adjustments resulting from the audit.

The Committee concurs with, and accepts, the external auditor's report included in the annual financial statements.

## Auditor's Report

We have reviewed the public entity's implementation plan for audit issues raised in the prior year and we are satisfied that the matters have been adequately resolved.

The Audit Committee concurs and accepts the conclusions of the external auditor on the annual financial statements and is of the opinion that the audited annual financial statements be accepted and read together with the report of the auditor.



**Mr Marius Rezelman**

**Chairperson of the Audit and Risk Committee**



**PART D**  
HUMAN RESOURCE  
MANAGEMENT

## Introduction

The Human Resources team aims to ensure that SANSA becomes an employer of choice, through the implementation of effective human capital management practices. This is achieved by enabling employees to play an active part in the organisation and contribute to the achievement of the organisation's goals.

In order to execute these deliverables, the HR team oversees and manages the full spectrum of the Agency's human capital value chain. This includes: resourcing; career and talent management; performance management; remuneration; reward and recognition; training and development; employee satisfaction and organisational culture. Employment equity and the effective management of diversity are given special attention as part of the Agency's human capital value chain imperative.

Through the development and implementation of the various HR initiatives, a foundation has been created upon which improvements in human capital management, with a view of ensuring sustainable organisational performance, can be built.

## Human Resources' Priorities

Human capital management priorities are informed by the SANSA Human Capital Management Strategic Plan (2012/13-2014/15), which represents SANSA's commitment to building and maintaining the workforce needed to achieve mission success, both now and in the future.

During the period under review, the HR team focused on improving HR practices and provided guidance and direction on workforce planning; analysis and forecasting; job analysis and evaluation; training and development; career and diversity management.

## Continuous Improvement of HR Practices

The Human Resources function successfully continued to develop and improve human resource management policies, processes, systems, and standard operating procedures.

## Workforce Plan

A 2014-2017 SANSA workforce plan has been developed. The plan seeks to ensure that organisational human capital planning is proactive and that human resource requirements are adequately forecast.

## Staff Development

In a continuous effort to achieve its strategic objectives, SANSA encourages and supports staff development through annual training plans.

During the period under review, staff development focused on leadership development as well as technical and core skills interventions to ensure a high-performing workforce.

May 2013 saw the introduction of a leadership development programme, which is currently under way. Senior managers of SANSA were all required to participate in the programme and a second intake, from the next level of management/supervisory staff, will commence in the 2014/15 financial year.

## Employment Equity and Diversity

Through SANSA's commitment to building a workforce free from all unfair discrimination and where diversity is seen as a key building block, the Agency aims to fully represent the wide demographic of the South African population. The diversity management put in place by SANSA focuses on ensuring a work environment that is respectful, inclusive and supportive, with the contributions of this diverse workforce being seen as a valuable mechanism when facing issues such as disadvantage, discrimination and/or harassment that may be experienced by staff.

This is the perspective that has been adopted by SANSA, in accordance with the requirements of various legislative requirements as set out by the Department of Labour. Therefore, the Agency has submitted a Board-approved Employment Equity Plan for the five-year period, ranging from 2011 to 2016.

The Employment Equity Plan (EEP) reflects progress that has been made in the meeting of targets for black people and women and shows that the plan is on track, and that goals have even been exceeded in some of the cases. A conscious effort is also being made to close the gap in the representation of persons with disabilities.

## Employee Recognition

Ensuring employee recognition is highly correlated to an increase in engagement and productivity. In this regard, an Employee Achievement Awards Framework has been adopted, and all SANSA divisions now formally recognise employee excellence through Employee Achievement Awards ceremonies.

## Employee Satisfaction

In a bid to gauge employee satisfaction and organisational climate, processes have been undertaken to ensure fair and equitable grade levels across the Agency. One of these being a comprehensive employee satisfaction survey that was successfully conducted in March 2014. Issues raised by staff are also addressed in an ongoing manner by management.

## Job Analysis and Evaluation

A SANSA-wide job analysis and evaluation project has been concluded. The process was undertaken to ensure fair and equitable grade levels across SANSA. The comprehensive evaluation has addressed many anomalies that may have existed post-migration of staff, from the Council for Scientific and Industrial Research (CSIR) and the National Research Foundation (NRF) in 2011.

## Salary Benchmarking

Regular salary benchmarking surveys are conducted to ensure that SANSA retains a competitive standing in the market. In a recent survey, conducted in March 2014, it was found that whilst SANSA's salary structure is aligned in terms of pay slope, salary ranges and overlaps in salary ranges, individual salaries tend to lag behind the market, as most salaries fall below the market median level. This trend suggests that SANSA may in future find itself exposed in terms of its ability to attract and retain talent, particularly when it comes to scarce and critical skill employees.

## Hartebeesthoek Staff Transportation Scheme

The staff transportation scheme for employees who work at the SANSA Hartebeesthoek worksite was reviewed to take into consideration tax implications and operational business imperatives. Following extensive staff consultations, the existing staff transportation scheme was terminated and replaced by a remote workplace scheme to cater for the unique challenges presented by the Hartebeesthoek worksite.

## Human Resource Oversight Statistics

SANSA Workforce Profile as at 31 March 2014



63% Africans  
9% Coloureds  
5% Indians  
23% White

Figure 4: Overall Employment Equity profile

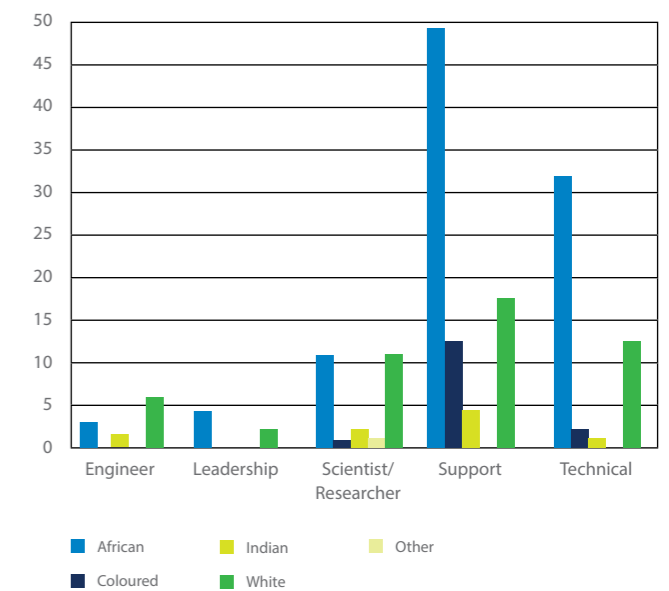


Figure 5: Workforce profile by race and job category

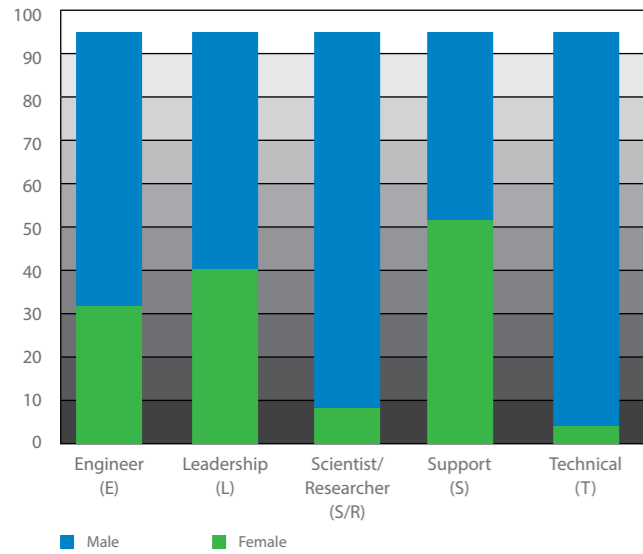


Figure 6: Workforce profile by gender and job category

### Workforce Profile by Occupational Level

Total number of employees (including employees with disabilities) in each occupational category as at 31 March 2014.

The table below is based on the format prescribed by the Employment Equity Act (No. 55 of 1998).

Occupational Level	Male				Female				Foreign Nationals		Total
	A	C	I	W	A	C	I	W	Male	Female	
Top management	2	0	0	0	1	0	0	0	0	0	3
Senior management	0	0	0	1	1	0	0	1	0	0	3
Professionally qualified and experienced specialists and mid-management	9	0	5	14	7	2	2	8	1	0	48
Skilled technical and academically qualified workers, junior management, supervisors, foremen, and superintendents	31	4	1	1	17	5	0	6	0	0	65
Semi-skilled and discretionary decision making	10	2	0	0	6	1	0	0	0	0	19
Unskilled and defined decision making	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL PERMANENT</b>	<b>52</b>	<b>6</b>	<b>6</b>	<b>16</b>	<b>32</b>	<b>8</b>	<b>2</b>	<b>15</b>	<b>1</b>	<b>0</b>	<b>138</b>
<b>TEMPORARY EMPLOYEES</b>	<b>17</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>36</b>
<b>GRAND TOTAL</b>	<b>69</b>	<b>7</b>	<b>7</b>	<b>87</b>	<b>40</b>	<b>8</b>	<b>2</b>	<b>16</b>	<b>3</b>	<b>0</b>	<b>174</b>
<b>EMPLOYEES WITH DISABILITIES</b>				<b>2</b>	<b>1</b>						<b>3</b>

Table 13: Workforce profile by occupational level

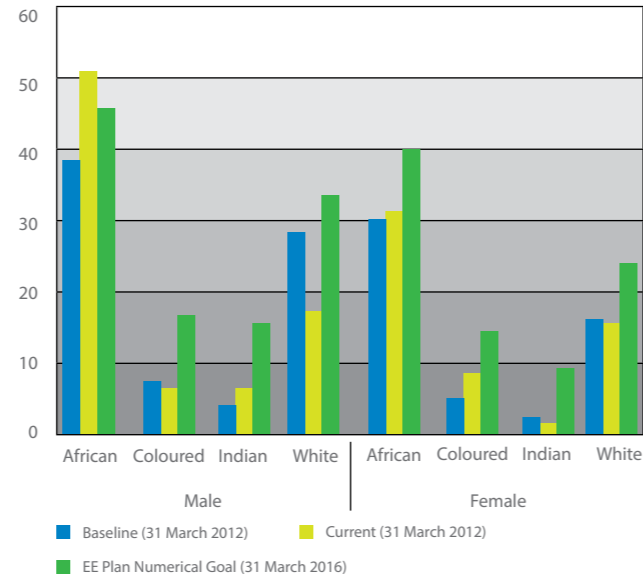


Figure 7: Employment Equity (progress against employment equity plan)

## Personnel Details

Establishment and vacancies by SANSA division

Division	Number of posts	Number of posts filled (1 April 2013 – 31 March 2014)	Vacancy rate
Corporate Office (CEO's Office; Finance; Corporate Services; Space Engineering division)	33	28	15.2%
Space Science	45	37	17.8%
Space Operations	54	53	1.9%
Earth Observation	37	30	18.9%
<b>Total</b>	<b>169</b>	<b>148</b>	<b>12.4%</b>

Table 14: Posts and vacancies by SANSA division

### Turnover by SANSA division

Division	Number of permanent employees as at 31 March 2013	Number of terminations (1 April 2013 - 31 March 2014)	Turnover rate
Corporate Office (CEO's Office; Finance; Corporate Services; Space Engineering Division)	28	3	10.7%
Space Science	37	3	8.1%
Space Operations	53	3	5.7%
Earth Observation	30	4	13.3%
<b>Total</b>	<b>148</b>	<b>13</b>	<b>8.8%</b>

Table 15: Turnover by SANSA division

### Turnover by Occupational Category

Division	Number of permanent employees as at 31 March 2013	Number of terminations	Turnover rate
Leadership (Exec & Senior Management)	6	0	0%
Engineers	8	2	25.0%
Scientists / Researchers	20	2	10.0%
Technical	43	5	11.6%
Support	71	4	5.6%
<b>Total</b>	<b>148</b>	<b>13</b>	<b>8.8%</b>

Table 16: Turnover by occupational category



**PART E**  
IMPACT REPORT

# Overview

With an average growth rate of between 5% and 8%, the space sector is one of the fastest growing sectors in the world. Space-based infrastructure supports an overall ever increasing selection of downstream products and services across a wide range of users and markets. Due to the expansion of global competitiveness and new satellite technology, it is not only the wealthy nations that are reaping the benefits; developing countries are making the necessary investments in space, with the goal of growing their economies.

When a country first invests in space, its focus is on developing capabilities and forms part of the larger national plan to improve information and communications technology (ICT), infrastructure, agriculture and education. These are all essential elements for building a resilient economy that is underpinned by sustainable development.

Due to the specialised skill sets needed for these space programmes, space agencies and governments need to invest in education and outreach programmes in schools through to higher education institutions to generate a skilled technical workforce. Science, technology, engineering and mathematics (STEM) education develops the advanced skills required for a competitive workforce that can generate economic growth.

Some of the benefits of space investment are:

- **Transport and navigation:** These have been revolutionised through space-based technologies, which result in more efficient routes, better safety records and decreased operating costs.

- **Spin-offs:** Thousands of technologies used in the space sector have been successfully spun off for use in practical terrestrial applications. Space spin-offs are not limited to high technology but extend to applications in medicine, energy, food, textiles and agriculture, just to name a few.
- **Modern infrastructure and scientific activities:** Rely on the services provided by satellites. These include water management systems (dams and irrigation), electric power grids, weather predictions and disaster monitoring/management as well as climate change studies. Space-based systems are crucial for risk prediction and mitigation, globally.

*The impact of space is far more prevalent than what can be detected from its economic footprint.*

## Space monitoring radar goes digital

SANSA has successfully commissioned and installed the new High Frequency Digital Radar at the South African Antarctic Research Base, SANAE IV. The new digital radar system replaced an outdated analogue system and forms part of the Super Dual Auroral Radar Network (SuperDARN), an international network of over 30 radars used to monitor the dynamics of space weather. SANSA decided to undertake the ambitious project of constructing the radar in-house to take advantage of the training opportunities offered by a project of this magnitude, as well as the opportunity to develop a radio frequency laboratory. Through the development of the new digital radar, SANSA is able to provide a state-of-the-art radar platform for space science research to take place nationally and internationally, further enhancing South Africa as global space player. Probing the space environment allows scientists to make new breakthroughs in the fascinating world of space weather research and find novel ways to protect our technology in space and on Earth.



Space weather impacts various technologies on Earth



SANSA's new SuperDARN digital radar system successfully installed at the SANAE base in Antarctica

## Keeping an eye on the sun, while addressing needs on the ground

Since the early 90s, the Sun and its daily activity has had a significant impact on humanity and in particular on modern technology due to society's increasing reliance on satellites. Space weather as a concept and as a new research area was born. Today it is a hot topic around the world and has become a vital area of research for government, industry and society.

*An extreme space weather event or "solar superstorm" is a potentially high-impact, low-probability natural hazard. Due to a growing awareness of the potential consequences of extreme space weather, governments in numerous countries now consider this as an element of national risk assessment.*

Space weather can have detrimental effects on the power grid; satellites; avionics; aircraft over polar regions; high frequency radio communication; mobile telephones; internet; and GPS, to name a few. Solar superstorms have consequently been identified as a risk to the world economy and society.

As the only Space Weather Centre in Africa, SANSA provides an essential service to the nation by monitoring the Sun and its activity, providing space weather forecasts, warnings, alerts, and environmental data on space weather conditions to governments and private industries in Africa.

The Agency collaborates with various institutions nationally and internationally on space weather research including the impacts of space weather on radio communication systems, GPS, power systems and on satellite technologies. SANSA is also developing systems for the estimation of the time of arrival and intensity of space weather storms based on observations from satellites and ground-based instruments.

Our aim is to provide the right information, in the right format, at the right time, to the right people, in order to facilitate the right decisions.

## Service delivery through space

SANSA provided yet another high quality National Mosaic, taken through the SPOT 5 satellite, which combine to provide comprehensive information about every part of the country. The 2013 SPOT 5 National Mosaic compilation was completed and distributed to stakeholders in the country.

