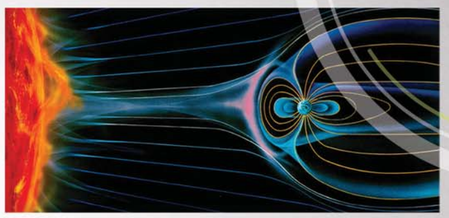
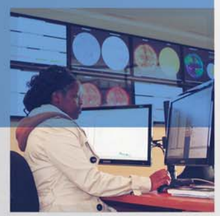
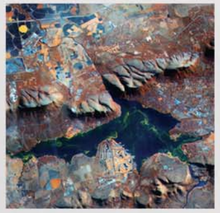
sansa
SOUTH AFRICAN NATIONAL
SPACE AGENCY







ANNUAL REPORT 2011-12

ROGUE / 2688

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CHAIRPERSON'S **STATEMENT**

The South African National Space Agency (SANSA) has been operational for one year. It has made significant strides towards contributing to one of the key national objectives: transforming South Africa from a largely resource-based economy to a knowledge-based economy through skills development, innovation, sustainable development and positively impacting on the quality of lives of South Africans. This is the first Annual Report generated by SANSA and it highlights the Agency's contribution towards achieving its set goals.

SANSA has a mandate to drive the promotion and use of space and cooperation in space-related activities. To achieve this mandate, SANSA fosters research in space science, advances scientific engineering through human capital, and supports the creation of an environment conducive to industrial development in space technologies within the framework of national government policy. This policy includes the Ten-Year Innovation Plan, National Space Strategy and South African Earth Observation Strategy, along with consideration of the New Growth Path and National Development Plan: Vision for 2030. In line with these national imperatives, SANSA has five strategic programmes, namely Corporate Support, Earth Observation, Space Operations, Space Science and Space Engineering.

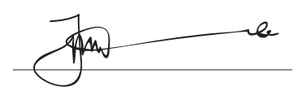
> "As a public entity, SANSA needs to excel on two key fronts: good corporate governance and meeting the institutional performance mandate."

The key focus areas for the SANSA Board have been to provide governance, strategic planning and performance management of SANSA. As a public entity, SANSA needs to excel on two key fronts: good corporate governance and meeting the institutional performance mandate. I am delighted to report that the organisation has laid a good foundation of corporate governance in its first year of operation. Major policies have been developed and implemented, and governance structures and related internal control measures are in place.

With respect to the institutional performance side, SANSA has been able to perform well against set targets while concurrently establishing the essential operating processes and organisational infrastructure.

As per their reputation, our directorates deliver high-quality products and services to our stakeholders and clients. A good platform has now been laid for SANSA to deliver on every aspect of its mandate.

I wish to express my appreciation to the Department of Science and Technology, fellow Board members, SANSA management and staff, as well as to all the SANSA stakeholders, clients and partners who have provided support and direction to SANSA during its first year of operation. As SANSA progresses into its second year of operation, the Board is confident that the Agency will progressively increase its contribution to the advancement of the Department of Science and Technology's Strategic Plan and to the National System of Innovation while abiding 'in service of humanity'.



Mr Maurice Magugumela
Chairperson of the SANSA Board
Accounting Authority

Chairperson, Maurice Magugumela

CEO'S **OVERVIEW**

The South African National Space Agency (SANSA) was established in 2010. Following a period of rapid growth and transition during its first year of operation, the Agency has made significant advancements towards addressing its key mandate of deriving greater value from space science and technology for the benefit of South African society.

SANSA has achieved numerous successes and South African firsts in its pursuit of scientific excellence. Through the dedication and hard work of its employees and stakeholders, the Agency has taken steps towards satisfying targets set out in the National Space Strategy and the Grand Challenge of Space Science and Technology within the Department of Science and Technology's Ten-Year Innovation Plan.

Among the key highlights, after a year of operation, is SANSA's successful contribution towards creating societal benefits by providing government with tools and resources to improve the planning and monitoring of housing service delivery and better resource management. Despite experiencing some difficulty in the harsh space environment, the mission of SANSA's technology demonstrator, SumbandilaSat, has been an overall success. After almost two years in space, the satellite has delivered 1 128 highly usable and cloud-free images that should prove to be of great value to the country. SANSA's data collection, processing and distribution have been successful. It also implemented the data access catalogue, facilitating easy access to SANSA data. In addition, SANSA delivered the SPOT flagship product to its key clients, largely in the public sector.

CEO, Sandile Malinga

SANSA's Space Operations directorate has been successful in providing telemetry, tracking and command support to many international space nations, thus positioning South Africa as a reliable and serious space player. SANSA currently provides launch support in excess of 40% of the total space market share. The successful launch support for NASA's Mars Science Laboratory in November 2011 was certainly one of the directorate's main highlights during the past financial year. This mission is significant in its aims, which include establishing whether the Mars environment supports any life and exploring the current geographical composition of the planet.

> "All the goals set out for SANSA align to its mandate of bringing the benefits of space science and technology to fellow South Africans."

The Space Science directorate, based in Hermanus, has been instrumental in driving human capital development through the utilisation of space science as a vehicle to stimulate an interest in science and engineering and to drive research and innovation. In its contribution to knowledge creation, the directorate has published a number of research papers with the purpose of increasing humankind's understanding of the universe. A number of flagship projects have been pursued in Antarctica and on the South African mainland.

Our directorates have hosted numerous international visitors and researchers who have often been instrumental in establishing strategic partnerships for SANSA. This engagement with the scientific community enables us to constantly strive for excellence in our products and services while remaining at the forefront of technological developments and gaining an insight into challenges facing the space industry.

In this, its first Annual Report, SANSA highlights its journey of successes and challenges as it forges ahead in the achievement of its targets while simultaneously putting the necessary policies, processes and organisational structures into place. All the goals set out for SANSA align to its mandate of bringing the benefits of space science and technology to fellow South Africans. These goals aim to generate benefits to our society and to develop a knowledge-based workforce while creating intellectual and economic value for South Africa that will enable the country to integrate successfully into the global society.

SANSA remains committed to supporting and integrating the efforts of all stakeholders, industry and academic partners active in the field of space science and technology for the greater benefit of South Africa. We have a great deal more to achieve as we progress towards the establishment of South Africa's first National Space Programme. This endeavour has seen the successful collaboration of national stakeholders from government, industry, academia and the public in order to create a new piece of South African heritage. SANSA looks forward to sharing the ground-breaking impact this programme will make in its contribution towards the New Growth Path and National Development Plan: Vision for 2030 in its next Annual Report.

I wish to acknowledge the outstanding contribution made by our staff, partners and stakeholders towards achieving our strategic goals for the past year. I am encouraged by their clear commitment to the realisation of SANSA's mandate.

Watch this space as SANSA ensures South Africa's space activities are integrated and optimised for the maximum benefit of our citizens through the fostering of research in space science, the advancement of scientific engineering, and the support of an environment conducive to industrial development.

Dr Sandile Malinga
SANSA Chief Executive Officer

SPACE IS ALL **AROUND US** |

Our Earth-space infrastructure in the Antarctic enables us to monitor space weather and its effects on the Earth.

ANNUAL PERFORMANCE **HIGHLIGHTS** |

World-class and efficient services and societal benefits (Societal Capital)

- SANSA acquired and archived 34 terabytes (Tb) of Earth observation satellite data for numerous societal delivery needs, such as geo-spatial information for natural resource (water, land, etc.) management, environmental management and sustainability, agriculture and food security, rural development and urban planning, disaster management, and policy formulation and decision-making.
- SANSA rendered satellite launch support to 18 global satellites, including the US$2.3 billion National Aeronautics and Space Administration (NASA) Mars Science Laboratory (MSL) mission that aims to land and operate a rover named Curiosity on the surface of Mars.
- SANSA delivered the Informal Settlement Atlas as part of the North West Informal Settlement Upgrading Programme (NWISUP). The atlas provides spatial information about informal settlements that can be used to efficiently locate these settlements and quantify the provincial housing delivery.

2011 saw the launch of the SANSA Space Weather Centre at the SANSA Space Science Directorate in Hermanus by Minister Naledi Pandor.

Cutting-edge research, development, innovation, technology and applications (Intellectual Capital)

- SANSA provided 40 TB of Earth observation satellites data for research and knowledge creation.

Effective development of human capital, transformation, science advancement and engagement of the citizenry (Human Capital)

- Through collaborative student training, SANSA developed human capital in Earth Observation techniques such as remote sensing, image processing, data management, electronics, satellite technology and distributed satellite data to 41 Honours, 95 MSc and 48 PhD students.
- SANSA developed human capital in space science by training and supervising eight interns, 18 MSc and 12 PhD students.
- SANSA promoted and advanced science among the youth and the public by engaging 8 436 learners at SANSA facilities, hosting 324 educators and holding 15 public engagement activities.

Globally competitive national space industry (Economic Capital)

- SANSA made an active contribution to the South African space industry through research, technological advancement, science advancement and local and global partnerships, as well as provided services that stimulated industry growth. This enabled SANSA Earth Observation to derive 27% of its income from collaborative projects with industry.

Hartebeesthoek ground station

Legislative Mandate

SANSA derives its mandate from the South African National Space Agency Act (SANSA Act No. 36 of 2008). According to Section 4 of the Act, the object 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
5. foster international cooperation in space-related activities
4. nurture space-related partnerships to enhance South Africa's standing in the community of nations
5. grow South Africa's contribution to the global space value chain

Strategic Mandate

SANSA primarily derives its strategic mandate from the:

1. Ten-Year Innovation Plan
2. National Space Strategy
3. South African Earth Observation Strategy

Vision

To be a leading contributor to the perpetual advancement of society through the benefits of space science and technology.

Mission

SANSA's five-fold mission statement, which spans its legislative mandate, is to:

1. enable the delivery of space-related services to the citizens of South Africa
2. support, guide and conduct research and development (R&D) 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 technologies in South Africa

Sansa's mission is succinctly captured in the agency's motto:

"In service of humanity"

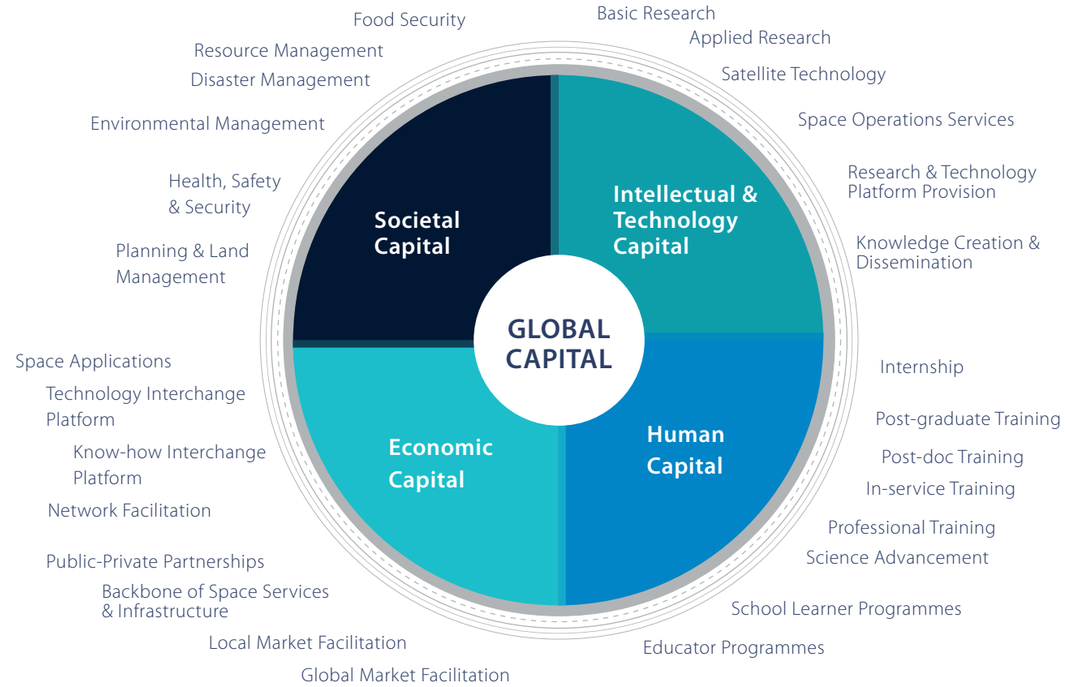
Values

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

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
5. Global Capital

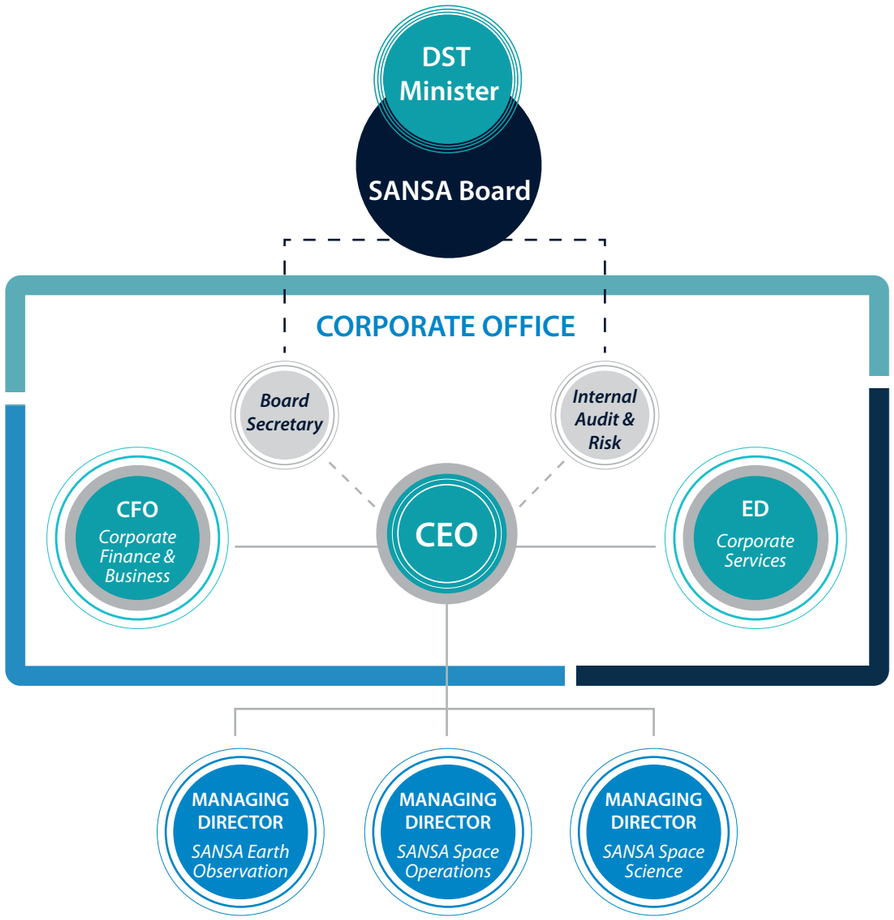


Strategic Goals

The 2011–2012 SANSA Annual Performance Plan indicates how the respective business units within SANSA intend 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)***
5. Make South Africa a recognised global space citizen ***(Global Capital)***

CORPORATE **GOVERNANCE**



Governing Board

The functions of the SANSA Board as outlined in Section 9 of the SANSA Act (No. 36 of 2008) are to:

1. perform any function imposed upon it in accordance with a policy direction issued by the Minister and in terms of the SANSA Act
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
6. establish or disestablish organisational divisions of the agency, as appropriate, after consultation with the Minister

The other responsibilities of the Board are as outlined in the Board charter.

SumbandilaSAT image of Knysna

MR MAURICE MAGUGUMELA
CHAIRPERSON

DR SANDILE MALINGA
CEO

MS JOY-MARIE LAWRENCE
BOARD MEMBER

DR ROBERT SCHOLES
BOARD MEMBER

MS LOUISA MOGUDI
BOARD MEMBER

DR ELIZABETH GAVIN
BOARD MEMBER

MR LEEANDRAN ANNAMALAI
BOARD MEMBER

MR MTHOBISI ZONDI
BOARD MEMBER

MR POTLAKI MAINE
BOARD MEMBER

DR LEE-ANNE MCKINNELL
BOARD MEMBER

ADV. TSHEKO RATSHEKO
BOARD MEMBER

CAPT. MPHO MAMASHELA
BOARD MEMBER

MR VINCENT GORE
BOARD MEMBER

COMMITTEES OF THE **BOARD**

The membership of the Board and its attendance record in 2011/12 is reflected in the following table:

Name	20/04/11	13-14/05/11	12/07/11	01/08/11	25/10/11	17/01/12
Mr Maurice Magugumela – Chairperson	✓	✓	✓	✓	✓	✓
Mr Leeandran Annamalai	✓	✓	✓	✓	✓	✓
Mr Potlaki Maine	✓	✓	✓	✓	✓	✓
Dr Lee-Anne McKinnell	✓	✓	✓	✓	✂	✂
Ms Louisa Mogudi	✓	✓	✓	✓	◉	✓
Dr Robert Scholes	✓	✓	✓	✓	✓	✓
Ms Joy-Marie Lawrence	✓	✓	✓	✓	✓	✓
Mr Vincent Gore	◉	✓	✓	✓	✓	◉
Capt. Mpho Mamashela	✓	✓	◉	✓	✓	✓
Mr Mthobisi Zondi	✓	◉	✓	◉	◉	✓
Dr Elizabeth Gavin	✓	✓	◉	◉	✓	✓
Adv. Tsheko Ratsheko	✓	✓	✓	✓	◉	✓
Dr Sandile Malinga – CEO	✓	✓	✓	✓	✓	✓

✓ *Attendance* ◉ *Apology* ✂ *Resigned 1 September 2011*

Business Planning and Governance (BPG) Committee

The main function of the BPG Committee is to provide strategic direction to the executive management team by recommending and reviewing strategic actions to the Board and monitoring organisational performance. The membership of the committee and its attendance record in 2011/12 is reflected in the following table:

Name	08/04/11	05/07/11	18/08/11	13/09/11	13/10/11	14/12/11	30/01/12
Mr Leeandran Annamalai	✓	✓	✓	✓	✓	✓	✓
Dr Lee-Anne McKinnell	✓	◉	◉	✓	✂	✂	✂
Capt. Mpho Mamashela	✓	◉	✓	◉	✓	✓	◉
Dr Elizabeth Gavin	✓	✓	✓	✓	◉	✓	✓
Ms Joy-Marie Lawrence	✓	◉	◉	✓	◉	◉	✓
Dr Robert Scholes	◉	◉	✓	◉	◉	◉	✓
Dr Sandile Malinga	✓	✓	✓	✓	✓	✓	✓

✓ *Attendance* ◉ *Apology* ✂ *Resigned 1 September 2011*

Finance, Audit and Risk (FAR) Committee

The FAR Committee fulfils a vital role in Corporate Governance by assisting the Board in discharging its duties relating to the safeguarding of assets, oversight on the operation of adequate systems controls, the assessment of a going-concern status, the reviewing of and reporting on financial information, and the review of the Annual Financial Statements for recommendation to the Board.

The membership of the committee and its attendance record in 2011/12 is reflected in the following table:

Name	12/04/11	04/07/11	06/09/11	20/09/11	22/02/12
Ms Joy-Marie Lawrence	✓	◉	✓	✓	✓
Mr Mthobisi Zondi	✓	✓	◉	◉	◉
Mr Vincent Gore	✓	✓	✓	✓	✓
Adv. Tsheko Ratsheko	✓	✓	✓	◉	✓
Dr Sandile Malinga	◉	✓	✓	◉	✓

✓ *Attendance* ◉ *Apology*

Human Resources (HR) Committee

The primary objective of the Human Resources Committee is to develop and monitor the implementation of a competitive human resources strategy to ensure that SANSA is able to attract, retain and develop the best possible talent to enable organisational performance.

The membership of the committee and its attendance record in 2011/12 is reflected in the following table:

Name	11/04/11	12/05/11	30/06/11	27/09/11	06/03/12
Adv. Tsheko Ratsheko	✓	✓	✓	✓	✓
Dr Lee-Anne McKinnell	◉	✓	◉	✂	✂
Ms Louisa Mogudi	✓	✓	✓	✓	✓
Mr Potlaki Maine	✓	◉	✓	✓	✓
Dr Sandile Malinga	✓	✓	✓	◉	✓

✓ *Attendance* ◉ *Apology* ✂ *Resigned 1 September 2011*

Corporate Executive

The Corporate Executive Management, under the 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
- Ms Thandeka Mxenge, Board Secretary and Legal Officer

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, Chief Executive Officer (CEO)
- Ms Bulelwa Pono, Chief Financial Officer (CFO)
- Mr Zweli Ndziba, Executive Director (ED)
- Ms Thandeka Mxenge, Board Secretary and Legal Officer
- Dr Lee-Anne McKinnell, Managing Director (MD): SANSA Space Science
- Mr Raoul Hodges, Managing Director (MD): SANSA Space Operations

Management Forum

The Management Forum consists of the Corporate Senior Management, middle management and key staff members. It meets twice a year and is a platform for discussing and implementing corporate-wide and operational strategies.

DR SANDILE MALINGA
CHIEF EXECUTIVE OFFICER
(CEO)

MS BULELWA PONO
CHIEF FINANCIAL OFFICER
(CFO)

MR ZWELI NDZIBA
EXECUTIVE DIRECTOR (ED)
CORPORATE SERVICES

SPACE IS ALL **AROUND US** |

Satellite imagery enables us to effectively plan human settlement and urban development.

Sumbandila satellite.

Space science finds application in all areas of human endeavour including agriculture and food security.

Hartebeesthoek ground station.

Goal 1: World-class and efficient services and societal benefits (Societal Capital)

Globally, space science and technology is finding application in all areas of human endeavour, including the conservation of our natural environment and global change monitoring; natural resource management; agriculture and food security; economic activity; disaster management; urban planning and rural development; health, safety and security; navigation and logistics; and decision-making and policy enforcement. It is for this reason that this industry has grown by 5.5% in 2011. In this regard, SANSA is well aligned to position South Africa as a beneficiary of space assets and applications. In an effort to achieve this, SANSA has set, as its first goal, a strategic intent to provide "world-class and efficient services for societal benefits".

SANSA allocates the bulk of its resources to achieving this goal, which comprise approximately R23.5 million for satellite data access to continually maintain a comprehensive satellite sensor portfolio, including SPOT, Landsat and MODIS. Satellite image data totalling 34Tb was collected. The Data Information Management System (DIMS), which includes an online data catalogue for Earth Observation, was implemented to improve data access. The completion of the new generation Landsat processing system, LPGS, created an advanced capability to produce processed Landsat images at the same standard delivered by the United States Geological Survey (USGS). The result is improved high calibre radiometric and geometrical product that will contribute to improved time series analytical results.

In its first year of operations, SANSA contributed to efforts that resulted in creating societal benefits. SANSA Earth Observation, in collaboration with SATPLAN, finalised and delivered the Informal Settlement Atlas as part of the North West Informal Settlement Upgrading Programme (NWISUP). The atlas series provides a systematic way of monitoring informal settlement growth patterns and assists local and provincial authorities in planning, implementing and monitoring informal settlement development programmes. The annual SPOT-5 mosaic was released to government departments and other public entities. This is a useful resource that is used by over 60 public entities from Statistics South Africa to the Presidency.

SANSA uses its ground station at Hartebeesthoek for numerous space operation activities, including launch and early orbit support for the local and international space industry and governments. During the year, SANSA has served international markets by supporting 18 spacecraft launches and eight in-orbit tests.

Together with the ground-hosting services, this generated about R35 million in revenue. One of the missions supported by SANSA was the US$2.3 billion NASA Mars Science Laboratory (MSL) mission which aims to land and operate a rover named Curiosity on the surface of Mars. The mission will assess whether Mars is, or ever was, an environment able to support microbial life. It will also analyse rock and soil samples on the planet. This is part of NASA's Mars Exploration Program, a long-term plan for the robotic exploration of Mars. Other science missions supported by SANSA included the India-France Megha-Tropiques, and the Argentina-America SAC-D mission. The bulk of the launches, however, were for satellite communication. SumbandilaSat mission control continued well with a total of 951 passes monitored. The last image was downloaded on 27 July 2011 and the last thematic mapper (TM) data was drawn on 4 February 2012.

The SANSA Space Weather Centre at the SANSA Space Science directorate in Hermanus has been fully operational since 2011. As the sun reaches its peak in activity (solar maximum), the centre actively provides information and monitors the space weather conditions for the general public and government officials. It has also hosted a number of international space weather experts.

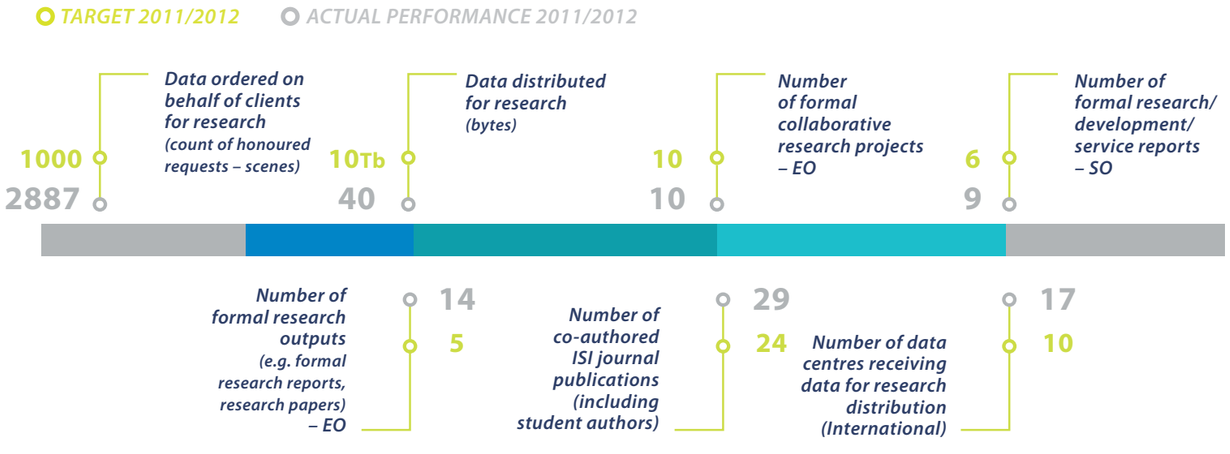
Goal 2: Cutting-edge research, development, technology, innovation and applications (Intellectual Capital)

SANSA serves the intellectual, technological and innovation needs of the country through continuous cutting-edge and capital-intensive R&D platforms that are easily accessible to researchers, students and other trainees for R&D purposes. In line with this strategic goal, SANSA has engaged in a number of activities with the aim of advancing research and development objectives.

In contributing to the national drive to move from a resource-based economy to a knowledge-based economy, SANSA played an important role in knowledge creation. A total of 29 research papers were published, at least nine R&D/technical reports were produced, and a number of scientific conferences were attended. To facilitate research, 2 887 satellite image scenes were ordered on request and over 40 Tb of image data was distributed. A total of 20 data centres (17 international) were provided with scientific data. Over 30 research visitors were hosted at SANSA Space Science.

Numerous multi-national projects were undertaken, including three European Union (EU) FP7 projects.

KEY PERFORMANCE INDICATOR (KPI)



These included: the PLASMON objective to create a real-time data assimilative model of the plasmasphere using data from whistlers and field line resonances; the SATSA aim to build capacity in satellite navigation in anticipation of the imminent deployment of EGNOS (European Geostationary Navigation Overlay Service) in South Africa; the Garnet-E focus on disaster management; and the GeoNetCab focus on GEO-related capacity building. Other multinational projects included the African Monitoring of the Environment for Sustainable Development workshop (AMESD), TIGER – with a focus on water, and the Multi-angle Imaging SpectroRadiometer (MISR).

Space science research conducted in Antarctica and neighbouring islands under the South African National Antarctic Programme (SANAP) secured funding to continue with the related projects.

The roll-out of research instrumentation under the National Equipment Programme (NEP) of the National Research Foundation (NRF) was successfully undertaken. It included the Magnetotelluric (MT) stations that will be used as reference stations during surveys of the subterranean conductivity of the South African crust by researchers under the leadership of experts from the Department of Geology at the Tshwane University of Technology (TUT). These stations will also measure the magnetic environment as required by SANSA. SANSA hosted many workshops, including Garnet-E, IRI, PLASMON and TIGER.

Goal 3: Effective development of human capital, transformation, science advancement and engagement of the citizenry (Human Capital)

Aspiring to address the country's skills needs in the Science, Engineering and Technology (SET) domain and the acutely low (28.3%) enrolment in the SET fields, SANSA utilises the novelties associated with space as a vehicle to stimulate interest in SET. SANSA participated in several science and youth events, including SciFest Africa, the Rand Show, National Science Week, World Space Week, and Public Service Week. The SANSA Space Lab, a mobile learning unit sponsored by the NRF and DST, has extended the reach of the SANSA science advancement programmes beyond the previously feasible 200 km radius of Hermanus. In excess of 9 000 learners and over 350 teachers have visited SANSA facilities. A larger audience was reached offsite through the activities mentioned.

