

DEPARTMENT OF  
SCIENCE AND TECHNOLOGY

Vote No. 34

# ANNUAL REPORT

## 2014/2015

FINANCIAL YEAR



science  
& technology

Department:  
Science and Technology  
REPUBLIC OF SOUTH AFRICA



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The background of the entire page is a close-up, high-contrast photograph of a thermometer. The thermometer is oriented vertically, with its scale visible on the right side. The liquid inside the glass tube is a bright, glowing orange-yellow color. The scale has markings for 150, 200, and 250. The overall color palette is dominated by warm, golden-yellow and orange hues, creating a sense of heat and precision. The thermometer's glass and the liquid inside are the primary focus of the background image.

## PART A: GENERAL INFORMATION

## I. Contact information

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## 2. List of abbreviations

<b>ACCESS</b>	Applied Centre for Climate and Earth Systems Science
<b>AFIS</b>	Advanced Fire Information System
<b>AGA</b>	Astronomy Geographic Advantage
<b>AISA</b>	Africa Institute of South Africa
<b>AMI</b>	Advanced Metals Initiative
<b>ANA</b>	Annual National Assessments
<b>APP</b>	annual performance plan
<b>ASADA</b>	African Science Academies Development Agenda
<b>ASSAf</b>	Academy of Science of South Africa
<b>AU</b>	African Union
<b>AVN</b>	African Very Long Baseline Interferometry Network
<b>BMGF</b>	Bill & Melinda Gates Foundation
<b>BRAGMA</b>	Bridging Actions for GMES and Africa
<b>BRICS</b>	Brazil, Russia, India, China and South Africa
<b>BTTC</b>	BRICS Think Tanks Council
<b>CEO</b>	chief executive officer
<b>CeSTII</b>	Centre for Science, Technology and Innovation Indicators
<b>CHPC</b>	Centre for High Performance Computing
<b>CoC</b>	centre of competence
<b>CoE</b>	centre of excellence
<b>CSIR</b>	Council for Scientific and Industrial Research
<b>DEA</b>	Department of Environmental Affairs
<b>DHET</b>	Department of Higher Education and Training
<b>DIRCO</b>	Department of International Relations and Cooperation
<b>DIRISA</b>	Data Intensive Research Initiative for South Africa
<b>DRUSSA</b>	Development Research Uptake in Sub-Saharan Africa
<b>DST</b>	Department of Science and Technology
<b>EIAP</b>	Emerging Industries Action Plan
<b>ENE</b>	Estimates of National Expenditure
<b>ERA</b>	Emerging Research Areas
<b>ESASTAP</b>	European South African Science and Technology Advancement Programme
<b>EST</b>	environmental services and technologies
<b>EU</b>	European Union
<b>Exco</b>	DST Executive Committee
<b>FEI</b>	Fluorochemicals Expansion Initiative
<b>GCIP</b>	Global Cleantech Innovation Programme
<b>GDP</b>	gross domestic product
<b>GERD</b>	gross expenditure on research and development
<b>GMES</b>	Global Monitoring for Environment and Security
<b>HartRAO</b>	Hartebeesthoek Radio Astronomy Observatory
<b>HCD</b>	human capital development
<b>HEI</b>	higher education institution
<b>HPC</b>	high performance computing
<b>HSRC</b>	Human Sciences Research Council
<b>HySA</b>	Hydrogen South Africa