*Key decision-makers in government departments fulfil their mandates with regard to their planning on matters such as disaster management, agriculture, water management, housing development and national security, through the National Mosaic. The Mosaic fulfils a number of duties, including that of measuring the growth of informal settlements over the years to monitoring the quality of water in dams, as well as industrial development and monitoring agricultural land and crop yields.*

Landsat 8, an Earth Observation satellite, sends data to the Agency, regarding a number of applications ranging from land use planning and monitoring, urban growth and agricultural monitoring, disaster management, water resource monitoring, climate-carbon cycles and sequestration to ecosystems function and services, hydrological cycles and various other terrestrial processes. Through the acquisition and distribution of the data from Landsat8, SANSA's range of satellite products widened and increased the scope for Earth Observation experts to develop operational remote sensing services for socio-economic benefit.

*The Agency also became one of the first ground stations in the world to be in possession of a moving window display for Landsat 8.*



The Earth Observation moving window display

A moving window display is a visual representation of a satellite pass over the footprint area. With this display, technical operators monitoring the pass are able to observe the quality of the pass, while the imagery is being downloaded.

The acquisition of this tool, takes SANSA one step closer to becoming the world's foremost authority on technology in the field of Earth Observation.

SANSA also undertook three major spatial planning and monitoring projects, namely:

- a. Mapping of informal settlements in the 45 Priority Municipalities for 2006 and 2011 for the National Department of Human Settlements;
- b. Infrastructure Monitoring Demonstrating Project (IMDP) for the Department of Performance Monitoring and Evaluation in the Presidency; and
- c. Low Cost Housing Project for the North West Provincial Government.

The IMDP involved the application of remote sensing change detection techniques to monitor public infrastructure and to track Government investment in mega infrastructure projects such as the Medupi Power Station.

The rainy season provided for proactive demonstration on the value of Earth Observation to the National Disaster Management Centre (NDMC) by providing flood maps of the affected areas in Matatiele in the Eastern Cape.

Another disaster, this time one of fire, provided a platform for assessment and analysis to be done for the Aliwal North, Eastern Cape and Dewetsdorp, Free State areas for use in adjudication and dispute settlement processes.

## The youth hold the key to our success

With the enrolments for Science, Engineering and Technology (SET) at South African public higher education institutions remaining at approximately 29% for the past 5 years, the promotion of the development of human capital in space science and engineering becomes a matter of compelling urgency.

*Space science and technology not only promotes public engagement, but is also an ideal instrument for science advancement.*

SANSA researchers and students have embraced the international conference circuit, with a number of impactful research papers presented at international conferences, and have contributed to the Agency in aid of local Human Capital Development (HCD).

Some of the conferences where researchers and students participated were:

- International Reference Ionosphere (IRI) 2013 Workshop in Poland;
- Beacon Satellite Symposium in the United Kingdom;
- 12th Scientific Assembly of the International Association of Geomagnetism and Aeronomy (IAGA) in Mexico;
- COSPAR Symposium in Bangkok, Thailand;
- European Space Weather week in Antwerp, Belgium;
- American Geophysical Union (AGU) conference in San Francisco, United States;
- World Meteorological Organisation (WMO) Inter-Programme Coordination Team on Space Weather (ICTSW) in Geneva, Switzerland;
- 7th International Conference on the Physics of Dusty Plasmas in New Delhi, India; and
- 2014 International Astronautical Congress in Beijing, China.

These engagements provide collaborative opportunities for expert South African scientists and researchers, and also serve to develop the human capital within SANSA through interaction and knowledge sharing with global experts.

SANSA has embarked on a successful Eminent Speaker Series, that is a platform for the local public to engage with renowned scientists and thought leaders on relevant space science topics.



A SPOT 6 workshop in Pretoria



Fundisa Disk school edition

Scientists and researchers make use of a number of other platforms to target public stakeholders on space science related topics. Courses in remote sensing and digital elevation modelling were offered to participants from the industry, research institutions and universities, and interns were trained in Space Science and Technology.

SANSA and the European Space Agency (ESA) worked in partnership to provide TIGER regional training workshops. This initiative aims to train water professionals across the continent, including how to make use of Earth Observation data in the improvement of monitoring and management of the scarce resource of natural water on the continent.

The SPOT 6 workshop was hosted in partnership with Astrium and introduced users to the data available from this new satellite.

Staff members continue to be involved with students, above and beyond workshops. They offer external examiner services and engage with the Department of Education in the development of material for school curricula. SANSA scientists and researchers offer valuable input and contribute knowledge from their extensive experience in the field.

As part of such knowledge creation and development, SANSA developed and distributed the first Fundisa school edition for Grade 10-12 learners, who can now learn about Earth observations.

## Building capacity through outreach programmes and public engagement

The various engagements with South African learners and the public were undertaken by SANSA teams to increase the uptake and appreciation of science among the youth as well as to improve the overall scientific literacy of the public.

*These space science initiatives reached approximately 11 000 learners this past year.*

National school visits; guided tours of SANSA facilities; National Science Week events; World Space Week activities; the Eding Festival; the Sasol Techno X: SciFestAfrica; Science Tube; and the SAASTEC Conference; among various other career showcasing outreach and awareness programmes provided participation opportunities for the team. Several successful public "Open Days" were hosted by the SANSA Science Centre in Hermanus, Western Cape with the aim of showcasing the Agency's impact on the daily lives of South Africans. The Centre hosts regular holiday programmes for learners. SANSA researchers also hosted winter & summer schools for undergraduate students.

*As a result, there was an invaluable increase in the volume of bursary applications for further study in space science and engineering disciplines.*

Through the SANSA Mobile Space Lab, our teams take science to remotely located schools that do not have the privilege of permanent laboratory facilities. Some of these include the rural areas around Oudtshoorn; George; Mossel Bay; and Ceres in the Western Cape Province as well as Mdantsane in the Eastern Cape.

Through these service offerings, SANSA has contributed to significantly increasing the practical understanding of science and mathematics among learners in these areas.



Public engagement with SANSA



## Africa: An alluring and emerging space-faring nation

SANSA is not only the primary point of contact, but also the face of South Africa, in the global space arena. The Agency is a vehicle for the strategic positioning of South Africa in the community of space-faring nations.

*SANSA has utilised its skilled team and infrastructure to deliver quality service and support to some well-known international space missions this past FY.*

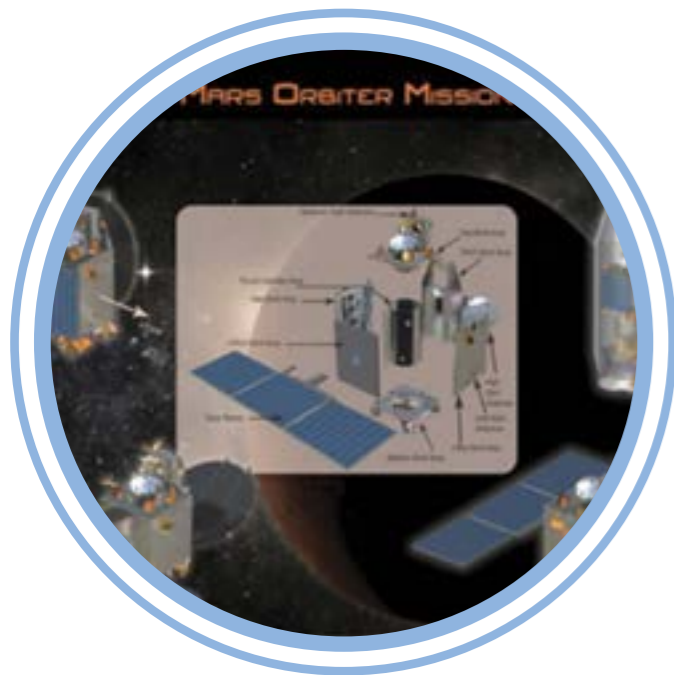


Image credit [www.space.com](http://www.space.com)

### *SANSA successfully supported global Deep Space Missions.*

India's Mars Orbiter Mission (MOM), carried by the PSLV-C25 rocket, was successfully launched on 5 November 2013. Shortly after its launch; SANSA acquired the Mars Orbiter signals.

This, being India's first deep space mission, was aimed at establishing the country's technological capabilities as well as orbiting the Red Planet in search of signs of life and to study its surroundings. The duration of this mission is nine months, with the first 20-25 days spent orbiting the Earth.

Indian Space Research Organisation (ISRO) acknowledged that the SANSA HBK station was ideally located to be the closest point to the satellite pass.

This mission, with the support of SANSA, generated a lot of interest both nationally and internationally. It has made India the first Asian country to have a spacecraft orbiting the Red Planet and only the sixth agency to launch a spacecraft headed to Mars.

SANSA has previously successfully supported NASA's Mars Science Laboratory (MSL) launch in 2011 and played a supporting role in NASA's launch of its Lunar Atmosphere and Dust Environment Explorer (LADEE) spacecraft on a Minotaur V vehicle during a five-day launch period, which started on 6 September 2013.

LADEE will enter into a series of phasing orbits, allowing the spacecraft to arrive at the Moon at the proper time and phase. By doing so, any dispersions in the Minotaur V launch injection can be accommodated. Its scientific objectives are to determine global density, composition and the measurement of any spatial and temporal variability of the Moon's fragile atmosphere.

The Moon has remained relatively unchanged since its initial development, unlike Earth and Mars, and therefore offers a unique look at planetary evolution. Once LADEE spacecraft reached the Moon, the various instruments on-board scan the Moon's atmosphere in detail to provide a glimpse into how dust moves on the lunar surface.

Through the LADEE mission, it is expected that further knowledge will be gained about the Moon, to inform understanding of the development of other planetary bodies within the solar system: Mercury, Venus, Earth and Mars.

It is the team's technical competency in the international space community that influences these space agencies to seek out its services. Over the years SANSA has firmly established an efficient and reputable TT&C station for various launch missions. Through consistently reliable performance, the Agency can offer the operational efficiencies that international clients require to remain at the top of their competitors in the space industry.

After engaging with or hosting visits by representatives of



*The new KU-DBS band antenna in the foreground and the almost-completed C-band in the background, on the left*

numerous space agencies, it is evident that SANSA has the potential to cement a leading position in this arena.

SANSA has also participated in the African Union Space Working Group for the development of African space policy and strategy, and in a number of multi-national projects and forums, including the intergovernmental Group on Earth Observations (GEO); an initiative which aims to facilitate the implementation of the Global Earth Observation System of Systems and related Earth Observation activities in Africa (AfriGEOSS); the Committee on Earth Observation Satellites (CEOS); the Space Frequency Coordination Group (SFCG); and the International Astronautical Congress (IAC).

Investment in infrastructure upgrades and developments have allowed South Africa to provide world-class support to international clients.

The In-Orbit Testing (IOT) Ka-band antenna based at the Hartebeesthoek facility was launched as part of the World Space Week 2013 initiatives. This event is an initiative by the United Nations to acknowledge the strides made by humanity in space and the consequent impact on people. It was celebrated around the world from 4-10 October 2013 with the theme of 'Exploring Mars, Discovering Earth'.

### *SANSA is now well placed to monitor a new wave of satellites being launched over the southern hemisphere.*

This innovative antennae facility consists of a new 10m KU-DBS band antenna and the IOT facility contains equipment and infrastructure to assist clients as they commission new satellites.

Another significant upgrade has been given to the first Ka-band tracking antenna which was installed in 1997. This maiden Ka-band satellite was a US Ka-band satellite constellation responsible for the broadcasting of three American television networks, but unfortunately it was not utilised on a regular basis and not to its full potential.

This Ka-band has recently become more popular as a satellite frequency, thus prompting investment in the upgrade of the IOT facility to support more launches and IOT campaigns. In January 2014, it was upgraded to include the replacement of the antenna horn and all the equipment used for receiving and transmitting the full commercial Ka-band.



*Raoul Hodges (SANSA Space Operations MD) and Pandey Shyam, an ISRO scientist who was stationed at HBK for the Transfer-orbit Support services (TOSS) duration*



Image Credit: NASA Ames/Dana Berry

## A promise for the future

SANSA, in partnership with the Cape Peninsula University of Technology (CPUT), was proudly involved in the development of South Africa's first nano-satellite, known as TshepisoSAT (meaning promise in Sesotho).

The satellite was launched from Russia on 21 November 2013, and carries a high frequency (HF) beacon transmitter, designed to calibrate the new digital HF radar system in Antarctica.

SANSA is managing an experimental aspect of the nano-satellite programme which aims to determine how to broadcast a high frequency radio signal using an antenna on-board TshepisoSAT. The resulting data will be invaluable to gain a better understanding of how radio signals propagate through space.

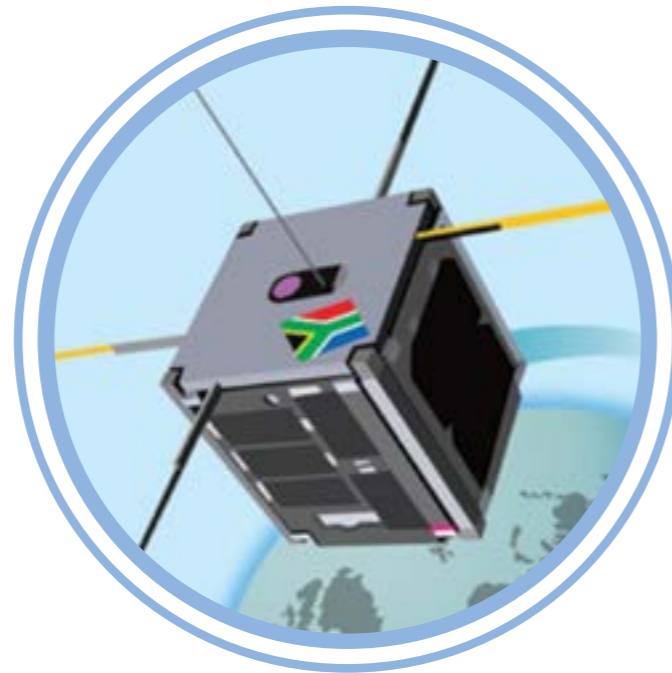
South Africa achieved another milestone with regard to space engineering in terms of the ongoing development of an Earth Observation satellite. The African continent faces many unique challenges, but with this satellite these challenges can be independently managed as part of the African Resources Management Constellation. Once functional, data provided by this satellite will assist in addressing the needs of societies across Africa. This includes food security, disaster management and land use. Good examples of addressing such needs are the management of natural disasters, like floods and fires, as well as crop disease management.

The primary mission is the characterisation of vegetation over selected land areas and the state and evolution thereof.

The secondary mission includes the surveillance of the built environment, including settlements and infrastructure as well as monitoring water and air quality. Part of the secondary mission also includes supporting management of natural hazards and human disasters.



*[Inset] Gladys Magagula (Mission Control Specialist at SANSA's Space Operations) live in-studio, following the launch of South Africa's first cubeSat, TshepisoSAT.*



*Artist's impression of TshepisoSAT in orbit*

The tertiary mission, or the enabling mission, includes activities such as instrument calibration in the form of lab, on-board, Moon and vicarious calibration. Algorithm benchmarking, intermediary and final products validation also forms part of this mission.

Thirteen candidates were awarded bursaries to pursue their Masters and PhDs in projects directly benefitting the new satellite development. This forms part of the implementation of the HCD plan.

The development of a satellite results in numerous challenging and exciting growth opportunities. These range from the development of new intellectual capital covering a variety of disciplines, to the actual physical design of the structure of the satellite. Such design requires ingenious electronic engineering to ensure a consistent and reliable line of communication with Earth, and protection from radiation.

The design of sub systems goes hand-in-hand with building highly sensitive sensors, which have historically resulted in advances in various other fields of science, for example, in medicine.

Consequently, there is a constant stream of developments within the realm of satellite upgrades and maintenance. The capacity and capability upgrade of the HouwTeq facility in the Western Cape is a good example of such developments. It is here where the assembly, integration and testing of new satellites, which can be manufactured locally or abroad, take place. The Denel SpaceTeq is also undergoing capacity upgrading to ensure that the design and construction of the satellite and future satellites benefit the space industry in South Africa.