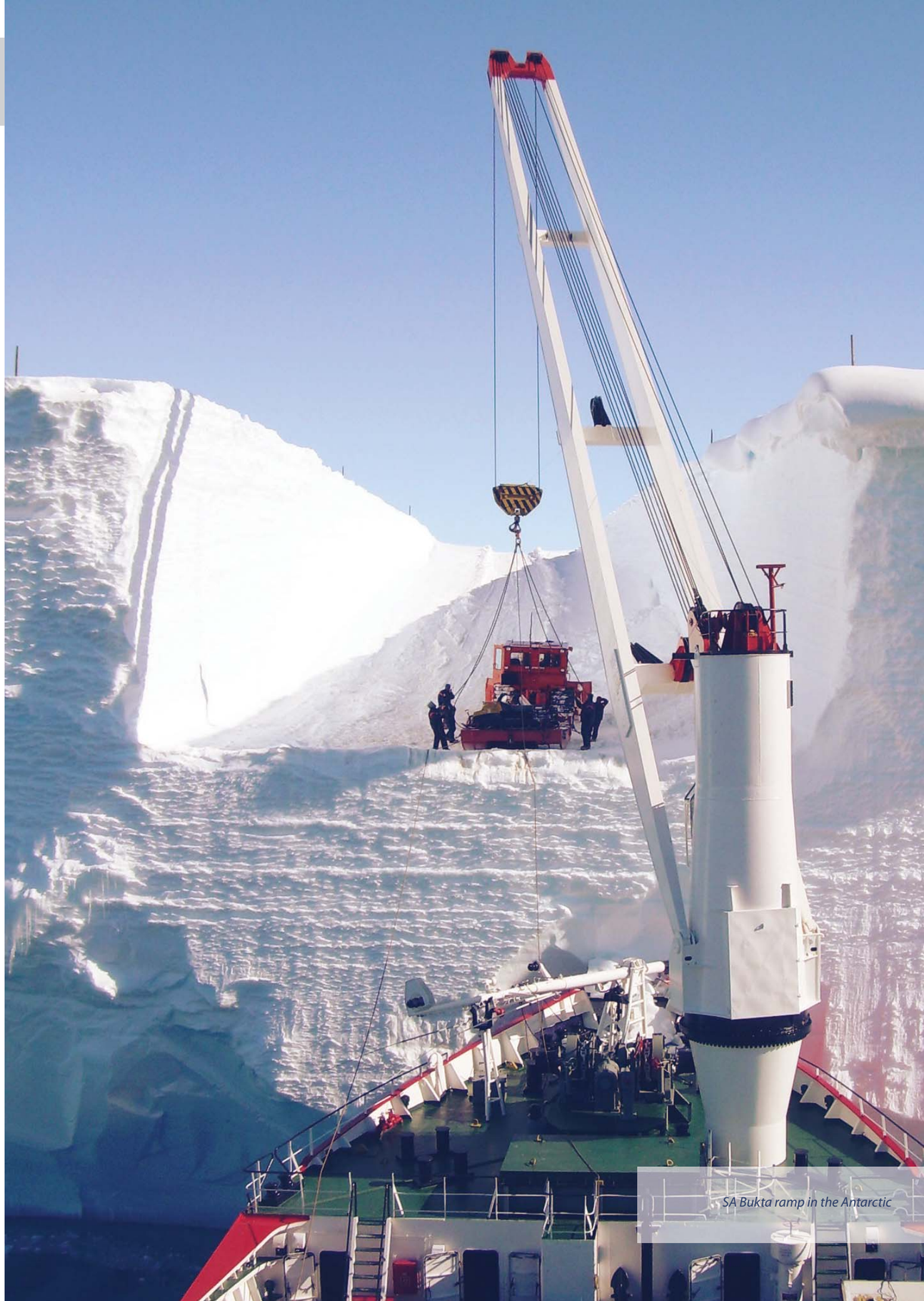
Apart from targeting the youth, SANSA also focuses on the overall improvement of the scientific literacy of the general population through its investment in organising open days, public lectures and similar activities. International partnerships enabled SANSA to use the visit of a Russian cosmonaut and an American astronaut as part of space science awareness activities. Both the electronic and print media were extensively engaged to inform the general public about SANSA and space science and technology.

SANSA supports formal training initiatives and provided at least 30 Masters and PhD students with funding and/or supervision. These were predominantly space science students. Several short-term training courses were run by the SANSA directorates covering a wide spectrum of areas within Space Science, Earth Observation and Navigation, with attendance exceeding 500 participants. Some of the notable training workshops or sessions include the SANSA-COSPAR MISR workshop, NASSP, SATSA training, SAAF training and TIGER training.

Goal 4: Globally competitive national space industry (Economic Capital)

In order to contribute to the development of an efficient national intelligent transportation system and hence improve the country's competitiveness, SANSA has been actively involved in numerous initiatives, including the development of a space-based augmentation system for the region by Space operations. As part of this project, several staff visited Toulouse in France to develop and source funding for the expansion of EGNOS into South Africa and the SADC region. Since the primary "client" for EGNOS is the air traffic navigation sector, SANSA collaborated closely with ATNS, the CAA and SAMSA, which report to the Department of Transport.

SANSA met with Convergence Partners (a South African investment management and advisory firm, focused on the telecommunications, media and technology sectors in emerging markets, with a principal focus on Africa) to learn more about its recently launched satellite, New Dawn, and its service and product offering to the African continent. Discussions centred on a possible collaborative expansion of satellite communications to rural South African schools in the future. SANSA also explored potential collaboration with Cell C in the area of extended ICT and telecommunications platforms to support SANSA's strategic initiatives, particularly the mobile distribution of space-based content for societal benefits.



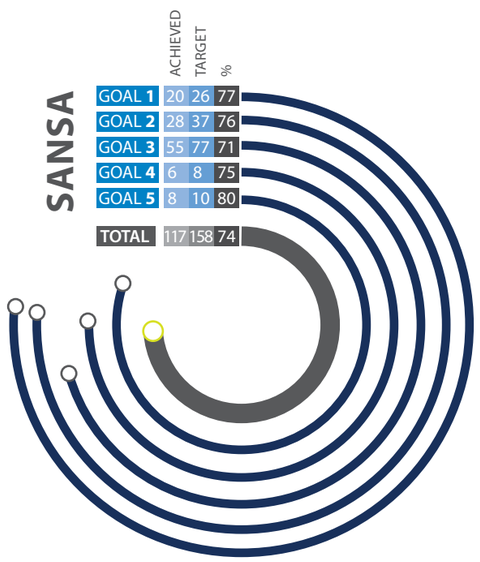
SA Bukta ramp in the Antarctic

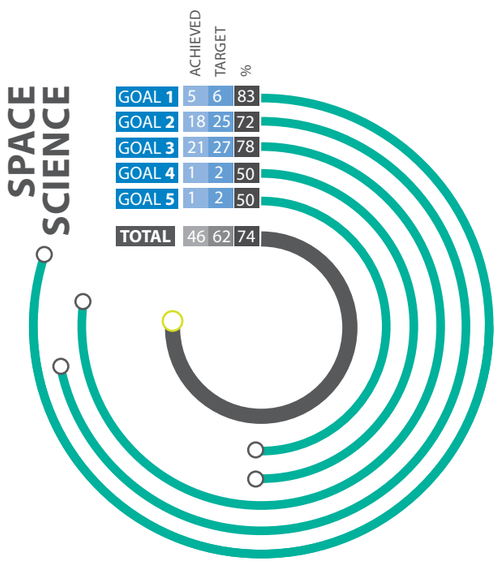
National consultation has been conducted to establish programmes that would form part of the National Space Programme (NSP). This consultation included discussions with industry, science councils and universities on possible Centres of Competence, Centres of Excellence, Research Chairs and dedicated nationwide HCD programmes.

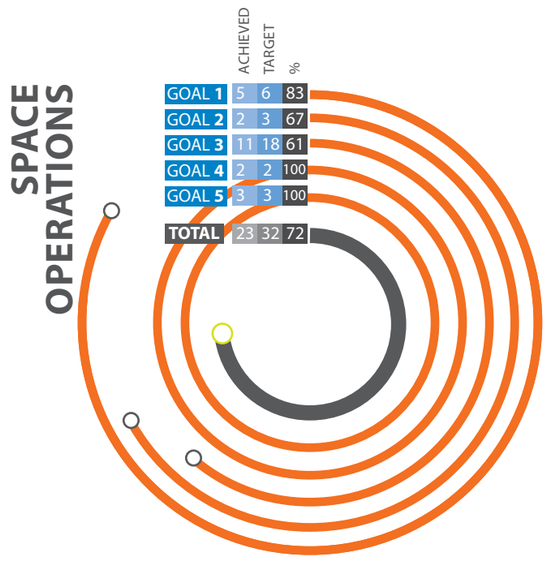
Goal 5: Make South Africa a recognised global space citizen (Global Capital)

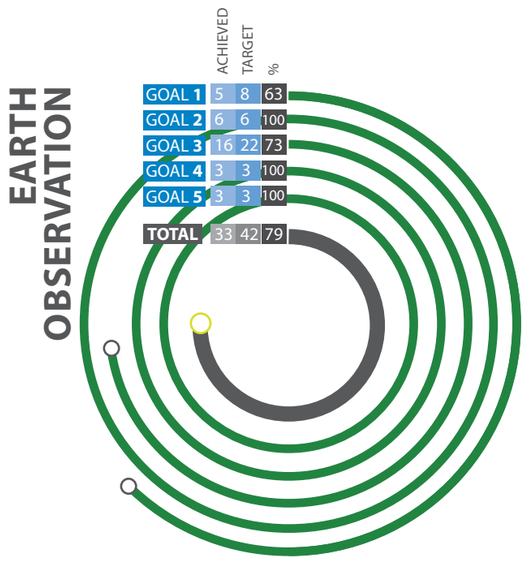
SANSA is the primary point of contact and the face of South Africa in the global space arena. It is a vehicle for strategically positioning the country among the community of space-faring nations. SANSA met with a total of 13 space agencies during the year under review. Further, the Agency hosted foreign visitors from Thales, Arianespace, Astrium and IntelSat. SANSA participated in multi-national projects, including PLASMON, AMESD, TIGER, GEONetCab and GARNET-E. The Agency also participated in multi-national forums, such as GEO, CEOS and ALC.

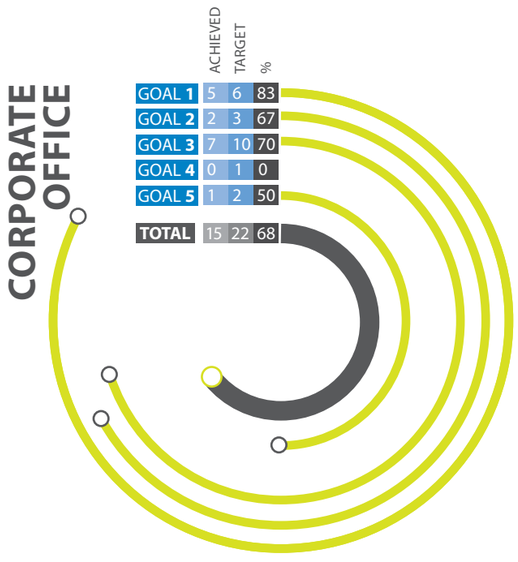
SANSA has contributed data to a number of global data centres, including INTERMAGNET, DIDBase, SEC, SuperDARN, IPS Radio & Space Services, SPIDR and WWLLN.











Consolidated SANSA Performance

Measuring the overall success of the Agency is a constant challenge, given that the various key performance indicators have differing levels of significance, resource demands and work effort. This being said, a reasonable first order approximation of success was to quantify the proportional achievement of the set targets on a value-neutral basis. Adopting this approach, SANSA achieved 74% of the overall set targets, with SANSA Earth Observation leading at 79%, followed by SANSA Space Science at 74%, SANSA Space Operations at 72% and SANSA Corporate Office at 68%.

Performance against SANSA **Goal 1: World-class and efficient services and societal benefits (Societal Capital)** was exceptional at a consolidated 77% target achievement across all SANSA units. The unit performance ranged from 63% in SANSA Earth Observation to 83% in the other three business units. This demonstrated how SANSA is fulfilling its value proposition of contributing to the improvement of the quality of life of South Africans in a sustained and conserved environment through the use of space science and technology for day-to-day societal benefits. Given that SANSA Earth Observation is the primary driver for Goal 1, there is a need to increase the success rate to at least 75% in the coming financial year.

SANSA achieved 76% of all targets in fulfilling **Goal 2: Cutting-edge research, development, technology, innovation and applications (Intellectual Capital).** The continued excellence in providing geo-spatial data, value-added data products, information and services to R&D and tertiary education institutions enabled SANSA to leverage space science and technology as a vehicle to increase South Africa's intellectual capital and advance the country's technological capital and global new knowledge share. The primary drivers of R&D, namely SANSA Space Science and SANSA Earth Observation, delivered well on this goal.

The average performance level of 71% on SANSA **Goal 3: Effective development of human capital, transformation, science advancement and engagement of the citizenry (Human Capital)** is good.

The achievement of this goal remains a core objective of SANSA in enabling human capital development and achieving equity and transformation. SANSA Space Science performed exceptionally well in this goal, achieving 78% of set targets. This goal forms a key focus area of the directorate.

Performance on SANSA **Goal 4: Globally competitive national space industry (Economic Capital)** and **Goal 5: Make South Africa a recognised global space citizen (Global Capital)** was achieved at 75% and 80% respectively. This confirms SANSA's commitment to promoting South Africa as an emerging global space player.

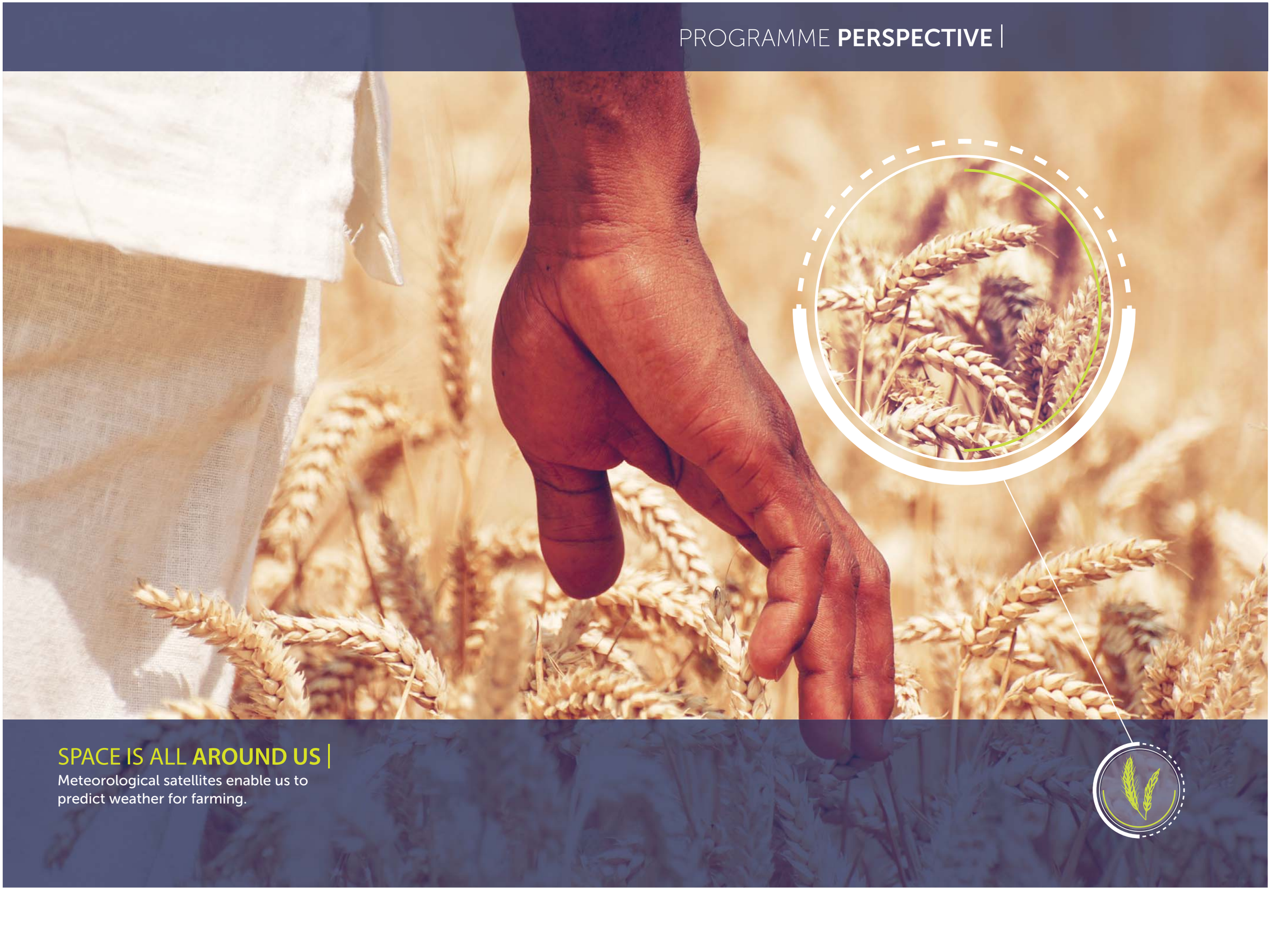
PERFORMANCE

Mapping of SANSA Goals to Government Outcomes

SANSA's performance contributes to government outcomes, as indicated in the following table:

Key Government Outcome	*Goal 1*	*Goal 2*	*Goal 3*	*Goal 4*	*Goal 5*
Improved quality of basic education			✓		
A long and healthy life for all South Africans					
All people in South Africa are safe and feel safe	✓	✓			✓
Decent employment through inclusive economic growth		✓			✓
A skilled and capable workforce to support an inclusive growth path			✓		
An efficient, competitive and responsive economic infrastructure network		✓		✓	✓
Vibrant, equitable and sustainable rural communities with food security for all	✓	✓			✓
Sustainable human settlements and improved quality of household life	✓	✓			✓
A responsive, accountable, effective and efficient local government system	✓	✓			✓
Environmental assets and natural resources that are well protected and continually enhanced	✓	✓			✓
Create a better South Africa and contribute to a better and safer Africa and world	✓	✓	✓	✓	✓
An efficient, effective and development oriented public service and an empowered fair and inclusive citizenship					

Sustainable human settlements and improved quality of household life



SPACE IS ALL **AROUND US** |

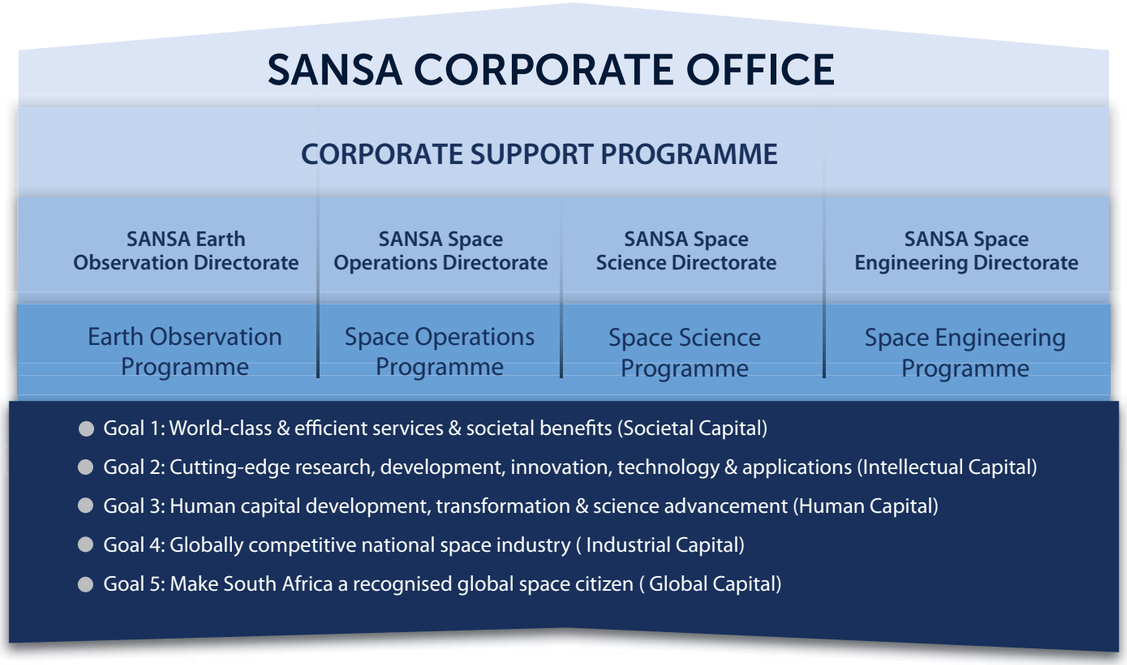
Meteorological satellites enable us to predict weather for farming.

Programmes overview

Structurally, SANSA consists of a Corporate Office and three directorates that give effect to its goals. These are:

- SANSA Corporate Support
- SANSA Earth Observation
- SANSA Space Operations
- SANSA Space Science

The SANSA Space Engineering directorate has not yet been established and is planned for the future.



An outline of the performance of the different units and the programmes they drive follows.

SANSA Corporate Office: Corporate Support Programme

Functional Focus

The SANSA Corporate Office ensures that the agency is operationally efficient, cost-effective and properly managed, complies with good corporate governance principles, and fosters seamless integration and collaboration among all SANSA directorates.

This is achieved through key corporate management functions for the executive and administration, human resources, the finance and supply chain, information and communications technology, planning and performance, stakeholder relations, corporate communication and science advancement, audit and risk, and the board secretariat and legal management services.

Strategic Objectives

The Corporate Support programme has five key objectives, namely:

1. Management and leadership excellence
2. Operational excellence, particularly in finance, SCM, HR and ICT, which form the core of SANSA's operations
3. Excellence in planning and performance management
4. Effective communication and stakeholder relations
5. Sound corporate governance

Performance Highlights

CEO'S OFFICE

Internal Audit and Risk

Guided by the legislative requirements, the following policies have been developed and approved by the SANSA Board:

1. Enterprise Risk Management Policy and Strategy
2. Enterprise Risk Management Charter
3. Code of Business Conduct
4. Fraud Prevention Plan

The SANSA risk analysis has culminated in a corporate top ten risk matrix, mitigation strategies and a three-year audit plan. SANSA's disaster recovery and business continuity plans are currently incoherent among the directorates, and a process is under way to harmonise these in the 2012/2013 financial year. SANSA launched its fraud prevention/anti-corruption hotline – Tip-Offs Anonymous, which is one of the strategic initiatives detailed in the fraud prevention plan.

Planning and performance management

The planning and performance management unit finalised the SANSA Strategic Plan and Annual Performance Plan, and initiated the process of developing unit-specific strategies and Annual Operating Plans. The unit also coordinated the development of the National Space Programme (NSP): Space Vision 2030, as well as the quarterly performance reporting of SANSA. A planning, monitoring, evaluation and reporting plan has been developed to align with government planning and reporting cycles.

Stakeholder Engagement

SANSA takes its partnerships with African countries seriously and, in this regard, engaged with representatives from Botswana, Madagascar, Kenya, Gabon and Ghana. Discussions on partnerships were held with representatives from the Algerian Space Agency (ASAL) and the Nigerian Space Agency (NASRDA). SANSA also took part in the African Leadership Conference (ALC) on space science and technology where the partnership on the African Resource Management Constellation (ARMC) was re-affirmed.

SANSA has engaged with numerous global space agencies, including the Indian Space Research Organisation (ISRO), Roscosmos, NASA, the Canadian Space Agency (CSA), the State Space Agency of Ukraine (SSAU), the German Space Agency (DLR), the Brazilian Space Agency (AEB), the Pakistan Space & Upper Atmosphere Research Commission (SUPARCO) and the European Space Agency (ESA). The main objective of these discussions were to establish collaborations in areas of mutual interest in Earth observation, such as capacity development, research and development, image processing, and the processing of value-added remote-sensing products. Under the European Union-South Africa Cooperation, the South African Department of Science and Technology and SANSA, together with the European Commission and the European Space Agency, held the annual Space Dialogue to discuss and review progress made under the Cooperation in the field of space.

SANSA met with Arianespace to discuss Arianespace's launch service offerings. As part of its contribution to multi-national forums, SANSA took part in the Committee on Earth Observation Satellites (CEOS) Plenary and in the Group on Earth Observation (GEO) plenary. In partnership with the European Space Agency (ESA), SANSA hosted an event on space-based monitoring of global change at the UN's 17th Session of the Conference of Parties (COP 17) on climate change.

Communication and Science Advancement

SANSA and its value proposition have been profiled in numerous publications accessing key stakeholder audiences of government, industry and academic decision-makers. The National Space Programme garnered much media interest and coverage, with the media being invited to two significant forums as well as a social media campaign to encourage public participation. Interviews were arranged for a number of our young Black male and female researchers in various youth and career publications. These included the Mail & Guardian, My Future and Career Focus. The SANSA CEO and selected management have been interviewed during the annual review period by Business Day, Engineering News, Sunday Times, Mail & Guardian, Pretoria News, Eye Witness News, Position IT, IT Web, SABC, eTV and various radio stations.

A total of 14 media releases were sent to media over this period and a total of seven advertorials were placed with a value of approximately R250k (for six advertorials) and a rerun of one advertorial placed for free. Media briefings totalled four this past year, with the focus on the International Astronautical Congress (IAC) 2011 and the National Space Programme. The majority of media coverage contained information on solar activity, NSP, TIGER workshops and Satellite technology used for provincial planning and development. The media report for the period under review indicates a return on investment of all media (not paid for) to be in excess of R7 million.

The reputation management indicators reveal the vast majority of the coverage to be positive to neutral with minimal negative perceptions. Various advertorials were placed on the benefit of investing in SANSA and space science and technology in South Africa. Internal communication skills development to improve the capacity and capability of the workforce was implemented through a series of communication tips via e-mail. The internal newsletter for SANSA serves to regularly update all employees on what has happened across all units of SANSA.

Finance and Procurement Division

Financial Control and Governance
The refinement of the configuration of the financial management system has progressed to provide a measure of stability in the system. The finance team conducted an asset verification exercise in all business areas with assistance from a consulting service provider. Standardised reporting templates have been formulated and tested for the new financial year. This will ensure consistency in financial reporting for the entity. In line with the Public Finance Management Act (PFMA), a dedicated Supply Chain Management (SCM) unit under the CFO has been fully established.

Corporate Services Division

Human Resources

Organisational Culture
The establishment of SANSA has resulted in the amalgamation of the former Satellite Applications Centre (SAC) of the CSIR, the Hermanus Magnetic Observatory (HMO) of the NRF, and the newly established Corporate Office. As with any merger of entities, the establishment has required an alignment of our people to the mandate, vision and mission of SANSA. To achieve the alignment, core SANSA values to underpin the desired organisation culture have been institutionalised through the "Earn Your STRIPEs" values campaign.

HR Systems and Processes
To ensure integration and alignment across SANSA, all HR systems and processes have been standardised and are informed by a comprehensive suite of HR policies developed during the period under review.

Performance Management
The Agency has developed and implemented a performance management and development framework and system to ensure individual and organisational performance. The performance management and development system is aligned to SANSA's strategic and operational plans, and facilitates employee performance evaluations.

Training
The Training and development of staff is a key focus area and SANSA is committed to maintaining high standards of service and performance delivery by supporting and training staff through training plans which aim to develop both technical and people skills. During the period under review our training focused mainly on capacity building for staff to be able to effectively work with newly implemented SANSA systems and processes.

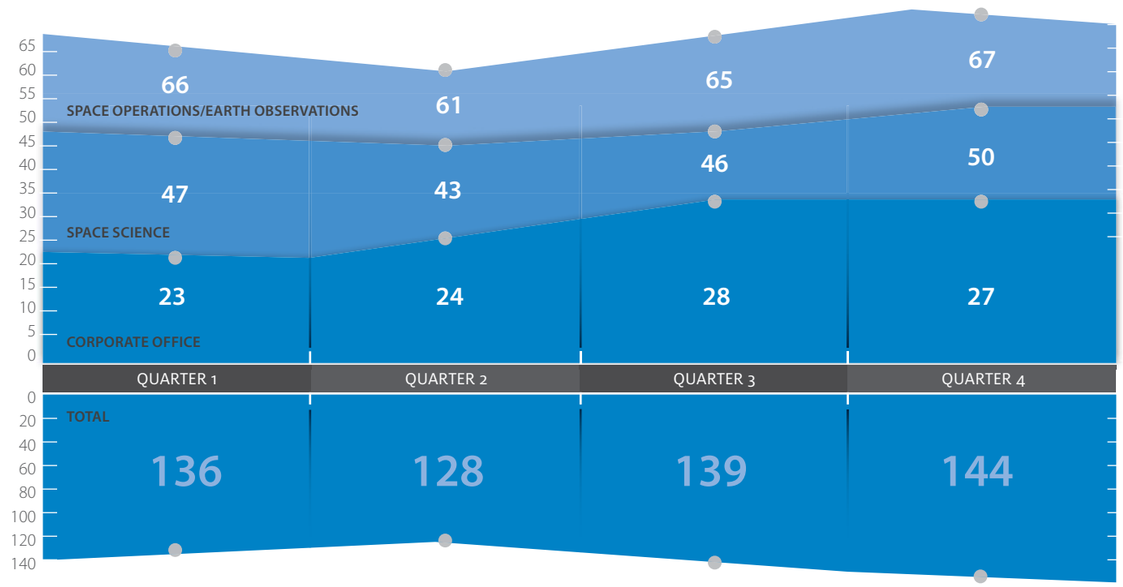
Employee Benefits
SANSA expresses its employee value proposition through employee benefit programmes other than remuneration as part of the retention programme. During the period under review, medical aid, retirement and group life schemes, and a staff bursary scheme were developed and implemented. A benefits harmonisation process was also undertaken.

Staff Profile and Transformation
Human capital development, equity and transformation are underpinned by broad principles that reflect the overall strategy of SANSA. Key principles include: providing sustainable capacity development opportunities for staff and management to enhance performance; promoting equity and fairness in employment; ensuring legal compliance to employment equity requirements; and promoting skills development to create capacity in relevant competencies to meet organisational performance requirements.

SANSA has developed its first Employment Equity Plan (EEP), which will serve as the basis for EE reporting to the Department of Labour. A Workforce Plan Project has also been commissioned for implementation in the 2012/13 financial year. The SANSA staff profiles are represented in the figure and table that follow.