## 2. List of abbreviations (continued)

<b>ICSU</b>	International Council for Science
<b>ICT</b>	information and communication technology
<b>IEP</b>	Integrated Energy Plan
<b>IK</b>	indigenous knowledge
<b>IKS</b>	indigenous knowledge systems
<b>IKSDC</b>	indigenous knowledge systems documentation centre
<b>IMS</b>	Intelligent Manufacturing Systems
<b>IP</b>	intellectual property
<b>IPAP</b>	Industrial Policy Action Plan
<b>IPR Act</b>	Intellectual Property Rights from Publicly Financed Research and Development Act
<b>IT</b>	information technology
<b>MOF</b>	metal-organic framework
<b>MoU</b>	memorandum of understanding
<b>MTEF</b>	Medium Term Expenditure Framework
<b>MTSF</b>	Medium Term Strategic Framework
<b>NACI</b>	National Advisory Council on Innovation
<b>NAM</b>	Non-Aligned Movement
<b>NDP</b>	National Development Plan
<b>NEPAD</b>	New Partnership for Africa's Development
<b>NGP</b>	New Growth Path
<b>NIC</b>	nanotechnology innovation centre
<b>NICIS</b>	National Integrated CyberInfrastructure System
<b>NIPMO</b>	National Intellectual Property Management Office
<b>NRDS</b>	National Research and Development Strategy
<b>NRF</b>	National Research Foundation
<b>NSI</b>	National System of Innovation
<b>NWU</b>	North-West University
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OHS</b>	occupational health and safety
<b>OTT</b>	office of technology transfer
<b>R&amp;D</b>	research and development
<b>R&amp;V</b>	risk and vulnerability
<b>RDI</b>	research, development and innovation
<b>RI</b>	research infrastructure
<b>S&amp;T</b>	science and technology
<b>SACNASP</b>	South African Council for Natural Scientific Professions
<b>SADC</b>	Southern African Development Community
<b>SAEON</b>	South African Environmental Observation Network
<b>SANReN</b>	South African National Research Network
<b>SANSA</b>	South African National Space Agency
<b>SARChI</b>	South African Research Chairs Initiative
<b>SARIR</b>	South African Research Infrastructure Roadmap
<b>SASAS</b>	South African Social Attitudes Survey
<b>SET</b>	science, engineering and technology
<b>SETI</b>	science, engineering, technology and innovation



## 2. List of abbreviations (continued)

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<b>SKA</b>	Square Kilometer Array
<b>SKARAB</b>	Square Kilometer Array Reconfigurable Architecture Boards
<b>SME</b>	small and medium enterprise
<b>STISA</b>	Science, Technology and Innovation Strategy for Africa
<b>STI</b>	science, technology and innovation
<b>TAP</b>	technology assistance package
<b>THP</b>	traditional health practitioner
<b>TIA</b>	Technology Innovation Agency
<b>TRM</b>	technology roadmap
<b>TWAS</b>	The World Academy of Sciences
<b>TYIP</b>	Ten-Year Innovation Plan
<b>UCT</b>	University of Cape Town
<b>UK</b>	United Kingdom
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>UNISA</b>	University of South Africa
<b>UP</b>	University of Pretoria
<b>USAID</b>	United States Agency for International Development
<b>UWC</b>	University of the Western Cape
<b>WACS</b>	West Africa Cable System
<b>WISA</b>	Women in Science Awards
<b>WRC</b>	Water Research Commission



### 3. Foreword by the Minister

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

In the period under review the Department of Science and Technology, with a R6,480 billion budget, worked towards the ultimate aim of expanding the country's economy, creating employment, and enhancing the quality of life of all South Africa's people. Our policies, such as the National Research and Development Strategy and the Ten-Year Innovation Plan, play an important role in creating a suitable environment for the development and application of science, technology and innovation in support of broader government policies.

#### Research and innovation infrastructure

In the 2014/15 financial year, the DST awarded 69 research infrastructure grants to universities, science councils and museums through a ring-fenced allocation of R551,9 million. The National Research Foundation managed about 84% of these grants directly through the National Equipment and National Nanotechnology Equipment Programmes. In addition to the acquisition of infrastructure, grants are used to enable South African researchers to access global infrastructure, and for support to the national research facilities.

The DST continued to invest significantly in the National Integrated Cyberinfrastructure System, supporting the Centre for High Performance Computing, the South African National Research Network (SANReN), and the Data Intensive Research Initiative of South Africa, as well as the acquisition of international broadband connectivity

on the West Africa Cable System (WACS). A major achievement was the activation on WACS of the first international capacity (about 20 gigabits per second) for SANReN, to complement the connectivity on the east coast cable system, SEACOM.