**PART F**  
ANNUAL FINANCIAL  
STATEMENTS

# Audit Report

## INDEPENDENT AUDITOR'S REPORT TO PARLIAMENT ON THE SOUTH AFRICAN NATIONAL SPACE AGENCY

### REPORT ON THE FINANCIAL STATEMENTS

#### Introduction

1. I have audited the financial statements of the South African National Space Agency set out on pages 68 to 112 which comprise the statement of financial position as at 31 March 2014, the statement of financial performance, statement of changes in net assets, the statement of cash flows and the statement of comparison of budget and actual amounts for the year then ended, as well as the notes, comprising a summary of significant accounting policies and other explanatory information.

#### Accounting Authority's responsibility for the financial statements

2. The accounting authority is responsible for the preparation and fair presentation of these financial statements in accordance with South African Standards of Generally Recognised Accounting Practice (SA Standards of GRAP) and the requirements of the Public Finance Management Act of South Africa, 1999 (Act No.1 of 1999) (PFMA), and for such internal control as the accounting authority determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' responsibility

3. My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with the Public Audit Act of South Africa, 2004 (Act No. 25 of 2004) (PAA), the general notice issued in terms thereof and International Standards on Auditing. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.
4. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected

depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

5. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

#### Opinion

6. In my opinion, the financial statements present fairly, in all material respects, the financial position of the South African National Space Agency as at 31 March 2014, and its financial performance and cash flows for the year then ended, in accordance with South African Standards of Generally Recognised Accounting Practices (SA Standards of GRAP) and the requirements of the Public Finance Management Act of South Africa, 1999 (Act No.1 of 1999) (PFMA).

### REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

7. In accordance with the PAA and the general notice issued in terms thereof, I report the following findings on the reported performance information against predetermined objectives for selected objectives, non-compliance with legislation as well as internal control. I performed tests to identify reportable findings as described under each subheading but not to gather evidence to express assurance on these matters. Accordingly, I do not express an opinion or conclusion on these matters.

#### Predetermined objectives

8. I performed procedures to obtain evidence about the usefulness and reliability of the reported performance information for the following selected objectives presented in the annual performance report of the public entity for the year ended 31 March 2014:

#### Earth Observation programme:

- Strategic objective 1: Offer efficient EO services for national and international benefit and a sustained environment (number of images acquired and archived [2EO1]) on page 25.
- Strategic objective 1: Offer efficient EO services for national and international benefit and a sustained environment (number of images distributed [2EO2]) on page 25.
- Strategic objective 2: Conduct cutting-edge research, development and innovation to continually improve SANSAs offering (number of images distributed for research [2EO4]) on page 25.
- Strategic objective 2: Conduct cutting-edge research, development and innovation to continually improve SANSAs offering (number of technical reports and research publications [EO6]) on page 25.

#### Space Operation programme:

- Strategic objective 1: Offer efficient, cost effective & globally competitive space operations and applications for societal benefit and global market (success rate of 95% of all passes taken for Earth Observation [2SO1]) on page 28.
- Strategic objective 1: Offer efficient, cost effective & globally competitive space operations and applications for societal benefit and global market (number of mission launches supported and in-orbit tests undertaken [2SO2]) on page 28.

#### Space Science programme:

- Strategic objective 1: Offer state-of-the-art research platform and applied science/technology service platforms (amount (Tb) of science data acquired and archived [2SS1]) on page 31.
- Strategic objective 2: Conduct cutting-edge research, development and innovation (number of ISI publications per researcher [2SS4]) on page 31.
- Strategic objective 3: Development of human capital in space science and science advancement (number of learners reached through direct & specific engagement [2SS13]) on page 31.
- Strategic objective 3: Development of human capital in space science and science advancement (proportion [%] of permanent staff from designated groups in the top two management levels [manager, senior manager] [2SS12]) on page 31.
- Strategic objective 3: Development of human capital in space science and science advancement (number of short courses conducted [2SS9]) on page 31.

- Strategic objective 3: Development of human capital in space science and science advancement (number of students/interns supported/trained [2SS6]) on page 31.
9. I evaluated the reported performance information against the overall criteria of usefulness and reliability.
  10. I evaluated the usefulness of the reported performance information to determine whether it was presented in accordance with the National Treasury's annual reporting principles and whether the reported performance was consistent with the planned objectives. I further performed tests to determine whether indicators and targets were well defined, verifiable, specific, measurable, time bound and relevant, as required by the National Treasury's Framework for managing programme performance information (FMPPI).
  11. I assessed the reliability of the reported performance information to determine whether it was valid, accurate and complete.
  12. I did not raise any material findings on the usefulness and reliability of the reported performance information for the selected objectives.

#### Additional matter

13. Although I raised no material findings on the usefulness and reliability of the reported performance information for the selected, I draw attention to the matter below:

#### Achievement of planned targets

14. Refer to the annual performance report on page 21 for information on the achievement of planned targets for the year.

#### Compliance with legislation

15. I performed procedures to obtain evidence that the entity has complied with applicable laws and regulations regarding financial matters, financial management and other related matters.
16. I did not identify any instances of material non-compliance with specific matters in key legislation as set out in the general notice issued in terms of the PAA.

#### Internal control

17. I considered internal control relevant to my audit of the financial statements, annual performance report and compliance with legislation. I did not identify any significant deficiencies in internal control.

## OTHER REPORTS

### Agreed-upon procedures engagement

18. An agreed-upon procedures engagement was performed on donor funding concerning the application of grant funding received from the National Research Foundation (NRF) and the Human Resources for Industry Programme (THRIP GRANTS) for the period 1 April 2013 to 31 March 2014, and was issued to the South African National Space Agency (SANSA) management on the 27th of June 2014.



**SizweNtsalubaGobodo Inc.**  
**Zaheeda Bashir**  
**Chartered Accountant (SA)**  
**Registered Auditor**

**31 July 2014**  
**20 Morris Street East**  
**Woodmead**  
**2191**

# Annual Financial Statements

## STATEMENT OF FINANCIAL POSITION AT 31 March 2014

	Note	2014	2013
		R	R
<b>ASSETS</b>			
<b>Current Assets</b>		<b>143 056 946</b>	<b>114 619 383</b>
Cash and Cash Equivalents	4	120 641 894	96 106 738
Receivables from Exchange Transactions	5,1	13 813 040	15 445 347
Receivables from Non-Exchange Transactions	5,2	8 195 079	2 635 853
Inventory	6	406 933	431 445
<b>Non-Current Assets</b>		<b>128 185 348</b>	<b>99 955 807</b>
Property, Plant and Equipment	7	121 900 169	96 644 803
Intangible Assets	8	6 285 179	3 311 004
<b>Total Assets</b>		<b>271 242 294</b>	<b>214 575 190</b>
<b>LIABILITIES</b>			
<b>Current Liabilities</b>		<b>102 198 313</b>	<b>56 674 074</b>
Trade and Other Payables from Exchange Transactions	9	19 423 216	27 260 277
Provisions	10	5 123 482	4 813 029
Unspent Conditional Grants and Receipts	11	77 100 177	24 033 386
Current Portion of Long-Term Liabilities	12	153 565	169 243
Operating Lease Liability	12,3	397 873	398 139
<b>Non-Current Liabilities</b>		<b>103 000</b>	<b>256 585</b>
Long-Term Liabilities	12	103 000	256 585
<b>Total Liabilities</b>		<b>102 301 313</b>	<b>56 930 659</b>
<b>NET ASSETS</b>		<b>168 940 981</b>	<b>157 644 531</b>
Accumulated Surplus	13	168 940 981	157 644 531
<b>Total Net Assets</b>		<b>168 940 981</b>	<b>157 644 531</b>

STATEMENT OF FINANCIAL PERFORMANCE AT 31 March 2014

Note	2014	2013
	R	R
<b>REVENUE</b>		
Revenue from Non-exchange Transactions		
Transfers and Subsidies Received	135 554 650	128 986 184
Revenue from Exchange Transactions		
Finance Income	4 653 074	5 286 039
Rendering of Services	71 272 116	72 321 889
Other Income	1 209 119	412 349
Gains on Disposal of Property, Plant and Equipment	1 399	24 683
<b>Total Revenue</b>	<b>212 690 358</b>	<b>207 031 144</b>
<b>EXPENDITURE</b>		
Employee Related Costs	76 282 483	62 397 952
Board Member Remuneration	473 846	330 655
Depreciation and Amortisation	16 283 354	15 476 099
Impairment Losses	19 629	20 670
Repairs and Maintenance	3 911 936	2 446 929
Finance Costs	124 892	122 535
Data Licence fees	25 580 933	16 392 047
Grants and Subsidies Paid	4 056 122	2 875 721
Research and Development Costs	5 002 132	19 256 821
General Expenses	68 384 465	57 063 620
Net Gains/Losses on foreign exchange transactions	1 207 929	(171 193)
Loss on Disposal of Property, Plant and Equipment	66 187	372 368
<b>Total Expenditure</b>	<b>201 393 908</b>	<b>176 584 224</b>
<b>SURPLUS FOR THE YEAR</b>	<b>11 296 450</b>	<b>30 446 920</b>

STATEMENT OF CHANGES IN NET ASSETS FOR THE YEAR ENDED 31 March 2014

Description	Accumulated Surplus Account	Total
	R	R
<b>2013</b>		
<b>Balance at 1 April 2012</b>	<b>127 197 611</b>	<b>127 197 611</b>
Surplus for the year	30 446 920	30 446 920
Balance as at 31 March 2013	157 644 531	157 644 531
<b>2014</b>		
<b>Balance at 1 April 2013</b>	<b>157 644 531</b>	<b>157 644 531</b>
Surplus for the year	11 296 450	11 296 450
<b>Balance at 31 March 2014</b>	<b>168 940 981</b>	<b>168 940 981</b>

## CASH FLOW STATEMENT FOR THE YEAR ENDED 31 March 2014

	Note	2014	2013
		R	R
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
<b>Receipts</b>			
Grants		135 554 650	133 610 912
Sales of goods and services		71 272 116	75 185 391
Interest Received		4 653 074	5 286 039
Other Receipts		1 210 517	437 033
<b>Payments</b>			
Employee Costs		(76 756 329)	(62 067 297)
Suppliers		(38 551 123)	(40 098 270)
Interest Paid		(124 892)	(122 535)
Other Payments		(30 670 907)	(57 063 618)
<b>NET CASH FLOWS FROM / (USED IN) OPERATING ACTIVITIES</b>	<b>28</b>	<b>66 587 106</b>	<b>55 167 655</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Purchase of Property, Plant and Equipment	7	(40 805 005)	(30 973 787)
Purchase of Intangible Assets	8	(1 236 858)	(1 354 530)
Proceeds on Disposal of Property, Plant and Equipment		143 498	104 441
<b>NET CASH FLOWS FROM / (USED IN) INVESTING ACTIVITIES</b>		<b>(41 898 365)</b>	<b>(32 223 876)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Movement in Finance Lease Liability		(153 585)	(128 753)
<b>NET CASH FLOWS FROM / (USED IN) FINANCING ACTIVITIES</b>		<b>(153 585)</b>	<b>(128 753)</b>
<b>NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS</b>		<b>24 535 156</b>	<b>22 815 024</b>
Cash and Cash Equivalents at the beginning of the year	4	96 106 738	73 291 714
Cash and Cash Equivalents at the end of the year	4	120 641 894	96 106 738

## STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS FOR THE YEAR ENDED 31 March 2014

	Approved Budget	Final Budget	Actual Amounts on Comparable Basis	Difference	Notes
<b>Revenue</b>					
<b>Revenue from Non-exchange Transactions</b>	<b>153 235 659</b>	<b>208 178 569</b>	<b>208 543 123</b>	<b>364 554</b>	
Parliamentary Grant	111 708 000	111 708 000	111 708 000	-	
Ring Fenced Transfers	37 200 000	90 816 206	90 816 206	-	
Research Grants	4 327 659	5 654 363	6 018 917	364 554	
<b>Revenue from Exchange Transactions</b>	<b>62 224 069</b>	<b>63 392 782</b>	<b>71 272 116</b>	<b>7 879 334</b>	
Contract Income: Public	25 793 069	24 698 061	17 169 870	-7 528 191	3,3
Contract Income: Private	36 431 000	38 694 721	54 102 246	15 407 525	3,3
<b>Finance and other Income</b>	<b>154 000</b>	<b>2 682 021</b>	<b>5 863 591</b>	<b>3 181 570</b>	<b>3,3</b>
Prior years Surplus Rollovers		41 784 918	41 784 918	-	
<b>Total Revenue</b>	<b>215 613 728</b>	<b>316 038 290</b>	<b>327 463 748</b>	<b>11 425 458</b>	
<b>Economic Classification</b>					
<b>Current Payments</b>					
Compensation of Employees	80 752 208	82 483 411	76 282 483	-6 200 928	
Board Costs	1 372 000	500 000	473 846	-26 154	
Goods and services	81 436 520	125 724 750	107 077 829	-18 646 921	3,3
	<b>163 560 728</b>	<b>208 708 161</b>	<b>183 834 158</b>	<b>-24 874 003</b>	
<b>Payments for Capital Assets</b>					
Buildings and other fixed structures	-	3 049 928	4 186 692	1 136 764	
Machinery and equipment	12 653 000	35 998 630	23 338 675	-12 659 955	3,3
Software and intangible assets	1 700 000	1 560 195	1 236 858	-323 337	3,3
Vehicles	500 000	2 648 194	2 779 638	131 444	3,3
Satellite Development	37 200 000	64 073 182	10 500 000	-53 573 182	3,3
	52 053 000	107 330 129	42 041 863	-65 288 266	
<b>Total Expenditure</b>	<b>215 613 728</b>	<b>316 038 290</b>	<b>225 876 021</b>	<b>-90 162 269</b>	
Surplus/Deficit		-	101 587 727	101 587 727	

### Reconciliation of Actual amounts on a Comparable Basis and Actual amounts on the annual financial statements

Net Cash flows from	Operating Activities	Financing Activities	Investing Activities	Total
Actual Amount on Comparable Basis as Presented in the Budget and Actual Comparative Statement	101 587 727	-	-42 958 804	58 628 922
Basis Differences	-76 758 538	-153 565	-	-76 912 103
Timing Differences	41 784 918	-	-	41 784 918
Entity Differences	-	-	-	-
<b>Actual amount in Cash Flow Statement</b>	<b>66 587 106</b>	<b>-153 585</b>	<b>-41 898 365</b>	<b>24 535 156</b>

# Accounting Policies

## 1. BASIS OF PRESENTATION

The annual financial statements have been prepared using the accrual basis of accounting, in terms of which items are recognised as assets, liabilities, net assets, revenue and expenses when they satisfy the definitions and recognition criteria for those elements, which in all material aspects are consistent with those applied in the previous year, except where a change in accounting policy has been recorded. The historic cost convention has been used, except where indicated otherwise.

The Annual Financial Statements are prepared in South African Rand (R) and have been prepared on a going concern basis.

### Statement of compliance

The Annual Financial Statements have been prepared in accordance with the Standards of Generally Recognised Accounting Practice (GRAP), including any interpretations and directives issued by the Accounting Standards Board (ASB) and the Public Finance Management Act (PFMA).

### 1.1 CHANGES IN ACCOUNTING POLICY AND COMPARABILITY

Accounting Policies have been consistently applied, except where otherwise indicated below:

The Accounting Policies applied are consistent with those used to present the previous year's financial statements, unless explicitly stated.

The entity changes an Accounting Policy only if the change:

- is required by a Standard of GRAP; or
- results in the financial statements providing reliable and more relevant information about the effects of transactions, other events or conditions on the entity's financial position, financial performance or cash flow.

The details of any changes in accounting policies and comparative restatements are explained in the relevant policy.