The launch of the SANSA values with Sandile Malinga - CEO, Zweli Ndziba and Bulelwa Pono - CFO

TOTAL PERMANENT STAFF



STAFF PROFILES BY LEVEL

A - African *C - Coloured* *I - Indian* *W - White* *D - Disabled*

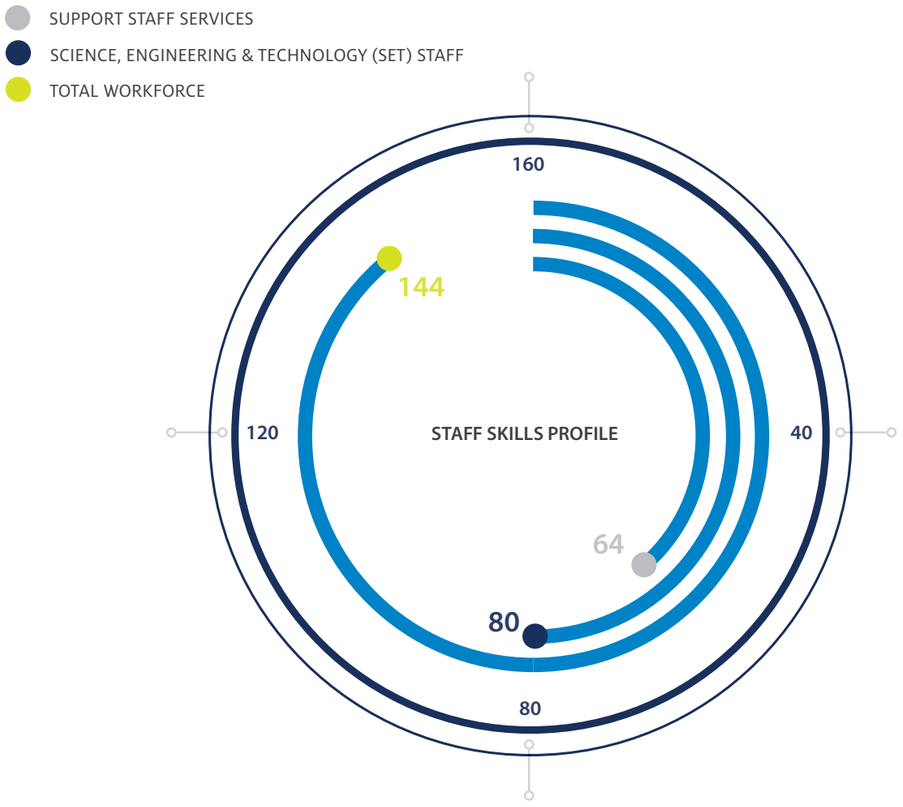
Occupation Level	*PDI's* Male				*PDI's* Female						*Male*	*Total Designated Group*	*Grand Total*
	A	*C*	*I*	*TOTAL*	*A*	*C*	*I*	*W*	*D*	*TOTAL*	*W*		
Top Management	2	-	-	2	1	-	-	-	-	1	-	3	3
Senior Management	1	-	-	1	4	-	1	2	-	7	9	8	17
Professionally Qualified Specialists & Mid-Management	2	3	2	7	4	2	1	4	-	11	8	18	26
Skilled technical & Academically Qualified Workers, Junior Management & Supervisors	11	1	1	13	14	1	1	8	1	25	11	38	49
Semi Skilled & Discretionary Decision-Making	14	2	2	18	9	-	-	-		9	8	27	35
Unskilled & Defined Decision Making	11	-	-	11	3	-	-	-	-	3	-	14	14
Total Permanent	41	6	5	52	35	3	3	14	1	56	36	108	144
Non-Permanent Employees	9	-	-	9	4	-	-	1	0	5	5	14	19
Grand Total	50	6	5	61	39	3	3	16	1	61	41	122	163

Skills and Talent Management
SANSA has primarily retained the skills profile inherited from the entities that were migrated from the CSIR and NRF, and has recruited and appointed staff at the Corporate Office. SANSA relies on staff with a wide range of experience and backgrounds, including professionals, technicians, engineers and scientists to deliver on its programmes.

The next planning phase will focus on skills alignment, informed by a comprehensive Workforce Plan.

The intention is to respond to SANSA's mandate through talent management strategies and skills development opportunities for employees. A succession management policy and process has been developed to ensure that robust talent contingency planning is in place and career development opportunities are available. The Agency is committed to maintaining high standards of service and performance delivery by supporting and training staff through training plans which aim to develop both the necessary technical and people skills.

SANSA STAFF SKILLS PROFILE



Information Technology

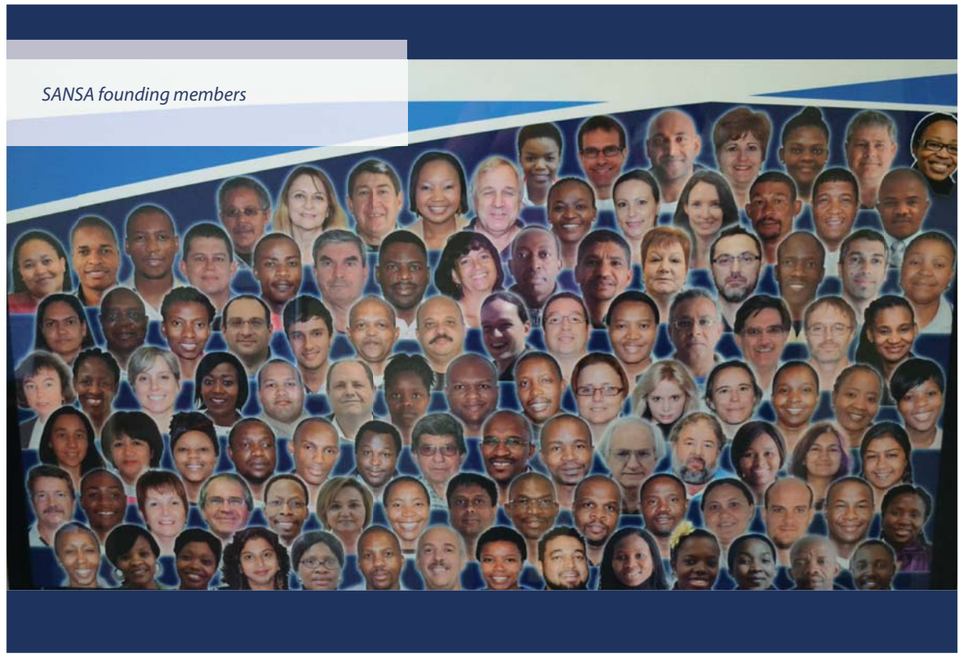
During the period under review, the primary focus was on establishing the appropriate ICT governance and controls within SANSA. In this regard, all core ICT policies were developed and approved. Furthermore, an ICT Strategic Plan premised on sound governance frameworks, including TOGAF (The Open Group Architecture Framework), COBIT (Control Objectives for Information and related Technology) and ITIL (Information Technology Information Library), was developed.

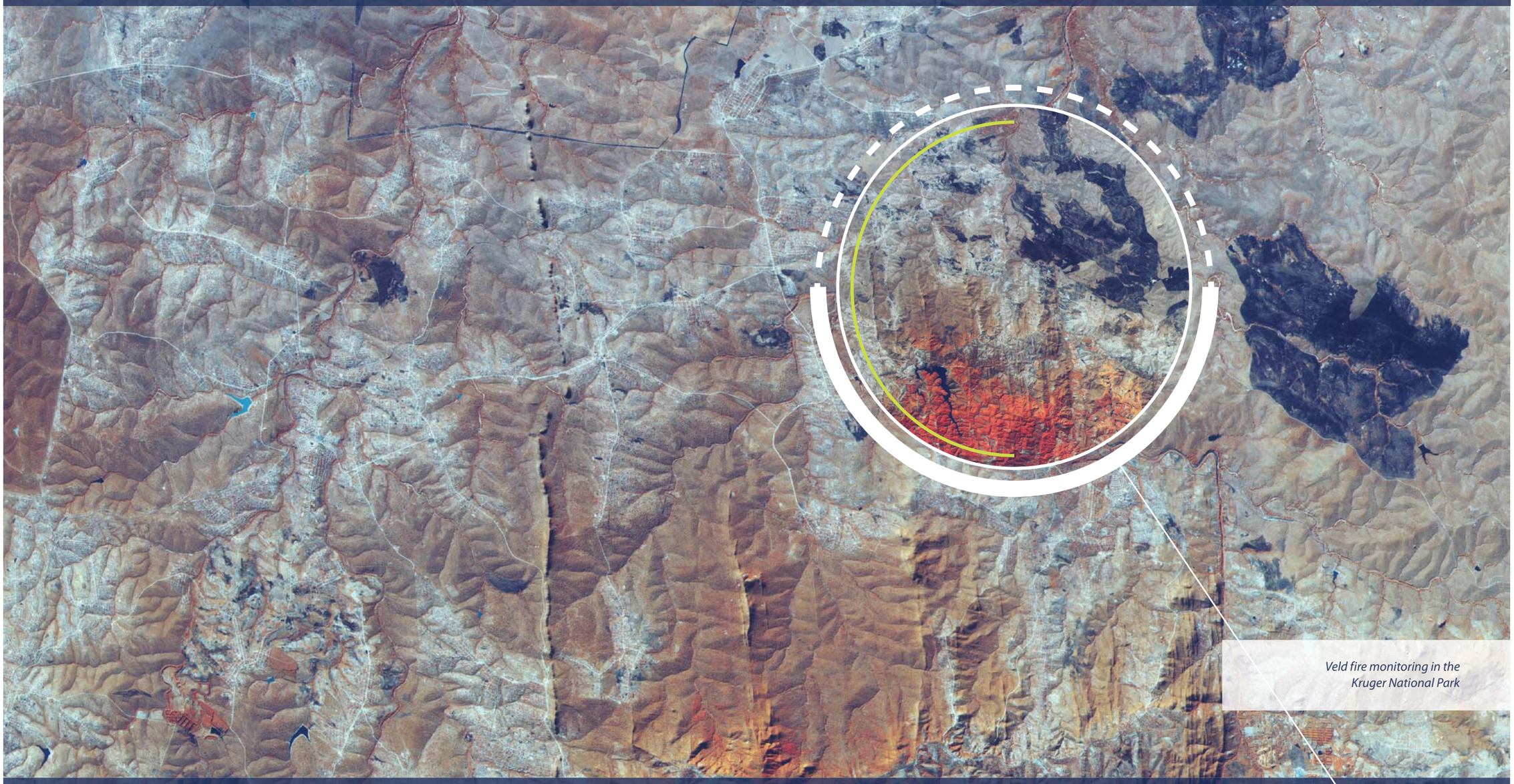
Recognising the value of ICT in support of the mission of SANSA, the following key strategic deliverables were accomplished:

- The implementation of SAP as SANSA's enterprise resource management system for the management of financials, human capital/payroll and billing
- Migration from Novell system to Microsoft environment. The newly installed Microsoft environment has consistently attained 100% availability, supported by conducting a comprehensive Microsoft compliance audit which provided a positive outcome consistent with the required standards
- Network connectivity and security improvement at Space Operations by installing a virtual private network between the Space Operations network and the CSIR
- Continuous availability of (a) critical services, i.e. voice communication, fax and mail routing/ replication; (b) essential services, i.e. network connectivity, storage, printing, Internet access and web hosting
- Deployment of the Alfresco Collaboration Tool in support of the NSP initiative

Safety, Health, Environmental and Quality (SHEQ)

SANSA's health and safety systems are subjected to rigorous annual and bi-annual audits and inspections by both management and/or external bodies, where applicable. Most of the activities are undertaken at SANSA directorates. SANSA is proud of, and committed to, caring for its natural environment.


SANSA founding members



Veld fire monitoring in the Kruger National Park

SPACE IS ALL **AROUND US** |

Satellites enable us to monitor and mitigate natural disasters such as fires.

SANSA **EARTH OBSERVATION** |

Functional Focus

SANSA Earth Observation distributes satellite imagery to government under a multi-user licence. This ensures the supply of cost-effective data to government in support of various national imperatives. In addition, the availability of processed imagery to stakeholders, such as research councils and academic institutions, enables these organisations to utilise all the multi-government licensed imagery at no additional cost. SANSA Earth Observation also provides Higher Education Institutions (HEIs) with geospatial resources for student training through its Fundisa Disk Programme (FDP) to promote the use of spatial information at tertiary level.

The impact of Earth Observation lies in providing data and value-added remote sensing services for research and development in Earth observation applications.

Earth Observation, as a source for geo-information, contributes to the management, sustained utilisation, preservation and understanding of natural resources; improved health, safety and security; disaster forecasting, monitoring and mitigation; increased R&D data stock and value-added data products and information; and 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 Earth Observation lies in providing:

- essential Earth Observation 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 Earth Observation applications
- human capital development and science advancement in geo-informatics, image and data processing and remote sensing

Strategic Objectives

The strategic objectives of the Earth Observation programme are to:

- offer efficient services and products to benefit national and international societies and sustain the environment
- conduct cutting-edge research, development and innovation to continually improve SANSA's offering
- develop human capital in-related science and engineering and to advance science among the youth and public
- provide services that stimulate industry growth and participation in Earth Observation
- establish and maintain effective and mutually beneficial international Earth Observation partnerships aligned with national strategic priorities

Performance Highlights

Sensor Portfolio Management

SANSA requires a diverse sensor portfolio that covers a wide spectrum of spatial and temporal resolution, as well as radiometric and spectral coverage functionality, to meet the needs of different government departments. The sensor portfolio mix includes commercial sensors, free/low-cost access sensors and South Africa's own sensor on SumbandilaSat.

SANSA allocates the bulk of its resources to managing its sensor portfolio. At least R23.5 million was used to access satellite data and maintain a comprehensive satellite sensor portfolio. SANSA's portfolio includes data from the SPOT, Landsat and MODIS satellites.

During the reporting period, SANSA representatives attended the annual Landsat Technical Work Group (LTWG) meeting to prepare for the archive transfer and Landsat-8 continuation mission. Meeting participants agreed on ground station preparation and archive format enhancement principles.

In addition, a new system for the low resolution reception and processing of data from the MODIS satellite was obtained from Orbital Systems. The system enables improved pre-processing levels (AAPP Level 0) with EOS-FES software. It is calibrated to ingest and process data from the MODIS, Terra and Aqua, NOAA POES, METOP, FY1, FY3 and future NPP and JPSS1 satellites.

Performance Highlights

Data management and the South African Earth Observation System (SAEOS)

SANSA continued to acquire and distribute data as a core function – 40 Tb were acquired, which exceeded the 10 Tb target. The 2011 SPOT-5 country mosaic was released at a stakeholder workshop held for representatives from government departments and public agencies. The imagery is used by over 60 public sector entities at national, provincial and local levels, including government departments, Statistics SA, Eskom and the Development Bank of SA (DBSA).

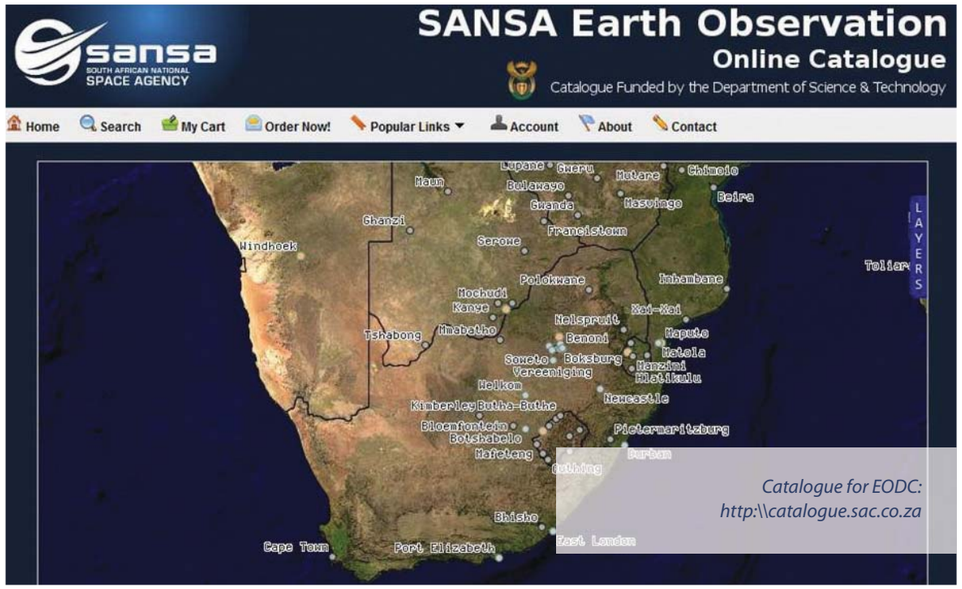
SANSA also implemented the Data Information Management System for Earth Observation (DIMS-EO), which is integral to the South African Earth Observation System (SAEOS). The system includes the implementation of a new Earth observation sensor catalogue and the hosting of metadata and thumbnails of multi-sensors, which allows the public to select and order the required imagery. The catalogue provides a user-friendly end-user interface.

The completion of the new generation Landsat processing system, LPGS, created an advanced capability to produce processed Landsat images at the same standard delivered by USGS in the United States. The result is an improved radiometric and geometrical product that will contribute to improved time series analytical results.

North West Informal Settlement Upgrading Programme (NWISUP)

The North West Department of Human Settlements, Public Safety & Liaison, in partnership with the South African National Space Agency (SANSA) and SATPLAN, has developed the first comprehensive provincial informal settlement dataset for the North West Informal Settlement Upgrading Programme.

The data, which was derived from remotely-sensed satellite imagery taken over the North West province during a five-year period, has been compiled into a series of print and digital atlases that identify and analyse the extent of informal settlement upgrading requirements across the province.



Landsat Technical Work Group (LTWG)

The MEC Human Settlements, North West Province, handing over the atlas to the HOD Human Settlements, Rustenburg

The atlas series provides a systematic way of monitoring informal settlement growth patterns and will assist local and provincial authorities in planning, implementing and monitoring informal settlement development programmes. SATPLAN and SANSA have added value to the informal settlements dataset through a variety of complementary analytical exercises, leading to a better understanding of:

- the implications of upgrading informal settlements in the context of post-apartheid urban planning and housing delivery
- the low-cost housing delivery status since 1994
- informal settlement correlation with other spatial features in the province in order to explain the spatial context and location choices of informal settlements

African Collaboration

SANSA donated SPOT-5 ortho-rectified images and mosaics of the Kavango, Caprici, Cuvelai, Kwando and Lake Liambezi areas to the Namibian Ministry of Agriculture, Water and Forestry to facilitate a full-scale ground control point validation in flood-prone areas. The donation is part of SANSA's contribution towards disaster management in the SADC region.

SANSA, as an AMESD partner, also participated in the AMESD SADC–Thema capacity-building regional training. Approximately 27 hard disks with 1.2 Tb of satellite data were distributed to nine SADC representatives. The training focused on agricultural monitoring using remote sensing, fire monitoring, fire risk assessment and forecasting, database design and implementation, and the mapping of drought hazards and risk.

Workshop and Conference Participation

SANSA Earth Observation experts participated in a number of workshops and conferences, including the third GEOSS African Water Cycle Symposium and the Kruger Networking Meeting on Savanna Ecosystems, an international event for ecosystem managers and scientists. The researchers marketed SANSA's online catalogue and promoted the use of multi-angle imaging spectroradiometer (MISR) data to analyse the structural components of vegetation, phenology changes and the differences in tree/grass phenology. Benefits from attendance at these events include opportunities in national carbon counting, flood monitoring and the determination of essential climate variables.

Space data enables us to predict flooding

Short-term Training
SANSA presented a number of geo-information courses. These included training in R (statistical computing), FossGIS and GPGPU (general-purpose computing on graphics processing units). SANSA also hosted a MISR training workshop in collaboration with COSPAR, NASA, ESA, the EC's JRC, the CSIR and CPUT. Twenty participants from industry, universities and research institutions attended the training session.

The TIGER initiative training and capacity-building workshop was an important highlight during the past year. This initiative was launched in 2002 by the European Space Agency (ESA) within the context of the Committee on Earth Observation Satellites (CEOS), in response to the urgent need for action in Africa which had been emphasised at the Johannesburg World Summit on Sustainable Development (WSSD). Under this initiative, SANSA hosted a capacity-building training session in water-related applications in Earth Observation. The training attracted 29 water professionals from across Africa and was followed by a two-day stakeholder workshop with 120 participants from Africa and Europe. The workshop and training was facilitated by ESA, ITC, DWA, WRC, TU Delft, VITO, the University of Nova and SANSA.

A remote-sensing capacity-development workshop was conducted in the School of Environmental Sciences at the University of Venda in March 2012. The 72 participants included lecturers, students, and geography and science teachers from local schools. SANSA provided the university with a copy of the Fundisa disk, which contains satellite data (such as SPOT-5 data for the entire country and SumbandilaSat and Landsat imagery). Open source software, hard-copy maps and lecture notes from the TIGER, MISR and AMESD workshops were also handed to workshop participants. SANSA's remote-sensing training for managers and researchers at the Water Research Commission focused on the practical applications of Earth Observation in water monitoring and water quality evaluation.

Science Advancement
SANSA Earth Observation participated in a science and technology exhibition held in Maputo. The exhibition was arranged by the Department of Science and Technology (DST) in partnership with the Mozambican Ministry of Science and Technology.

During the exhibition, SANSA presented a public lecture on "Earth Observation in Service of Humanity" to 35 physics, environmental and engineering students and staff at the Eduardo Mondale University. The presentation generated considerable interest in Earth observation and space technology. The exhibition created public and learner awareness about space science and technology, provided networking opportunities with Mozambican Earth observation experts, and promoted SANSA as a significant role player in Earth observation in the SADC region.

The Minister of Social Development and the Permanent Secretary of Science and Technology for Mozambique acknowledged SANSA's participation in the exhibition as significant for SADC's regional integration efforts.

In order to address the country's skills needs in the Science, Engineering and Technology (SET) domain, SANSA uses the novelties associated with space as a vehicle to stimulate interest in SET. This is achieved through school outreach programmes, learner visits to SANSA facilities, educator programmes, and participating in activities such as Public Service Week and SciFest to expose the youth and the public to space science and technology.

Capturing the hearts and minds of the youth to pursue SET careers

Partnerships
As both an active participant in space science and technology forums and a contributor to global initiatives, SANSA undertook a number of stakeholder interactions. These included participation in the GEO Network for Capacity Building (GEONetCab), a project aimed at improving the capacity-building effectiveness and efficiency of the Geostationary Earth Orbiting (GEO) satellite system to benefit society.

During the course of the year, SANSA received a number of foreign visitors. These included representatives from Thales, Astrium and IntelSat, as well as delegations from China and Ghana and visitors from the German Space Agency.

Partnerships are a cornerstone of SANSA's success.

SANSA also held discussions with Critical Software from Portugal about collaboration in FP7 projects. The concept of the PREFIRE project is to develop a Decision Support System tool for civil protection agencies. The focus will be on fire ignition and behaviour prediction to improve preparedness activities and, in time, to deliver recovery information to protect the environment from the impact of fire.

The engagements with the CSA will focus on leveraging their Synthetic Aperture Radar (SAR) capability, creating radar-processing capability in SANSA and cooperation in radar research and development. Discussions with ISRO entailed the development of socio-economic applications in Earth observation using Resourcesat and Cartosat, while negotiations included the possible acquisition of imagery from the Resourcesat-2 satellite. SANSA intends to distribute Resourcesat-2 data to the Earth observation user community in South Africa. The meeting with the Brazilian Space Agency focused on the development of the South African, Brazilian and Indian satellite.

Other international interactions included:

China: A delegation from MOST in China discussed future cooperation agreements between China and South Africa. Talks centred on SANSA's involvement in CBERS-2 and possible future involvement in CBERS-3.

Namibia: Two Namibian delegations visited Hartebeesthoek. The first, accompanied by delegates from the DST, gathered information about receiving EO data from SANSA. The second, which included members of university and government departments, aimed to strengthen their capacity in Earth observation.

Thales: SANSA and Thales met with DST, ATNS and UCT to further the goals of the EGSA initiative. Such co-operations are essential to funding the extension of the EGNOS.

Norway: Visitors from KSAT in Norway visited Hartebeesthoek for assistance in resolving power-related problems with their local installation which they had been experiencing since its inception.

Some of the SANSA Earth Observation team members who participated in the AMESD workshop

SPACE IS ALL **AROUND US** |

Our unique position on the planet makes us an important role player in the control of space instruments and satellites.

Functional Scope

SANSA Space Operations operates state-of-the-art ground station facilities and provides services to the local and international space industry and governments. These services include launch support and early-orbit support (LEOP), in-orbit testing (IOT), satellite life-cycle support and mission control. The objective is to be the leading ground station on the continent by focusing on:

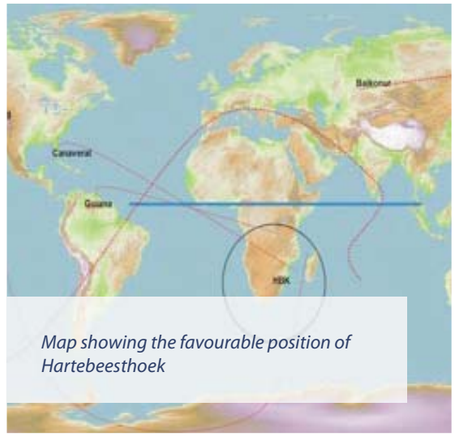
- satellite ground services through telemetry, tracking and command (TT&C) for the various launcher and satellite support services, as well as hosting satellite ground infrastructure for various international and local clients
- space applications in collaboration with government departments and private industry, specifically:
  - downloading Earth observation data from various LEO satellites (SPOT, Landsat and others), an application in which SANSA is the leader in Africa
  - downloading datasets from Space Science payloads
  - communications and data transmission, with the DoC and industry
  - positioning, navigation and timing, with NGI, the DoT and industry

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 harbouring 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. The figure that follows demonstrates the favourable the favourable position of Hartebeesthoek for the TT&C of satellites launched from global launch sites.

Presently SANSA operates, maintains and hosts 22 antennas for services rendered to local and international clients. The following table shows the telemetry, tracking and command clients and their associated market segment:

Customer	*LEOP*	*IOT*	*Routine Support*	*Monitoring*	*Launch Support*	*Network Providers*	*Hosting Services*
Astrium		✓			✓		
Boeing Launch Services							
Boeing Satellite Services	✓						
CNES	✓		✓			✓	✓
Eutelsat		✓					✓
Intelsat	✓	✓		✓		✓	✓
Lockheed Martin							
Telesat	✓						
USN						✓	
SANSA Earth Observation			✓				
Orbcomm							✓
KSAT							✓

SANSA Space Operations in Hartebeesthoek, Roodepoort, South Africa



Map showing the favourable position of Hartebeesthoek

SHEQ team receive their certification from SABS

In addition to its commercial (private) customers, SANSA has additional public and institutional stakeholders. These include, but are not limited to, the EC, ESA and DGI.

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. SANSA activities include:

- globally competitive space operations and applications, with services provided daily to satellite operators around the globe
- launch support, tracking telemetry and command 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
- 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

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.

Strategic Objectives

The objectives of the programme are to:

- offer efficient, cost-effective and globally competitive space operations and applications for societal benefit
- conduct focused and needs-driven applied research, development and innovation in key space operations and applications areas
- conduct focused HCD in space operations, space applications and active science advancement
- maintain a strong commercial service for industry
- establish and maintain effective and mutually-beneficial international partnerships and customer relations, aligned with national strategic priorities

Performance Highlights

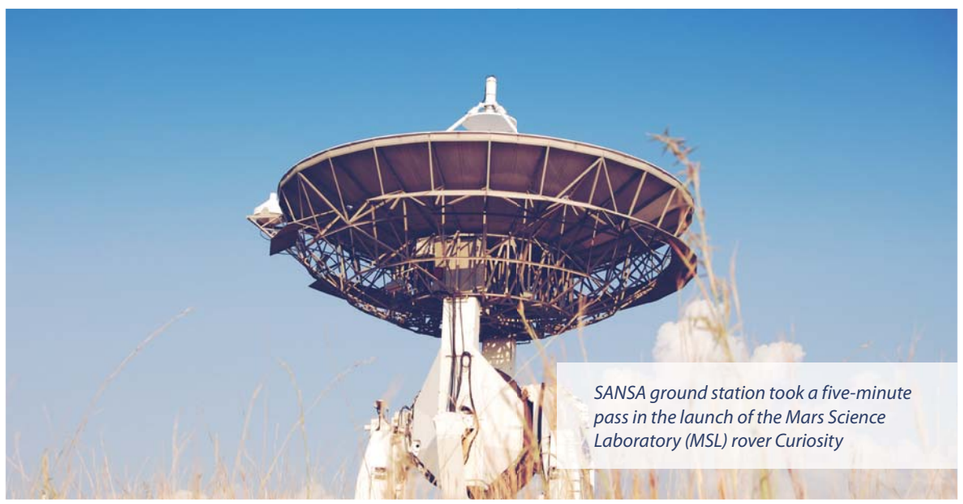
Spacecraft Launch Support and In-orbit Testing
During the year in review, SANSA has served international markets by supporting 18 spacecraft launches and eight in-orbit tests. Together with the ground hosting services, this generated about R35 million for the year. One of the missions supported by SANSA is the US$2.3 billion NASA MSL mission, which aims to land and operate a rover named Curiosity on the surface of Mars.

The mission will assess whether Mars is, or ever was, an environment able to support microbial life. It will also analyse rock and soil samples on the planet. This is part of NASA's Mars Exploration Program, a long-term plan for the robotic exploration of Mars.

Other science missions also supported by SANSA included the India-France Megha-Tropiques, and the Argentina-America SAC-D mission. However, the bulk of the launches were for satellite communication.

SumbandilaSat Mission Control
SumbandilaSat functioned well and delivered beyond expectations. To celebrate its success, a SumbandilaSat commemorative stamp was launched by the South African Post Office (SAPO) at SANSA. The satellite has completed over 9 000 orbits and SANSA has monitored in the region of 1 300 passes. The payload produced good quality images, some of which have contributed to the European GMES programme.

SANSA was also able to supply the Namibian government with a processed SumbandilaSat image within 24 hours of an urgent request from Windhoek to image serious flooding in the north of the country. The image showed extensive flooding in and around the major town of Oshakati revealing, for example, which roads had been rendered impassible and which were still usable.



SANSA ground station took a five-minute pass in the launch of the Mars Science Laboratory (MSL) rover Curiosity

Navigation Development
In order to contribute to the development of an efficient national intelligent transportation system and improve the country's competitiveness, SANSA has been actively involved in numerous initiatives, including the development of a space-based augmentation system for the region. Consistent with these aims, SANSA representatives, the Civil Aviation Authority and the DST engaged with the European Commission (EC) on a new version of the European Geostationary Navigation Overlay Service (EGNOS), a satellite-based augmentation system (SBAS) developed by the European Space Agency and the European Commission. The aim of the engagement entails expanding the EGNOS system to South Africa to enable its use as a navigation system in aviation.