To advance new industry development, including the high-potential titanium industry, the Department continued to provide infrastructure funding support for a titanium metal powder pilot system and additive manufacturing technology for 3D printing of large titanium parts. Infrastructure funding support was also provided for the establishment of a lithium-ion battery development laboratory. The National Recordal System for the capturing, storage and management of indigenous knowledge, was also supported.

#### Human capital development and science promotion

In the period under review, the Department finalised the Human Capital Development Strategy for Research, Innovation and Scholarship. Support for postgraduate students increased from 7 712 in 2012/13 to 11 335 in the 2014/15 financial year. The number of researchers supported with grants increased from 3 079 in 2012/13 to 4 064 in 2014/15. The DST also supported a total of 1 021 students and postgraduate students as interns in the workplace. There are now 153 awarded research chairs, up from 92 in 2010/11. The number of centres of excellence increased from eight in 2010/11 to 14 in 2014/15, with five new centres of excellence launched at the beginning of the 2014/15 financial year, and

a call for 23 new research chairs published. A study was commissioned on the retention and conversion of students in the postgraduate pipeline, and the factors that inform students' decisions to enrol or not to enrol for further postgraduate studies. A draft report on the study has been compiled.

The Science Engagement Framework, which provides an overarching strategy to advance science engagement in South Africa, was approved in the period under review. The framework is intended to improve the coordination of and encourage science promotion, communication and engagement activities across the Department, its entities, universities, other government departments and science councils, museums, and partners outside the public sector. The framework is also committed to integrating the natural sciences and engineering with the social sciences and humanities, aiming to foster better, more valuable science engagement.

### **The Square Kilometre Array (SKA)**

We are making progress with regard to the MeerKAT and it will start doing early science in 2016 with 32 dishes. On 28 February 2015, the Deputy President unveiled the second of the 64 MeerKAT antennas. Its full science programme will commence in 2017. Five years' worth of observing time has already been allocated to some of the leading radio astronomers in the world. At the completion of the science programme, the MeerKAT will be integrated with the rest of the SKA Phase I dishes (another 133 dishes will be added).

The SKA SA human capital development programme has been successful in bringing young people from the African continent into astronomy and engineering, and strengthening university teaching and research.

### **Co-funding leveraged from industry**

In the period under review nine sector-specific innovation funds were established. They are managed in a co-funding arrangement with a number of identified industry sector associations, including the Fresh Produce Exporters' Forum, Forestry SA, the South African Minerals to Metals Research Institute, the Marine Industry Association of South Africa, the Sugar Milling Research Institute, the Paper Manufacturers' Association of South Africa, and Citrus Research International.

### **Attracting foreign investment for research and development in ICT**

The ICT RDI Roadmap has aligned the DST investment with national priorities, and allowed it to grow significantly, creating an ecosystem that is attractive to foreign direct investment. During the period under review, ICT multinational IBM announced a R700 million investment over 10 years into ICT R&D, and Cisco announced a three-year partnership with government worth R66,6 million, aimed at substantially increasing R&D in South Africa in this area, with a research agenda directed by and aligned to the ICT RDI Roadmap.

The National Research Foundation approved three related research chairs, namely, Innovative Small Satellite Technology and Applications for Africa (at the Cape Peninsula University of Technology), Enabled Environments for Assisted Living (at Tshwane University of Technology), and Advanced Sensor Networks (at the University of Pretoria).

### **Industry development**

We have made considerable progress in scaling up a breakthrough innovation in the production of titanium powder. Work on our pilot plant at the Council for Scientific and Industrial Research is continuing and will be used to verify the processes before production is scaled up. This is a milestone in the development of titanium metal powder, and it is anticipated that the output from the full commercial plant will be 20 000 tons per annum.