### 1.2 CRITICAL JUDGEMENTS, ESTIMATIONS AND ASSUMPTIONS

In the application of the entity's accounting policies, which are described below, management is required to make judgements, estimates and assumptions about the amounts of assets, liabilities, revenue and expenses that are not readily

apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

These estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the critical judgements that management have made in the process of applying the entity's Accounting Policies and that have the most significant effect on the amounts recognised in the Annual Financial Statements:

#### 1.2.1 Financial assets and liabilities

The classification of financial assets and liabilities, into categories, is based on the relevant GRAP standards and the terms of the instruments. Accounting Policy 1.7.2 on Financial Assets Classification and Accounting Policy 1.7.3 on Financial Liabilities Classification describe the factors and criteria considered by the management of the entity in the classification of financial assets and liabilities.

In making the above-mentioned judgement, management considered the definition and recognition criteria for the classification of financial instruments as set out in GRAP.

#### 1.2.2 Impairment of Financial Assets

Accounting Policy 1.7.5 on Impairment of Financial Assets describes the process followed to determine the value by which financial assets should be impaired. In making the estimation of the impairment, the management of the entity considered the detailed criteria of impairment of financial assets as set out in GRAP, and used its judgement to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of the reporting period. The management of the entity is satisfied that the impairment of financial assets recorded during the year is appropriate.

The calculation in respect of the impairment of debtors is based on an assessment of the extent to which debtors have defaulted on payments already due, and an assessment of their ability to make payments based on their creditworthiness.

#### 1.2.3 Useful lives of Property, Plant and Equipment and Intangible Assets

Property, plant and equipment and Intangible assets

are depreciated over their useful life taking into account residual values, where appropriate. The useful lives of the assets and residual values are assessed annually and may vary depending on a number of factors. In re-assessing useful lives, factors such as technological innovation and maintenance programmes are taken into account. Residual value assessments consider issues such as future market conditions, the remaining life of the asset and projected disposal values.

#### 1.2.4 Impairment: Write down of Property, Plant and Equipment and Intangible Assets

Property, plant and equipment (PPE) and intangible assets are considered for impairment if there is a reason to believe that impairment may be necessary. The future cash flows expected to be generated by the assets are projected taking into account market conditions and the expected useful lives of the assets. The present value of these cash flows, determined using an appropriate discount rate, is compared to the current carrying value and, if lower, the assets are impaired to the present value taking into account the reasonable cost of replacement.

In making the above-mentioned estimates and judgement, management considered the subsequent measurement criteria and indicators of potential impairment losses as set out in GRAP 17: Property, Plant and Equipment and GRAP 31: Intangible assets. In particular, the calculation of the recoverable service amount for PPE and intangible assets involves significant judgment by management.

#### 1.2.5 Provisions and Contingent Liabilities

Management judgement is required when recognising and measuring provisions and when measuring contingent liabilities. Provisions are discounted where the effect of discounting is material using actuarial valuations. The amount of a provision is the best estimate of the expenditure expected to be required to settle the present obligation at the reporting date. SANSA recognises provision for bonuses based on the expected performance bonuses to be paid out to employees.

#### 1.2.6 Revenue Recognition

Accounting Policy 1.9.2 on Revenue from Exchange Transactions and Accounting Policy 1.9.3 on Revenue from Non-exchange Transactions describe the conditions under which revenue will be recorded by management of the entity.

In making their judgement, management considers the detailed criteria for the recognition of revenue as set out in GRAP 9: Revenue from Exchange Transactions and GRAP 23: Revenue from Non-Exchange transactions, as far as Revenue from Exchange and Non-Exchange Transactions is concerned. In particular, revenue from services rendered is

recognised in surplus or deficit in proportion to the stage of completion of the transaction at the reporting date.

The stage of completion is assessed by reference to work performed as at the reporting date. Contract revenue includes the initial amount agreed in the contract plus any variations in contract work, claims and incentive payments to the extent that it is probable that these will result in revenue and can be measured reliably. As soon as the outcome of a contract can be estimated reliably, contract revenue and expenses are recognised in profit or loss in proportion to the stage of completion of the contract.

The stage of completion is assessed by reference to work performed as at reporting date. When the outcome of a contract cannot be estimated reliably, contract revenue is recognised only to the extent of contract costs incurred that are likely to be recoverable. An expected loss on a contract is recognised immediately in surplus or deficit.

Management of the entity is satisfied that recognition of the revenue in the current year is appropriate.

#### 1.2.7 Going Concern Assumption

The Annual Financial Statements have been prepared on a going concern basis. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent liabilities and commitments will occur in the ordinary course of business.

## 1.3 OFFSETTING

Assets, liabilities, revenues and expenses have not been offset except when offsetting is required or permitted by a standard of GRAP.

## 1.4 STANDARDS, AMENDMENTS TO STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE

Standard Number	Standard Name	Effective date (if applicable)
GRAP 18	Segment Reporting	No Effective date
GRAP 20	Related party disclosures	No Effective date
GRAP 32	Service Concession Arrangements: Grantor	No Effective date
GRAP 105	Transfer of Functions Between Entities Under Common Control	No Effective date
GRAP 106	Transfer of Functions Between Entities Not Under Common Control	No Effective date
GRAP 107	Mergers	No Effective date
GRAP 108	Statutory Receivables	No Effective date



## GRAP 18 - Segment Reporting:

The standard requires the identification and aggregation of the operating segments of the entity into reportable segments. For each of the reportable segments identified details of the financial performance and financial position will be disclosed. The precise impact of this on the financial statements of the entity is still being assessed but it is expected that this will only result in additional disclosures without affecting the underlying accounting. This standard does not yet have an effective date.

## GRAP 20 – Related Parties

This standard provides the requirements for the disclosure of related parties and transactions and balances with related parties. This standard was based on IPSAS 20 as currently applied by the entity for its related party disclosures. Accordingly it is not expected that the adoption of this standard will have a material impact on the financial statements of the entity. This standard does not yet have an effective date.

## GRAP 105 – Transfer of Function Between Entities Under Common Control

This standard provides the accounting treatment for transfers of functions between entities under common control. The standard determines that assets and liabilities transferred to entities under common control will be recognized at their carrying values (per the records of the transferring entity) in the records of the receiving entity. The difference between the consideration transferred and the carrying value of the assets / liabilities transferred is recognized in accumulated surplus / deficit. This standard does not yet have an effective date.

## GRAP 106 – Transfer of Function Between Entities Not Under Common Control

This standard deals with other transfers of functions (i.e. between entities not under common control) and requires the entity to measure transferred assets and liabilities at fair value. The difference between the consideration transferred and the carrying value of the assets / liabilities transferred is recognized in accumulated surplus / deficit. This standard does not yet have an effective date.

## GRAP 107 – Mergers

This standard deals with requirements for accounting for a merger between two or more entities. The standard determines that the assets and liabilities acquired through the merger should be measured at their carrying values. Any difference between these carrying values and the consideration transferred for the merger is recognized in accumulated surplus / deficit. The standard would only apply to where the entity enters into a merger. This standard does not yet have an effective date.

The following interpretations have also been issued and are expected to have an insignificant impact on the financial statements, since they generally reflect the interpretation and principles already established under IFRS apart from the interpretations relating to leases, it is unlikely that the entity will encounter any of these issues in the normal course of its business.

Standard number	Standard name	Effective date (if applicable)
	Preface to Interpretations of the Standards of GRAP	No effective date
iGRAP7	The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their interaction	No effective date
iGRAP 11	Consolidation – Special Purpose Entities	No effective date
iGRAP 12	Jointly Controlled Entities – Nonmonetary Contributions By Venturers	No effective date
iGRAP 17	Interpretation of the standard of GRAP on service concession arrangements where a grantor controls a significant residual interest in an asset.	No effective date

## 1.5 PROPERTY, PLANT AND EQUIPMENT

### 1.5.1 Initial recognition and subsequent measurement

Property, plant and equipment are measured at cost, net of accumulated depreciation and/ or accumulated impairment losses, if any. Property, plant and equipment are tangible assets which are held for use in the production or supply of goods and services or for administrative purposes and are expected to be used during more than one financial period.

The cost of an item of property, plant and equipment is recognised as an asset when:

- It is probable that future economic benefits or service potential associated with the item will flow to the entity; and
- The cost of the item can be measured reliably.

Costs include costs incurred initially to acquire or construct an item of property, plant and equipment and significant costs incurred subsequently to add to, replace part of, or service it. If a replacement cost is recognised in the carrying amount of an item of property, plant and equipment, the carrying amount of the replaced part is derecognised.

Where an asset is acquired at no cost, (i.e. non-exchange transaction), its cost will be its fair value as at the date of acquisition.

All repair and maintenance costs are recognised in surplus or deficit as incurred. The present value of the initial expected estimate cost for the decommissioning of the asset after

its use is included in the cost of the respective asset if the recognition criteria for an allowance is met.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

### 1.5.2 Depreciation

Depreciation is recognised in surplus or deficit on a straight line basis over the estimated useful lives of each part of an item of property, plant and equipment:

- a. Freehold land  
Land has an unlimited useful life and therefore is not depreciated but stated at cost less any impairment losses.

- b. Freehold buildings

SANSA identified the following major components of buildings.

- Buildings; and
- Alterations and other fixtures.

The useful lives of the various components of buildings have been assessed to be:

- Buildings: 15-50 years
- Alterations and other fixtures: 14-15 years
- Equipment and Motor Vehicles

The useful lives of the various categories of equipment and vehicles have been assessed to be:

- Office furniture: 3-10 years
- Motor vehicles: 3-10 years
- Computer equipment: 1-10 years
- Research equipment: 2-15 years
- Plant & Machinery: 2-20 years
- Office Equipment: 3-10 years
- Exhibits: 10 years

- d. Leasehold improvements

These improvements are depreciated over the shorter of the contract period or the assessed useful lives of the assets.

The residual values, depreciation methods and useful lives of the asset categories are reviewed at each financial year end and adjusted if necessary. If the expectations differ from

previous estimates, the change is accounted for as a change in accounting estimate.

### Derecognition

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits or service potential are expected from its use or disposal. The gain or loss arising from the derecognition of an item of property, plant and equipment is included in surplus or deficit when the item is derecognised. The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

### 1.5.3 Impairment of non-financial assets

Cash generated units are determined as the smallest identified group of assets which can generate cash flows independently from other assets or groups of assets. Non-cash generating assets are primarily held for service delivery purposes.

#### 1.5.3.1 Cash generating assets

The entity assesses at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the entity estimates the recoverable amount of the individual asset.

If there is any indication that an asset may be impaired, the recoverable amount is estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, the recoverable amount of the cash-generating unit to which the asset belongs is determined.

A cash generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use.

If the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. That reduction is an impairment loss.

An impairment loss of assets carried at cost less any accumulated depreciation or amortisation is recognised immediately in surplus or deficit.

An impairment loss is recognised for cash-generating units if the recoverable amount of the unit is less than the carrying amount of the unit. The impairment loss is allocated to reduce the carrying amount of the assets of the unit as follows:

- to the assets of the unit, pro rata on the basis of the carrying amount of each asset in the unit.

An entity assesses at each reporting date whether there is any indication that an impairment loss recognised in prior periods for assets may no longer exist or may have decreased. If any such indication exists, the recoverable amounts of those assets are estimated and the carrying amount is increased to the recoverable amount.

The increased carrying amount of an asset attributable to a reversal of an impairment loss should not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior periods.

A reversal of an impairment loss of assets carried at cost less accumulated depreciation or amortisation is recognised immediately in surplus or deficit.

### 1.5.3.2 Non-Cash generating assets

The entity assesses at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the entity estimates the recoverable service amount of the asset.

The recoverable service amount is the higher of a non-cash generating asset's fair value less costs to sell and its value in use. The value in use for a non-cash generating asset is the present value of the asset's remaining service potential.

If the recoverable service amount of an asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable service amount. That reduction is an impairment loss and is recognized in surplus/deficit.

An impairment loss is recognised for non cash-generating units if the recoverable service amount of the unit is less than the carrying amount of the unit. The impairment loss is allocated to reduce the carrying amount of the assets of the unit as follows:

- to the assets of the unit, pro rata on the basis of the carrying amount of each asset in the unit.

An entity assesses at each reporting date whether there is any indication that an impairment loss recognised in prior periods for assets may no longer exist or may have decreased. If any such indication exists, the recoverable service amounts of those assets are estimated and increases the carrying amount to the recoverable service amount.

The increased carrying amount of an asset attributable to a reversal of an impairment loss does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior periods.

A reversal of an impairment loss of assets carried at cost less

accumulated depreciation or amortisation is recognised immediately in surplus or deficit.

## 1.6 INTANGIBLE ASSETS

An intangible asset is recognised when:

- It is probable that the expected future economic benefits or service potential that are attributable to the asset will flow to the entity; and
- The cost of the asset can be measured reliably.

Intangible assets are initially recognised at cost.

Expenditure on research (or on the research phase of an internal project) is recognized in surplus or deficit when it is incurred.

An intangible asset arising from development (or from the development phase of an internal project) is recognised when:

- it is technically feasible to complete the asset so that it will be available for use or sale;
- there is an intention to complete and use or sell it;
- there is an ability to use or sell it;
- it will generate probable future economic benefits;
- there are available technical, financial and other resources to complete the development and to use or sell the asset; and
- the expenditure attributable to the asset during its development can be used reliably.

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the asset to which it relates. The amortisation is calculated at a rate considered appropriate to reduce the cost of the asset less residual value over the shorter of its estimated useful life or contractual period. Residual values and estimated useful lives are reviewed annually. The amortisation method used is the straight line method.

Intangible assets that meet the recognition criteria are stated in the statement of financial position at amortised cost, being the initial cost price less any accumulated amortisation and impairment losses. The assets residual values, useful lives and methods of amortisation are reviewed at each financial year end, and adjusted prospectively if appropriate. Amortisation is charged to surplus or deficit so as to write off the cost of intangible assets over their estimated useful lives, using the straight-line method as follows:

- Computer Software: 3 years

An item of intangible assets is derecognised upon disposal

or when no future economic benefits or service potential are expected from its use or disposal. The surplus or deficit arising from the derecognition of an item of intangible assets is included in the surplus or deficit when the item is derecognised. The surplus or deficit arising from the derecognition of an item of intangible assets is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

## 1.7 FINANCIAL INSTRUMENTS

The entity has various types of financial instruments and these can be broadly categorised as either financial assets, financial liabilities or equity instruments in accordance with the substance of the contractual agreement.

### 1.7.1 Initial recognition

Financial assets and financial liabilities are recognised on the entity's Statement of Financial Position when the entity becomes party to the contractual allowances of the instrument, therefore trade date accounting applies.

The entity does not offset a financial asset and a financial liability unless a legally enforceable right to set off the recognised amounts currently exists; and the entity intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

### 1.7.2 Financial Assets - Classification

A financial asset is any asset that is cash or a contractual right to receive cash or another financial assets.

The financial assets of the entity are classified as Financial instruments at amortised cost.

The Financial assets at cost are investments in residual interests that do not have a quoted market price in an active market, fair value cannot be reliably measured.

The entity has the following types of financial assets as reflected on the face of the Statement of Financial Position or in the notes thereto:

Type of Financial Asset	Classification
Bank Balances and Cash	Financial instruments at amortised cost
Trade receivables	Financial instruments at amortised cost

Cash includes cash on hand (including petty cash) and cash with banks. Cash equivalents are short-term highly liquid investments, readily convertible into known amounts of cash, which are held with registered banking institutions with maturities of three months or less and are subject to an insignificant risk of change in value. For the purposes of the cash flow statement, cash and cash equivalents comprise cash on hand, deposits held on call with banks, net of bank overdrafts.

Trade receivables consists of amounts due by customers within a 30 day collection period.

### 1.7.3 Financial Liabilities - Classification

A financial liability is a contractual obligation to deliver cash or another financial asset to another entity. The entity has the following types of financial liabilities as reflected on the face of the Statement of Financial Position or in the notes thereto:

Type of Financial liability	Classification
Trade and other payables	Financial instruments at amortised cost
Finance leases	Financial instruments at amortised cost

There are three main categories of Financial Liabilities, the classification determining how they are measured. Financial liabilities may be measured at:

- Fair value or
- Amortised cost or
- Cost

### 1.7.4 Initial and Subsequent Measurement

#### Financial Assets:

Financial Assets (upon initial recognition) are stated at fair value, plus transaction costs that are directly attributable to the acquisition or issue of the financial asset. Subsequent to initial recognition, financial assets are measured at amortised cost.