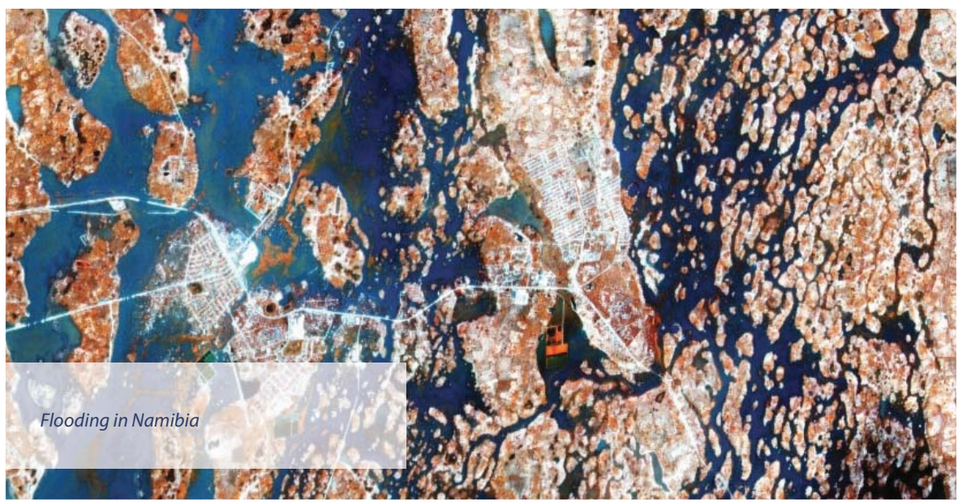
Navigation HCD Project
The SATSA (SBAS Awareness and Training for South Africa) project includes trials to illustrate the use of satellite-based augmentation systems in industry. Development projects have been identified in vehicle logistics, precision agriculture and geographic information systems (GIS). The projects will demonstrate the unique applications of SBAS technology.

SATSA is an EC FP7 project aimed at building capacity in satellite navigation in anticipation of the imminent deployment of EGNOS in South Africa. The project partners are GMV (Spain – project leader), Alpha Consult (Italy), NDConsult (UK) and SANSA (SA).The project offers four training sessions in basic to advanced SBAS concepts and three training trials to evaluate SBAS applications, using a test platform to produce realistic SBAS signals for the duration of the trials. The trials will focus on vehicle logistics, agriculture and GIS.

Safety, Health, Environment and Quality (SHEQ)
SANSA Space Operations is committed to providing a safe and healthy working environment and to maintaining formal occupational health and safety, environmental and quality systems that are designed to meet legal and other related requirements.

The following are the key SHEQ programme achievements for the period under review:

- ISO 14001:2004 (Environment) and OHSAS 18001:2007 (Health and Safety) certification in May 2011 at SANSA SO/ EO
- ISO 9001:2008 SABS external audit conducted in August 2011 found no non-conformances
- Quality Management System (ISO 9001:2008) implemented



Flooding in Namibia

SPACE IS ALL **AROUND US** |

Space science enables us to monitor the Earth's magnetic fields and the effects the Sun has on it.

Functional Scope

The SANSA Space Science directorate leads the space science programme by utilising the advantages of South Africa's geographic position in two areas in particular. First, South Africa is the only African country with a scientific base in Antarctica. Second, South Africa is ideally located 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 which leads to the interruption of, and damage to, communication systems.

SANSA Space Science is also 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 includes fundamental and applied space physics research, post-graduate student training, science advancement, space weather monitoring, and the provision of geomagnetic field-related services on a commercial and private basis. SANSA Space Science research and services are managed by means of various programmes.

Space Science Research Programme: The research areas covered by this programme are diverse and include studies on the variation of the Earth's geomagnetic field and its application to navigation; the propagation of waves in the various regions of the space environment and their effects; diagnostic information on the propagation media; ionospheric characterisation; basic and applied space weather; space plasmas; and radio wave propagation.

Space Weather Programme: SANSA Space Science is host to the only Space Weather Regional Warning Centre in Africa, which operates as part of the International Space Environment Service (ISES). The space weather products and services are required primarily for communication and navigation systems in the defence, aerospace, navigation and communication sectors.

Human Capital Development: SANSA Space Science contributes by means of summer and winter schools, the supervision of MSc and PhD students, and teaching at partner universities. It aims to build the scarce skills required for the country's SET programmes. In addition, SANSA also runs various in-service courses in navigational support and space weather for the defence force, training about 80 South African National Defence Force (SANDF) staff members each year. SANSA Space Science is instrumental in advancing science by promoting the teaching and learning of science, increasing public awareness, interest, appreciation and understanding of space science. It also provides policy-makers with scientific information and decision-making tools.

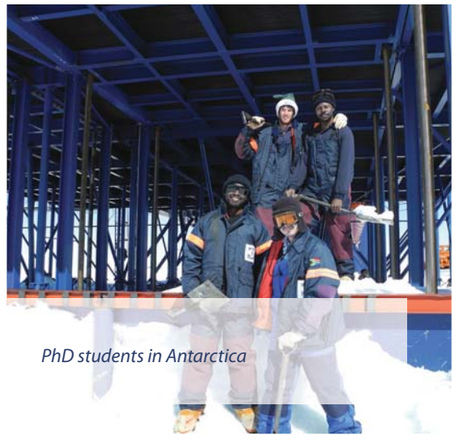
Electromagnetic Technology: The technology and geomagnetic services provided by SANSA Space Science contribute significantly to the work of the navy, airforce, and army, and thus to the safety and security of all South Africans. In addition, SANSA Space Science offers technical and geomagnetic services to private aviation companies, neighbouring national airports, exploration companies, and the Hydrographic Office of the South African Navy. Hence, it plays a key role in the navigation, communication and mineral exploitation sectors of the South African economy.

> Antarctica, also known as "The Ice", is a harsh but beautiful continent whose only human inhabitants are research teams.

SANAP team working hard in Antarctica

The SHARE (Southern Hemisphere Auroral Radar Experiment) radar in Antarctica

Solar Flare



PhD students in Antarctica

Strategic Objectives

The objectives of the programme are to:

- offer a state-of-the-art research platform and applied science/technology service platforms
- conduct cutting-edge research, development and innovation
- develop human capital in space science and science advancement
- contribute to the South African aerospace industry by means of applied science and technology
- establish and maintain effective and mutually beneficial international partnerships in line with national strategic alignment

Performance Highlights

Space Science on "The Ice"

Antarctica, also known as "The Ice", is a harsh but beautiful continent whose only human inhabitants are research teams. SANSA Space Science is a key player in the South African National Antarctic Programme (SANAP) and has several ongoing space science- and space weather-related projects in Antarctica, on Marion Island and on Gough Island. SANSA is particularly interested in polar research since the inward-curving magnetic lines at the pole provide the perfect opportunity to conduct space particle research. SANSA research includes the monitoring of space weather to provide data related to the effects of space weather on communication satellites.

The NRF awarded a three-year grant to the SANAP project for high latitude and polar region space weather studies in support of international space weather modelling. Activities will include the management, maintenance and installation of various instruments for space weather research.

SANSA provides opportunities and training in space science for science and engineering graduates interested in polar studies. The 2011/2012 SANAP takeover team included four science and engineering students who returned from a challenging yet rewarding expedition on "The Ice" aboard the S.A. Agulhas on its final Antarctic voyage.

Space Science for the Future

To facilitate human capital development at an undergraduate level in South Africa, SANSA Space Science hosted both a Winter School and a Summer School. The highly successful Winter School was attended by 17 undergraduate students from around the country. The Summer School was attended by 19 Honours students from the National Astrophysics and Space Science Programme (NASSP). The programme provided an action-packed introduction to space physics. The NASSP students are based at the University of Cape Town (UCT) where SANSA researchers are actively involved in delivering various aspects of the Space Science programme. Students who graduate from the Winter and Summer School programmes will be equipped to do research in space science and astrophysics. They will possess and further the broad science skills needed in South Africa.

SANSA has a student enrolment of 30 students at the MSc and PhD levels, exceeding the annual target of 19. The equity profiles of the students in terms of race are above target (63% vs. 30% for the year), as are the gender targets (13% vs. 5%).

Space Science Joins Forces Around the World

SANSA Space Science actively participates in international forums and contributes to international projects through research collaboration and membership of international organisations. SANSA scientists and engineers attend international conferences and are often invited to give key presentations or to sit on expert panels. Throughout the year, SANSA Space Science was involved in developing and maintaining research projects with multiple international partners, as well as hosting or participating in international workshops and conferences.

SANSA Space Science is an active participant in the FP7 and COST European Union projects, including the PLASMON project. SANSA is one of the principal investigative partners working on the PLASMON project in collaboration with representatives from eight countries. This project aims to investigate the plasmasphere, an area roughly 1 500 km above the Earth's surface, using distributed ground networks of advanced instrumentation. The members of the PLASMON FP7 project met at SANSA Space Science to discuss the progress made during the first year of the project.

Space Weather has Flare

The Sun is responsible for solar winds, solar flares, coronal mass ejections (CMEs) and geomagnetic storms, which all contribute to space weather. The Sun is continuously emitting particles, usually protons and electrons, creating the solar wind which flows at about 7 000 km per hour.

A CME is a massive cloud of plasma, an extremely hot gas, which is blasted out from the Sun when stored energy is suddenly released. If this cloud of plasma is aimed at the Earth, it can reach us within a day or two and cause a geomagnetic storm. Space weather does not harm humans or other life on Earth, but it can affect the Earth's magnetic field, resulting in disturbances to satellites and to navigation and communication systems such as GPS, cell phones and the Internet.

The Space Weather Centre at SANSA Space Science provides an important service to the nation by monitoring the Sun and its activity to provide information and early warning on space weather. The Sun is reaching the peak of its solar cycle, known as solar maximum, a period of increased solar activity. This increase in activity has been evident throughout the past year with a number of large CMEs disrupting the Earth's magnetic field. One of the largest solar flares of this solar cycle occurred early in 2012, causing minor disturbances to technological systems in space and on Earth.

The recent increase in frequency of significant space weather events set the scene for the formation of the Space Weather Forum (SWF) at SANSA Space Science. The SWF will address issues such as space weather statistics, a space weather communications plan, and ICT requirements for space weather monitoring.

A Winter School student learning to use a theodolite, a precision instrument for measuring angles in the horizontal and vertical planes

The international FP7 PLASMON Project Team

Science Centre, Hermanus. Pupils are given the chance to interact and learn about space science and its contribution to our lives.

Space Weather Experts
To enhance capital development and create collaborative efforts among various space weather centres around the world, SANSA Space Science hosted three space weather experts from international space weather centres. These international experts who visit SANSA provide support, training and guidance for the staff of the Space Weather Centre. Their extensive experience and insights assist SANSA with developing a strategy for space weather monitoring in the future.

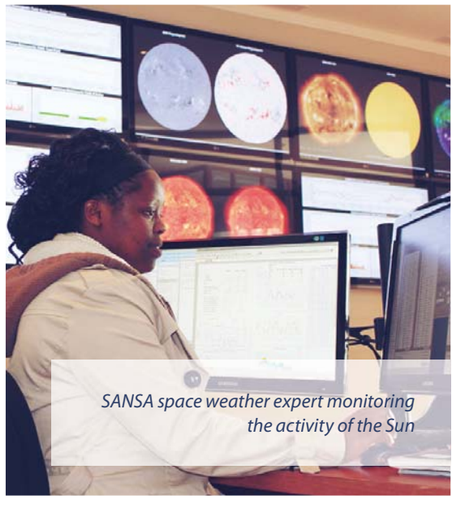
Space Science On the Road
Bringing space science to you – that is what the SANSA Space Lab will do! A state-of-the-art interactive mobile laboratory, the SANSA Space Lab travels to schools and universities, encouraging student involvement in space science research and development. SANSA Space Science was granted funding by the South African Agency for Science and Technology Advancement (SAASTA) for the acquisition of a mobile learning facility. The equipment inside the mobile lab was acquired through the DST Programmatic Support Grant Initiative (PSGI).

The Space Lab became necessary due to the difficulty of transporting learners from all over South Africa to Hermanus. It allows the SANSA team to conduct educational programmes anywhere in South Africa. The SANSA Space Lab provides learners and educators with the same programmes offered at the SANSA Space Science Centre in Hermanus. It has been designed to accommodate schools without halls and electricity and with limited water availability. This unit will go a long way in assisting SANSA with its public outreach mandate and its quest to take space science to schools.

During World Space Week, the SANSA Space Lab was taken to schools in Knysna, George, Oudtshoorn and Beaufort West, reaching over 1 000 learners from both primary and secondary schools. A layered approach was followed – the educators at the schools were also part of a teacher training workshop facilitated by SANSA in cooperation with the Western Cape Education Department (WCED) and SAASTA. The SANSA Space Lab programme is aligned with the DST Youth into Science Strategy and will continue to educate and motivate learners about possible careers in space science.

Space Science Enhancing Skills
SANSA Space Science offers various training courses throughout the year, such as the Compass Swing training course. During the 2011/2012 financial year, SANSA Space Science presented eleven Compass Swing courses to ground personnel and pilots of the South African Air Force. This course includes a basic introduction to space physics and the influence it has on compass swing procedure; basic mathematics for the theoretical background of compass swing procedures; aircraft magnetism and its effect on aircraft compasses; the execution of compass swings; and practical training in the use of landing compasses.

During the course, the attendees are shown prototypes of equipment used for magnetic navigation and ground support. This course has dramatically increased the technical knowledge of ground support staff and reduced the costs of maintenance of support equipment. SANSA Space Science also provides a compass calibration service to the private and public sectors. During the 2011/2012 financial year, 145 compasses were calibrated by SANSA.



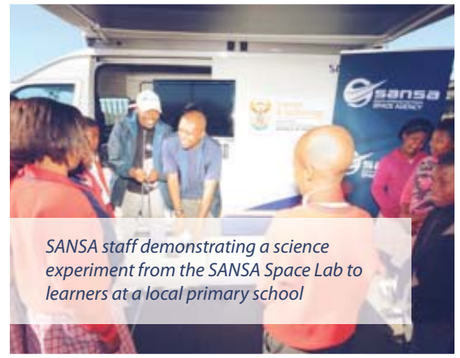
SANSA space weather expert monitoring the activity of the Sun

Space weather expert from the Natural Resources Canada Regional Warning Centre

Space Science Research Infrastructure
Magnetotellurics (MT) is an electromagnetic geophysical method of imaging the Earth's subsurface by measuring natural variations of electrical and magnetic fields at the Earth's surface. Commercial uses include hydrocarbon (oil and gas) exploration, geothermal exploration, mining exploration, as well as hydrocarbon and groundwater monitoring. Research applications include experimentation to further develop the MT technique, long-period deep crustal exploration, and earthquake precursor prediction research.

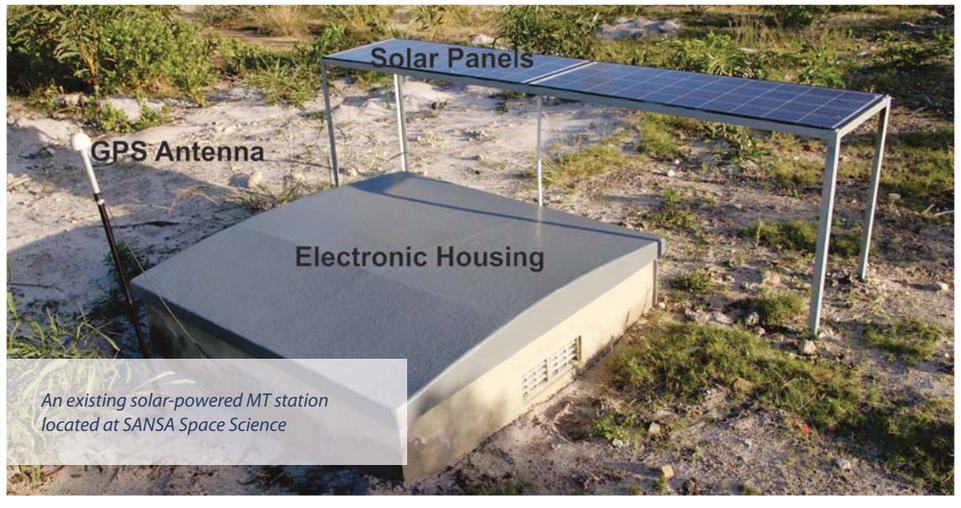
SANSA Space Science is installing MT Stations in various locations around South Africa to observe and study the variations in the ionosphere and in geomagnetically-induced currents. The equipment forms an analytical research system for observing the link between the magnetosphere, the ionosphere and the Earth's surface, called the South African Ionospheric Geophysics and Geomagnetic Experimental Resource (SNIGGER).

MT stations are remote stations and will require independent power and network services. Part of the development of the MT data units will be to investigate the optimum source of power for these stations (wind, solar, etc.) and to integrate a wireless data link to each station.



SANSA staff demonstrating a science experiment from the SANSA Space Lab to learners at a local primary school

Defence personnel involved in practical lessons during a Compass Swing course at SANSA Space Science.



An existing solar-powered MT station located at SANSA Space Science

GPS antenna SANSA Space Science centre, Hermanus.

A Space Science expert demonstrating magnetometer use to the group from Leiden University in the Netherlands

Helmholtz Coil at SANSA Space Science

SANSA staff during the Hermanus Environmental Day

Historic Investigation on Robben Island

SANSA Space Science assisted Iziko Museum and representatives from the Centre for International Heritage Activities at Leiden University in the Netherlands in investigating the possibility of 17th century settlements on Robben Island. Buildings constructed with building material containing magnetised particles make it possible to detect walls and other structures with a highly sensitive magnetometer. SANSA was instrumental in providing guidance on the use of magnetometer sensors for the detection of magnetic material.

Specialised Technology

SANSA Space Science is the only place in Africa with a large tri-axial Helmholtz Coil system. This system has a 2.5 m side length. Fields of up to 100 000 nT can be generated in three axes at a resolution of about 10 nT. The homogeneous area in the centre of the coil system, where the uniformity is 0.01%, is an oval form with a length of approximately 25 cm. The coil system can be used to create or cancel any geomagnetic field, and is controlled to cancel the local geomagnetic field in real time. This system is used to evaluate and calibrate various magnetic sensors and magnetic systems.

Safety, Health, Environment and Quality

SANSA is proud of, and committed to, taking care of its natural environment. As part of this commitment, the SANSA Space Science team regularly dedicates a day to removing alien invasive species from the SANSA grounds in Hermanus.

SANSA Space Science is the only place in Africa with a large tri-axial Helmholtz Coil system.

SPACE IS ALL **AROUND US** |

Houwteq SANSA - important for South Africa to develop its own satellite development capabilities to be self-reliant; develop unique technologies and related skills in Space Science.

Introduction

This KPI report gives a high-level summary of the performance of SANSA during the 2011/12 financial year. The document presents tables containing a summary of the performance of the organisation measured against the targets set in the 2011/12 Shareholder Compact. The report first reviews performance based on the five perspectives of the Balanced Scorecard, namely the:

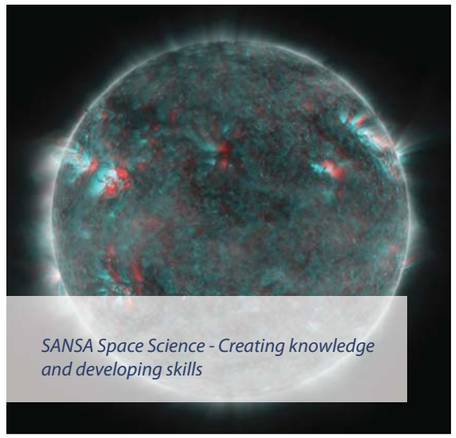
1. Stakeholder Perspective: Fulfilling the SANSA mandate to its key stakeholders
2. Financial Perspective: Financial stewardship and sustainability
3. Organisational Perspective: Institutional excellence and accountability
4. Learning and Growth Perspective: SANSA's scientific output
5. Transformation Perspective: Organisational demographics

The report further reviews performance against the SANSA Strategic Goals, as tabulated below:

Strategic Outcome:	*Strategic Outcome:*	*Strategic Outcome:*	*Strategic Outcome:*	*Strategic Outcome:*
World-class and efficient services and societal benefits (Societal Capital)	*Cutting-edge research, development, technology, innovation and applications (Intellectual Capital)*	*Effective development of human capital, transformation, science advancement and engagement of the citizenry (Human Capital)*	*Globally competitive national space industry (Economic Capital)*	*Make South Africa a recognised global space citizen (Global Capital)*
GOAL1	**GOAL 2**	**GOAL 3**	**GOAL 4**	**GOAL 5**
Goal Statement:	*Goal Statement:*	*Goal Statement:*	*Goal Statement:*	*Goal Statement:*
SANSA contributes to the improvement of the quality of life of South Africans in a sustained and conserved environment through the use of space science and technology for day-to-day societal benefits and the operational needs of the country. *This is achieved through the provisions of geospatial data, value-added data products, information and services, including:* 1. decision-making, policy-making and planning instruments 2. agriculture and food security services 3. water resource management 4. disaster management 5. safety and security 6. space weather and geo-space services	*SANSA uses space science and technology as a vehicle to increase South Africa's intellectual capital, advanced technological capital and global new knowledge share. This is achieved through the provision of geospatial data, value-added data products, information and services to R&D and tertiary education institutions to serve the intellectual, technological and innovation needs of the country and contribute to the global body of data and knowledge.* *This is done by means of:* 1. data procurement and acquisition 2. low-level data processing, archiving and distribution 3. R&D platform provision 4. research and development 5. facilitating the application of R&D	*SANSA trains and develops South Africans in key areas of national importance; promotes the uptake and appreciation of science by the youth; and improves the overall scientific literacy and engagement of our populace.* *This is achieved through the provision of:* 1. human capital development programmes 2. science advancement 3. public engagement	*To ensure South Africa's global competiveness, SANSA provides the country with necessary space applications and services that are increasingly permeating and driving successful economies around the world. This is achieved through:* 1. *space operations for the space industry* 2. *positioning, navigation and timing services* 3. *the promotion of industry participation in Earth observation, space operations, space science and space engineering programmes* 4. *creating international opportunities for South African industries through global partnerships*	*SANSA is the primary point of contact and face of South Africa in the global space arena and a vehicle for strategically positioning the country within the community of space-faring nations.*

SANSA Earth Observation - Giving us the big picture of our Earth

SANSA Space Operations - Controlling satellites in space to create value on Earth



SANSA Space Science - Creating knowledge and developing skills

SANSA Performance measured against the Balanced Scorecard Framework

This section contains tables on the performance of the organisation against the Balanced Scorecard Framework, namely Stakeholder, Financial, Organisational, Learning and Growth, and Transformation perspectives. The tables measure the performance of the four SANSA programmes, namely:

1. SANSA Corporate Office
2. SANSA Earth Observation
3. SANSA Space Operations
4. SANSA Space Science

The Stakeholder Perspective

SANSA key stakeholders are government departments and public entities, R&D institutions, educational institutions, the public and the youth, industry and private clients, as well as international partners and clients. This illustrates that SANSA is succeeding in serving its stakeholders and driving customer satisfaction in the execution of its mandate towards being a leader in ensuring that the benefits of space science and technology accrue to society. To this end, SANSA distributed more than 51 Tb of processed satellite data to key stakeholders and customers, 39 Tb of satellite data images specifically to the public sector, held a number of public engagement activities, and maintained formal local and international partnerships which both stimulate South Africa's space industry and position the country as a recognised space citizen.

The Financial Perspective

This perspective demonstrates SANSA's financial stewardship, its generation of revenue, and its efficiency and effectiveness in using the available financial resources. Through the improvement in the availability and affordability of data, value-added data products and services to industry stakeholders, SANSA has created value in industry participation. This stimulation of industry growth and participation in Earth Observation service platforms and product offerings has enabled SANSA Earth Observation to derive 27% of its total income from industry revenue against a targeted 12%. SANSA Space Operations derived 69% of its total income from industry against a target of 60%, through a product offering that includes TT&C and launch services for international clients.

To meet its strategic objective of conducting cutting-edge research, development and innovation to continually improve SANSA's product offering, SANSA Earth Observation spent 23% of its operating expenditure on internal R&D against a target of 10%. This achievement advances the SANSA goals of implementing R&D programmes that create new knowledge and develop skills.

The Organisational Perspective

This perspective demonstrates institutional excellence and accountability. It also shows how SANSA's internal business processes and systems enable the organisation to achieve its vision through continuous improvement. The development and implementation of finance, human resources and governance internal control instruments, as well as the implementation of programme strategies, have been successfully executed. These processes and systems are the key value drivers that enable SANSA to execute its strategic intent effectively.

Learning and Growth Perspective

SANSA's scientific output is an indicator of the organisation's ability to leverage the benefits of R&D and contribute to a knowledge-based economy. This is measured through the quality of SANSA scientific outputs, its scientific capacity in terms of Masters- and PhD-level researchers in the organisation, and its external development of scientific capacity.

Quality of Scientific Outputs

SANSA Earth Observation conducted and achieved 14 formal research outputs against a target of 5, while SANSA Space Operations produced 9 formal research outputs against a target of 6 for the year. SANSA Space Science produced 29 co-authored ISI journal publications against a target of 24 for the year, demonstrating its quality of scientific output, particularly in refereed journal articles.

Scientific capacity in terms of Masters- and PhD-level researchers

SANSA Space Science has four NRF-rated researchers. This affirms SANSA's continuous striving for the highest standards of research and its determination to produce quality and high impact research output.

Development of Scientific Capacity

SANSA Earth Observation formally supervised 2 MSc students and 1 PhD Student. SANSA Space Operations trained 5 interns and offered in-service training to 2 students. SANSA Space Science achieved exceptional results by supervising 10 Honours students, 18 MSc students and 12 PhD candidates.

Transformation Perspective

Since the scientific workforce has an ageing demographic profile, human resource transformation remains one of the key priorities of SANSA in order to benefit the South African economy. SANSA Corporate has 89% Black South African staff and 74% female staff. The attraction and recruitment of disabled South Africans will be a key focus in the upcoming financial year.

Table 1: SANSA Corporate performance measured against the Balanced Scorecard Framework

PROGRAMME 1: SANSA CORPORATE					
INDICATOR	CATEGORY	ACTUAL PERFORMANCE AGAINST TARGET		REASON FOR VARIANCE	PROPOSED ACTION TO RECTIFY NON-ACHIEVEMENT/OVERACHIEVEMENT
		2011/12 Target	Actual		
STAKEHOLDER PERSPECTIVE					
Develop, implement and comply with service charter		Develop & Implement	Policy Review	The finalisation of policies and the foundational operationalisation of SANSA took precedence over harmonisation of processes for the development of service charters.	The review of policies and development of procedures, has been prioritised. A charter would be informed by the Standard Operating Procedures (SOPs).
Number of formal public communication activities (e.g. media releases, interviews)		*8*	*24*		
Number of signed/formal and active international partnerships		*4*	*2*	This remains a lengthy process.	Draft MoU, still to be signed with Nigeria and Algeria.
Number of signed/formal and active international partnerships that promote SA industry participation		*2*	*0*	This remains a lengthy process.	Draft MoU, still to be signed with Algeria.
Number of international (multi-national/multi-institutional) bodies of which SANSA is a member		*1*	*1*		
ORGANISATIONAL PERSPECTIVE					
Development and implementation of Finance internal control instruments (% completion)		*85%*	*85%*		
Development and implementation of Human Resources internal control instruments (% completion)		*85%*	*90%*		
Development and implementation of Governance instruments (% completion)		*85%*	*85%*		
Develop and ensure implementation of Corporate-wide Earth Observation and societal benefit strategies		*85%*	*85%*		

Table 2: SANSA Earth Observation performance measured against the Balanced Scorecard Framework

...ORGANISATIONAL PERSPECTIVE (CONTINUED)					
Audit rating		*Unqualified*	*Pending audit outcome*		
Develop and ensure implementation of space science strategies		*85%*	*85%*		
Develop and ensure implementation of space operations strategies		*85%*	*85%*		
Develop and ensure implementation of space engineering/systems strategies		*85%*	*40%*	Clarity still outstanding on future of this directorate and Sunspace	The development of the NSP will bring greater clarity. A Programme Management Office is being developed to give further focus to this matter.
Develop and ensure implementation of Corporate-wide human capital development strategies		*85%*	*85%*		
Develop and ensure implementation of Corporate-wide science advancement strategies		*85%*	*70%*	Inconsistency of directorate specific strategy toward science advancement strategy	Finalisation in 2012/13
TRANSFORMATION PERSPECTIVE					
Proportion (%) of staff development and wellness expenditure to total expenditure		*0.3%*	*0.6%*		
Proportion (%) of South African staff from designated groups	Black	*60%*	*89%*		
	Women	*50%*	*74%*		
	Disabled	*1%*	*0%*	Continuous focus on identifying suitable people with disabilities for roles remains a priority	Efforts targeted to recruit and attract designated groups in 2012/13 through agencies focusing on employing people with disabilities to continue.
Proportion (%) of South African staff from designated groups in the top three levels	Black	*60%*	*91%*		
	Women	*50%*	*76%*		
	Disabled	*1%*	*0.0%*	Continuous focus on identifying suitable people with disabilities for roles remains a priority	Efforts targeted to recruit and attract designated groups in 2012/13 through agencies focusing on employing people with disabilities to continue.