### **Fluorochemical Expansion Initiative**

The Fluorochemical Expansion Initiative (FEI) is enabling Pelchem to increase its beneficiated fluorspar product range. Approximately R50m (of current R200m turnover) is attributed to FEI, while there is the potential for an additional R40m through international contracts. When the hydrogen fluoride plant is upgraded, FEI's direct contribution is expected to be about R150m of the envisaged R350m.

### **Water RDI Roadmap**

Recognising that water is a basic human right and, as a fundamental "connector", vital in the transition to a green economy, and a key driver in the economy and the wider socio-economic development paradigm, the Department

### 3. Foreword by the Minister (continued)

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developed the Water RDI Roadmap. The roadmap's vision is of South Africa as a leader among middle-income countries in the development and deployment of water management practices and technologies, and competing with leading countries in providing sustainable water solutions.

#### Science and technology for socio-economic development

The Department established various projects demonstrating how science and technology can be used to provide access to and improve the quality of basic services, and enhance local economic development, primarily in 27 priority District Municipalities.

The focus on access and quality of basic services includes the Technology of Rural Education and Development (Tech4RED) project, which is being implemented in Cofimvaba in the Eastern Cape. This project is demonstrating how science and technology can contribute to improve basic education service delivery through the intergration of ICTs in teaching and learning; provision of a mobile science centre to improve the teaching of science and maths; incorporating a fortified drink to improve the nutrition profile of the learners; and improving school sanitation and energy infrastructure.

One of the strengths of the Tech4RED project is in its design and implementation, which is based on a systems approach and involves various stakeholders committed to improving the delivery and outcomes of basic education. In addition to other government departments, these stakeholders include science councils and the private sector.

The DST continued to invest in projects that are aligned to local economic development. In the current financial year, the priority was on ensuring the sustainability of all funded initiatives. One innovation-enabled local economic development project focused on using agriculture to revitalise the local economy. Through this DST project, an ICT platform was developed to assist farmers in accessing market information, and local farmers have been trained in techniques to improve production. Lessons learnt in these projects are being shared with the provincial Department of Agriculture and are expected to contribute to the success of the Department of Rural Development and Land Reform-led initiatives on AgriParks.

#### International cooperation

The year under review has seen the Department strengthen its science, technology and innovation relations in Africa. The Department concluded new cooperation agreements with Ethiopia and Sudan, and participated in a joint meeting of the Southern African Development Community ministers responsible for science, technology, innovation and higher education, which was aimed at intensifying regional cooperation. It will play an important role in the implementation of the African Union's Science, Technology and Innovation Strategy for Africa, and significant progress has been made towards South Africa's hosting of the space science component of the Pan-African University.

A diverse portfolio of bilateral and multilateral relations with countries and groups around the globe has facilitated cooperation initiatives, allowing South Africans to benefit from international facilities and expertise. An ambitious new programme, the UK-SA Newton Fund, was entered into in September 2014, with a joint investment by South Africa and the United Kingdom of approximately R140 million annually. The research and innovation partnership will target social challenges in respect of public health and food security, among other things, with a focus on capacity-building.

The signature of the first Brazil, Russia, India, China and South Africa (BRICS) memorandum of understanding on cooperation in science, technology and innovation will provide a strategic framework for valuable cooperation opportunities with these major partners. A new cooperation agreement was signed with the Russian Federation, and science, technology and innovation featured prominently in the strategic programme of cooperation concluded with the People's Republic of China during President Zuma's state visit to China.

South Africa's influence in multilateral forums for science, technology and innovation was boosted by the election in August 2014 of prominent South Africans to leadership positions in the influential International Council for Science (ICSU.) Prof. Daya Reddy, President of the Academy of Science of South Africa, will assume the ICSU presidency in 2015, and the Vice-Chancellor of the University of Pretoria, Prof. Cheryl de la Rey, was elected to the ICSU executive committee.