#### Financial liabilities:

Financial Liabilities (upon initial recognition) are stated at fair value, plus transaction costs that are directly attributable to the acquisition or issue of the financial liabilities. Subsequent to initial recognition, financial liabilities are measured at amortised cost.

### 1.7.5 Impairment of Financial Assets

Financial assets, other than those at fair value, are assessed for indicators of impairment at the end of each reporting period. Financial assets are impaired where there is objective evidence of impairment of Financial Assets (such as the probability of insolvency or significant financial difficulties of the debtor). If there is such evidence the recoverable amount is estimated and an impairment loss is recognised.

#### Financial assets carried at amortised cost

Financial assets at amortised cost encompass accounts receivables and cash and cash equivalents. An estimate is made for doubtful debt based on past default experience of all outstanding amounts at year-end. Bad debts

are written off the year in which they are identified as irrecoverable.

An allowance for impairment of accounts receivables is established when there is objective evidence that the entity will not be able to collect all amounts due according to the original terms of receivables. The allowance is made whereby the recoverability of accounts receivable is assessed individually and then collectively after grouping the assets in financial assets with similar credit risk characteristics. The amount of the allowance is the difference between the financial asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. Future cash flows in a group of financial assets that are collectively evaluated for impairment are estimated on the basis of historical loss experience for assets with credit risk characteristics similar to those in the group.

When a debtor is considered uncollectible, it is written off. Changes in the carrying amount of the allowance account are recognised in the Surplus/Deficit.

#### 1.7.6 Derecognition of Financial Assets

The entity derecognises financial assets only when the contractual rights to the cash flows from the asset expire or it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. The entity transfers a financial asset if either it transfers the contractual rights to receive the cash flows of the financial asset or retains the contractual rights to receive the cash flows of the financial asset.

#### 1.7.7 Derecognition of Financial Liabilities

The entity derecognises financial liabilities when, and only when, the entity's obligations are discharged, cancelled or they expire.

The entity recognises the difference between the carrying amount of the financial liability (or part of a financial liability) extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, in surplus or deficit.

### 1.8 RISK MANAGEMENT OF FINANCIAL ASSETS AND LIABILITIES

It is the policy of the entity to disclose information that enables the user of its financial statements to evaluate the nature and extent of risks arising from financial instruments to which the entity is exposed on the reporting date.

The entity has exposure to the following risks from its use of financial instruments:

- credit risk
- liquidity risk
- market risk

Risks and exposure are disclosed as follows:

#### Market Risk

- Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the entity's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return.
- The maximum exposure to cash flow and fair value risk, price risk and foreign currency risk.
- Sensitivity analysis for each of the market risks

#### Credit Risk

- Credit risk is the risk of financial loss to the entity if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the entity's receivables from customers and investment securities.
- Each class of financial instrument is disclosed separately.
- Maximum exposure to credit risk not covered by collateral is specified.
- Financial instruments covered by collateral are specified.

#### Liquidity Risk

- Liquidity risk is the risk that the entity will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Entity's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the entity's reputation.
- A maturity analysis for financial assets and liabilities that shows the remaining contractual maturities.
- Liquidity risk is managed by ensuring that all assets are reinvested at maturity at competitive interest rates in relation to cash flow requirements. Liabilities are managed by ensuring that all contractual payments are met on a timeous basis and, if required, additional new arrangements are established at competitive rates to ensure that cash flow requirements are met.

## 1.9 REVENUE RECOGNITION

### 1.9.1 General

Revenue is derived from a variety of sources which includes government grants, rendering of services and finance income.

Revenue comprises the fair value of the consideration received or receivable for services rendered in the ordinary course of the entity's activities. Revenue is shown net of rebates and discounts.

The entity recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and when specific criteria have been met for each of the entity's activities as described below. The amount of revenue is not considered to be reliably measurable until all contingencies relating to the sale have been resolved. The entity bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

### 1.9.2 Revenue from Exchange Transactions

Revenue from exchange transactions refers to revenue that accrued to the entity directly in return for services rendered, the value of which approximates the consideration received or receivable.

#### 1.9.2.1 Finance income

Interest earned on investments is recognised in surplus or deficit on the time proportionate basis that takes into account the effective yield on the investment.

#### 1.9.2.2 Rendering of Services

Rendering of Services constitute revenue which arises from service delivery to customers.

The stage of completion is assessed by reference to work performed as at the reporting date. Contract revenue includes the initial amount agreed in the contract plus any variations in contract work, claims and incentive payments to the extent that it is probable that these will result in revenue and can be measured reliably. As soon as the outcome of a contract can be estimated reliably, contract revenue and expenses are recognised in surplus or deficit in proportion to the stage of completion of the contract.

The stage of completion is assessed by reference to work performed as at reporting date. When the outcome of a contract cannot be estimated reliably, contract revenue is recognised only to the extent of contract costs incurred that are likely to be recoverable. An expected loss on a contract is recognised immediately in surplus or deficit.

### 1.9.3 Revenue from Non-exchange Transactions

Revenue from non-exchange transactions refers to transactions where the entity received revenue from another entity without directly giving approximately equal value in exchange. Revenue from non-exchange transactions is generally recognised to the extent that the related receipt or receivable qualifies for recognition as an asset and there is no liability to repay the amount.

#### 1.9.3.1 Government grants/subsidies

##### Conditional Grants and receipts

Income received from conditional grants, donations and funding are recognised as revenue to the extent that the entity has complied with any of the criteria, conditions or obligations embodied in the agreement. To the extent that the criteria, conditions or obligations have not been met a liability is recognised.

##### Unconditional Grants and receipts

Government grants that are receivable as compensation for expenditure or losses already incurred or for the purpose of giving immediate financial support to the entity with no future related costs are recognised in surplus or deficit in the period in which they become receivable.

## 1.10 LEASES

### Lease Classification

Leases of property, plant and equipment, in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases.

Leases are classified as finance leases where substantially all the risks and rewards associated with ownership of an asset are transferred to the entity.

### The Entity as Lessee

Determining whether an arrangement contains a lease

At inception of an arrangement, the entity determines whether such an arrangement is or contains a lease. A specific asset is the subject of a lease if fulfilment of the arrangement is dependent on the use of that specified asset. An arrangement conveys the right to use the asset if the arrangement conveys to the entity the right to control the use of the underlying asset. At inception or upon reassessment of the arrangement, the entity separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the entity concludes for a finance lease that it is impracticable to separate the payments reliably, an asset and a liability are recognised at an amount equal to the fair value of the underlying asset.

Subsequently the liability is reduced as payments are made and an imputed finance charge on the liability is recognised using the entity's incremental borrowing rate.

#### Finance leases

Where the entity enters into a finance lease, Property, plant and equipment or Intangible Assets subject to finance lease agreements are capitalised at amounts equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments, each determined at the inception of the lease. Corresponding liabilities are included in the Statement of Financial Position as Finance Lease Liabilities. The corresponding liabilities are initially recognised at the inception of the lease and are measured as the sum of the minimum lease payments due in terms of the lease agreement, discounted for the effect of interest. In discounting the lease payments, the entity uses the interest rate that exactly discounts the lease payments and unguaranteed residual value to the fair value of the asset plus any direct costs incurred. Lease payments are allocated between the lease finance cost and the capital repayment using the effective interest rate method. Lease finance costs are expensed when incurred.

Subsequent to initial recognition, the leased assets are accounted for in accordance with the stated accounting policies applicable to property, plant, equipment or intangibles. The lease liability is reduced by the lease payments, which are allocated between the lease finance cost and the capital repayment using the effective interest rate method. Lease finance costs are expensed when incurred. The accounting policies relating to derecognition of financial instruments are applied to lease payables. The lease asset is depreciated over the shorter of the asset's useful life or the lease term.

#### Operating leases

The entity recognises operating lease rentals as an expenditure in surplus or deficit on a straight-line basis over the term of the relevant lease. The difference between the amounts recognised as an expenditure and the contractual payments are recognised as an operating lease asset or liability

#### 1.11 RELATED PARTIES

Individuals as well as their close family members, and/or entities are related parties if one party has the ability, directly or indirectly, to control or jointly control the other party or exercise significant influence over the other party in making financial and/or operating decisions. All entities within the national government sphere are also regarded as related parties.

#### 1.12 EVENTS AFTER THE REPORTING DATE

Events after the reporting date that are classified as adjusting events have been accounted for in the Annual Financial Statements, please refer to note 36. The events after the reporting date that are classified as non-adjusting events after the reporting date have been disclosed in the notes to the Annual Financial Statements.

#### 1.13 COMPARATIVE INFORMATION

##### Prior year comparatives

When the presentation or classification of items in the Annual Financial Statements is amended, prior period comparative amounts are reclassified. The nature and reasons for the reclassification are disclosed.

#### 1.14 CAPITAL COMMITMENTS AND EXPENDITURE

Items are classified as commitments where the entity commits itself to future transactions that will normally result in the outflow of resources.

Capital commitments are not recognised in the statement of financial position as a liability but are included in the disclosure notes in the following cases:

Approved and contracted commitments, where the expenditure has been approved and the contract has been awarded at the reporting date, where disclosure is required by a specific standard of GRAP.

#### 1.15 CONTINGENT ASSETS AND CONTINGENT LIABILITIES

Contingent liabilities represent a possible obligation that arises from past events and whose existence will be confirmed only by an occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

A contingent liability can also arise as a result of a present obligation that arises from past events but which is not recognised as a liability either because it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation or the amount of the obligation cannot be measured with sufficient reliability.

Contingent assets represent possible assets that arise from past events and whose existence will be confirmed only by an occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

Contingent assets and contingent liabilities are not recognised. Contingencies are disclosed in the notes to the annual financial statements.

#### 1.16 FOREIGN CURRENCIES

Transactions in foreign currencies are initially recorded at the prevailing exchange rate on the dates of the transactions.

Monetary assets and liabilities denominated in such foreign currencies are retranslated to the functional currencies at the rates prevailing at the reporting date. Exchange differences are included in surplus or deficit.

##### Foreign currency translation

###### (a) Functional and presentation currency

Items included in the financial statements are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The financial statements are presented in South African Rands, which is the company's functional and presentation currency.

###### (b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of financial position.

#### 1.17 IRREGULAR EXPENDITURE

Irregular expenditure is expenditure that is contrary to the Public Finance Management Act (Act No 56 of 2003) and is in contravention of any legislation. Irregular expenditure excludes unauthorised expenditure. All expenditure relating to irregular expenditure is recognised as an expense in the statement of financial performance in the year that the expenditure was incurred. The expenditure is classified in accordance with the nature of the expense, and where recovered, it is subsequently accounted for as revenue in the statement of financial performance.

#### 1.18 FRUITLESS AND WASTEFUL EXPENDITURE

Fruitless and wasteful expenditure is expenditure that was made in vain and would have been avoided had reasonable care been exercised. Fruitless and wasteful expenditure is accounted for as expenditure in surplus or deficit.

#### 1.19 EMPLOYEE BENEFITS

##### 1.19.1 Short-term Employee Benefits

Remuneration to employees is recognised in surplus or deficit as the services are rendered, except for non-accumulating benefits, which are only recognised when the specific event occurs.

The entity treats its provision for leave pay as an accrual.

The costs of all short-term employee benefits such as leave pay and bonus are recognised during the period in which the employee renders the related service. The liability for leave pay is based on the total accrued leave days at year end and is shown as a creditor in the Statement of Financial Position. The entity recognises the expected cost of performance bonuses only when the entity has a present legal or constructive obligation to make such payment and a reliable estimate can be made.

#### 1.20 Provisions

Provisions are recognised when the entity has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation and a reliable estimate can be made of the obligation.

Provisions are reviewed at reporting date and the amount of a provision is the present value of the expenditure expected to be required to settle the obligation. When the effect of discounting is material, provisions are determined by discounting the expected future cash flows that reflect current market assessments of the time value of money at a rate adjusted for the specific risks of a liability. The impact of the periodic unwinding of the discount is recognised in surplus or deficit as a finance cost as it occurs.

#### 1.21 INVENTORY

The entity uses the first in first out method (FIFO) to account for inventory. Inventories are valued at the lower of cost price or net realisable value. The net realisable value is the estimated selling price in the ordinary course of business, less the estimated or selling costs.

The cost of inventories comprises of all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expenditure in the period the write-down or loss occurs.

#### 1.22 TRANSFER OF FUNCTIONS UNDER COMMON CONTROL

A transfer of functions between entities within the same sphere of government or between entities that are part of the same economic entity the transfer is considered to have occurred between entities under common control. Assets and liabilities transferred between entities under common control are recognised at the carrying values. In instances where the carrying amount is not available or can't be

accurately determined, the depreciated replacement cost is used as the deemed carrying amount.

### 1.23 BUDGET INFORMATION

The financial statements and budget are not presented on the same basis as the financial statements are prepared on accrual basis and the budget on a cash basis of accounting. A reconciliation between the surplus/(deficit) for the period as per statement of financial performance and budgeted surplus/(deficit) is included in the statement of comparison of budget and actual amounts. At the end of September each year the budget may be revised if necessary due to changes in the operations of the entity which require a reallocation of resources. All budget changes are approved by the board of directors prior to the implementation of the revised budget.

## 2. GENERAL INFORMATION

### Domicile: South Africa

Nature of business and principle activities. The South African National Space Agency (SANSA) is mandated by the SANSA Act, 36 of 2008 and is South Africa's government body for the promotion and use of space. It also fosters cooperation in space-related activities and research in space science, seeks to advance scientific engineering through human capital, and supports the creation of an environment conducive to the industrial development of space technologies within the framework of national government.

### Legal form of entity

Public entity, as defined by the Public Finance Management Act schedule 3A(Act No. 1 of 1999 as amended by Act No. 29 of 1999).

### Executive authority

Department of Science and Technology

### Board members

- Mr M Magugumela (chairperson)
- Mr L Annamalai
- Mr P Maine
- Mr L Mogudi
- Adv T Ratsheko
- Ms J Lawrence
- Mr V Gore
- Capt M Mamashela

- Dr E Gavin
- Dr R Scholes
- Mr M Zondi
- Mr M Rezelman
- Ms G Khambule
- Mr A Walker
- Mr J Mphepya
- Ms D Manyadi

### Registered office

Enterprise Building,  
Mark Shuttleworth Street,  
Innovation Hub  
Pretoria  
Gauteng,  
South Africa

### Business address

Enterprise Building,  
Mark Shuttleworth Street,  
Innovation Hub  
Pretoria  
Gauteng,  
South Africa

### Postal address

PO Box 484,  
Silverton 0127,  
Gauteng,  
South Africa

### Auditor

Sizwe Ntsaluba Gobodo Inc.  
(011) 231 0600  
20 Morris Street East  
Woodmead, 2191

## 3. STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS

3.1. The South African National Space Agency presents its approved budget on a cash basis and the financial statements on the accrual basis.

3.2. The budget is approved on a cash basis by functional classification as well as economic classification. The approved budget covers the fiscal period from 1 April 2013 to 31 March 2014. The budget and the accounting basis differ. The financial statements for the entity are prepared on the accrual basis using a classification based on the nature of expenses in the statement of financial performance. The financial statements differ from the budget, which is approved on the cash basis. The statement of comparison of the budget and actual amounts is prepared on a comparable basis to the budget. The reconciliation of the actual comparable amounts to the net cash flows per the cash flow statement is presented on the statement of comparison of the budget and actual amounts.

3.3 The variance between the actual and budgeted values is explained as follows:

The favourable variance on total revenue is as a result of additional contract income received from international clients as well as interest income earned on the bank account during the year.