PROGRAMME 2: SANSA EARTH OBSERVATION					
INDICATOR	CATEGORY	ACTUAL PERFORMANCE AGAINST TARGET		REASON FOR VARIANCE	PROPOSED ACTION TO RECTIFY NON-ACHIEVEMENT/ OVERACHIEVEMENT
		2011/12 Target	Actual		
STAKEHOLDER PERSPECTIVE					
Data acquired and archived (bytes)	Processed	*10 Tb*	*34 Tb*		
Total data distributed (bytes)	Processed	*50 Tb*	*51 Tb*		
Total data distributed to the public sector (bytes)	Processed	*40 Tb*	*39.2 Tb*	Staff turnaround and data system challenges resulted in slow data distribution (2% underachievement)	Additional staff have been employed to address concerns with data distribution.
Image products and services (count of honoured requests)	Images	*3 000*	*62 372*		
Image products and services (proportion (%) of honoured requests)		*98%*	*99%*		
Development and compliance with service charter		*Development*	*Development*	The finalisation of policies and the foundational operationalisation of SANSA took precedence over development of service charters.	The review of policies and development of procedures will be implemented to develop the service charter

...STAKEHOLDER PERSPECTIVE (CONTINUED)					
SAEOS data system implementation		*100%*	*98%*	SANSA encountered limited resource to maintain and automate the systems (2% underachievement).	Additional staff have been employed, both in the data-processing and systems maintenance areas.
Number of signed/formal and active international partnerships		*6*	*6*		
Number of signed/ formal and active African partnerships		*4*	*4*		
Number of international (multi-national/multi-institutional) bodies of which SANSA Earth Observations is a member		*2*	*2*		
Number of collaborative projects with industry		*8*	*8*		
Number of facilitated local industry to international partners projects/ collaborations		*6*	*11*		
FINANCIAL PERSPECTIVE					
Proportion (%) of income industry to total income		*12%*	*27%*		
Proportion (%) of Sensor Portfolio expenditure to total expenditure		*70%*	*73%*		
Proportion (%) of internal R&D expenditure to total operating expenditure		*10%*	*23%*		
Proportion (%) of HCD expenditure to total expenditure		*4%*	*4%*		
Proportion (%) of staff development and wellness expenditure to total expenditure		*2%*	*3.4%*		
Proportion (%) of external research grant income to total income		*15%*	*36%*		

LEARNING & GROWTH PERSPECTIVE					
Data ordered on behalf of clients for research (count of honoured requests – scenes)		*1 000 scenes*	*2 887 scenes*		
Data distributed for research (bytes)		*10 Tb*	*40 Tb*		
Number of formal collaborative research projects		*10*	*10*		
Number of formal research outputs (e.g. formal research reports, research papers)		*5*	*14*		
Data directly distributed to students (count of honoured requests)	Honours or below	*20*	*41*		
	MSc	*35*	*95*		
	PhD	*5*	*48*		
Number of students or trainees formally trained, supervised, co-supervised	Interns	*5*	*5*		
Number of students or trainees formally trained, supervised, co-supervised	In-service	*2*	*1*	Resource shortgage impacted on the realisation of this KPI.	Recruitment drive to address resource shortages in EO to occur in 2012/13.
	Honours or below	*2*	*0*	Resource shortgage impacted on the realisation of this KPI.	Recruitment drive to address resource shortages in EO to occur in 2012/13.
	MSc	*2*	*2*		
	PhD	*1*	*1*		

...LEARNING & GROWTH PERSPECTIVE (CONTINUED)					
Proportion (%) of South African students from designated groups	Black	*50%*	*69%*		
	Women	*30%*	*31%*		
	Disabled	*1%*	*0%*	Recruitment of students from designated groups were unsuccessful, however; continuous focus on identifying suitable people with disabilities for roles remains a priority.	Efforts targeted to recruit and attract designated groups in 2012/13 through agencies focusing on employing people with disabilities to continue.
Training of staff/parties from African countries (count of engagements)		*2*	*7*		
Number of short courses conducted		*8*	*12*		
Total number of short course attendees		*160*	*341*		
TRANSFORMATION PERSPECTIVE					
Proportion (%) of South African staff from designated groups	Black	*42%*	*64%*		
	Women	*35%*	*33%*	Recruitment of suitably qualified women was not achieved within the expected timeframe.	2% underachievement to be recovered in 2012/13.
	Disabled	1%	0%	Continuous focus on identifying suitable people with disabilities for roles remains a priority.	Efforts targeted to recruit and attract designated groups in 2012/13 through agencies focusing on employing people with disabilities to continue.
Proportion (%) of South African staff from designated groups in the top three levels	Black	*33%*	*55%*		
	Women	*33%*	*33%*		
	Disabled	*1%*	*0%*	Continuous focus on identifying suitable people with disabilities for roles remains a priority.	Efforts targeted to recruit and attract designated groups in 2012/13 through agencies focusing on employing people with disabilities to continue.

Table 3: SANSA Space Operations performance measured against the Balanced Scorecard Framework

PROGRAMME 3: SANSA SPACE OPERATIONS					
INDICATOR	CATEGORY	ACTUAL PERFORMANCE AGAINST TARGET		REASON FOR VARIANCE	PROPOSED ACTION TO RECTIFY NON-ACHIEVEMENT/OVERACHIEVEMENT
		2011/12 Target	Actual		
STAKEHOLDER PERSPECTIVE					
Launch and early orbit support count		*15*	*18*		
In-orbit testing count		*3*	*8*		
Mission control (number of monitored passes of SumbandilaSat)		*1 300*	*951*	Mission was terminated due to damage by solar flares.	SANSA is developing an implementation blueprint for its next satellite.
Number of science advancement exhibits/ festivals participated in		*5*	*11*		
Number of public engagement activities		*15*	*19*		
Number of collaborative projects with industry		*11*	*11*		
Number of international (multi-national/multi-institutional) bodies of which SANSA Space Operations is a member		*1*	*1*		
Customer satisfaction rates (%)		*85%*	*85%*		
FINANCIAL PERSPECTIVE					
Proportion (%) of industry income to total income		*60%*	*69%*		
Proportion (%) of international industry income to total income		*60%*	*66%*		

...FINANCIAL PERSPECTIVE (CONTINUED)

Proportion (%) of infrastructure hosting income to total external income		*40%*	*44%*		
Proportion (%) of external research grant income to total income		*17%*	*32%*		
Proportion (%) of internal R&D expenditure to total operating expenditure		*12%*	*0%*	Focus was placed on operational system improvements.	Greater focus will be given to R&D activities in 2012/13.
Proportion (%) of HCD expenditure to total expenditure		*8%*	*3%*	Fewer students/trainees recruited than planned.	Expenditure on HCD will be a focus area in 2012/13.
Proportion (%) of non-government income to government income		*133%*	*257%*		
Proportion (%) of CAPEX and maintenance/upgrade expenditure to total expenditure		*69%*	*72%*		
Proportion (%) of staff development and wellness expenditure to total expenditure		*1.5%*	*3%*		
Proportion (%) of science advancement expenditure to EO and Space Operations expenditure		*0.4%*	*0.5%*		
LEARNING & GROWTH PERSPECTIVE					
Number of formal research/ development/service reports		*6*	*9*		
Number of students or trainees formally trained, supervised, co-supervised	Interns	*6*	*5*	Limited staff resource impacted on ability to train target number of students.	Recruitment drive to address resource shortages in SO to occur in 2012/13.
	In-service	*2*	*2*		

...LEARNING & GROWTH PERSPECTIVE (CONTINUED)

Proportion (%) of South African students from designated groups trained	Black	*80%*	*69%*	Limited staff resource impacted on ability to train target number of students.	Recruitment drive to address resource shortages in SO to occur in 2012/13.
	Women	*30%*	*31%*		
	Disabled	*1%*	*0%*	Continuous focus on identifying suitable people with disabilities for roles remains a priority.	Efforts targeted to recruit and attract designated groups in 2012/13 through agencies focusing on employing people with disabilities to continue.
Number of learner visitors		*220*	*1 045*		
Number of teacher/ educator visitors		*20*	*31*		
TRANSFORMATION PERSPECTIVE					
Proportion (%) of South African staff from designated groups in the top three levels	Black	*50%*	*55%*		
	Women	*15%*	*33%*		
	Disabled	*1%*	*0%*	Continuous focus on identifying suitable people with disabilities for roles remains a priority.	Efforts targeted to recruit and attract designated groups in 2012/13 through agencies focusing on employing people with disabilities to continue.
Proportion (%) of South African staff from designated groups	Black	*70%*	*64%*	Recruitment of suitably qualified Black persons not achieved within expected timeframe.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13.
	Women	*20%*	*32%*		
	Disabled	*1%*	*0%*	Continuous focus on identifying suitable people with disabilities for roles remains a priority.	Efforts targeted to recruit and attract designated groups in 2012/13 through agencies focusing on employing people with disabilities to continue.

Table 4: SANSA Space Science performance measured against the Balanced Scorecard Framework

PROGRAMME 4: SANSA SPACE SCIENCE					
INDICATOR	CATEGORY	ACTUAL PERFORMANCE AGAINST TARGET		REASON FOR VARIANCE	PROPOSED ACTION TO RECTIFY NON-ACHIEVEMENT/OVERACHIEVEMENT
		2011/12 Target	Actual		
STAKEHOLDER PERSPECTIVE					
On-time information distribution expressed as a percentage of the total possibilities		*80%*	*80%*		
Percentage uptime of space weather services		*85%*	*99%*		
Number of registered space weather service users		*15*	*992*		
Data access via electronic medium (e.g. website, Twitter), expressed as total number of accesses		*1 000*	*1 588 950*		
Number of data centres receiving data for research distribution	National	*6*	*3*	Limited availability of data centres.	The implementation of the NSP could address this challenge.
	Africa (excl. SA)	*3*	*0*	Limited availability of data centres.	SANSA needs to assist in creating alternative data centres through African partnerships. More partnerships in the distribution of data will be fostered in 2012/13.
	International (excl. Africa)	*10*	*17*		
Number of individual (not through data centre) requests for research data (including from organisations not part of data centres)	National	*3*	*41*		
	Africa (excl. SA)	*5*	*0*	Lack of awareness of available data and limited Internet access and bandwidth are challenges that constrain data distribution on the African continent.	A focus is on increasing our formal African partnerships.
	International (excl. Africa)	*6*	*19*		
Number of science advancement exhibits/ festivals participated in		*10*	*10*		
Number of science advancement programmes (e.g. learner supplementary programmes)		*8*	*7*	More effort was put into the seven programmes undertaken, given that some of them – such as the Mobile Lab initiative – were new.	Underachievement to be recovered in 2012/13.
Number of public engagement activities		*10*	*15*		
Number of collaborative projects with industry		*7*	*7*		
Number of international partnerships		*8*	*5*	The prioritisation of the operational stabilisation of SANSA affected pursuit of targeted partnerships.	A focused effort to address this to be undertaken in 2012/13.
Number of international (multi-national/multi-institutional) bodies of which SANSA Space Science is a member		*8*	*8*		
FINANCIAL PERSPECTIVE					
Proportion (%) of applied science income to total income		*15%*	*11%*	There was a significant reduction in naval contract income due to the re-direction of resources within the navy.	Negotiations for additional contracts with other clients are being explored with income ratio to be at a higher level in the new financial year.
Proportion (%) of technology income to total income		*8%*	*11%*		
Proportion (%) of research/science CAPEX to total research/science expenditure		*10%*	*70%*		
Proportion (%) of external research grant income to total income		*11%*	*33%*		

...FINANCIAL PERSPECTIVE (CONTINUED)

Proportion (%) of HCD expenditure to total expenditure		*20%*	*8%*	HCD expenditure not achieved within the expected timeframe.	Expenditure on HCD will be a focus area in 2012/13.
Proportion (%) of science advancement expenditure to total expenditure		*5%*	*5%*		
Proportion (%) of research grant income to total income		*15%*	*33%*		
Proportion (%) of staff development and wellness expenditure to total expenditure		*2%*	*0.01%*	HCD expenditure not achieved within the expected timeframe.	Expenditure on HCD will be a focus area in 2012/13
Proportion (%) of industry income to total income		*20%*	*10%*	There was a significant reduction in naval contract income due to the re-direction of resources within the navy.	Negotiations for additional contracts with other clients are being explored with income ratio to be at a higher level in the new financial year.

LEARNING & GROWTH PERSPECTIVE

Number of formal/funded collaborative research projects (not just joint publications)	National	*7*	*9*		
	Africa (excl. SA)	*3*	*2*	The prioritisation of the operational stabilisation of SANSA affected pursuit of targeted partnerships.	A focused effort to address this to be undertaken in 2012/13.
	International (excl. Africa)	*7*	*6*	The prioritisation of the operational stabilisation of SANSA affected pursuit of targeted partnerships.	A focused effort to address this to be undertaken in 2012/13
Number of research visitors to the centre (for at least three days)	National	*8*	*5*	Lack of a coherent national space science programme.	The NSP will rectify this shortcoming.
	Africa (excl. SA)	*6*	*6*		
	International (excl. Africa)	*10*	*21*		

...LEARNING & GROWTH PERSPECTIVE (CONTINUED)

Number of visits by staff or students (of at least one week duration) to other institutions for research purposes	National	*3*	*4*		
	Africa (excl. SA)	*4*	*6*		
	International (excl. Africa)	*10*	*10*		
Number of co-authored ISI journal publications (incl. student authors)		*24*	*29*		
Distribution of co-authors for the co-authored ISI journal publications (excl. student co-authors)	Internal	*24*	*16*	Low research staff numbers prevented achievement of this stretching target.	Internal collaboration to be fostered through the NSP, which seeks to address overarching "big science" questions.
	National (excl. Internal)	*3*	*16*		
	Africa (excl. SA)	*6*	*11*		
	International (excl. Africa)	*13*	*40*		
Number of conferences attended (only count once if HMO is represented, i.e. multiple attendance of the same conference is not counted)		*15*	*16*		
Conference attendance to journal publication ratio		*80%*	*94%*		
Number of rated researchers		*4*	*4*		
Number of students or trainees formally trained, supervised or co-supervised	Interns	*4*	*8*		
	In-service	*2*	*4*		

...LEARNING & GROWTH PERSPECTIVE (CONTINUED)					
Number of students or trainees formally trained, supervised or co-supervised	Honours or below	*9*	*10*		
	MSc	*9*	*18*		
	PhD	*10*	*12*		
Proportion (%) of South African students from designated groups	Black	*30%*	*63%*		
	Women	*5%*	*13%*		
	Disabled	*1%*	*0%*	Continuous focus on identifying suitable people with disabilities for roles remains a priority.	Efforts targeted to recruit and attract designated groups in 2012/13 through agencies focusing on employing people with disabilities to continue.
Number of short courses, incl. postgraduate schools, in-service training and formal training		*10*	*22*		
Total number of short course attendees	In-service	*60*	*88*		
	Formal training	*60*	*73*		
Number of learner visitors		*5 000*	*8 436*		
Number of educator visitors		*200*	*324*		
Number of educator workshops		*5*	*5*		
TRANSFORMATION PERSPECTIVE					
Proportion (%) of South African staff from designated groups	Black	*60%*	*56%*	Relocation of young professionals to Hermanus proved a challenge.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13.
	Women	*25%*	*30%*		
	Disabled	*1%*	*2%*		
Proportion (%) of South African staff from designated groups in the top three levels	Black	*8%*	*14%*		
	Women	*10%*	*18%*		
	Disabled	*1%*	*0%*	Continuous focus on identifying suitable people with disabilities for roles remains a priority.	Efforts targeted to recruit and attract designated groups in 2012/13 through agencies focusing on employing people with disabilities to continue.

Table 5: SANSA Corporate performance measured against the SANSA Strategic Goals

PROGRAMME 1: SANSA CORPORATE OFFICE							
MEASUREABLE OBJECTIVE	OUTPUT	INDICATOR	CATEGORY	ACTUAL PERFORMANCE		REASON FOR VARIANCE	PROPOSED ACTION TO RECTIFY NON-ACHIEVEMENT/ OVERACHIEVEMENT
				2011/12 TARGET	ACTUAL		
SANSA GOAL 1: World-class and efficient services and societal benefits (Societal Capital)							
Management and Leadership Excellence	Effective and efficient management and leadership structures, systems and processes.	Development and implementation of Finance internal control instruments (% completion).		85%	85%		
		Development and implementation of Human Resources internal control instruments (% completion).		85%	90%	Development and implementation of Human Resource internal control instruments exceeded expectations as more policies were approved and implemented.	Development and implementation of Human Resource internal control instruments were prioritised.
		Development and implementation of Governance instruments (% completion).		85%	85%		
		Develop and ensure implementation of Corporate-wide Earth observation and societal benefit strategies.		85%	85%		
	Efficient and effective administrative structures and processes.	Develop, implement and comply with service charter.		Develop and imple-ment	Policy review	The finalisation of policies and the foundational operationalisation of SANSA consumed most of the available time leaving little for the harmonisation processes which would allow for the development of service charters.	The review of policies and development of procedures, given existing challenges, has been prioritised. A charter would be informed by the Standard Operating Procedures (SOPs).
		Audit rating		Unqual-ified	Unqual-ified		

SANSA GOAL 2: Cutting-edge research, development, technology, innovation and applications (Intellectual Capital)							
Operational Excellence	Efficient core-operating units.	Develop and ensure implementation of space science strategies.		85%	85%		
	Enabling user-friendly procedures, processes and systems.	Develop and ensure implementation of space operations strategies.		85%	85%		
	Fast turnaround times and accountability.	Develop and ensure implementation of space engineering/ systems strategies.		85%	40%	There is currently no strategic clarity on space engineering including among other things clarity on Sunspace.	With the development of the NSP there would be greater clarity. A Programme Management Office is being developed to give further focus on this matter.
SANSA GOAL 3: Effective development of human capital, transformation, science advancement and engagement of the citizenry (Human Capital)							
Excellence in Communication; Staff and Stakeholder Relations	Internal and external communication.	Proportion (%) of staff development and wellness expenditure to total expenditure.		0.3%	0.6%	Proportion (%) of staff development and wellness expenditure to total expenditure exceeded expectations as more staff training events took place.	The planned performance target for this KPI will be revised in the new financial year.
	Creation of a conducive working environment and an attractive employee value proposition.	Proportion (%) of South African staff from designated groups.	Black	60%	89%	There were more concentrated recruitment activities on achievement of diversity.	The planned performance target for this KPI will be revised in the new financial year.
			Women	50%	74%	There were more concentrated recruitment activities on achievement of diversity.	The planned performance target for this KPI will be revised in the new financial year

....SANSA GOAL 3 (CONTINUED)							
Excellence in Communication; Staff and Stakeholder Relations		Proportion (%) of South African staff from designated groups	Disabled	1%	0%	Suitably qualified persons with disabilities could not be found. Focused efforts to rectify this were made and still continue.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13 through agencies that focus on people with disabilities.
		Proportion (%) of South African staff from designated groups in the top three levels.	Black	60%	91%	There were more concentrated recruitment activaties on achievement of diversity.	The planned performance target for this KPI will be revised in the new financial year.
			Women	50%	76%	There were more concentrated recruitment activaties on achievement of diversity.	The planned performance target for this KPI will be revised in the new financial year.
			Disabled	1%	0.0%	Suitably qualified persons with disabilities could not be found. Focused efforts to rectify this were made and still continue.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13 through agencies that focus on people with disabilities.
Excellence in Comm-unication; Staff and Stakeholder Relations	Engagement of external stakeholders.	Number of formal public communication activities (e.g. media releases, interviews).		8	24	There was increased interest in the work of the Agency accompanied by requests for interviews and media releases.	The planned performance target for this KPI will be revised in the new financial year.
		Develop and ensure implementation of Corporate-wide human capital development strategies.		85%	85%		
		Develop and ensure implementation of Corporate-wide science advancement strategies.		85%	70%	Delayed by the development of directorate specific strategies which will inform the Corporate-wide strategy.	To be finalised in 2012/13.
SANSA GOAL 4: Globally competitive national space industry (Economic Capital)							
Active strategic contribution to South African National Space Strategy		Number of signed/ formal and active international partnerships that promote SA industry participation.		*2*	*0*	A meeting to sign agreement was cancelled and is planned for the future. However discussions are on-going.	Draft MoU, still to be signed with Algeria, would partly address this.

GOAL 5: Make South Africa a recognised global space citizen (Global Capital)							
Establish and maintain effective and mutually beneficial international partnerships, in line with national strategic alignment	Engagement of external stakeholders.	Number of signed/ formal and active international partnerships.		*4*	*2*	A meeting to sign agreement was cancelled and is planned for the future. However discussions are on-going.	Draft MoU, still to be signed with Nigeria and Algeria, would partly address this.
		Number of international (multi-national/multi-institutional) bodies of which SANSA is a member.		*1*	*1*		

Table 6: SANSA Earth Observation performance measured against the SANSA Strategic Goals

PROGRAMME 2: SANSA EARTH OBSERVATION								
MEASUREABLE OBJECTIVE	ACTIVITIES	OUTPUT	INDICATOR	CATEGORY	ACTUAL PERFORMANCE		REASON FOR VARIANCE	PROPOSED ACTION TO RECTIFY NON-ACHIEVEMENT/ OVERACHIEVEMENT
					2011/12 TARGET	ACTUAL		
SANSA GOAL 1: World-class and efficient services and societal benefits (Societal Capital)								
Offer efficient EO services for national and international benefit and a sustained environment	1. EO data stock 2. Space-based EO data products, value-added data products and services. Decision-making tools for policy- and decision-makers	Data collection	Data acquired and archived (bytes).	Processed	*10 Tb*	*34 Tb*	The demand for data exceeded expectation and since this KPI is partially driven by customer orders the figure was higher than expected.	No action necessary.

...SANSA GOAL 1 (CONTINUED)								
Offer efficient EO services for national and international benefit and a sustained environment	1. EO data stock 2. Space-based EO data products, value-added data products and services. Decision-making tools for policy- and decision-makers	Data distrib-ution	Total data distributed (bytes).	Processed	*50 Tb*	*51 Tb*	About 98% of the total data distributed each year is the yearly mosaic. The mosiac was distributed to 2 more stakeholders than expected, thus the overachievement.	No action necessary.
		Data processing	Total data distributed to the public sector (bytes).	Processed	*40 Tb*	*39.2 Tb*	Loss of key staff and some data system challenges were experienced resulting in slow data distribution. (2% underachievement)	New staff have been employed both in the data processing and systems maintenance areas. This will address the challenges experienced.
		Value-added services	Image products and services (count of honoured requests).	Images	*3 000*	*62 372*	Orthorectified satellite imagery and mosaics were distrbuted to 11 SADC countries participating in the AMESD ptoject. These included CBERS 2, SAC-C and Landsat TM data. The AMESD project was coming to an end and this was our final deliverable.	No action necessary.
			Image products and services (proportion (%) of honoured requests).		*98%*	*99%*	Increased demand of satellite imagery.	No action necessary.
			Proportion (%) of Sensor Portfolio expenditure to total expenditure.		*70%*	*73%*	Increased demand of satellite imagery.	No action necessary.

...SANSA GOAL 1 (CONTINUED)

Offer efficient EO services for national and international benefit and a sustained environment	1. EO data stock 2. Space-based EO data products, value-added data products and services. Decision-making tools for policy- and decision-makers		Development and compliance with service charter.		*Development*	*Development*	The finalisation of policies and foundational operationalisation of SANSA consumed most of the available time leaving little for the harmonisation of processes which would allow for the development of service charters.	The review of policies and development of procedures has been prioritised. A charter would be informed by the Standard Operating Procedures (SOPs).
			SAEOS data system implementation		*100%*	*98%*	SANSA had limited data systems technologists to maintain and automate the systems. (2% underachievement).	New staff have been employed both in the data processing and systems maintenance areas. This will address the challenges experienced.

SANSA GOAL 2: Cutting-edge, research, development, technology, innovation and applications (Intellectual Capital)

Conduct cutting-edge research, development and innovation to continually improve SANSA's EO offering		Provide data for R&D purposes	Data ordered on behalf of clients for research (count of honoured requests – scenes).		*1 000 scenes*	*2 887*	Demand from the research community exceeded expectations.	No action necessary.
		Collaborative projects with R&D and tertiary institutions	Data distributed for research (bytes).		*10 Tb*	*40 Tb*	Demand from the research community exceeded expectations and thus more data was distributed.	No action necessary.
		Continual R&D of internal processes	Number of formal collaborative research projects.		*10*	*10*	None	No action necessary.
			Number of formal research outputs (e.g. formal research reports, research papers).		*5*	*14*	There was an increase in involvement in international and national research projects with subsequent increase in reports.	No action necessary.

...SANSA GOAL 2 (CONTINUED)

Conduct cutting-edge research, development and innovation to continually improve SANSA's EO offering	New and innovative data-/image-/signal-processing techniques.		Proportion (%) of internal R&D expenditure to total operating expenditure.		*10%*	*23%*	Costs were initially underestimated since R&D is new and real cost unknown.	No action necessary.
			Proportion (%) of external research grant income to total income.		*15%*	*36%*	Payment of FP7 grants since most of the projects were ending.	No action necessary.

SANSA GOAL 3: Effective development of human capital, transformation, science advancement and engagement of the citizenry (Human Capital)

Development of human capital in EO-related science and engineering, and advance science among the youth and the public	Skilled students	Provision of data for student training	Data directly distributed to students (count of honoured requests).	Honours or below	*20*	*41*	Demand from students was higher than expected.	No action necessary.
	Skilled workers	Collaborative student training		MSc	*35*	*95*	Demand from students was higher than expected.	No action necessary.
	Science advancement programmes.	Internship training		PhD	*5*	*48*	Demand from students was higher than expected.	No action necessary.
	Public engagement programmes.	Science advancement	Number of students or trainees formally trained, supervised, co-supervised.	Interns	*5*	*5*	None.	None.
				In-service	*2*	*1*	This was mainly due to a shortage of Earth Observation staff to train students. More focus was put on the operationalisation of SANSA and integration issues.	All efforts will be put in place to actively recruit and attract additional EO staff in 2012/13.

...SANSA GOAL 3 (CONTINUED)

Development of human capital in EO-related science and engineering, and advance science among the youth and the public			Number of students or trainees formally trained, supervised, co-supervised.	Honours or below	*2*	*0*	This was mainly due to a shortage of Earth Observation staff to train students. More focus was put on the operationalisation of SANSA and integration issues.	All efforts will be put in place to actively recruit and attract additional EO staff in 2012/13.
				MSc	*2*	*2*	None.	
				PhD	*1*	*1*	None.	
			Proportion (%) of South African students from designated groups.	Black	*50%*	*69%*	SANSA EO increased the inolvement of young people from black african schools and universities..	No action necessary.
				Women	*30%*	*31%*	There could be more girls than boys in the schools that we interact with or girls have more interest in Earth Observation.	No action necessary.
				Disabled	*1%*	*0%*	The institutions we interacted with either have no disabled students or they didn't take part.	All efforts will be put in place to actively identify and promote earth observation in institutions with disabled members.
			Number of short courses conducted.		*8*	*12*	Demand from the public, available of resources from EO to make courses free	No action necessary.
	Skilled students.	Provision of data for student training.	Total number of short course attendees.		*160*	*341*	Courses were free and demand for training exceeded expectations.	No action necessary.

...SANSA GOAL 3 (CONTINUED)

Development of human capital in EO-related science and engineering, and advance science among the youth and the public	Skilled workers	Collaborative student training	Proportion (%) of HCD expenditure to total expenditure.		*4%*	*4%*	None.	None.
	Science advancement programmes	Internship training	Proportion (%) of staff development and wellness expenditure to total expenditure.		*2%*	*3.4%*	Demand for new skills to cope with technological trends and the new requirements in SANSA.	Increase/ adjust budget for staff development.
	Public engagement programmes	Science advancement	Proportion (%) of South African staff from designated groups.	Black	*42%*	*64%*	SANSA EO's targeted plans to contribute to transformation. There as a n effort put to attract black African to our job market.	No action necessary.
				Women	*35%*	*33%*	Recruitment of suitably qualified women was not achieved within the expected timeframe.	2% underachievement to be recovered in 2012/13.
				Disabled	*1%*	*0%*	Suitably qualified persons with disabilities could not be found. Focussed efforts to rectify this were made and still continue.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13 through agencies that focus on people with disabilities.
			Proportion (%) of South African staff from designated groups in the top three levels.	Black	*33%*	*55%*	SANSA EO's targeted plans to contribute to transformation. There as an effort put to attract black African to our job market.	No action necessary.

...SANSA GOAL 3 (CONTINUED)								
Development of human capital in EO-related science and engineering, and advance science among the youth and the public			Proportion (%) of South African staff from designated groups in the top three levels.	Women	*33%*	*33%*	None	None
				Disabled	*1%*	*0%*	Suitably qualified persons with disabilities could not be found. Focussed efforts to rectify this were made and still continue.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13 through agencies that focus on people with disabilities.
			Training of staff/parties from African countries (count of engagements).		*2*	*7*	Leveraged in international projects such as TIGER and AMESD.	No action necessary.
SANSA GOAL 4: Globally competitive national space industry (Economic Capital)								
Provide services that stimulate industry growth and participation in EO	Value-added services	Collaborative projects with industry.	Proportion (%) of industry income to total income.		*12%*	*27%*	High demand of satellite imagery from industry e.g Eskom.	No action necessary.
			Number of collaborative projects with industry.		*8*	*8*	None.	None.
			Number of facilitated local industry with international partners projects/ collaborations.		*6*	*11*	High demand of satellite imagery from industry e.g Eskom.	No action necessary.

SANSA GOAL 5: Make South Africa a recognised global space citizen (Global Capital)								
Establish and maintain effective and mutually beneficial international partnerships, in line with national strategic alignment	Membership of international organisations of strategic importance.		Number of signed/formal and active international partnerships.		*6*	*6*	None.	None.
	Beneficial multi-national agreements, partnerships and projects.		Number of signed/ formal and active African partnerships.		*4*	*4*	None.	None.
	High-impact contribution to global initiatives.		Number of international (multi-national/ multi-institutional) bodies of which SANSA Earth Observation is a member.		*2*	*2*	None.	None.

Table 7: SANSA Space Operations performance measured against the SANSA Strategic Goals

PROGRAMME 3: SANSA SPACE OPERATIONS								
MEASUREABLE OBJECTIVE	ACTIVITIES	OUTPUT	INDICATOR	CATEGORY	ACTUAL PERFORMANCE		REASON FOR VARIANCE	PROPOSED ACTION TO RECTIFY NON-ACHIEVEMENT/ OVERACHIEVEMENT
					2011/12 TARGET	ACTUAL		
SANSA GOAL 1: World-class and efficient services and societal benefits (Societal Capital)								
Offer efficient, cost-effective and globally competitive space operations and applications for societal benefit and global market	Directly acquired data for EO.	Data collection	Launch and early orbit support count.		*15*	*18*	This is mainly due to good marketing and growth in the launch market.	KPI target increased to 20 in 2012/13.
	Launch support services	Launch support	In-orbit testing count.		*3*	*8*	This is a new market we are persuing and did some good marketing.	KPI target increased to 4 in 2012/14.

...SANSA GOAL 1 (CONTINUED)

Offer efficient, cost-effective and globally competitive space operations and applications for societal benefit and global market	In-orbit tests	In-orbit testing (IOT)	Mission control (number of monitored passes of SumbandilaSat).		*1 300*	*951*	The satellite experienced technical problems leading to the termination of the primary mission of the satellite. Tracking is still on-going for experimental purposes.	SANSA is developing an implementation blueprint for its next satellite.
			Proportion (%) of infrastructure-hosting income to total external income.		*40%*	*44%*	We strive to grow the external market and therefore the direct impact on the international market and this is related to the Ksat project.	KPI not measured in 2012/13.
			Proportion (%) of non-government income to government income.		*133%*	*257%*	Growth in the market as described above.	KPI not measured in 2012/13.
			Proportion (%) of CAPEX and maintenance/ upgrade expenditure to total expenditure.		69%	72%	We were fortunate to do a lot of Capex infrastructure and exceeded the target.	KPI not measured in 2012/13.
SANSA GOAL 2: Cutting-edge research, development, technology, innovation and applications (Intellectual Capital)								
Focused and needs-driven applied research, development and innovation in key space operations and applications areas.	New and innovative space operations processes and application.	R&D activities in space operations and applications.	Proportion (%) of internal R&D expenditure to total operating expenditure.		*12%*	*0%*	SANSA Space Operations did not conduct formalised & structured R&D, save for operational system improvements .	SANSA Space Operations will focus on R&D activities in 2012/13.

...SANSA GOAL 2 (CONTINUED)

Focused and needs-driven applied research, development and innovation in key space operations and applications areas.			Number of formal research/ development/ service reports.		*6*	*9*	For each launch there are service reports and this increased due to the amount of launches.	KPI reduced to 3 in 2012/13.
			Proportion (%) of external research grant income to total income.		*17%*	*32%*	When the KPI was set we were not sure of the grant we would receive.	KPI not measured in 2012/13.
SANSA GOAL 3: Effective development of human capital, transformation, science advancement and engagement of the citizenry (Human Capital)								
Focused HCD in space operations, space applications and active science advancements	Skilled youth	Intern training	Number of students or trainees formally trained, supervised, co-supervised.	Interns	*6*	*5*	This was mainly due to a shortage of Space Operations staff to train students. More focus was put on the operationalisation of SANSA and integration issues.	All efforts will be put in place to actively recruit and attract additional Space Operations staff in 2012/13.
	Skilled workers	Staff training		In-service	*2*	*2*	None	None.
			Proportion (%) of South African students from designated groups trained.	Black	*80%*	*69%*	This was mainly due to a shortage of Space Operations staff to train students. More focus was put on the operationalisation of SANSA and integration issues.	All efforts will be put in place to actively recruit and attract additional Space Operations staff in 2012/13.
				Women	*30%*	*31%*	We endeavour to surpass set KPI's.	KPI not measured in 2012/13.
				Disabled	*1%*	*0%*	Suitably qualified persons with disabilities could not be found. Focussed efforts to rectify this were made and still continue.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13 through agencies that focus on people with disabilities.

...SANSA GOAL 3 (CONTINUED)

Focused HCD in space operations, space applications and active science advancements			Proportion (%) of HCD expenditure to total expenditure.		*8%*	*3%*	Fewer students/ trainees recruited than planned.	Expenditure on HCD will be a focus area in 2012/13.
			Proportion (%) of staff development and wellness expenditure to total expenditure.		*1.5%*	*3%*	This due to intensive training regarding SCM and other new SANSA programms.	KPI not measured in 2012/13.
			Proportion (%) of South African staff from designated groups.	Black	*70%*	*64%*	Recruitment of suitably qualified persons who are Black not achieved within expected timeframe.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13.
				Women	*20%*	*32%*	We tried and achieved the goal to employ more woman into the space sector.	
				Disabled	*1%*	*0%*	Suitably qualified persons with disabilities could not be found. Focussed efforts to rectify this were made and still continue.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13 through agencies that focus on people with disabilities.

...SANSA GOAL 3 (CONTINUED)

Focused HCD in space operations, space applications and active science advancements	Skilled youth	Intern training	Proportion (%) of South African staff from designated groups in the top three levels.	Black	*50%*	*55%*	Concerted effort to get equity.	Will continue to achieve diverse staff complement.
	Skilled workers	Staff training		Women	*15%*	*33%*	Concerted effort to get equity.	Will continue to achieve diverse staff complement.
	Science advancement programmes	Science advancement activities		Disabled	*1%*	*0%*	Suitably qualified persons with disabilities could not be found. Focussed efforts to rectify this were made and still continue.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13 through agencies that focus on people with disabilities.
			Number of learner visitors.		*220*	*1 045*	We had the advantage to join forces with SANSA Space Science and could reach more educators.	KPI target increased to 1200 in 2012/13.
			Number of teacher/educator visitors.		*20*	*31*	We had the advantage to join forces with SANSA Space Science and could reach more educators.	KPI target increased to 60 in 2012/13.
			Number of science advancement exhibits/festivals participated in.		*5*	*11*	We had the advantage to join forces with SANSA Space Science and could participate in various exhibits and festivals.	KPI not measured in 2012/13.

...SANSA GOAL 3 (CONTINUED)								
Focused HCD in space operations, space applications and active science advancements			Number of public engagement activities.		*15*	*19*	Concerted effort and wanted to over achieve to enhance the SANSA brand.	KPI not measured in 2012/13.
			Proportion (%) of science advancement expenditure to EO and Space Operations expenditure.		*0.4%*	*0.5%*	Participated in various exhibits and festivals.	KPI not measured in 2012/13.
SANSA GOAL 4: Globally competitive national space industry (Economic Capital)								
Maintaining a strong commercial service for industry	Value-added services.	Commercial support to industry.	Proportion (%) of industry income to total income.		*60%*	*69%*	This is due to us doing more launches and IOT.	2012/13 KPI target increased to 70 %.
			Number of collaborative projects with industry.		*11*	*11*	None.	None.
SANSA GOAL 5: Make South Africa a recognised global space citizen (Global Capital)								
Establish and maintain effective and mutually beneficial international partnerships and customer relations, in line with national strategic alignment	High-quality professional services.	Global space industry servicing.	Proportion (%) of international industry income to total income.		*60%*	*66%*	This is due to us doing more launches and IOT.	2012/13 KPI target increased to 70 %.
			Number of international (multi-national/multi-institutional) bodies of which SANSA Space Operations is a member.		*1*	*1*	None.	None.
			Customer satisfaction rates (%).		*85%*	*85%*	None.	None.

Table 8: SANSA Space Science performance measured against the SANSA Strategic Goals

PROGRAMME 4: SANSA SPACE SCIENCE								
MEASUREABLE OBJECTIVE	ACTIVITIES	OUTPUT	INDICATOR	CATEGORY	ACTUAL PERFORMANCE		REASON FOR VARIANCE	PROPOSED ACTION TO RECTIFY NON-ACHIEVEMENT/ OVERACHIEVEMENT
					2011/12 TARGET	ACTUAL		
SANSA GOAL 1: World-class and efficient services and societal benefits (Societal Capital)								
Offer a state-of-the-art research platform and applied science/ technology service platform	Geo-space and space weather products and services.	Data collection.	On-time information distribution, expressed as a percentage of the total possibilities.		*80%*	*80%*	None.	None.
	Applied science and technology products and services.	Data distribution.	Percentage uptime of space weather services.		*85%*	*99%*	Our promise to our clients is 100% uptime. We anticipated challenges in the first year after our migration, but fortunately we were able to mitigate these challenges and produce a better service than we envisaged.	Since this KPI is not SMART, we have changed the KPI for the new year to be something more directly measurable.
		Data processing.	Number of registered space weather service users.		*15*	*992*	This past year was the first year after establishing our space weather services and so we found new ways to obtain space weather users, and invested in significant space weather exposure to increase the number of users.	Since this KPI is not SMART, we have changed the KPI for the new year to be something more directly measurable.

...SANSA GOAL 1 (CONTINUED)

Offer a state-of-the-art research platform and applied science/ technology service platform		Value-added services.	Data access via electronic medium (e.g. website, Twitter), expressed as total number of accesses.		*1 000*	*1 588 950*	This past year was the first year after establishing our space weather services and so we found new ways to obtain space weather users, and invested in significant space weather exposure to increase the number of users.	Since this KPI is not SMART, we have changed the KPI for the new year to be something more directly measurable.
			Proportion (%) of applied science income to total income.		*15%*	*11%*	There was a significant reduction of a naval contract income due to re-direction of resources within the navy.	Still in negotiations for additional contracts with other clients. This income ratio will be at a higher level in the new financial year.
			Proportion (%) of technology income to total income.		*8%*	*11%*	It is a necessary requirement to remain operational that some of our income come from external contracts. In 2011/2012 we exceeded the target due to the additional of a few short term technology contracts that were negotiated for during the year.	Achievement to be set as new baseline.

SANSA GOAL 2: Cutting-edge research, development, technology, innovation and applications (Intellectual Capital)

Conduct cutting-edge research, development and innovation	Knowledge outputs.	Provide data for R&D purposes.	Number of data centres receiving data for research distribution.	National	*6*	*3*	This is due to the limited space science nodes in the country. In that sense the target was set too high.	The implementation of the NSP might address this challenge.
	Geo-space and space weather products and services.	Collaborative projects with R&D and tertiary institutions.		Africa (excl. SA)	*3*	*0*	Currently SANSA is one of few data centres in Africa.	SANSA needs to assist in creating alternative data centres through African partnerships. More partnerships in the distribution of data will be fostered in 2012/14.
	Applied science and technology products and services.	Continual R&D of internal processes.		International (excl. Africa)	*10*	*17*	There are a significant number of international data centers who receive data for re-distribution to scientists and researchers around the world. South Africa has become well known for its ground based distribution network for measuring space from the ground, and the requests for access to our data through international data centres has increased.	We will continue to send our data to data centres and to attract attention to the high quality data we produce as this is a good thing and will enhance SANSA's reputation.
			Number of individual (not through data centre) requests for research data (including from organisations not part of data centres).	National	*3*	*41*	Due to the upcoming solar maximum and the interest in the South Atlantic Magnetic Anomaly as well as the procedure that is now well known for requesting our data, we are receiving more individual requests for information a nd data to be used for research.	Achievement to be set as new baseline.

...SANSA GOAL 2 (CONTUNED)

Conduct cutting-edge research, development and innovation			Number of individual (not through data centre) requests for research data (including from organisations not part of data centres).	Africa (excl. SA)	*5*	*0*	Lack of awareness of available data and limited internet access and bandwidth are challenges that constrain data distribution on the African continent.	We are currently increasing our formal African partnerships which should address this KPI.
				International (excl. Africa)	*6*	*19*	Due to the upcoming solar maximum and the interest in the South Atlantic Magnetic Anomaly as well as the procedure that is now well known for requesting our data, we are receiving more individual requests for information a nd data to be used for research.	Achievement to be set as new baseline.
			Number of formal/funded collaborative research projects (not just joint publications).	National	*7*	*9*	We have increased our efforts to bring in national partnerships, and the number of national institutions who which to collaborate with SANSA has increased with awareness.	Achievement to be set as new baseline.
				Africa (excl. SA)	*3*	*2*	The prioritisation of the operational stabilisation of SANSA constrained the ability to pursue partnerships as originally intended.	With SANSA now more stable focus will shift to the establishment of strategic partnerships.
				International (excl. Africa)	*7*	*6*	The prioritisation of the operational stabilisation of SANSA constrained the ability to pursue partnerships as originally intended.	With SANSA now more stable focus will shift to the establishment of strategic partnerships.

..SANSA GOAL 2 (CONTINUED)

Conduct cutting-edge research, development and innovation			Number of research visitors to the centre (for at least three days).	National	*8*	*5*	Lack of a coherent national space science programme.	The NSP will rectify this short-coming.
				Africa (excl. SA)	*6*	*6*	We have made huge efforts to increase the number of African partnerships, and have invited specifically African scientists to spend time at SANSA Space Science. We also hosted an international workshop where the focus was on Africa which contributed to this achievement.	We will continue with our efforts to collaborate with African partners and to invite them to spend time at SANSA Space Science working with national partners.
				International (excl. Africa)	*10*	*21*	We hosted an international workshop in October and invited 5 international scientists to spend time at SANSA after the workshop. In addition, we have introduced international collaboration into Space Weather through inviting international experts to spend time in the centre. This has all contributed to the increase in this target.	This target will always be variable as it depends on the activities during the year, and the requests for visits. We will adjust the target accordingly.

...SANSA GOAL 2 (CONTINUED)

Conduct cutting-edge research, development and innovation	Knowledge outputs.	Provide data for R&D purposes.	Number of visits by staff or students (of at least one week duration) to other institutions for research purposes.	National	*3*	*4*	We encouraged our researchers to visit national institutions and spend time developing national collaborations.	Achievement to be set as new baseline.
	Geo-space and space weather products and services.	Collaborative projects with R&D and tertiary institutions.		Africa (excl. SA)	*4*	*6*	We encouraged our researchers to visit African institutions and spend time developing African partnerships.	Achievement to be set as new baseline.
	Applied science and technology products and services.	Continual R&D of internal processes.		International (excl. Africa)	*10*	*10*	None.	None.
			Number of co-authored ISI journal publications (incl. student authors).		*24*	*29*	A lot of pressure was put on the research group to publish their work, and journals were chosen very carefully to ensure faster turn around times in publication. This resulted in us unexpectedly exceeding our target.	Target has been redefined going forward.
			Distribution of co-authors for the co-authored ISI journal publications (excl. student co-authors).	Internal	*24*	*16*	The internal research projects are not as linked as intended, further the target was set too high given the current low research staff numbers.	Internal collaboration to be fostered through the NSP which seeks to address overarching "big science" questions.

..SANSA GOAL 2 (CONTINUED)

Conduct cutting-edge research, development and innovation			Distribution of co-authors for the co-authored ISI journal publications (excl. student co-authors).	National (excl. Internal)	*3*	*16*	There was a larger number of national co-authors than expected due to prioritising collaboration.	Achievement to be set as new baseline.
				Africa (excl. SA)	*6*	*11*	There was a larger number of national co-authors than expected due to prioritising collaboration.	Achievement to be set as new baseline.
				International (excl. Africa)	*13*	*40*	There was a larger number of national co-authors than expected due to prioritising collaboration.	Achievement to be set as new baseline.
			Number of conferences attended (only count once if HMO is represented, i.e. multiple attendance of the same conference is not counted).		*15*	*16*	Attendance and representation at conferences in 2011/2012 was higher than expected.	A new baseline will be defined.
			Conference attendance to journal publication ratio.		*80%*	*94%*	Due to the fact that the publication rate and conference attendance rates were higher than expected, so was this target.	A new KPI has been defined as this is a non-SMART duplicate measure.
			Number of rated researchers.		*4*	*4*	None.	None.
			Proportion (%) of research/science CAPEX to total research/ science expenditure.		*10%*	*70%*	This was higher than expected due to two large capex intensive projects, the NEP programme for which a large NRF grant was received and the Digital Radar project for which funds were reassigned. A lot of the capex on both these projects were purchased last year.	Nothing, as this was a special capex intensive year.

..SANSA GOAL 2 (CONTINUED)

Conduct cutting-edge research, development and innovation			Proportion (%) of external research grant income to total income.		*11%*	*33%*	The researchers are encouraged to apply for NRF research grants to suppliment the income and do their research. In some years the success rate is higher than in others. 2011/2012 was a good year for success in obtaining research grants.	This target will always be variable as it depends on the grants applied for and the success rate. However, we will attempt to estimate this in a more realistic way going forward.
SANSA GOAL 3: Effective development of human capital, transformation and science advancement (Human Capital)								
Development of human capital in space science and science advancement	Skilled students	Provision of data for student training.	Number of students or trainees formally trained, supervised or co-supervised.	Interns	*4*	*8*	HCD is one of our priority areas and as such we exceeded expectations in our efforts to increase the number of young people afforded opportunities with SANSA. The budget and programmes available were increased and exceeded expectations. The increase was particularly noticed in the January 2012 intake.	Target has been redefined going forward.
	Skilled workers	Collaborative student training.		In-service	*2*	*4*	HCD is one of our priority areas and as such we exceeded expectations in our efforts to increase the number of young people afforded opportunities with SANSA. The budget and programmes available were increased and exceeded expectations. The increase was particularly noticed in the January 2012 intake.	Target has been redefined going forward.

...SANSA GOAL 3 (CONTINUED)

Development of human capital in space science and science advancement	Science advancement programmes.	Internship training.		Honours or below	*9*	*10*	HCD is one of our priority areas and as such we exceeded expectations in our efforts to increase the number of young people afforded opportunities with SANSA. The budget and programmes available were increased and exceeded expectations. The increase was particularly noticed in the January 2012 intake.	Target has been redefined going forward.
	Public engagement programme.	Science advance-ment.		MSc	*9*	*18*	HCD is one of our priority areas and as such we exceeded expectations in our efforts to increase the number of young people afforded opportunities with SANSA. The budget and programmes available were increased and exceeded expectations. The increase was particularly noticed in the January 2012 intake.	Target has been redefined going forward.

...SANSA GOAL 3 (CONTINUED)

Development of human capital in space science and science advancement				PhD	*10*	*12*	HCD is one of our priority areas and as such we exceeded expectations in our efforts to increase the number of young people afforded opportunities with SANSA. The budget and programmes available were increased and exceeded expectations. The increase was particularly noticed in the January 2012 intake.	Target has been redefined going forward.
			Proportion (%) of South African students from designated groups.	Black	*30%*	*63%*	Efforts have been undertaken successfully to encourage students from designated groups to join us.	Target has been redefined going forward.
				Women	*5%*	*13%*	Efforts have been undertaken successfully to encourage students from designated groups to join us.	Target has been redefined going forward.
				Disabled	*1%*	*0%*	Suitably qualified persons with disabilities could not be found. Focussed efforts to rectify this were made and still continue.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13.
			Number of short courses, incl. postgraduate schools, in-service training and formal training.		*10*	*22*	A number of short courses are planned each year but we have an agreement with our client that should more be required we will produce them.	Target will always be set at the minimum value that we have promised to produce for a year.
			Total number of short course attendees.	In-service	*60*	*88*	As above, since this is linked.	Target will always be set at the minimum value that we have promised to produce for a year.
				Formal training	*60*	*73*	As above, since this is linked.	Target will always be set at the minimum value that we have promised to produce for a year.

..SANSA GOAL 3 (CONTINUED)

Development of human capital in space science and science advancement			Proportion (%) of HCD expenditure to total expenditure.		*20%*	*8%*	HCD expenditure not achieved within the expected timeframes.	Expenditure on HCD will be a focus area in 2012/13.
			Proportion (%) of staff development and wellness expenditure to total expenditure.		*2%*	*0.01%*	Staff development and wellness expenditure not achieved within the expected timeframes.	Expenditure on staff development and wellness will be more defined in 2012/13 as specific programmes are addressed.
	Skilled students.	Provision of data for student training.	Proportion (%) of South African staff from designated groups.	Black	*60%*	*56%*	Suitably qualified Blacks could not be found and relocation to Hermanus of young professionals is a challenge.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13.
	Skilled workers.	Collaborative student training.		Women	*25%*	*30%*	During 2011/2012 we were successful in increasing the number of women that we have on the staff.	Target will be redefined going forward.
	Science advancement programmes.	Internship training.		Disabled	*1%*	*2%*	Efforts have been made towards attracting persons with disabilities to our staff.	We will continue to make efforts to attract suitable people with disabilities to our staff.
	Public engagement programmes.	Science advancement.	Proportion (%) of South African staff from designated groups in the top three levels.	Black	*8%*	*14%*	When we are able to address the representation in these levels we do so.	We will continue our efforts in this regard.

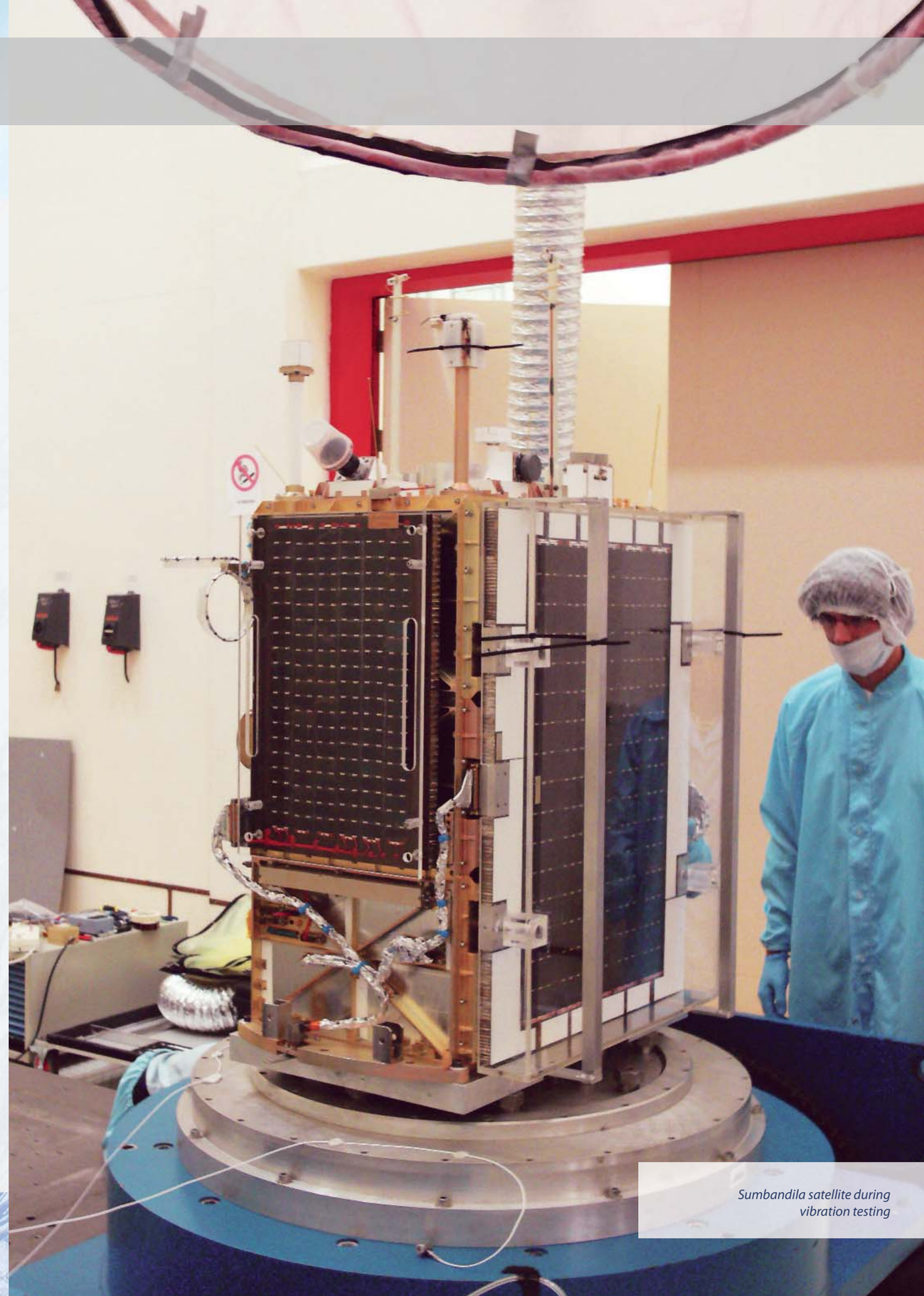
..SANSA GOAL 3 (CONTINUED)

Development of human capital in space science and science advancement			Proportion (%) of South African staff from designated groups in the top three levels.	Women	*10%*	*18%*	When we are able to address the representation in these levels we do so.	We will continue our efforts in this regard.
				Disabled	*1%*	*0%*	Suitably qualified persons with disabilities could not be found. Focussed efforts to rectify this were made and still continue.	All efforts will be put in place to actively recruit and attract designated groups in 2012/13.
			Number of learner visitors.		*5 000*	*8 436*	New intiatives like bringing Science Advancement into the Space Weather Centre and the mobile unit has meant that more learners can be exposed to SANSA.	Target will be redefined going forward as the minimum we expect given the issues around contact time.
			Number of educator visitors.		*200*	*324*	2011/2012 was a good year for exposing educators to SANSA as we embarked on a collaboration with the WCED to host educator workshops during that year.	Target will be redefined going forward as the minimum we expect given the issues around contact time.
			Number of science advancement exhibits/ festivals participated in.		*10*	*10*	None.	None.
			Number of science advancement programmes (e.g. learner supplementary programmes).		*8*	*7*	More effort was put on the 7 programmes undertaken given that some of them such as the Mobile Lab initiative were new.	Under-achievement to be recovered in 2012/13.

..SANSA GOAL 3 (CONTINUED)

Development of human capital in space science and science advancement			Number of educator workshops.		*5*	*5*	None.	None.
			Number of public engagement activities.		*10*	*15*	Efforts were made to increase the exposure of the public to SANSA during 2011/2012. New intiatives were attempted and engagement with the public was prioritised.	Target will be redefined going forward.
			Proportion (%) of science advancement expenditure to total expenditure.		*5%*	*5%*	None.	None.
			Proportion (%) of research grant income to total income.		*15%*	*33%*	The researchers are encouraged to apply for NRF research grants to suppliment the income and do their research. In some years the success rate is higher than in others. 2011/2012 was a good year for success in obtaining research grants.	This target will always be variable as it depends on the grants applied for and the success rate. However, we will attempt to estimate this in a more realistic way going forward.
SANSA GOAL 4: Globally competitive national space industry (Economic Capital)								
Active contribution to South African aerospace industry.	Value-added services and products for navigation, communication, mineral exploration, satellite systems, power distribution.	Provision of geo-space and space weather services and products for industry (navigation, communication, mineral exploration, power distribution).	Proportion (%) of industry income to total income.		20%	10%	There was a significant reduction of a naval contract income due to the re-direction of resources within the navy.	Still in negotiations for additional contracts. This income ratio will be at a higher level in the new financial year.

..SANSA GOAL 4 (CONTINUED)								
Active contribution to South African aerospace industry.		Development of satellite sub-systems, e.g. satellite orientation magnetometers.	Number of collaborative projects with industry.		*7*	*7*	None.	None.
SANSA GOAL 5: Make South Africa a recognised global space citizen (Global Capital)								
Establish and maintain effective and mutually beneficial international partnerships, in line with national strategic alignment	Membership of international organisations of strategic importance.	Develop and maintain active international partnerships.	Number of international partnerships.		*8*	*5*	The prioritisation of the operational stabilisation of SANSA constrained the ability to pursue partnerships as originally intended.	A focussed effort to address this to be undertaken in 2012/13.
	Beneficial multi-national agreements, partnerships and projects.		Number of international (multi-national/multi-institutional) bodies of which SANSA Space Science is a member.		*8*	*8*	None.	None.



Sumbandila satellite during vibration testing

STATEMENT OF **RESPONSIBILITY** |

Statement of Reponsibility of the Accounting Authority

The South African National Space Agency (SANSA) was established in terms of the SANSA Act 36 of 2008 and is subject to the provisions of the Public Finance Management Act (PFMA) of 1999. The SANSA Board is responsible for the integrity and presentation of the annual financial statements in compliance with generally recognised accounting practices, the maintenance of accounting records, internal control and risk management, and the consistent use of appropriate accounting policies supported by reasonable judgements and estimates.

The SANSA Board is committed to ensuring good governace and compliance with all relevant legislation and regulations applicable to the South African National Space Agency.

This is SANSA's first full year of operation. The CSIR Satellite Application Centre and the Hermanus Magnetic Observatory of the NRF were integrated into SANSA as going concerns from 1 April 2011. The Board continued to focus on stabilising the operations and refinement of governance structures, policies and internal control systems. During this transitional phase, there were instances where SANSA was not able to comply fully with all PFMA and related National Treasury requirements. These areas were monitored through the risk management processes and corrective action was taken. The Board acknowledges that it is ultimately responsible for the system of internal control established by the entity. It places considerable importance on maintaining a strong control environment.

The annual financial statements have been prepared in accordance with the Standards of Generally Recognised Accounting Practices (GRAP). They incorporate disclosures in line with appropriate accounting policies that have been consistently applied and are supported by reasonable and prudent judgements and estimates.

The SANSA Board has reviewed the Agency's budget and annual performance plan for the year to 31 March 2013. On the basis of this review, and in light of its current financial position, the Board has every reason to believe that SANSA will be a going concern in the year ahead.

It has continued to adopt the going-concern basis in preparing the financial statements.

In auditing the annual financial statements, the auditors were given unrestricted access to all financial records and related data and information. The Board further believes that all the representations made to independent auditors during their audit were valid and appropriate.

The annual financial statements set out on pages 126 to 168 were approved by the Board on 26 July 2012 and are signed on its behalf by:

Mr Maurice Magugumela
Chairperson of the SANSA Board

Dr Sandile Malinga
SANSA Chief Executive Officer

FINANCE, AUDIT & RISK **COMMITTEE REPORT** |

The SANSA Finance, Audit and Risk Committee is pleased to present the report for its first year of operation, ending 31 March 2012.

Finance, Audit and Risk Committee members and attendance

The Finance, Audit and Risk Committee, which consists of the members listed in the table below, was constituted in June 2010. It met five times during the year under review to undertake its responsibilities as mandated in the Public Finance Management Act (PFMA), and as required by the King Code on Corporate Governance.

Name	12/04/11	04/07/11	06/09/11	20/09/11	22/02/12
Ms Joy-Marie Lawrence – Chairperson	✓	◉	✓	✓	✓
Mr Mthobisi Zondi	✓	✓	◉	◉	◉
Mr Vincent Gore	✓	✓	✓	✓	✓
Adv. Tsheko Ratsheko	✓	✓	✓	◉	✓
Dr Sandile Malinga	◉	✓	✓	◉	✓

✓ *Attendance* ◉ *Apology*

Responsibilities of the Finance, Audit and Risk Committee

The Committee's responsibilities arise from section 51(1)(a)(ii) of the Public Finance Management Act and Treasury Regulations 27.1. The Committee adopted a charter, approved by the Board, which encapsulated its legislative and corporate governance responsibilities. Due to the fact that the Agency was in its foundation phase during the year under review, the Committee met five times during the year to discharge its duties as required by its Charter.