Total expenditure is reflected at 23% below the budget. The major differences are attributable to employee related costs coming in below the budget at R6million due to unfilled vacancies from resignations, delayed spending on the satellite development and industry infrastructure upgrade projects, due to funding transfers received in the last quarter, whose funds are now committed.

	2014	2013
	R	R
<b>CASH AND CASH EQUIVALENTS</b>		
Cash and Cash Equivalents	120 641 894	96 106 738
<b>Total Cash and Cash Equivalents</b>	<b>120 641 894</b>	<b>96 106 738</b>
	-	-

#### 4.1 Current Investment Deposits

Call Deposits	18 626 233	-
<b>Total Current Investment Deposits</b>	<b>18 626 233</b>	<b>-</b>
Call Deposits are investments with a maturity period of less than 3 months.		

#### 4.2 Bank Accounts

Cash in Bank	102 008 390	96 100 609
<b>Total Bank Accounts</b>	<b>102 008 390</b>	<b>96 100 609</b>
	-	-

#### 4.3 Cash on hand

Cash on hand	7 271	6 129
<b>Cash on hand</b>	<b>7 271</b>	<b>6 129</b>
Cash and cash equivalents are measured at amortised cost. Cash includes cash on hand and cash with banks.		

### 5.1 RECEIVABLES FROM EXCHANGE TRANSACTIONS

	2014	2013
	R	R
Trade receivables from exchange transactions	13 813 040	15 445 347
	<b>13 813 040</b>	<b>15 445 347</b>

#### 5.1.1 Trade receivables from exchange transactions

	Gross Balances	Allowance for Impairment	Net Balances
<b>As at 31 March 2014</b>			
Trade customers	13 830 634	(17 594)	13 813 040
<b>Total</b>	<b>13 830 634</b>	<b>(17 594)</b>	<b>13 813 040</b>

	Gross Balances	Allowance for Impairment	Net Balances
<b>As at 31 March 2013</b>			
Trade customers	15 454 617	(9 270)	15 445 347
<b>Total</b>	<b>15 454 617</b>	<b>(9 270)</b>	<b>15 445 347</b>

#### 5.1.2 Ageing of Trade receivables from exchange transactions

	2014	2013
	R	R
Current:		
0 - 30 days	13 268 301	2 553 839
Past Due:		
31 - 60 Days	334 990	12 784 604
61 - 90 Days	23 006	102 839
91 - 120 Days	115 540	7 600
+ 120 Days	88 796	5 735
<b>Total</b>	<b>13 830 633</b>	<b>15 454 617</b>

	2014	2013
	R	R
<b>5.1.3 Reconciliation of the allowance for Impairment</b>		
Balance at beginning of year	(9 270)	(546 900)
Impairment Losses recognised	(17 594)	(9 270)
Impairment Losses reversed	9 270	546 900
Amounts recovered	-	-
<b>Balance at end of year</b>	<b>(17 594)</b>	<b>(9 270)</b>

In determining the recoverability of debtors, the allowance for impairment of trade receivables has been made for all consumer balances outstanding. No further credit allowance is required in excess of the allowance for impairment.

Financial assets that are neither past due nor impaired are considered to be fully performing. The carrying amounts of fully performing financial assets included in trade and receivables at year-end are:

	<b>13 312 468</b>	<b>2 553 840</b>
--	-------------------	------------------

Financial assets included in trade receivables that are outside their normal payment terms are considered to be past due. The following represents an analysis of the past due financial assets that are past due but not impaired:

	542 703	12 891 507
Receivables from Local debtors	6 217 899	7 165 953
Receivables from International debtors	7 656 901	8 288 664
<b>Total Trade Debtors</b>	<b>13 874 800</b>	<b>15 454 617</b>

Credit quality of trade receivables from exchange transactions

## Credit quality of trade receivables from exchange transactions

Trade receivables consist of a large number of customers, spread across different industries in the geographical area of the entity. Periodic credit evaluation is performed on the financial condition of accounts receivable and, where appropriate, credit guarantee is increased accordingly. Trade receivables are non-interest bearing and are generally on 30 day collection terms. The maximum exposure to credit risk at the reporting date is the amortised cost of each class of receivable mentioned above.

In determining the recoverability of a receivable, management considers any change in the credit quality of the debtor from the date credit was initially granted up to the reporting date. Any allowance for impairment on trade and other receivables (loans and receivables) exists predominantly due to the possibility that these debts will not be recovered. Management assesses these debtors individually for impairment and group them together in the Statement of Financial Position as financial assets with similar credit risk characteristics.

The credit quality of trade receivables that are neither past due nor impaired are considered fair by the company taking into account the historical information available.

### Fair value of trade receivables from exchange transactions

Trade and other receivables from exchange transactions (upon initial recognition) are stated at fair value, plus transaction costs that are directly attributable to the acquisition or issue of the financial asset. Subsequent to initial recognition, financial assets are measured at amortised cost.

Management considers the carrying amounts of financial assets recorded at amortised cost in the financial statements to approximate their fair values on 31 March 2014, as a result of the short-term maturity of these assets and liabilities.

### Classification of financial assets

The Financial Assets of the entity are classified as follows:

Financial Assets	Classification
<b>Trade receivables from exchange transactions</b>	
Trade receivables	At amortised cost

## 5.2 RECEIVABLES FROM NON-EXCHANGE TRANSACTIONS

	2014	2013
	R	R
Receivables from non-exchange transactions	8 195 079	2 635 853
<b>Total</b>	<b>8 195 079</b>	<b>2 635 853</b>

5.2.1 Receivables from non-exchange transactions	Gross Balances	Allowance for Impairment	Net Balances
As at 31 March 2014			
Prepaid expenses	6 758 257	-	6 758 257
Sundry deposits	1 368 601	-	1 368 601
Other Debtors	68 222	-	68 222

<b>Total</b>	<b>8 195 080</b>	<b>-</b>	<b>8 195 080</b>
--------------	------------------	----------	------------------

	Gross Balances	Allowance for Impairment	Net Balances
As at 31 March 2013			
Prepaid expenses	1 766 436	-	1 766 436
Sundry deposits	865 944	-	865 944
Other Debtors	3 474	-	3 473
<b>Total</b>	<b>2 635 854</b>	<b>-</b>	<b>2 635 853</b>

	2014	2013
5.2.2 Ageing of Receivables from non-exchange transactions	R	R
Current:		
0 - 30 days	6 826 479	1 769 909
Past Due:		
31 - 60 Days	-	-
61 - 90 Days	-	-
91 - 120 Days	-	-
+ 120 Days	1 368 601	865 944
<b>Total</b>	<b>8 195 080</b>	<b>2 635 853</b>

### Credit quality of Receivables from non-exchange transactions

Periodic credit evaluation is performed on the financial condition of accounts receivable and, where appropriate, credit guarantee is increased accordingly. Trade receivables are non-interest bearing. The maximum exposure to credit risk at the reporting date is the fair value of each class of receivable mentioned above.

In determining the recoverability of a receivable, management considers any change in the credit quality of the debtor from the date credit was initially granted up to the reporting date. Any allowance for impairment on trade and other receivables (loans and receivables) exists predominantly due to the possibility that these debts will not be recovered. Management assesses these debtors individually for impairment and group them together in the Statement of Financial Position as financial assets with similar credit risk characteristics.

The credit quality of trade receivables from non-exchange that are neither past due nor impaired are considered fair by the company taking into account the historical information available.

### Fair value of Receivables from non-exchange transactions

Trade and other receivables from non-exchange transactions (upon initial recognition) are stated at fair value, plus transaction costs that are directly attributable to the acquisition or issue of the financial asset. Subsequent to initial recognition, financial assets are measured at amortised cost.

Management considers the carrying amounts of financial assets recorded at amortised cost in the financial statements to approximate their fair values on 31 March 2014, as a result of the short-term maturity of these assets and liabilities.

### Classification of financial assets

The Financial Assets of the entity are classified as follows:

Financial Assets	Classification
<b>Receivables from non-exchange transactions</b>	
Sundry deposits	At mortised cost
Other Debtors	At mortised cost

	2014	2013
6. INVENTORY	R	R
Fuel - at cost	406 933	431 445
<b>Total Inventory</b>	<b>406 933</b>	<b>431 445</b>

## 7. PROPERTY, PLANT AND EQUIPMENT

31 March 2014

Reconciliation of Carrying Value

	Land	Leasehold Improvements	Leased Assets	Buildings	Plant and Machinery	Research equipment	Vehicles	Office equipment	Furniture and fittings	Computer equipment	Exhibits	Work In Progress	Laboratory equipment	Assets Denel	Total
Description	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Carrying values at 1 April 2013	4 307 700	1 476 172	288 044	9 343 375	40 183 042	8 211 107	3 221 603	4 023 028	3 083 115	9 282 003	361 302	12 864 313	-	-	96 644 804
Cost	4 307 700	1 477 521	328 387	10 046 382	50 104 657	10 846 556	3 879 077	8 070 265	3 713 152	18 592 107	364 800	12 864 313	-	-	124 594 917
- Completed Assets	4 307 700	1 477 521	328 387	10 046 382	50 104 657	10 846 556	3 879 077	8 070 265	3 713 152	18 592 107	364 800	-	-	-	111 730 604
- Under construction	-	-	-	-	-	-	-	-	-	-	-	12 864 313	-	-	12 864 313
Accumulated Depreciation:	-	(1 349)	(40 343)	(703 007)	(9 921 615)	(2 635 449)	(657 474)	(4 047 237)	(630 037)	(9 310 104)	(3 498)	-	-	-	(27 950 113)
Acquisitions at cost	-	166 913	-	4 186 692	23 437 605	5 646 438	2 779 638	545 485	846 312	3 877 852	-	-	235 011	-	41 721 946
Capital under Construction - Additions	-	-	-	-	-	-	-	-	-	-	-	25 080 909	-	-	25 080 909
Depreciation	-	(526 499)	(120 348)	(386 726)	(6 780 003)	(1 495 283)	(662 697)	(1 024 465)	(433 004)	(3 737 817)	(36 480)	-	-17 349	-	(15 220 671)
Carrying value of Disposals:	-	-	-	(4 960)	-	(30 050)	(168 718)	-	-	(125 241)	-	-	-	-	(328 970)
CAPITALISED AMOUNTS	-	-	-	-	-	-	-	-	-	-	-	-25 997 850	-	-	-25 997 850
Impairment Losses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Carrying values at 31 March 2014	4 307 700	1 116 586	167 696	13 138 381	56 840 644	12 332 212	5 169 826	3 544 048	3 496 423	9 296 797	324 822	11 947 372	217 662	-	121 900 169
Cost	4 307 700	1 644 434	328 387	14 227 825	73 542 262	16 432 893	6 403 445	8 615 750	4 559 464	22 172 695	364 800	11 947 372	235 011	-	164 782 038
- Completed Assets	4 307 700	1 644 434	328 387	14 227 825	73 542 262	16 432 893	6 403 445	8 615 750	4 559 464	22 172 695	364 800	-	235 011	-	152 834 666
- Under Construction	-	-	-	-	-	-	-	-	-	-	-	11 947 372	-	-	11 947 372
Accumulated Depreciation:	0	(527 848)	(160 691)	(1 089 444)	(16 701 618)	(4 100 681)	(1 233 618)	(5 071 702)	(1 063 041)	(12 875 898)	(39 978)	0	(17 349)	0	(42 881 869)



## 7. PROPERTY, PLANT AND EQUIPMENT

31 March 2013

Reconciliation of Carrying Value

Description	Land	Leasehold Improvements	Leased Assets	Buildings	Plant	Research equipment	Vehicles	Office equipment	Furniture and fittings	Computer equipment	Exhibits	Work In Progress	Laboratory equipment	Total
	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Carrying values at 1 April 2012	4 307 700	-	-	9 699 143	34 902 664	8 664 450	2 665 744	5 834 462	2 498 982	9 718 180	-	2 234 734		80 526 059
Cost	4 307 700	-	-	10 046 381	39 631 892	9 912 695	2 919 825	7 875 240	2 800 061	14 160 668	-	2 234 734		93 889 196
- Completed Assets	4 307 700			10 046 381	39 631 892	9 912 695	2 919 825	7 875 240	2 800 061	14 160 668	-			91 654 462
- Under construction	-			-	-	-	-	-	-	-	-	2 234 734		2 234 734
Accumulated Depreciation:	-	-	-	(347 238)	(4 729 228)	(1 248 245)	(254 081)	(2 040 778)	(301 079)	(4 442 488)	-	-		(13 363 137)
Acquisitions at cost	-	1 477 521	328 387	-	10 472 764	933 861	1 022 553	544 051	1 045 648	4 483 009	364 800	-		20 672 595
Capital under Construction - Additions												10 629 579		10 629 579
Depreciation	-	(1 349)	(40 343)	(355 768)	(5 192 386)	(1 387 204)	(403 393)	(2 071 611)	(336 191)	(4 877 200)	(3 498)	-		(14 668 944)
Carrying value of Disposals:	-	-	-	-	-	-	(63 301)	(279 870)	(68 761)	(39 197)	-	-		(451 129)
Impairment Losses	-	-	-	-	-	-	-	(4 004)	(56 564)	(2 791)	-	-		(63 358)
Carrying values at 31 March 2013	4 307 700	1 476 172	288 044	9 343 375	40 183 042	8 211 107	3 221 603	4 023 028	3 083 115	9 282 002	361 302	12 864 313		96 644 803
Cost	4 307 700	1 477 521	328 387	10 046 382	50 104 657	10 846 556	3 879 077	8 070 265	3 713 152	18 592 107	364 800	12 864 313		124 594 916
- Completed Assets	4 307 700	1 477 521	328 387	10 046 382	50 104 657	10 846 556	3 879 077	8 070 265	3 713 152	18 592 107	364 800			111 730 603
- Under Construction	-	-	-	-	-	-	-	-	-	-	-	12 864 313		12 864 313
Accumulated Depreciation:	-	(1 349)	(40 343)	(703 007)	(9 921 615)	(2 635 449)	(657 474)	(4 047 237)	(630 037)	(9 310 104)	(3 498)	0		(27 950 113)

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2013

	2 014	2 013
	R	R

### 7. PROPERTY, PLANT AND EQUIPMENT (Continued)

#### 7.1. Fully depreciated items still in use

Number of fully depreciated assets that is still in use	588	509
---	-----	-----

#### 7.2. Change in estimates

There was no change in estimates of useful life and residual values during the year.	-	-
--	---	---

#### 7.3. Assets given as security

No assets were given as security.

### 8. INTANGIBLE ASSETS

At Cost less Accumulated Amortisation and Accumulated Impairment Losses	6 285 179	3 311 004
---	-----------	-----------

	Computer Software and Intellectual Property	Total
The movement in Intangible Assets is reconciled as follows:		
<b>Carrying values at 01 April 2013</b>	<b>3 311 004</b>	<b>3 311 004</b>
Cost	4 735 542	4 735 542
Accumulated Amortisation	(1 424 538)	(1 424 538)
Acquisitions during the Year:		
Purchased	1 236 858	1 236 858
Transfer of functions	2 800 000	2 800 000
Amortisation during the Year:	(1 062 683)	(1 062 683)
<b>Carrying values at 31 March 2014</b>	<b>6 285 179</b>	<b>6 285 179</b>
Cost	8 772 400	8 772 400
Accumulated Amortisation	(2 487 221)	(2 487 221)

	2 014	2 013
	R	R
	Computer Software	Total
<b>Carrying values at 01 April 2012</b>	<b>2 700 271</b>	<b>2 700 271</b>
Cost	3 381 012	3 381 012
Accumulated Amortisation	(680 741)	(680 741)
Acquisitions during the Year:	1 354 530	1 354 530
Purchased	1 354 530	1 354 530
Transfer of functions	-	-
Amortisation during the Year:	(743 797)	(743 797)
Transfers during the Year:	-	-
<b>Carrying values at 31 March 2013</b>	<b>3 311 004</b>	<b>3 311 004</b>
Cost	4 735 542	4 735 542
Accumulated Amortisation	(1 424 538)	(1 424 538)
The amortisation expense has been included in the line item "Depreciation and Amortisation" in the Statement of Financial Performance.		

	2014	2013
	R	R
<b>9. TRADE AND OTHER PAYABLES FROM EXCHANGE TRANSACTIONS</b>		
Trade Creditors	3 219 086	1 862 937
Other Creditors	3 953	152 704
Income received in advance	5 241 535	4 397 331
Accrued Expenses	4 678 607	16 081 862
Accrued leave	5 673 777	4 765 443
13th Cheque	606 258	-
<b>Total Creditors</b>	<b>19 423 216</b>	<b>27 260 277</b>

The average credit period on purchases is 30 days from the receipt of the invoice, as determined by the accounting policy. No interest is charged for the first 30 days from the date of receipt of the invoice. Thereafter interest is charged in accordance with the credit policies of the various individual creditors that the entity deals with. The entity has financial risk policies in place to ensure that all payables are paid within the credit timeframe.

Leave accrues to the staff of the entity on a monthly basis, subject to certain conditions. The accrual is an estimate of the amount due at the reporting date. An employees may not accumulated more than 50 leave days at any given point in time and may not roll forward leave for a period of more than 6 months after year end.

## 9.1 Credit terms of trade and other payables

Trade payables are non-interest bearing and are generally on 30 day payment terms. The entity does not pledge any of its assets as security for the payables. The entity has internal operating procedures and controls in place to ensure that all payables are paid within the credit timeframe.

## 9.2 Classification of financial liabilities

The Financial Liabilities of the entity is classified as follows:

Financial Liabilities	Classification
<b>Trade and other payables</b>	
Trade Creditors	Financial liabilities at amortised cost
Other Creditors	Financial liabilities at amortised cost
Accrued Expenses	Financial liabilities at amortised cost

	2014	2013
10. PROVISIONS	R	R
Bonus Provision	5 123 482	4 813 029
<b>Total Provisions</b>	<b>5 123 482</b>	<b>4 813 029</b>

The bonus provision represents the estimated liability in respect of performance bonuses to be paid out to employees.

The movement in current provisions is reconciled as follows:

Provisions:	Performance Bonuses
	R
<b>31 March 2014</b>	
Balance at beginning of year	4 813 029
Contributions to provision	3 439 023
Amount utilised during the year	(3 128 570)
<b>Balance at end of year</b>	<b>5 123 482</b>
<b>31 March 2013</b>	
Balance at beginning of year	5 375 000
Contributions to provision	2 533 998
Expenditure incurred	(3 095 969)
<b>Balance at end of year</b>	<b>4 813 029</b>

	2014	2013
11. UNSPENT CONDITIONAL GRANTS AND RECEIPTS	R	R

<b>11.1 Conditional Grants from Government</b>	<b>77 100 177</b>	<b>24 033 386</b>
National Government Grants	77 100 177	24 033 386
	-	-
<b>Total Conditional Grants and Receipts</b>	<b>77 100 177</b>	<b>24 033 386</b>
<b>Unspent Grants is made up of the following Grants:</b>		
DST Grant (Ring Fenced)	75 314 075	21 816 206
NRF Research and Development grant	1 786 102	2 217 180
	<b>77 100 177</b>	<b>24 033 386</b>

See Note 15 (Transfers and subsidies received) for a reconciliation of the grants received, recognized as revenue and unspent as at year end.

## 12. LONG TERM LIABILITIES

Finance Lease Liabilities	256 565	425 828
Sub-total	256 565	425 828
Less: Current Portion transferred to Current Liabilities:-	(153 565)	(169 243)
Finance Lease Liabilities	(153 565)	(169 243)
<b>Total Long-term Liabilities</b>	<b>103 000</b>	<b>256 585</b>

### 12.1 Summary of Arrangements

Finance Leases relate to the leasing of office equipment with lease terms of between 3-6 years. This office equipment has been accounted for in Property Plant and Equipment under the asset category leased assets. The average effective interest rate on finance leases is 30.75% (2013: 38.67%).

Management is of the opinion that the carrying value of long-term liabilities recorded at amortised cost in the Annual Financial Statements approximates their fair values.

The fair value of Long-Term Liabilities was determined after considering the standard terms and conditions of agreements entered into between the entity and the relevant financing institutions.

### 12.2 Obligations under Finance Lease Liabilities

#### The entity as Lessee:

The management of the entity is of the opinion that the carrying value of long-term liabilities recorded at amortised cost in the Annual Financial Statements approximate their fair values.

The obligations under finance leases are as follows:

	Minimum Lease Payments		Present Value of Minimum Lease Payments	
	2014	2013	2014	2013
Amounts payable under finance leases:	R	R	R	R
Within one year	203 250	294 157	153 565	169 243
In the second to fifth years	113 204	316 473	103 000	256 585
Over five years		-		-
	316 454	610 630	256 565	425 828
Less: Future Finance Obligations	(59 888)	(184 803)	-	-
Present Value of Minimum Lease Obligations	256 565	425 827	256 565	425 828
Less: Amounts due for settlement within 12 months (Current Portion)			(153 565)	(169 243)
Finance Lease Obligations due for settlement after 12 months (Non-current Portion)			103 000	256 585

The entity has finance lease agreements for the following significant classes of assets:

- Office Equipment

Included in these classes are the following significant leases:

Canon Copier 1

- Instalments are payable monthly in advance

- Average period outstanding 6 months

- Average effective interest rate, based on prime 89,27%

- Average monthly instalment R 8 852,77

PABX Ericsson

- Instalments are payable monthly in advance

- Average period outstanding 14 months

- Average effective interest rate, based on prime 11,57%

- Average monthly instalment R 2 710,92

Minolta Copier 1

- Instalments are payable monthly in advance

- Average period outstanding 23 months

- Average effective interest rate 20,17%

- Average monthly instalment R 3 266,72

Minolta Copier 2

- Instalments are payable monthly in advance

- Average period outstanding 23 months

- Average effective interest rate, based on prime 20,17%

- Average monthly instalment R 3 266,72

Minolta Copier 3

- Instalments are payable monthly in advance

- Average period outstanding 23 months

- Average effective interest rate, based on prime 20,17%

- Average monthly instalment R 3 266,72

	2014	2013
12.3 Operating lease liability	R	R

Operating Leases are recognised on the straight-line basis as per the requirements of GRAP 13. In respect of Non-cancellable Operating Leases the following liabilities have been recognised:

Balance at beginning of year	398 139	-
Operating lease liability during the period	-266	398 139
<b>Total Operating Lease Liabilities</b>	<b>397 873</b>	<b>398 139</b>

### 12.3.1 Amounts payable under Operating Leases

At the reporting date the entity had outstanding commitments under non-cancellable operating leases, which fall due as follows:

Up to 1 year	1 964 701	2 891 970
Buildings	1 925 158	1 642 604
Office equipment	39 543	92 149
Vehicles	-	1 157 217
2 to 5 years	1 759 890	3 351 259
Buildings	1 681 772	3 261 174
Office equipment	78 118	23 186
Vehicles	-	66 899
More than 5 years	-	-
Buildings	-	-
Office equipment	-	-
Vehicles	-	-
<b>Total Operating Lease Arrangements</b>	<b>3 724 591</b>	<b>6 243 229</b>

The entity has operating lease agreements for the following classes of assets, which are only significant collectively:

- Buildings

- Office Equipment

- Vehicles

No restrictions have been imposed on the entity in terms of the operating lease agreements.

	2014	2013
	R	R
<b>13. ACCUMULATED SURPLUS</b>		
<b>The Accumulated Surplus consists of the following Internal Funds and Reserves:</b>		
Accumulated Surplus due to the results of Operations	168 940 981	157 644 531
<b>Total Accumulated Surplus</b>	<b>168 940 981</b>	<b>157 644 531</b>

Refer to Statement of Changes in Net Assets for more detail and the movement on Accumulated Surplus.

<b>14 FINANCE INCOME</b>		
<b>External Investments:</b>		
Bank Account	4 653 074	5 283 048
Investments - Call and fixed deposits	-	2 991
Other Interest - Outstanding debtors	-	-
	<b>4 653 074</b>	<b>5 286 039</b>

<b>15. TRANSFERS AND SUBSIDIES RECEIVED</b>		
<b>Operational Grants:</b>		
Parliamentary Grants (DST)	111 708 000	96 031 000
Parliamentary Grants (NRF)	-	9 888 000
<b>Conditional Grants (Ring fenced allocations)</b>		
DST Grant (Ring fenced)	-	6 392 815
NRF Research and Development Grant	-	3 445 563
Transferred from Deferred Revenue	21 046 650	13 228 806
Transferred Assets	2 800 000	
<b>Total Government Grants and Subsidies</b>	<b>135 554 650</b>	<b>128 986 184</b>

<b>15.1 DST Grant (Ring Fenced)</b>		
<b>Total</b>		
Balance unspent at beginning of year	21 816 564	13 228 806
Current year receipts	69 000 000	28 209 000
Conditions met - transferred to Revenue	(15 502 132)	(19 621 242)
Conditions still to be met - transferred to Liabilities (see note 11)	75 314 432	21 816 564

See the breakdown of this grant with the descriptions for each component below:

<b>15.1.1 SAEON &amp; NRF</b>		
Balance unspent at beginning of year	6 484 806	13 228 806
Current year receipts	-	-
Conditions met - transferred to Revenue	-	(6 744 000)
Conditions still to be met - transferred to Liabilities	6 484 806	6 484 806

These ring fenced grants received from the DST for projects related to Sunspace: SAEON (South African Environmental Observation Network); for the development of the South African Earth Observation System Portal and NRF (National Research Foundation): for Human Capital Development Initiatives. These projects were ceded to SANSA and are currently being finalised.

	2014	2013
	R	R
<b>15.1.2 Sunspace (Transition)</b>		
Balance unspent at beginning of year	258 576	-
Current year receipts	-	12 089 000
Conditions met - transferred to Revenue	(169 576)	(11 830 424)
Conditions still to be met - transferred to Liabilities	<b>89 000</b>	<b>258 576</b>

Sunspace Transition: for the Transition Phase for Sunspace Core Capabilities Absorption Process Work Packages. This project has been concluded.

<b>15.1.3 Satellite Development</b>		
Balance unspent at beginning of year	15 073 182	-
Current year receipts	49 000 000	16 120 000
Conditions met - transferred to Revenue	(10 500 000)	(1 046 818)
Conditions still to be met - transferred to Liabilities	<b>53 573 182</b>	<b>15 073 182</b>

The Satellite development funding were received in the latter part of the financial year and are committed for the preliminary design phase of the project.

<b>15.1.3 Sunspace IP acquisition and Industry upgrade</b>		
Balance unspent at beginning of year	-	-
Current year receipts	20 000 000	-
Conditions met - transferred to Revenue	(4 832 556)	-
Conditions still to be met - transferred to Liabilities	<b>15 167 444</b>	-

Satellite Development (ZA-SAT)

<b>15.2. NRF Research and Development grants</b>		
<b>Total</b>		
Balance unspent at beginning of year	2 217 181	3 311 609
Current year receipts	3 801 736	1 282 879
Conditions met - transferred to Revenue	(3 651 852)	(2 377 307)
Conditions still to be met - transferred to Liabilities (see Note 11)	<b>2 367 065</b>	<b>2 217 181</b>

These grants are for multiple purposes which include research infrastructure grants as well as student bursaries linked to research projects. The research project grants include running expenses and travel funds as well. The grants were received from the National Research Fund (NRF) by particular researchers after successful application to a competitive programme. Some of the grants were purely mobility grants. All of the grants are multiple year awards and are on-going until the project is completed.

<b>16 OTHER INCOME</b>		
Sundry Income	1 071 892	68 243
Rent Received	127 795	118 150
Discount Received	3 569	3 593
Bad Debts Recovered	1 900	222 363
Donation	267	-
Expense Recovery	3 696	-
<b>Total Other Income</b>	<b>1 209 119</b>	<b>412 349</b>

	2014	2013
17. EMPLOYEE RELATED COSTS	R	R
Employee Related Costs - Salaries and Wages	67 669 676	55 536 274
Employee Related Costs - Contributions for UIF, Pensions and Medical Aids	5 149 785	4 327 680
Performance Bonuses current year adjustment	3 463 022	2 533 998
<b>Total Employee Related Costs</b>	<b>76 282 483</b>	<b>62 397 952</b>

The members of key management personnel of SANSA during the year were:

Chief Executive Officer - Dr. S Malinga
Chief Financial Officer and Executive Director Finance and Business - Ms. B Pono
Executive Director Corporate Services - Mr. Z Ndziba
Managing Director SANSA Space Operations - Mr. R Hodges
Managing Director SANSA Earth Observations - Dr. J Olwoch
Managing Director SANSA Space Science - Dr. L McKinnell

Remuneration of the Chief Executive Officer: Dr. S Malinga

Annual Remuneration	1 507 097	1 407 690
Performance Bonus	95 479	75 768
Contributions to UIF, Medical and Pension Funds	114 866	121 611
<b>Total</b>	<b>1 717 442</b>	<b>1 605 069</b>

Remuneration of the Chief Financial Officer: Ms. B Pono

Annual Remuneration	1 155 591	1 083 723
Performance Bonus	74 022	91 620
Car and Travel Allowance	24 000	24 000
Contributions to UIF, Medical and Pension Funds	89 454	78 273
<b>Total</b>	<b>1 343 067</b>	<b>1 277 616</b>

Remuneration of the Executive Director: Mr. Z Ndziba

Annual Remuneration	972 838	895 270
Performance Bonus	69 257	82 488
Car and Travel Allowance	212 850	212 850
Contributions to UIF, Medical and Pension Funds	1 785	1 641
<b>Total</b>	<b>1 256 730</b>	<b>1 192 249</b>

Remuneration of the Managing Director SANSA Space Operations: Mr. R Hodges

Annual Remuneration	936 860	875 571
Performance Bonus	61 920	73 748
Car and Travel Allowance	-	-
Contributions to UIF, Medical and Pension Funds	107 718	116 786
<b>Total</b>	<b>1 106 498</b>	<b>1 066 105</b>

Remuneration of the Managing Director SANSA Earth Observation: Dr. J Olwoch

Annual Remuneration	935 852	728 856
Performance Bonus	48 939	0
Car and Travel Allowance	0	0
Contributions to UIF, Medical and Pension Funds	71 339	53 895
<b>Total</b>	<b>1 056 129</b>	<b>782 751</b>

Remuneration of the Managing Director SANSA Space Science: Dr. L McKinnell

Annual Remuneration	941 962	880 339
Performance Bonus	59 110	93 870
Car and Travel Allowance	-	-
Contributions to UIF, Medical and Pension Funds	71 793	67 069
<b>Total</b>	<b>1 072 865</b>	<b>1 041 278</b>

	2014	2013
18. BOARD MEMBERS REMUNERATION	R	R

Non-executive Chairman	74 620	62 517
Other Board members	399 226	268 138
<b>Total Board members Remuneration</b>	<b>473 846</b>	<b>330 655</b>

Mr L Annamalai	51 973	53 170
Mr P Maine	42 812	37 155
Adv T Ratsheko	31 782	32 452
Ms J Lawrence	21 095	58 492
Mr V Gore	22 680	29 596
Capt M Mamashela	22 798	13 630
Ms L Mogudi	55 863	43 643
Dr E Gavin <sup>1</sup>	-	-
Dr R Scholes <sup>1</sup>	-	-
Mr M Zondi <sup>1</sup>	-	-
Mr M Rezelman	50 404	-
Ms G Khambule	35 491	-
Mr A Walker	42 624	-
Mr R G Nicholls <sup>2</sup>	3 045	-
Mr S S Faku <sup>2</sup>	3 182	-
Mr J Mphepya <sup>1</sup>	7 886	-
Ms D Manyadi	7 590	-

<sup>1</sup>These board members are in the employ of the state and therefore do not receive board remuneration however they receive travel claim and cell phone allowance .

<sup>2</sup>Mr R G Nicholls and Mr S S Faku are lead independent Non-Executive Audit and Risk committee and the Human Resources and Social Ethics committee respectively.