Effectiveness of Internal Control

The Agency became operational on 1 April 2011 and continued the process, initiated in the prior year, of establishing policies, procedures, systems and controls. Due to the focus of the financial year on setting the Agency foundations, much of the year was spent on setting up structures and procedures to adhere to the SANSA policies and internal control systems established during the prior year. As a result, not all necessary controls were in place for the duration of the financial year in the areas of supply chain management and performance information. Further to this, the timing of internal audit reviews resulted in deficiencies being identified and corrective action being implemented in the second half of the financial year. The Committee focused its attention on these areas during the year since these issues were highlighted by the internal audit reviews. It continues to monitor corrective action and the improvement of control systems in these areas.

Notwithstanding the control deficiencies highlighted, the Committee is satisfied that the control systems around financial reporting are becoming effective and no serious breaches of control have resulted during this foundational phase.

Risk management

Following the appointment of a risk manager in June 2011, the Committee is satisfied that SANSA has established a risk management process. This focused on identifying, assessing, managing and monitoring risks during the year under review and was successfully operational by the end of the financial year.

Internal audit

The Committee is satisfied that the internal audit function was effective in its operation during the year under review. Due to the limitations presented by the Agency being in its foundational phase, internal audit reviews were timed for the second half of the financial year.

In line with the PFMA, 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.

Evaluation of annual 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 entities' 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. It holds the opinion that the audited annual financial statements should be accepted and read together with the report of the external auditors.

External Auditors

We have met with the external auditors, and are satisfied that there are no unresolved issues arising from the external audit.

Ms. Joy-Marie Lawrence
Chairperson

To Parliament and the Board of the South African National Space Agency (SANSA)

Report on the Annual Financial Statements

We have audited the annual financial statements of the South African National Space Agency (hereafter referred to as SANSA), as set out on pages 126 to 168. These comprise the statement of financial position as at 31 March 2012, the statement of financial performance, the statement of changes in net assets, the cash flow statement for the year then ended, and the notes comprising a summary of significant accounting policies and other explanatory information.

Board members' responsibility for the financial statements
The board members, who constitute the accounting authority, are responsible for the preparation and fair presentation of the annual financial statements in accordance with the South African Standards of Generally Recognised Accounting Practice (SA Standards of GRAP) and the requirements of the Public Finance Management Act of South Africa (PFMA). In addition, they are responsible for such internal control as they determine necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility
Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the Public Audit Act of South Africa, the General Notice issued in terms thereof, and the International Standards on Auditing. These standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about the absence of material misstatement in the financial statements.

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 in the financial statements, whether due to fraud or error. In making these risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements. This takes place 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 the accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluates the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion these financial statements fairly present, in all material respects, the financial position of the SANSA as at 31 March 2012, and its financial performance and cash flows for the year then ended in accordance with the South African Standards of Generally Recognised Accounting Practice and the requirements of the Public Finance Management Act of South Africa.

Report on Other Legal and Regulatory Requirements

Public Audit Act (PAA) requirements
In accordance with the Public Audit Act of South Africa and the General Notice issued in terms thereof, we report the following findings relevant to performance against predetermined objectives, compliance with laws and regulations and internal control, but not for the purpose of expressing an opinion.

Predetermined objectives
We performed procedures to obtain evidence about the usefulness and reliability of the information in the annual performance report, as set out on pages 89 to 118 of the annual report, and reported thereon to the Board of SANSA.

The reported performance against predetermined objectives was evaluated against the overall criteria of usefulness and reliability. The usefulness of information in the annual performance report relates to whether it is presented in accordance with the National Treasury's annual reporting principles and whether the reported performance is consistent with the planned objectives. The usefulness of information further relates to whether indicators and targets are measurable (i.e. well defined, verifiable, specific, measurable and time-bound) and relevant, as required by the National Treasury Framework for managing programme performance information (FMPPI).

The reliability of the information in respect of the selected objectives is assessed to determine whether it adequately reflects the facts (i.e. whether it is valid, accurate and complete).

The material findings from our report to the Board of SANSA are as follows:

Usefulness of information
Measurability
The FMPPI requires that indicators should have clear, unambiguous data definitions so that data is collected consistently and is easy to understand and use. A total of 14% of the indicators relevant to Societal Capital, Human Capital and Global Capital were not well defined. In other words, clear and unambiguous data definitions were not available to allow for data to be collected consistently. In addition, the FMPPI requires that performance targets be measurable. The required performance could not be measured for a total of 61% of the targets relevant to Societal Capital, Human Capital and Global Capital.

Reliability of information
The FMPPI requires that it must be possible to validate the processes and systems that produce the actual performance results associated with an indicator. A total of 49% of the indicators relevant to Societal Capital, Human Capital and Global Capital were not verifiable in that valid processes and systems that produce the information on actual performance did not exist. Consequently, we were not able to perform procedures to determine whether the reported performance adequately reflects the facts (i.e. whether it is valid, accurate and complete). This was due to the lack of key controls in the relevant systems of collection, collation, verification and storage of actual performance information.

In addition to the above material findings, we draw attention to the following matter in our report to the Board of SANSA:

Achievement of planned targets
Of the total 158 planned targets, only 117 were achieved during the year under review. This represents 26% of the total planned targets which were not achieved during the year under review.

Compliance with laws and regulations
We performed procedures to obtain evidence that the entity has complied with applicable laws and regulations regarding financial matters, financial management and other related matters. Our findings on material non-compliance with specific matters in key applicable laws and regulations, as set out in the General Notice issued in terms of the PAA, are as follows:

Strategic planning and performance management
- Formal policies and procedures – prepared in terms of Section 51(1)(a)(i) of the PFMA and describing how the entity's processes of performance planning, monitoring, measurement, review and reporting should be conducted, organised and managed – have not been prepared, rolled out and embedded throughout the entity.
- Contrary to the requirements of the National Treasury Framework for Strategic Plans and Annual Performance plans, the performance indicators of the entity have not been aligned to the prepared budget.

Procurement and contract management
- As required by Section 51(1)(a)(iii) of the PFMA and TR 16A6.3, a policy on Supply Chain Management was developed and approved by the Board. The following material non-compliance with the policy was identified:
- Three quotations were not always obtained as required. This was the result of the SANSA utilising the database of approved suppliers from the migrated entities during the first six months of operations, following the migration and transfer of functions while SANSA's supplier database was being established. Irregular expenditure of R871 071 was incurred as a result of this contravention.
- Management did not, in all instances, apply the requirements of the Preferential Procurement Policy Framework Act of South Africa, obtain tax clearance certificates and standard bidder information – facilitated through the use of standard bidding documents (SBDs), as stipulated in the National Treasury Practice Notes for procurements above R30 000. This resulted in irregular expenditure of R13 917 943.

Note 29.2 in the financial statements indicates all instances of irregular expenditure incurred by the SANSA as a result of non-compliance with the Supply Chain Management policies.

Internal control
We considered internal control relevant to our audit of the financial statements, as well as the reports on predetermined objectives and compliance with laws and regulations. This was not for the purpose of expressing an opinion on the effectiveness of internal control. The matters reported below are limited to the significant deficiencies relating to leadership and financial and performance management and governance, which resulted in the findings on the report on predetermined objectives and compliance with laws and regulations, as included in this report.

- Adequate risk management following the transfer of functions was not exercised in that the entity did not identify, assess and adapt the systems of internal control with regard to procurement and contract management.
- Management, with the oversight of the Board, did not establish adequate reporting lines and appropriate authorities and responsibilities with regard to reporting on predetermined objectives. Policies and procedures to enable and support the understanding and execution of internal control objectives, processes and responsibilities were not always established and communicated or reviewed and revised.

Other reports

Agreed-upon procedures engagements
As requested by the entity, we were engaged to issue an agreed-upon procedures report concerning the application of grant funding received from the National Research Foundation (NRF grants) and The Human Resources for Industry Programme (THRIP grants) for the period 1 April 2011 to 31 March 2012. This engagement remains ongoing and the report has not been finalised and issued.

Other matters

The matters contained in the Report on Other Legal and Regulatory Requirements are not considered to affect the opinion contained in our Report on the Annual Financial Statements.

KPMG Inc.
Per WS Pretorius
Chartered Accountant (SA)
Registered Auditor
Director
31 July 2012

Statement of financial position at 31 March 2012

	Note	2012	2011
		R	R
Assets			
Current Assets		**93,439,997**	**21,193,701**
Inventory	4	313,960	-
Receivables from Exchange Transactions	5.1	18,535,947	15,359
Receivables from Non-Exchange Transactions	5.2	1,298,376	878,064
Cash and Cash Equivalents	6	73,291,714	20,300,278
Non-Current Assets		**83,226,330**	**3,819,511**
Property, Plant and Equipment	7	80,526,059	535,914
Intangible Assets	8	2,700,271	3,283,597
Total Assets		**176,666,327**	**25,013,212**
Liabilities			
Current Liabilities		**49,300,587**	**20,298,115**
Provisions	9	5,375,000	-
Trade and Other Payables	10	27,261,795	1,881,947
Unspent Conditional Grants and Receipts	11	16,540,416	18,416,168
Current Portion of Long-term Liabilities	12	123,376	-
Non-Current Liabilities		**168,129**	**-**
Long-term Liabilities	12	168,129	-
Total Liabilities		**49,468,716**	**20,298,115**
Total Assets and Liabilities		**127,197,611**	**4,715,097**
Net Assets		**127,197,611**	**4,715,097**
Accumulated Surplus	13	127,197,611	4,715,097
Total Net Assets		**127,197,611**	**4,715,097**

Statement of financial performance at 31 March 2012

	Note	2012	2011
		R	R
Revenue			
Revenue from Non-exchange Transactions			
Transfers and Subsidies Received	15	128,659,905	9,528,407
Revenue from Exchange Transactions			
Interest Earned	14	3,903,586	48,322
Rendering of Services	26	56,704,810	-
Other Income	16	217,476	-
Gains on Foreign exchange transactions	25	528,573	-
Gains on Disposal of Property, Plant and Equipment		4,134	-
Total Revenue		**190,018,484**	**9,576,729**
Expenditure			
Employee Related Costs	17	55,353,111	1,470,945
Board Member Remuneration	18	690,620	1,068,121
Depreciation and Amortisation	19	14,073,942	17,645
Impairment Losses	20	546,900	-
Repairs and Maintenance		5,378,119	692
Finance Costs	21	125,193	-
Data Licence fees	27	18,336,144	-
Grants and Subsidies Paid	22	2,820,608	-
Research and Development Costs	23	16,657,195	-
General Expenses	24	41,102,911	2,304,229
Loss on Disposal of Property, Plant and Equipment		250,268	-
Total Expenditure		**155,335,011**	**4,861,632**
Surplus for the year		**34,683,473**	**4,715,097**

Statement of Changes in Net Assets for the year ended 31 March 2012

DESCRIPTION	Accumulated Surplus Account	Total for Accumulated Surplus Account	Total
	R	R	R
2011			
Balance at 1 April 2010	-	-	-
Surplus for the year	4,715,097	4,715,097	4,715,097
Balance at 31 March 2011	**4,715,097**	**4,715,097**	**4,715,097**
		-	
2012			
Balance at 1 April 2011	**4,715,097**	**4,715,097**	**4,715,097**
Surplus for the year	34,683,473	34,683,473	34,683,473
Space Operations (CSIR) carry on equity due to migration to SANSA (refer to note 41)	25,287,706	25,287,706	25,287,706
Space Science (NRF) carry on equity due to migration to SANSA (refer to note 41)	21,115,841	21,115,841	21,115,841
Asset additions at deemed cost (refer to note 7.1)	41,395,494	41,395,494	41,395,494
Balance at 31 March 2012	**127,197,611**	**127,197,611**	**127,197,611**

Cash Flow Statement for the year ended 31 March 2012

	Note	2012	2011
		R	R
Cash flows from operating activities			
Cash receipts from grants and from charges for services provided by the entity		188,816,961	27,943,678
Cash paid to Suppliers and Employees		(153,613,984)	(3,854,566)
Cash generated from / (utilised in) operations	**28**	**35,202,977**	**24,089,112**
Interest Received		3,859,591	48,322
Interest Paid	21	(125,193)	-
Net cash flows from / (used in) operating activities		**38,937,375**	**24,137,434**
Cash flows from investing activities			
Purchase of Property, Plant and Equipment	7	(11,233,838)	(551,127)
Purchase of Intangible Assets	8	(3,206)	(3,286,029)
Proceeds on Disposal of Property, Plant and Equipment		70,000	-
Net Cash received as result of transfer of functions		25,240,224	-
Net cash flows from / (used in) investing activities		**14,073,180**	**(3,837,156)**
Cash flows from financing activities			
Movement in Finance Lease Liability	12	(19,119)	-
Net cash flows from / (used in) financing activities		**(19,119)**	**-**
Net increase / (decrease) in cash and cash equivalents		**52,991,436**	**20,300,278**
Cash and Cash Equivalents at the beginning of the year	6	20,300,278	-
Cash and Cash Equivalents at the end of the year	6	73,291,714	20,300,278

Accounting Policies for the year ended 31 March 2012

1. Basis of presentation

The annual financial statements have been prepared using the accrual basis of accounting, in terms of which items are recognized 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.

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 ongoing 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 the 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 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 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.

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.

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 Exhange 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 defict.

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

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

The following GRAP standards have been issued but are not yet effective and have not been early adopted by the entity:

- GRAP 18 Segment Reporting - issued March 2005
- GRAP 21 Impairment of Non-cash-generating Assets - issued March 2009
- GRAP 23 Revenue from Non-Exchange Transactions (Taxes and Transfers) - issued February 2008
- GRAP 24 Presentation of Budget Information in Financial Statements - issued November 2007
- GRAP 25 Employee Benefits - issued December 2009
- GRAP 26 Impairment of Cash-generating Assets - issued March 2009
- GRAP 105 Transfer of Functions Between Entities Under Common Control
- GRAP 104 Financial Instruments - issued October 2009

The Minister of Finance announced that the application of GRAP 21, GRAP 23, GRAP 24, GRAP 26, GRAP 104 will be effective for periods starting after 1 April 2012. All other standards as listed above will only be effective when a date is announced by the Minister of Finance.

Management has considered all of the above-mentioned GRAP standards issued but not yet effective and anticipates that the adoption of these standards will not have a significant impact on the financial position, financial performance or cash flows of the entity. These GRAP standards will be adopted by the entity as soon as they become effective.

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 admnitrative 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 aquired at no cost, (ie. non-exchange transaction), it's cost will be it's fair value as at the date of aquisition.

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 a allowance is met.

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

1.5.2. Depreciation

Depreciation is recognized in surplus or deficit on a straight line basis over the estimated useful lifes 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.

b. Freehold buildings
SANSA identified the following major components of buildings.

- Buildings
- Alterations and other fixtures

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

- Buildings 40-50 years
- Alterations and other fixtures 14-15 years

c. 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

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

1.5.3. Impairment of assets non-financial assets

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

A 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.

A 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 recognized 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. Amortization 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 amortization 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:

- IT Software Average of 3-5 years

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.

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.
The financial assets of the entity are classified as follows into the two categories allowed by this standard:

Loans and Receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than 12 months, which are classified as non-current assets. Loans and receivables are initially recognised at fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset. After initial recognition Financial Assets are measured at amortised cost, using the effective interest rate method less a allowance for impairment.

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	Loans and Receivables
Trade Receivables	Loans and Receivables

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, that 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.

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	Other financial liabilities at amortizied cost
Finance Leases	Other financial liabilities at amortizied cost

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

1. Fair value through surplus or deficit; or
2. Other financial liabilities (Financial liabilities measured at amortised cost)
3. Financial guarantee contract

Financial liabilities that are measured at fair value through surplus or deficit are financial liabilities that are essentially held for trading (i.e. purchased with the intention to sell or repurchase in the short term; derivatives other than hedging instruments or are part of a portfolio of financial instruments where there is recent actual evidence of short-term profiteering or are derivatives).

Any other financial liabilities are classified as "Other financial liabilities".

1.7.4. Initial and subsequent measurement

Financial Assets:
Loans and Receivables are initially measured at fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset. Subsequently, these assets are measured at amortised cost using the Effective Interest Method less any impairment, with interest recognised on an effective yield basis.

Financial liabilities:
Financial liabilities that are measured are stated at amortized cost, with any resulted surplus or deficit recognised in surplus or deficit.

1.7.5. Impairment of financial assets

Financial assets, other than those at fair value through surplus or deficit, 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
Loans and receivables encompass accounts receivables. 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.

A 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.

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 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.

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

Conditional Grants and receipt
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
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. Public entities in the same sphere of government 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. 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.

1.17. Irregular expenditure

Irregular expenditure is expenditure that is contrary to the Public Finance Management Act (Act No 56 of 2003) or is in contravention of the entity's supply chain management policies. Irregular expenditure excludes unauthorised expenditure.

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.

1.19.1.1. 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.

Future events that may affect the amount required to settle an obligation are reflected in the amount of a provision where there is sufficient objective evidence that they will occur. Gains from the expected disposal of assets are not taken into account in measuring a provision. provisions are not recognised for future operating losses. The present obligation under an onerous contract is recognised and measured as a provision. An onerous contract is a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it - this unavoidable cost resulting from the contract is the amount of the provision to be recognised.

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 the prevailing market rate. The impact of the periodic unwinding of the discount is recognised in surplus or deficit as a finance cost as it occurs.

1.20. 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 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.

1.21. 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.

Notes to the financial statements for the year ended 31 March 2012

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
Registered office	Building 23, CSIR Meiring Naudé Road, Brummeria, Pretoria Gauteng, South Africa
Business address	Building 23, CSIR Meiring Naudé Road, Brummeria, Pretoria Gauteng, South Africa
Postal address	PO Box 484, Silverton 0127, Gauteng, South Africa
Auditor	KPMG inc.

3 RECONCILIATION OF BUDGET EXPENSES WITH THE EXPENSES IN THE STATEMENT OF FINANCIAL PERFORMANCE

	2012 R'000
Expenses as per the statement of financial performance	155,335
Adjusted for:	
Interest on Finance Leases	-125
Capital Expenditure	17,745
Impairments recognised / reversed	-547
Depreciation and Amortisation	-14,074
Over Expenditure	3,375
Expenses as per Approved Budget	**161,709**

4 INVENTORY

	2012 R	2011 R
Fuel - at cost	313,960	-
Total Inventory	**313,960**	**-**

5.1 RECEIVABLES FROM EXCHANGE TRANSACTIONS

Trade Receivables from exchange transactions	18,535,947	15,359
	18,535,947	**15,359**

5.1.1 Trade Receivables from exchange transactions

	Gross Balances	Allowance for Impairment	Net Balances
As at 31 March 2012	R	R	R
Trade Customers	19,082,847	(546,900)	**18,535,947**
Total	**19,082,847**	**(546,900)**	**18,535,947**
As at 31 March 2011			
Trade Customers	**15,359**	-	**15,359**
Total	**15,359**	**-**	**15,359**

Notes to the financial statements for the year ended 31 March 2012

5.1.1 Trade Receivables from exchange transactions (continued)

The entity is of the opinion that the carrying value of Trade Receivables approximate their fair values.

The fair value of Trade Receivables was determined after considering the standard terms and conditions of agreements entered into between SANSA and Trade Receivables as well as the current payment ratio's of the entity's Trade Receivables.

	2012	2011
	R	R
5.1.2 Ageing of Trade Receivables from exchange transactions		
Current:		
0-30 days	16,981,366	15,359
Past Due:		
31-60 days	161,217	-
61-90 days	48,542	-
91-120 days	1,785	-
+120 days	1,889,937	-
Total	**19,082,847**	**15,359**
5.1.3 Reconciliation of the allowance for Impairment		
Balance at beginning of year	-	-
Impairment Losses recognised	(546,900)	-
Balance at end of year	**(546,900)**	**-**

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 fully performing. The carrying amounts of fully performing financial assets included in trade and receivables at year-end are:

	16,981,366	**15,359**

5.1.3 Reconciliation of the allowance for Impairment (continued)

	2012	2011
	R	R

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:

	1,554,581	**-**
Local Debtors	8,407,950	15,359
International Debtors	10,674,897	-
Total Trade Debtors	**19,082,847**	**15,359**

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 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.

Fair value of Trade Receivables from exchange transactions

The carrying amount of trade and other receivables (upon initial recognition) are stated at amortised cost, comprising original debt according to the invoice amounts less principle payments and amortisations.

Management considers the carrying amounts of financial assets and financial liabilities recorded at amortised cost in the financial statements to approximate their fair values on 31 March 2012, 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**
Trade Receivables from exchange transactions	
Trade Receivables	At amortised cost

Notes to the financial statements for the year ended 31 March 2012

5.2 RECEIVABLES FROM NON-EXCHANGE TRANSACTIONS

	2012	2011
	R	R
Receivables from non-exchange transactions	1,298,376	878,064
	1,298,376	**878,064**

5.2.1 Receivables from non-exchange transactions

	Gross Balances	Allowance for Impairment	Net Balances
As at 31 March 2012	R	R	R
Prepaid Expenses	901,294	-	901,294
Sundry Deposits	105,544	-	105,544
Other Debtors	291,538	-	291,538
Total	**1,298,376**	**-**	**1,298,376**
As at 31 March 2011			
Prepaid Expenses	871,353	-	871,353
Sundry Deposits	6,711	-	6,711
Other Debtors	-	-	-
Total	**878,064**	**-**	**878,064**

5.2.2 Ageing of Receivables from non-exchange transactions

	R	R
Current:		
0 - 30 days	1,192,832	871,353
Past Due:		
31 - 60 Days	-	-
61 - 90 Days	-	-
91 - 120 Days	-	-
+ 120 Days	105,544	6,711
Total	**1,298,376**	**878,064**

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.

Fair value of Receivables from non-exchange transactions

The fair value of the trade and other receivables (upon initial recognition) are stated at amortised cost, comprising original debt according to the invoice amounts less principle payments and amortisations.

Management considers the carrying amounts of financial assets and financial liabilities recorded at amortised cost in the financial statements to approximate their fair values on 31 March 2012, as a result of the short-term maturity of these assets and liabilities.

Classification of financial assets

The Financial Assets of the entity is classified as follows:

Financial Assets	**Classification**
Receivables from non-exchange transactions	
Sundry Deposits	At amortised cost
Other Debtors	At amortised cost

6 CASH AND CASH EQUIVALENTS

	2012	2011
	R	R
Cash and Cash Equivalents	73,291,714	20,300,278
Total Cash and Cash Equivalents	**73,291,714**	**20,300,278**

6.1 Current Investment Deposits

Call Deposits	62,521	-
Total Current Investment Deposits	**62,521**	**-**

Call Deposits are investments with a maturity period of less than 3 months.

6.2 Bank Accounts

Cash in Bank	73,222,384	20,299,601
Total Bank Accounts	**73,222,384**	**20,299,601**

6.3 Cash on hand

Cash on hand	6,809	677
Total Cash on hand	**6,809**	**677**

The management of the entity is of the opinion that the carrying value of bank balances, cash and cash equivalents recorded at amortised cost in the Annual Financial Statements approximate their fair values.

7 PROPERTY, PLANT AND EQUIPMENT

DESCRIPTION	LAND	BUILDINGS	PLANT	RESEARCH EQUIPMENT	VEHICLES	OFFICE EQUIPMENT	FURNITURE AND FITTINGS	COMPUTER EQUIPMENT	TOTAL
	R	R	R	R	R	R	R	R	R
Reconciliation of carrying value 31 March 2012									
Carrying values at 1 April 2011	-	-	-	-	-	**73,270**	**46,181**	**416,463**	**535,914**
Cost	-	-	-	-	-	75,698	46,381	429,048	551,127
Accumulated Depreciation	-	-	-	-	-	(2,428)	(200)	(12,585)	(15,213)
Acquisitions at cost		1,046,244	85,629	2,797,476	1,706,449	637,607	695,425	2,030,274	8,999,104
Acquisitions at deemed cost	-	-	21,911,052	1,187,360	393,793	5,991,602	1,837,444	10,074,243	41,395,494
Capital under Construction - Additions	-	-	2,234,734	-	-	-	-	-	2,234,734
Depreciation	-	(347,238)	(4,729,228)	(1,248,246)	(268,229)	(2,040,707)	(302,196)	(4,459,789)	(13,395,633)
Carrying value of Disposals:	-	-	-	(5)	(183,551)	(8,478)	(12,184)	(111,916)	(316,134)
Cost	-	-	-	(6)	(197,699)	(10,835)	(13,501)	(141,802)	(363,843)
Accumulated Depreciation	-	-	-	1	14,148	2,357	1,317	29,886	47,709
Other Movements:									
Transfer of functions	4,307,700	8,871,189	17,635,212	5,999,432	1,017,282	1,109,083	234,312	1,969,938	41,144,148
Transfers	-	128,948	-	(71,567)	-	72,085	-	(201,033)	(71,567)
Carrying values at 31 March 2012	**4,307,700**	**9,699,143**	**37,137,398**	**8,664,450**	**2,665,744**	**5,834,462**	**2,498,982**	**9,718,180**	**80,526,059**
Cost	4,307,700	10,046,381	41,866,626	9,912,695	2,919,825	7,875,240	2,800,061	14,160,668	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)
Reconciliation of carrying value 31 March 2011									
Carrying values at 1 April 2010	-	-	-	-	-	-	-	-	-
Cost	-	-	-	-	-	-	-	-	-
Completed Assets	-	-	-	-	-	-	-	-	-
Accumulated Depreciation	-	-	-	-	-	-	-	-	-
Acquisitions at cost	-	-	-	-	-	75,698	46,381	429,048	551,127
Depreciation:	-	-	-	-	-	(2,428)	(200)	(12,585)	(15,213)
Based on Cost	-	-	-	-	-	(2,428)	(200)	(12,585)	(15,213)
Carrying values at 31 March 2011	-	-	-	-	-	**73,270**	**46,181**	**416,463**	**535,914**
Cost	-	-	-	-	-	75,698	46,381	429,048	551,127
Completed Assets	-	-	-	-	-	75,698	46,381	429,048	551,127
Accumulated Depreciation	-	-	-	-	-	(2,428)	(200)	(12,585)	(15,213)

Notes to the financial statements for the year ended 31 March 2012

7 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)	2012	2011
	R	R
7.1 Property, Plant and Equipment at deemed cost		
Property, Plant and Equipment recognised at deemed cost		
Plant	21,911,052	-
Research Equipment	1,187,360	-
Vehicles	393,793	-
Office Equipment	5,991,602	-
Furniture and Fittings	1,837,444	-
Computer Equipment	10,074,243	-
Net assets	**41,395,494**	**-**

SANSA was established in terms of the SANSA Act 2008. In terms of this act, the Satellite Applications Centre (SAC) and Hermanus Magnetic Observatory (HMO) transferred to SANSA from CSIR and NRF respectively on 1 April 2011. Since all these entities are under common control of the Department of Science and Technology all assets and liabilities were transferred to SANSA at carrying value. The transfer of functions did not include the transfer of all asset values due to these entities having previously expensed these items and as a result of differences in accounting policies. SANSA has performed a process of allocating a deemed cost value to these items. The value was determined using a depreciated replacement cost for all items of property, plant and equipment that were identified.

7.2 Fully depreciated items still in use		
Number of fully depreciated assets that is still in use	458	-
Gross carrying amount of fully depreciated assets still in use	179	-
7.3 Change in estimates		
Decrease in depreciation due to change in useful life and residual values	543,747	-

7.4 Assets given as security

No assets were given as security

Notes to the financial statements for the year ended 31 March 2012

8 INTANGIBLE ASSETS

	2012	2011
	R	R
At Cost less Accumulated Amortisation and Accumulated Impairment Losses	**2,700,271**	**3,283,597**

The movement in Intangible Assets is reconciled as follows:

	Computer Software	TOTAL
Carrying values at 1 April 2011	**3,283,597**	**3,283,597**
Cost	3,286,029	3,286,029
Accumulated Amortisation	(2,432)	(2,432)
Acquisitions during the year:	**23,416**	**23,416**
Purchased	3,206	3,206
Transfer of functions	20,210	20,210
Amortisation during the year:	(678,309)	(678,309)
Transfers during the year:	71,567	71,567
Carrying values at 31 March 2012	**2,700,271**	**2,700,271**
Cost	3,381,012	3,381,012
Accumulated Amortisation	(680,741)	(680,741)
Carrying values at April 2010	**-**	**-**
Cost	-	-
Accumulated Amortisation	-	-
Acquisitions during the year:	3,286,029	3,286,029
Amortisation during the year:	(2,432)	(2,432)
Purchased	(2,432)	(2,432)
Carrying values at 31 March 2011	**3,283,597**	**3,283,597**
Cost	3,286,029	3,286,029
Accumulated Amortisation	(2,432)	(2,432)

The amortisation expense has been included in the line item "Depreciation and Amortisation" in the Statement of Financial Performance.

9 PROVISIONS

	2012	2011
	R	R
Bonus Provision	5,375,000	-
Total Provisions	**5,375,000**	**-**

Performance bonuses accrue to all employees on an annual basis, subject to key performance indicators based on the employees performance. The provision is an estimate of the amount due at the reporting date.

The movement in current provisions is reconciled as follows:

Provisions:	Performance Bonuses
	R
31 March 2012	
Balance at beginning of year	-
Contributions to Provision	5,375,000
Expenditure Incurred	-
Balance at end of year	**5,375,000**
31 March 2011	
Balance at beginning of year	-
Contributions to Provision	-
Expenditure Incurred	-
Balance at end of year	**-**

10 TRADE AND OTHER PAYABLES

	2012	2011
	R	R
Trade Creditors	11,570,877	-
Retentions	117,519	-
Other Creditors	176,124	436,524
Income received in advance	10,036,306	-
Accrued Expenses	1,608,502	1,445,423
Accrued Leave	3,752,467	-
Total Creditors	**27,261,795**	**1,881,947**

Notes to the financial statements for the year ended 31 March 2012

10 TRADE AND OTHER PAYABLES (CONTINUED)

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.

The management of the entity is of the opinion that the carrying value of creditors approximate their fair values.

The fair value of creditors was determined after considering the standard terms and conditions of agreements entered into between the entity and other parties.

Leave accrued to the staff of the entity on an annual basis, subject to certain conditions. The accrual is an estimate of the amount due at the reporting date.

10.1 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.