	2014	2013
	R	R
<b>19. DEPRECIATION AND AMORTISATION</b>		
Depreciation: Property, Plant and Equipment	15 220 671	14 732 302
Amortisation: Intangible Assets	1 062 683	743 797
<b>Total Depreciation and Amortisation</b>	<b>16 283 354</b>	<b>15 476 099</b>

## 20. IMPAIRMENT LOSSES

### 20.1 Impairment Losses on Financial Assets

<b>Impairment Losses Recognised:</b>		
Receivables from exchange transactions	19 629	20 670
<b>Impairment Losses Reversed:</b>		
Receivables from exchange transactions	-	-546 900
<b>Total Impairment losses</b>	<b>19 629</b>	<b>-526 230</b>

## 21. FINANCE COSTS

Finance Leases	124 892	122 535
Interest Paid	-	-
<b>Total Interest Expense</b>	<b>124 892</b>	<b>122 535</b>
<b>Total Interest Paid on External Borrowings</b>	<b>124 892</b>	<b>122 535</b>

## 22. GRANTS AND SUBSIDIES PAID

Bursaries to students	3 579 122	2 414 945
Research and development	477 000	460 776
<b>Total Grants and Subsidies</b>	<b>4 056 122</b>	<b>2 875 721</b>

## 23. RESEARCH AND DEVELOPMENT COSTS

Satellite Programme	4 832 556	4 980 379
Sunspace Transition	169 576	12 512 442
CPUT CubeSat Launch	-	1 764 000
Launch capability development	-	-
<b>Total Research and Development Costs</b>	<b>5 002 132</b>	<b>19 256 821</b>

Research and Development Costs disclosed above, have been expensed immediately and are in respect of research into the future needs of the entity and new resources to fulfil these needs.

## 24. GENERAL EXPENSES

Advertising & Marketing	1 733 272	2 369 046
Audit Fees	1 760 530	2 394 097
Bank Charges	125 619	104 358
Consulting fees	5 217 770	4 842 644
Conferences and Seminars	718 572	1 033 191

Consumables	110 419	374 040
Electricity	2 807 386	3 710 719
Entertainment	136 990	284 934
Fuel and Oil	1 209 484	1 996 728
Insurance	1 325 410	802 151
Legal Costs	2 459	57 258
License fees	3 652 710	3 169 550
Other General Expenses	25 375 863	12 572 878
Printing and Stationery	746 252	1 242 065
Rent and lease charges	3 057 295	3 350 058
Travel and accommodation	8 236 902	6 649 778
Security	924 343	899 859
Telephone Cost	1 977 831	1 353 978
Data and internet services	7 978 891	9 378 139
Transport Costs	1 286 467	478 149
<b>Total General Expenses</b>	<b>68 384 465</b>	<b>57 063 620</b>

The amounts disclosed above for Other General Expenses are in respect of costs incurred in the general management of the entity and not directly attributable to a specific service or class of expense.

	2014	2013
	R	R
<b>25. NET GAINS AND LOSSES ON FOREIGN EXCHANGE TRANSACTIONS</b>		
Gains in net Foreign Exchange	1 640 570	1 128 201
(Losses) in net Foreign Exchange	(2 848 499)	(957 008)
<b>Net foreign Gains/(Losses)</b>	<b>(1 207 929)</b>	<b>171 193</b>

## 26. RENDERING OF SERVICES

Services to local Public entities	17 169 870	25 179 269
Services to local Private entities	2 076 908	1 657 769
Services to Foreign clients	51 964 305	45 484 851
Other services rendered	61 033	-
<b>Total</b>	<b>71 272 116</b>	<b>72 321 889</b>

## 27. DATA LICENCE FEES

Data licence fees	25 580 933	16 392 047
<b>Total</b>	<b>25 580 933</b>	<b>16 392 047</b>

Data licence fees consists mainly of SPOT data access fees for downloading satellite imagery for earth observation services.

## 28. CASH GENERATED FROM OPERATING ACTIVITIES

Surplus for the Year	11 296 449	30 446 920
Adjustment for:		
Depreciation and Amortisation	16 266 005	15 476 099
Transfer of Intellectual Property	(2 800 000)	-
Gains on Disposal of Property, Plant and Equipment	(1 399)	(24 683)
Loss on Disposal of Property, Plant and Equipment	66 187	372 368
Unrealised exchange rate gains and losses	1 207 929	(171 193)
Impairment Loss	19 629	20 670
Sundry income	62 158	80 621

Discount Received	3 569	3 593
<b>Operating surplus before working capital changes</b>	<b>26 120 527</b>	<b>46 204 395</b>
(Increase) in Inventories	24 512	(117 485)
(Increase) in Receivables from exchange and non- exchange transactions	(3 926 919)	1 753 123
(Decrease) in Creditors, Provisions and unspent conditional grants and receipts	44 368 986	7 327 622
<b>Cash flow from operating activities</b>	<b>66 587 106</b>	<b>55 167 655</b>

	2014	2013
<b>29. IRREGULAR, FRUITLESS AND WASTEFUL EXPENDITURE</b>	<b>R</b>	<b>R</b>

### 29.1. Fruitless and Wasteful Expenditure

To the best of management's knowledge there were no instances of fruitless and wasteful expenditure identified for the year under review and in the prior year.

### 29.2 Irregular Expenditure

Reconciliation of Irregular Expenditure:		
Opening balance	-	9 376 687
Irregular Expenditure current year	-	-
Amounts not recoverable (Not Condoned)	-	(9 376 687)
Irregular Expenditure awaiting condonement	-	-

### Details of irregular expenditure not recoverable (not condoned)

Supply chain policy not followed:	Disciplinary Steps / Criminal Proceedings	Amount
Three quotations were not always obtained as required. During the first six months of operations and due to the migration and transfer of functions, the database of approved suppliers from the migrated entities (from CSIR and NRF) was utilized while SANSA's supplier database was being established.	Not practical due to transactions incurred entity wide during the transitional phase for a period of 6 months	4 458 744
PPPFA requirements not adhered to as required. During the first six months of operations, procurement was decentralized while setting up SCM structures. The database of approved suppliers from the migrated entities were utilised or otherwise, three quotations obtained. As far as possible, tax clearance certificates and SBD forms were requested and obtained from suppliers retrospectively. The PPPFA requirements on these transactions could not be adhered to without an SCM structure to administer the process.	Not practical due to transactions incurred entity wide during the transitional phase for a period of 6 months	4 917 943
		<b>9 376 687</b>

## 30. COMMITMENTS FOR EXPENDITURE

	2014	2013
<b>30.1 Capital and Expenditure Commitments</b>		
<b>- Approved and Contracted for:-</b>	<b>155 779 883</b>	<b>41 923 661</b>
Property, Plant and Equipment	38 033 150	24 743 364
Intangible assets	1 993 895	1 560 195
Expenditure	115 752 837	15 620 102
<b>- Approved but Not Yet Contracted for:-</b>	<b>621 292</b>	<b>-</b>
Property, Plant and Equipment	621 292	-
Expenditure	-	-
<b>Total Capital and Expenditure Commitments</b>	<b>156 401 175</b>	<b>41 923 661</b>
This expenditure will be financed from:		
Own Resources	156 401 175	41 923 661
	<b>156 401 175</b>	<b>41 923 661</b>

## 31. EMPLOYER RETIREMENT BENEFIT INFORMATION

The only obligation of the entity with respect to the retirement benefit plans is to make the specified contributions.

The total expense recognised in the Statement of Financial Performance represents contributions payable to the plan by the entity at rates specified in the rules of the plan. These contributions have been expensed.

## 32. RELATED PARTY TRANSACTIONS

Related party relationships:

South African National Space Agency (SANSA) is a Public Entity under the control of the Department of Science and Technology South Africa. The Agency is a schedule 3A Public entity in terms of the Public Finance Management Act, Act 1 of 1999 as amended by Act 29 of 1999, and therefore falls within the national sphere of government. SANSA has a significant number of related parties, being those that fall within the national sphere of government. Amounts due from / (to) these entities are subject to the same terms and conditions as normal trade receivables and trade payables and transactions with these entities are concluded at arm's length.

The land currently occupied by the business area, SANSA Space Operations (Portions of farm Hartebeeshoek 502-JQ, from where its operations are conducted) is owned by the Department of Land Affairs and Rural Development. SANSA does not pay rent for the use of this property, but has been given right of use by the Department.

For key management emoluments, please refer to note 17.

## 33. PENDING LAND CLAIM

A land claim remains pending since approximately 2008 in respect of the property upon which SANSA Space Operations is located. South African National Space Agency (SANSA) is not the owner of the land. The legal and financial implications of the land claim will be determined upon the ruling of the Land Claims Commissioner.

## 34. IN-KIND DONATIONS AND ASSISTANCE

The entity receive a donation of R267 from the University of the Third Age Heldeberg.

## 35. EVENTS AFTER THE REPORTING DATE

No events having financial implications requiring disclosure occurred subsequent to 31 March 2014.

## 36. GOING CONCERN

The annual financial statements have been prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business.

## 37. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

All Financial instruments arise directly from operations.

The entity does not enter into any derivative transactions. The main risk arising from the entity's financial instruments are cash flow interest rate risk, liquidity risk and credit risk.

The entity reviews and implements policies managing each of these risks. There are no significant concentrations of risk. Compliance with policies and procedures is reviewed by internal and external auditors on a continuous basis.

	2014	2013
	R	R
The carrying amounts of financial liabilities at reporting date was:		
Trade and other payables	19 423 216	18 097 503
Finance leases	256 565	425 828
	<b>19 679 781</b>	<b>18 523 331</b>

### Interest Rate Risk

No material risk exists due to there being no material finance costs in the current finance year. The only real risk that exists is the risk of variations in cash flow due to changes in the interest rate, which will affect interest income.

The entity's income and operating cash flows are substantially independent of changes in the market interest rates.



31 March 2014	Floating Interest Rate	Non-interest Bearing	Total
	R	R	R
<b>Assets</b>			
Receivables from Exchange Transactions	-	13 813 040	13 813 040
Receivables from Non-Exchange Transactions	-	8 195 079	8 195 079
Cash and cash equivalents	120 634 623	7 271	120 641 894
<b>Liabilities</b>			
Trade and other payables	-	(19 423 216)	(19 423 216)
Long-term Liabilities	(256 565)	-	(256 565)
<b>Net Financial assets/(Liabilities)</b>	<b>120 378 058</b>	<b>2 592 174</b>	<b>122 970 232</b>

31 March 2013	Floating Interest Rate	Non-interest Bearing	Total
	R	R	R
<b>Assets</b>			
Receivables from Exchange Transactions	-	15 445 347	15 445 347
Receivables from Non-Exchange Transactions	-	2 635 853	2 635 853
Cash and cash equivalents	96 100 609	6 129	96 106 738
<b>Liabilities</b>			
Trade and other payables	-	(18 097 503)	(18 097 503)
Long-term Liabilities	(425 828)	-	(425 828)
<b>Net Financial assets/(Liabilities)</b>	<b>95 674 781</b>	<b>-10 174</b>	<b>95 664 607</b>

#### Interest Rate Sensitivity Analysis

The sensitivity analysis below was determined based on the exposure to interest rates at the reporting date. For variable rate long-term instruments, the analysis is prepared assuming the amount of the instrument outstanding at the reporting date was outstanding for the whole year. A 100 basis point increase or decrease was used, which represents management's assessment of the reasonably possible change in interest rates.

Effect of a change in interest rate on interest bearing financial assets and liabilities

Financial Assets	Classification	2014	2013
		R	R
<b>External investments:</b>			
Call Deposits	Loans and receivables	18 626 233	-
Bank Balances	Loans and receivables	102 008 390	96 100 609
Cash Floats and Advances	Loans and receivables	7 271	6 129
		<u>120 641 894</u>	<u>96 106 738</u>
<b>Interest received</b>		<u>4 653 074</u>	<u>5 286 039</u>
Interest rate		<u>3,9%</u>	<u>5,3%</u>

Effect of a change in interest rate on interest earned from external investments:

Effect of change in interest rate	1%	1%
Effect of change in interest rate	<u>1 206 418,94</u>	<u>961 067</u>
Effect of change in interest rate	-1%	-1%
Effect of change in interest rate	<u>(1 206 419)</u>	<u>(961 067)</u>

#### Liquidity risk

The entity prevents liquidity risk by maintaining adequate banking facilities and by receiving contributions annually in the form of Grants.

The following are the contractual maturities of financial liabilities, including interest payments and excluding the impact of netting agreements for the entity:

Carrying amount	Contractual cash flows: 1 month or less	2014		
		Contractual cash flows: 1 - 3 months	Contractual cash flows: 3 - 12 months	Contractual cash flows: 12 - 60 months
R'000	R'000	R'000	R'000	R'000
<b>Non-derivative financial liabilities</b>				
Trade and other payables	19 423 216	19 423 216	-	-
Finance lease liability	256 565	12 797	28 207	115 174
	<u>19 679 781</u>	<u>19 436 013</u>	<u>28 207</u>	<u>115 174</u>

Carrying amount	Contractual cash flows: 1 month or less	2013		
		Contractual cash flows: 1 - 3 months	Contractual cash flows: 3 - 12 months	Contractual cash flows: 12 - 60 months
R'000	R'000	R'000	R'000	R'000
<b>Non-derivative financial liabilities</b>				
Trade and other payables	18 097 503	18 097 503	-	-
Finance lease liability	425 828	14 104	20 563	126 932
	<u>18 523 331</u>	<u>18 111 607</u>	<u>20 563</u>	<u>126 932</u>

#### Market and Credit risk

Financial assets which potentially subject the entity to the risk of non-performance by counter parties consist of Receivables from exchange and non-exchange.

An allowance for impairment is established based on management's estimate of any identified potential losses in respect of Receivables from exchange and non-exchange. Bad debts identified are written off as they occur. The entity does not have any significant credit risk exposure to any single counterparty. There is a foreign exchange risk due to the existence of international debtors. These debtors however have strict 30 day payment terms which ensures that the movement in exchange rates are limited to a shorter time period.

The entity's exposure to foreign currency risk was as follows:

	31 March 2014					
	Total	ZAR	EURO	USD	SEK	GBP
Receivables from Exchange Transactions	13 813 040	7 595 142	1 146 917	5 070 982	-	-
Trade payables	(19 423 216)	(19 401 816)	(21 400)	-	-	-
Gross exposure	<u>(5 610 176)</u>	<u>(11 806 674)</u>	<u>1 125 517</u>	<u>5 070 982</u>	<u>-</u>	<u>-</u>

	31 March 2013					
	Total	ZAR	EURO	USD	SEK	GBP
Receivables from Exchange Transactions	15 454 617	7 165 953	7 635 991	652 673	-	-
Trade payables	(18 097 503)	(17 772 850)	-	(320 293)		(4 360)
Gross exposure	<b>(2 642 886)</b>	<b>(10 606 897)</b>	<b>7 635 991</b>	<b>332 380</b>	<b>-</b>	<b>(4 360)</b>

The following significant exchange rates applied during the year:

	2014	2013
Year-end spot rate		
Euro	14,55	11,81
USD	10,58	9,25

#### Sensitivity analysis

A 10% weakening of the rand against the above currencies at 31 March would have had the equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remain constant.

Euro	112 552	763 599
USD	507 098	33 238
SEK	-	-
GBP	-	(436)
<b>Total</b>	<b>619 650</b>	<b>796 401</b>

A 10% strengthening of the rand against the following currencies at 31 March 2014 would have decreased profit or loss by the amounts shown below. This analysis assumes that all other variables remain constant. The analysis is performed on the same basis as was performed at 31 March 2013.



**(T) 012 844-0500**

**(F) 012 844-0396**

**(E) [information@sansa.org.za](mailto:information@sansa.org.za)**



**Physical Address**

**South African National Space Agency (SANSA)**

**Enterprise Building**

**Mark Shuttleworth Street**

**Innovation Hub**

**Pretoria**

**0087**

**Gauteng**

**South Africa**