10.2 Classification of Financial Liabilities

The Financial Liabilities of the entity is classified as follows:

Financial Liabilities	**Classification**
Trade and Other Payables	
Trade Creditors	Financial liabilities at amortised cost
Retentions	Financial liabilities at amortised cost
Other Creditors	Financial liabilities at amortised cost
Accrued Expenses	Financial liabilities at amortised cost

11 UNSPENT CONDITIONAL GRANTS AND RECEIPTS

	2012	2011
	R	R
11.1 Conditional Grants from Government		
National Government Grants	16,540,416	18,416,168
Total Conditional Grants and Receipts	**16,540,416**	**18,416,168**
Unspent Grants are made up of the following Grants:		
DST Grant (Ring fenced)	13,228,806	18,416,168
NRF Research and Development Grant	3,311,610	-
	16,540,416	**18,416,168**

11 UNSPENT CONDITIONAL GRANTS AND RECEIPTS (CONTINUED)

	2012	2011
	R	R

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	291,505	-
Sub-total	**291,505**	**-**
Less: Current Portion transferred to Current Liabilities:	(123,376)	-
Finance Lease Liabilities	(123,376)	-
Total Long-term Liabilities	**168,129**	**-**

12.1 Summary of Arrangements

Finance lease liabilities relates to equipment with lease terms ranging from 2-6 years. The average effective interest rate on finance leases is 38.67%.

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.

12.2 Obligations under Finance Lease Liabilities

The entity as Lessee:

The entity has acquired leased office equipment

The obligations under Finance Leases are as follows:

	Minumum Lease Payments		Present Value of Minimum Lease Payments	
	2012	2011	2012	2011
Amounts payable under Finance Leases:	R	R	R	R
Within one year	241,488	-	123,376	-
In the second to fifth years, inclusive	267,625	-	168,129	-
Over five years	-	-	-	-
Present Value of Minimum Lease Obligations	**509,113**	**-**	**291,505**	**-**
Less: Amounts due for settlement within 12 months (Current Portion)			(123,376)	
Finance Lease Obligations due for settlement after 12 months (Non-current Portion)			**168,129**	**-**

Notes to the financial statements for the year ended 31 March 2012

12.2 Obligations under Finance Lease Liabilities Continued

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

- Office Equipment

Included in these classes are the following significant leases:

(i) Minolta Copier

- Instalments are payable monthly in advance
- Average effective interest rate 10.14%
- Average monthly instalment R3,129.48

(ii) Canon Copier 1

- Instalments are payable monthly in advance
- Average effective interest rate, based on prime 89.27%
- Average monthly instalment R6,825.45

(iii) Canon Copier 2

- Instalments are payable monthly in advance
- Average effective interest rate, based on prime 43.72%
- Average monthly instalment R5,197.53

(iiii) PABX Ericsson

- Instalments are payable monthly in advance
- Average effective interest rate, based on prime 11.57%
- Average monthly instalment R2,710.92

13 ACCUMULATED SURPLUS

	2012	2011
The Accumulated Surplus consists of the following Internal Funds and Reserves:	R	R
Accumulated Surplus due to the results of Operations	127,197,611	4,715,097
Total Accumulated Surplus	**127,197,611**	**4,715,097**

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

14 INTEREST EARNED

Bank Account	1,385,204	48,322
Investments - Call and fixed deposits	2,474,387	-
Other Interest - Outstanding debtors	43,995	-
Total Interest Earned	**3,903,586**	**48,322**

15 TRANSFERS AND SUBSIDIES RECEIVED

	2012	2011
	R	R
Operational Grants	**103,670,319**	**9,528,407**
Parliamentary Grants (DST)	93,583,000	9,528,407
Parliamentary Grant (NRF)	10,087,319	-
Conditional Grants (Ring fenced allocations)	**6,573,418**	**-**
DST Grant (Ring fenced)	107,215	-
NRF Research and Development Grant	6,466,203	-
Transferred from Deferred Revenue	18,416,168	
Total Government Grants and Subsidies	**128,659,905**	**9,528,407**

15.1 Conditional Grants:

DST Grant (Ring fenced)

Total

Balance unspent at beginning of year	18,416,168	-
Current year receipts	13,336,021	27,944,575
Conditions met - transferred to Revenue	(18,523,383)	(9,528,407)
Conditions still to be met - transferred to Liabilities	**13,228,806**	**18,416,168**

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

15.1.1 Development of Liquid Rocket Engine Technologies (Marcom)

Balance unspent at beginning of year	1,175,000	-
Current year receipts	200,021	1,175,000
Conditions met - transferred to Revenue	(1,375,021)	-
Conditions still to be met - transferred to Liabilities	**-**	**1,175,000**

This grant relates to the development of South African liquid rocket engine technologies for satellite launching capabilities.

15.1.2 Satellite research and development (Sunspace)

Balance unspent at beginning of year	15,000,000	-
Current year receipts	-	15,000,000
Conditions met - transferred to Revenue	(14,907,195)	-
Conditions still to be met - transferred to Liabilities	**92,805**	**15,000,000**

Notes to the financial statements for the year ended 31 March 2012

15.1.2 Satellite research and development (Sunspace) (continued)	2012	2011
	R	R

The grant relates to the South African Satellite programme that is being done and prepared by Sunspace. This is mainly in preparation for the future satellites programme in South Africa.

15.1.3 SANSA Establishment Fund

Balance unspent at beginning of year	2,241,168	-
Current year receipts	-	11,769,575
Conditions met - transferred to Revenue	(2,241,168)	(9,528,407)
Conditions still to be met - transferred to Liabilities	**-**	**2,241,168**

This grant is for the provision of administrative structures and processes, including stakeholder engagement for institutional cohesion for the entity.

15.1.4 Sunspace, SAEON and CPUT (DST)

Current year receipts	13,136,000	-
Conditions met - transferred to Revenue	-	-
Conditions still to be met - transferred to Liabilities	**13,136,000**	**-**

This grant is for the cubesat Satellite program developed by CUPT. Also funds that are allocated for further development of the SAEOS South African Earth Operations System that operates from Hartebeeshoek for the processing and dissemination of earth observation data to all government entities.

15.2 NRF Research and Development Grants

Total

Current year receipts - Transfer of functions	7,457,299	
Current year receipts	2,320,513	-
Conditions met - transferred to Revenue	(6,466,203)	-
Conditions still to be met - transferred to Liabilities (see note 10)	**3,311,609**	**-**

15.2.1 SAASTA

Current year receipts	271,653	-
Conditions met - transferred to Revenue	(271,653)	-
Conditions still to be met - transferred to Liabilities (see note 10)	**-**	**-**

SAASTA awards grants related to science advancement which have particular duration and are for a particular project linked to science advancement. The SAASTA grant is ongoing.

	2012	2011
	R	R

15.2.2 NEP, Bursaries, The Competitive Program for Rated Researchers and Emergency Infrastructure

Current year receipts - Transfer of functions	7,457,299	
Current year receipts	2,048,860	-
Conditions met - transferred to Revenue	(6,194,550)	-
Conditions still to be met - transferred to Liabilities (see note 10)	**3,311,609**	**-**

These grants are for multiple purposes which includes 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 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 ongoing until the project is completed. There is no liability linked to the student support as all the owed bursary funds have been paid out to the student nominated on the grants.

Bursaries have been paid in full, refer to note 22. The remaining liability is shown until the student passes his or her course.

16 OTHER INCOME

Sundry Income	47,510	-
Discount Received	65,766	-
Rent Received	104,200	-
Total Other Income	**217,476**	**-**

17 EMPLOYEE RELATED COSTS

Employee Related Costs - Salaries and Wages	46,078,665	1,470,256
Employee Related Costs - Contributions for UIF, Pensions and Medical Aids	3,899,446	689
Performance Bonuses provided for	5,375,000	-
Total Employee Related Costs	**55,353,111**	**1,470,945**

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 from 1 May 2011 - current

Mr. T Sparks from 1 April 2010 - 31 May 2011

Executive Director Corporate Services - Mr. Z Ndziba

Notes to the financial statements for the year ended 31 March 2012

17 EMPLOYEE RELATED COSTS (CONTINUED)

	2012	2011
	R	R
Remuneration of the Chief Executive Officer: Dr. S Malinga		
Annual Remuneration	1,315,598	746,739
Contributions to UIF, Medical and Pension Funds	112,795	-
Total	**1,428,393**	**746,739**
Remuneration of the Chief Financial Officer: Ms. B Pono (from 01/05/2011)		
Annual Remuneration	861,307	-
Car and Travel Allowance	22,000	-
Contributions to UIF, Medical and Pension Funds	67,021	-
Total	**950,328**	**-**
Remuneration of the Chief Financial Officer: Mr. T Sparks (until 31/05/2011)		
Annual Remuneration	190,000	141,791
Contributions to UIF, Medical and Pension Funds	250	-
Total	**190,250**	**141,791**
Remuneration of the Executive Director: Mr. Z Ndziba		
Annual Remuneration	822,776	231,000
Car and Travel Allowance	212,850	-
Contributions to UIF, Medical and Pension Funds	1,497	-
Total	**1,037,123**	**231,000**

18 BOARD MEMBERS REMUNERATION

Non-executive Chairman	109,427	137,514
Other Board members	581,193	930,607
Total Board members Remuneration	**690,620**	**1,068,121**
Remuneration of the Non-executive Chairman - Mr. M Magugumela	**109,427**	**137,514**
Remuneration of other Board Members	**581,193**	**930,607**
Mr. L Annamalai	102,261	97,051
Mr. P Maine	66,164	91,805
Dr. L McKinnell*	-	119,346
Ms. L Mogudi	70,826	131,806
Adv. T Ratsheko	86,745	149,183

18 BOARD MEMBERS REMUNERATION (CONTINUED)

	2012	2011
	R	R
Dr. R Scholes*	-	62,624
Ms. J Lawrence	98,064	117,805
Mr. V Gore	91,570	112,789
Capt. M Mamashela	65,563	48,198
Dr. EJO Gavin	-	-
M Zondi	-	-
	690,620	**1,068,121**

Board remuneration 2011:

*Dr. L McKinnell - R 119 346: Paid to the National Research Foundation (NRF) Hermanus Magnetic Observatory (HMO) and not directly to the member.

*Dr. R Scholes - R 62 624: Paid to CSIR and not directly to the member.

19 DEPRECIATION AND AMORTISATION

Depreciation: Property, Plant and Equipment	13,395,633	15,213
Amortisation: Intangible Assets	678,309	2,432
Total Depreciation and Amortisation	**14,073,942**	**17,645**

20 IMPAIRMENT LOSSES

20.1 Impairment Losses on Financial Assets

Impairment Losses Recognised:		
Other Debtors	546,900	-
Total Impairment Losses	**546,900**	**-**

21 FINANCE COSTS

Finance Leases	125,193	-
Total Interest Paid on External Borrowings	**125,193**	**-**

22 GRANTS AND SUBSIDIES PAID

Bursaries to Students	1,926,136	-
Research and Development	894,472	-
Total Grants and Subsidies	**2,820,608**	**-**

Notes to the financial statements for the year ended 31 March 2012

23 RESEARCH AND DEVELOPMENT COSTS

	2012	2011
	R	R
Satellite Programme	14,907,195	-
Development of Liquid Rocket Engine	1,750,000	-
Total Research and Development Costs	**16,657,195**	**-**

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.

These costs were mainly incurred with the use of the Marcom and Sunspace ringfenced grants received from DST. See note 15.1 for more details on the nature of these grants.

24 GENERAL EXPENSES

Advertising & Marketing	1,044,118	488,751
Audit Fees	518,025	-
Bank Charges	86,281	7,549
Consulting Fees	5,125,969	575,167
Conferences and Seminars	1,776,562	56,928
Consumables	55,817	7,482
Electricity	2,941,141	-
Entertainment	160,280	9,883
Fuel and Oil	1,226,622	-
Insurance	994,116	8,639
Legal Costs	95,067	50,000
License Fees	1,682,127	6
Other General Expenses	5,902,310	177,664
Postage and Telegrams	3,705	-
Printing and Stationery	779,747	145,490
Rent and Lease Charges	2,692,264	198,405
Travel and Accomodation	3,939,135	383,579
Security	764,813	-
Telephone Cost	1,483,628	176,240
Data and Internet Services	5,342,065	3,443
Transport Costs	4,489,119	15,003
Total General Expenses	**41,102,911**	**2,304,229**

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.

25 OTHER GAINS AND LOSSES

	2012	2011
	R	R
(Gains) in net Foreign Exchange	(1,026,265)	-
Losses in net Foreign Exchange	497,692	-
Net foreign (Gains) and Losses	**(528,573)**	**-**

26 RENDERING OF SERVICES

Services to local Public Companies	8,544,621	-
Services to local Private Companies	10,118,689	-
Services to Foreign Clients	38,029,304	-
Other Services Rendered	12,196	-
	56,704,810	**-**

27 DATA LICENCE FEES

Data Licence Fees	18,336,144	-
	18,336,144	**-**

This is mainly SPOT data access fees for downloading satellite imagery for earth observation services.

28 CASH GENERATED BY OPERATIONS

Surplus for the year	**34,683,473**	**4,715,097**
Adjustment for:		
Correction of Prior Year error	-	-
Depreciation and Amortisation	14,073,942	17,645
Gains on Disposal of Property, Plant and Equipment Profit	(4,134)	-
Gains on Disposal of Property, Plant and Equipment Loss	250,268	-
Contribution to Provisions - Current	5,375,000	-
Leave Accrual	4,276,314	-
Unrealized exchange rate gains and losses	(12,535)	-
Finance Income	(3,903,586)	(48,322)
Finance Cost	125,193	-
Allowance for impairment of Receivables	546,900	-
Operating surplus before working capital changes	**55,410,835**	**4,684,420**

Notes to the financial statements for the year ended 31 March 2012

28 CASH GENERATED BY OPERATIONS (CONTINUED)

	2012	2011
	R	R
(Increase) in Inventories	(122,298)	-
(Increase) in Trade Receivables from exchange and non- exchange transactions	(12,572,463)	(893,423)
(Decrease) in Creditors, Provisions and unspent conditional grants and receipts	(7,513,096)	20,298,115
Cash generated by Operations	**35,202,977**	**24,089,112**

29 IRREGULAR, FRUITLESS AND WASTEFUL EXPENDITURE

29.1 Fruitless and Wasteful Expenditure

To the best of management's knowledge instances of Fruitless and wasteful expenditure for the year under review, were not revealed.

Reconciliation of Fruitless and wasteful expenditure:

Opening Balance	-	-
Fruitless and Wasteful Expenditure current year	-	25,000
Condoned or written off	-	(25,000)
Fruitless and Wasteful Expenditure awaiting condonement	**-**	**-**

The Fruitless and Wasteful expenditure with regards to the prior year relates to a penalty issued by SARS. This penalty has been reversed by SARS in the current year.

29.2 Irregular Expenditure

Reconciliation of Irregular Expenditure:

Opening Balance	3,587,673	-
Irregular Expenditure current year	14,789,014	3,587,673
Condoned or written off	(9,000,000)	-
Irregular Expenditure awaiting condonement	**9,376,687**	**3,587,673**

29 IRREGULAR, FRUITLESS AND WASTEFUL EXPENDITURE (CONTINUED)

Supply chain policy not followed:	Disciplinary Steps / Criminal Proceedings	Amount R
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 month.	871,071
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
Tax clearance certificate could not be obtained in time for transacting with Sunspace on the satellite programme. Sunspace subsequently received a reprieve from National Treasury, to transact with SANSA.	Not practical as the transaction relates to strategic sourcing of national capabilities as a ring fenced project.	9,000,000

30 OPERATING LEASE ARRANGEMENTS

At the reporting date the entity had outstanding commitments under non-cancellable operating leases, which fall due as follows:	2012 R'000	2011 R'000
Up to 1 year	**815**	**376**
- Buildings	226	343
- Office Equipment	110	33
- Vehicles	479	-
2 to 5 years	**82**	**66**
- Buildings	-	-
- Office Equipment	74	66
- Vehicles	8	-
More than 5 years	**-**	**-**
	897	**442**

Notes to the financial statements for the year ended 31 March 2012

30 OPERATING LEASE ARRANGEMENTS (CONTINUED)

	2012	2011
	R'000	R'000

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.

31 COMMITMENTS FOR EXPENDITURE

31.1 Capital and Expenditure Commitments

Commitments in respect of Capital Expenditure:

Approved and Contracted for:	**21,597**	**825**
Property, Plant and Equipment	21,343	-
Intangible Assets	-	825
Expenditure	254	-
Approved but Not Yet Contracted for:	**-**	**215**
Property, Plant and Equipment	-	215
Total Capital and Expenditure Commitments	**21,597**	**1,040**

This expenditure will be financed from:

Own Resources	21,597	1,040
	21,597	**1,040**

32 MULTI-EMPLOYER RETIREMENT BENEFIT INFORMATION

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

Sufficient information is not available to use defined benefit accounting for the pension fund, due to the following reasons:

(i) The assets of each fund are held in one portfolio and are not notionally allocated to each of the participating employers.

(ii) One set of financial statements are compiled for each fund and financial statements are not drafted for each participating employer.

(iii) The same rate of contribution applies to all participating employers and no regard is paid to differences in the membership distribution of the participating employers.

It is therefore seen that each fund operates as a single entity and is not divided into sub-funds for each participating employer.

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.

33 RELATED PARTY TRANSACTIONS

Related party relationships:

Controlling entity - Department of Science and Technology South Africa

SANSA is a Public Entity under the control of the Department of Science and Technology South Africa. All transactions with the Department are considered to be related party transactions.

SANSA 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.

Related party transactions:

	2012	2011
	R'000	R'000
Assets		
Trade Receivables: other national public entities	5,593	-
	5,593	**-**
Liabilities		
Grants received from DST unspent at year end	13,229	18,416
Trade Payable: other national public entities	3,483	236
	16,712	**18,652**

Notes to the financial statements for the year ended 31 March 2012

33 RELATED PARTY TRANSACTIONS (CONTINUED)

	2012	2011
	R'000	R'000
Income		
Grants received from DST recognized as revenue	112,106	9,528
Services rendered to other national public entities	27,584	-
	139,690	**9,528**
Expenses		
Services received from other national public entities	7,866	711
	7,866	**711**

The above transactions with other national public entities was conducted at arms length.

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

Total remuneration of key management is included in employees' remuneration (refer to note 17 and 18 for Executive Management and Board Member remuneration).

34 PENDING LAND CLAIM

The pending land claim on the land that is currently being occupied by Space Operations has no legal implications for SANSA as SANSA is not the title holder of the land. The implications will only be determined once the Commissioner has made a ruling. It is not clear as to when the claim will be finalised as it has been running since 2008.

35 IN-KIND DONATIONS AND ASSISTANCE

The entity did not receive any in-kind donations and assistance during the year under review.

36 COMPARISON WITH THE BUDGET

The comparison of the entity's actual financial performance with that budgeted, is set out in note 3.

37 EVENTS AFTER THE REPORTING DATE

No events having financial implications requiring disclosure occurred subsequent to 31 March 2012.

38 COMPARATIVE FIGURES AND SIGNIFICANT EVENTS DURING THE YEAR

With effect from 1 April 2011, two operations were migrated into the SANSA entity. One is the former Satellite Applications Centre operating under the CSIR, the other is the Hermanus Magnetic Observatory operating under the National Research Foundation (NRF). See note 41 for more details.

39 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.

40 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 auditors on a continuous basis.

	2012	2011
The carrying amounts of financial liabilities at reporting date was:	R	R
Trade and Other Payables	13,473,022	1,881,947
Finance Leases	291,505	-
	13,764,527	**1,881,947**

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 2012	Floating Interest Rate	Non-interest Bearing	TOTAL
Assets	R	R	R
Receivables from Exchange Transactions	-	18,535,947	**18,535,947**
Receivables from Non-Exchange Transactions	-	1,298,376	**1,298,376**
Cash and Cash Equivalents	73,284,905	6,809	**73,291,714**
Liabilities			
Trade and Other Payables	-	13,473,022	**13,473,022**
Long-term Liabilities	291,505	-	**291,505**
Net Financial Assets/(Liabilities)	**73,576,410**	**33,314,154**	**106,890,564**

31 March 2011	Floating Interest Rate	Non-interest Bearing	TOTAL
Assets	R	R	R
Trade and Other Receivables	-	15,359	**15,359**
Receivables from Non-Exchange Transactions	-	878,064	**878,064**
Cash and Cash Equivalents	20,299,601	677	**20,300,278**
Liabilities			
Trade and Other Payables	-	1,881,947	**1,881,947**
Long-term Liabilities	-	-	-
Net Financial Assets/(Liabilities)	**20,299,601**	**2,776,047**	**23,075,648**

Notes to the financial statements for the year ended 31 March 2012

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	2012	2011
External investments:		R	R
Call Deposits	Loans and Receivables	62,521	-
Bank Balances	Loans and Receivables	73,222,384	20,299,601
		73,284,905	**20,299,601**
Interest Received		3,903,586	48,322
Interest Rate		5.3%	0.2%

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	Rand value	732,849	202,996
Effect of change in interest rate	%	-1%	-1%
Effect of change in interest rate	Rand value	(732,849)	(202,996)

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:

	2012			2011		
	Carrying Amount	Contractual Cash Flows: 6 months or less	Contractual Cash Flows: 6-12 months	Carrying Amount	Contractual Cash Flows: 6 months or less	Contractual Cash Flows: 6-12 months
Non-derivative financial liabilities	R	R	R	R	R	R
Trade and Other Payables	13,473,022	13,473,022	-	1,881,947	1,881,947	-
Finance Lease Liability	291,505	61,688	61,688	-	-	-
	13,764,527	**13,534,710**	**61,688**	**1,881,947**	**1,881,947**	**-**

Market and Credit Risk

Financial assets which potentially subject the entity to the risk of non-performance by counter parties consist of trade and other receivables.

An allowance for impairment is established based on management's estimate of any identified potential losses in respect of trade receivables. 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 2012				
	TOTAL	ZAR	EURO	USD	OTHER
Trade Receivables	19,082,847	8,407,950	6,010,654	4,664,243	-
Trade Payables	(13,473,022)	(9,657,168)	(2,647,996)	(969,245)	(198,613)
Gross exposure	**5,609,825**	**(1,249,218)**	**3,362,658**	**3,694,998**	**(198,613)**

	31 March 2011				
	TOTAL	ZAR	EURO	USD	OTHER
Trade Receivables	15,359	15,359	-	-	-
Trade Payables	(1,881,947)	(1,881,947)	-	-	-
Gross exposure	**(1,866,588)**	**(1,866,588)**	**-**	**-**	**-**

The following significant exchange rates applied during the year:	2012	2011
Year-end spot rate		
Euro	10.24	n/a
USD	7.68	n/a

Sensitivity Analysis

A 10% strengthening of the rand against the following currencies at 31 March 2012 would have decreased profit or loss by the amounts shown below. This analysis assumes that all other variables remain constant.

Euro	336,266	-
USD	369,500	-
Other	(19,861)	-

A 10% weakening of the rand against the above currencies at 31 March 2012 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.

Notes to the financial statements for the year ended 31 March 2012

41 TRANSFER OF FUNCTIONS

SANSA was established in terms of the SANSA Act 2008. In terms of this act, the Satellite Applications Centre (SAC) and Hermanus Magnetic Observatory (HMO) transferred to SANSA from CSIR and NRF respectively on 1 April 2011. Since all these entities are under common control of the Department of Science and Technology all assets and liabilities were transferred to SANSA at carrying value.

Statement of Financial Position	Space Operations (CSIR)	Space Science (NRF)
	2011/12	2011/12
	R'000	R'000
Assets		
Current Assets	**20,344**	**11,936**
Cash and Cash Equivalents	16,116	9,127
Inventory	192	2
Trade Receivables	4,036	2,807
Non-Current Assets	**20,172**	**21,004**
Property, Plant & Equipment	20,152	21,004
Intangible Assets	20	-
Total Assets	**40,516**	**32,940**
Liabilities		
Current Liabilities	**15,228**	**11,513**
Trade Payables	8,653	10,558
Deferred Income	4,930	-
Provisions	1,645	955
Non-Current Liabilities	**-**	**311**
Borrowings	-	311
Total Liabilities	**15,228**	**11,824**
Net Assets	**25,288**	**21,116**

ACRONYMS |

AEB	*Brazilian Space Agency*
AIT	*Assembly, Integration and Testing*
ALC	*African Leadership Conference*
AMESD	*Africa Monitoring of the Environment for Sustainable Development*
ARMC	*African Resource Management Constellation*
ASAL	*Algerian Space Agency*
ATNS	*Air Traffic and Navigation Services*
BPG	*Business Planning and Governance*
BRICS	*Brazil, Russia, India, China and South Africa*
CAA	*Civil Aviation Authority*
CAPEX	*Capital Expenditure*
CBERS	*China Brazil Earth Resource Satellite*
CEOS	*Committee on Earth Observation Satellites*
CME	*Coronal Mass Ejection*
COBIT	*Control Objectives for Information and related Technology*
CoC	*Centre of Competence*
CoE	*Centre of Excellence*
COP	*Conference of Parties*
COSPAR	*Committee on Space Research*
COST	*Cooperation in the field of Science and Technology research (EU)*
CPUT	*Cape Peninsula University of Technology*
CSA	*Canadian Space Agency*
CSIR	*Council for Scientific and Industrial Research*
DBSA	*Development Bank of South Africa*
DGI	*Directorate for Geospatial Information*
DIMS	*Data Information Management System*
DLR	*German Space Agency*
DoC	*Department of Communications*
DoT	*Department of Transport*
DST	*Department of Science and Technology*
DWA	*Department of Water Affairs*
EC	*European Commission*
EEP	*Employment Equity Plan*
EGNOS	*European Geostationary Navigation Overlay Service*
EGSA	*Electrical Generating Systems Association*
EO	*Earth Observation*
EODC	*Earth Observation Data Centre*
ERP	*Enterprise Resource Planning*
ESA	*European Space Agency*
EU	*European Union*
FAR	*Finance, Audit and Risk*
FDP	*Fundisa Disk Programme*
FP7	*Seventh Framework Programme for Research and Technological Development*
FY	*Financial Year*
GEO	*Group on Earth Observation*
GEO	*Geostationary Earth Orbiting*
GEONetCab	*Geostationary Earth Orbiting Network for Capacity Building*
GEOSS	*Global Earth Observation System of Systems*
GIS	*Geographic Information System*
GMES	*Global Monitoring for Environment and Security*
GPS	*Global Positioning System*
HCD	*Human Capital Development*
HEI	*Higher Education Institution*
HMO	*Hermanus Magnetic Observatory*
HR	*Human Resources*
IAC	*International Astronautical Congress*
IBSA	*India, Brazil and South Africa*
ICT	*Information and Communications Technology*
INTERMAGNET	*International Real-time Magnetic Observatory Network*
IOT	*In-orbit Testing*
IRI	*International Reference Ionosphere*
ISES	*International Space Environment Service*
ISI	*Institute for Scientific Information*
ISRO	*Indian Space Research Organisation*
ITC	*Institute Technology Centre*
ITIL	*Information Technology Information Library*
ITU	*International Telecommunications Union*
JPSS	*Joint Polar Satellite System*
JRC	*Joint Research Centre*
KHTT	*Know-how and Technology Transfer*
KPI	*Key Performance Indicator*
KSAT	*Kongsberg Satellite Services (Norway)*
LEOP	*Launch and Early Orbit Phase*
LPGS	*Landsat Processing Geological System*
LTWG	*Landsat Technical Work Group*
MDGs	*Millennium Development Goals*
MEC	*Member of Executive Council*
MISR	*Multi-angle Imaging Spectroradiometer*

ACRONYMS |

MODIS	*Moderate resolution Imaging Spectroradiometer*
MOST	*Ministry of Science and Technology (China)*
MoU	*Memorandum of Understanding*
MSL	*Mars Science Laboratory*
MT	*Magnetotelluric*
MTEF	*Medium-term Expenditure Framework*
NASA	*National Aeronautics and Space Administration*
NASRDA	*Nigerian Space Agency*
NASSP	*National Astrophysics and Space Science Programme*
NEP	*National Equipment Programme*
NGI	*National Geospatial Information*
NOAA	*National Oceanic and Atmospheric Administration*
NPP	*National Polar-orbiting Operational Environmental Satellite System Preparatory Project*
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*
POES	*Polar Operational Environmental Satellite*
PSGI	*Programmatic Support Grant Initiative*
R&D	*Research and Development*
RF	*Radio Frequency*
RWC	*Regional Warning Centre*
SAAF	*South African Air Force*
SAASTA	*South African Agency for Science and Technology Advancement*
SAC	*Satellite Applications Centre*
SADC	*Southern African Development Community*
SAEOS	*South African Earth Observation System*
SAMA	*South Atlantic Magnetic Anomaly*
SAMSA	*South African Maritime Safety Authority*
SANAP	*South African National Antarctic Programme*
SANDF	*South African National Defence Force*
SANSA	*South African National Space Agency*
SAP	*Systems Applications and Products*
SAR	*Synthetic Aperture Radar*
SAPO	*South African Post Office*
SATSA	*SBAS Awareness and Training for South Africa*
SBAS	*Satellite-based Augmentation System*
SCM	*Supply Chain Management*
SET	*Science, Engineering and Technology*
SHARE	*Southern Hemisphere Auroral Radar Experiment*
SHEQ	*Safety, Health, Environment and Quality*
SMP	*Satellite Mega Programme*
SNIGGER	*South African Ionospheric Geophysics and Geomagnetic Experimental Resource*
SOP	*Standard Operating Procedures*
SPOT	*System for Earth Observation (Système Pour l'Observation de la Terre)*
SSAU	*State Space Agency of Ukraine*
SUPARCO	*Pakistan Space & Upper Atmosphere Research Commission*
TM	*Thematic Mapper*
TOGAF	*The Open Group Architecture Framework*
TT&C	*Telemetry, Tracking and Command*
TU Delft	*Delft University of Technology (Netherlands)*
TUT	*Tshwane University of Technology*
TYIP	*Ten Year Innovation Plan*
UCT	*University of Cape Town*
USGS	*United States Geological Survey*
VITO	*Flemish Institute for Technological Research*
WCED	*Western Cape Education Department*
WRC	*Water Research Commission*
WSSD	*World Summit on Sustainable Development*