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Strategic partnerships with the European Union and philanthropic organisations such as the Bill & Melinda Gates Foundation have resulted in foreign investment in South African initiatives in water and sanitation technologies, as well as the health of women and children.

The European Union is also working with South Africa on new initiatives in marine science and in minerals and mining technology, among other things. The first rounds of the EU's new Horizon 2020 Framework Programme for Research and Innovation saw funding of more than R150 million allocated to South Africa following competitive calls for proposals. The next phase of the multi-billion rand European and Developing Countries Clinical Trials Partnership was launched with the aim of accelerating the development of new drugs, vaccines and other interventions in the fight against infectious and neglected diseases.

## Conclusion

I offer my sincere gratitude to the Deputy Minister, Ms Zanele kaMagwaza-Msibi, the DST Director-General, Dr Phil Mjwara, deputy directors-general and staff, the CEOs and staff of the public entities, the Portfolio Committee on Science and Technology and its Chair, Dr Bevan Goqwana, our international and private sector partners, and all the stakeholders in the national system of innovation that have worked with us to achieve our goals.

As required by the National Development Plan, the Department will continue its efforts to provide South Africa with enduring benefits from science, technology and innovation.



**Mrs GNM Pandor, MP**  
**Minister of Science and Technology**  
**31 July 2015**





## 4. Statement by the Deputy Minister

**Zanele kaMagwaza-Msibi,**  
Deputy Minister of Science and Technology

**T**he world in which we live depends heavily on the application of science and technology to achieve economic growth in an increasingly competitive global environment. It would be impossible for us to achieve our growth targets and ensure a life of dignity and equal worth for our citizens without applying the best of our scientific expertise towards finding solutions to the critical challenges facing us.

The Department of Science and Technology continues to make significant strides in its quest to achieve planned annual targets as underlined in the 2008 Ten-Year Innovation Plan, which seeks to contribute to the transformation of the South African economy into a knowledge-based economy in which the production and dissemination of knowledge lead to economic benefits and enrich all fields of human endeavour.

It is important to ensure that science and technology make an impact on growth and development in a sustainable manner, and in areas that matter to all our people.

### Biotechnology

The period under review saw an improvement in South Africa's ranking in the bioeconomy space – the World Review of Biotechnology (2014) ranked us number 36 out of 54 leading players. We believe the huge investments made in the last few years are now bearing fruit.

One of the key achievements within the bioeconomy portfolio was the signing of a memorandum of understanding (MoU) between Pfizer Inc. and the North-West University in June 2014 towards the potential use of Pfizer's genetically modified animal models for evaluations in oncology, inflammation and immunology, as well as central nervous system and cardiovascular system disorders. The MoU is expected to contribute towards the development of the pharmaceutical sector in South Africa, which is outlined by the Bio-economy Strategy as a priority area. To give life to the MoU, the Department has established a national Preclinical Drug Development Platform for South Africa, which includes the creation of a national preclinical drug development platform for small animals. These will be hosted by the North-West University.

### Indigenous knowledge systems

Our indigenous knowledge systems portfolio is growing by leaps and bounds. In September 2014, an access and benefit-sharing agreement was signed for skin-tone candidate products between a cosmeceuticals consortium and the community of kuNdabakazi in the Eastern Cape. This agreement underpins the commitment of the bioprospecting platform to comply with national legislation that regulates bioprospecting work for a pipeline of innovative products.

Other initiatives implemented by the Department continued to generate significant research interest, as evidenced by the publication of an article on the Eucalyptus

Genome Platform collaboration between the University of Pretoria, the Forestry and Agricultural Biotechnology Institute (FABI) and the Department in *Nature*, a prestigious scientific journal.

In addition, the draft Protection, Promotion, Development and Management of Indigenous Knowledge Systems Bill was tabled with Cabinet during the reporting period. This Bill, we believe, will formally establish and define the functions and role of the National Indigenous Knowledge Systems Office.

### Innovation instruments

During the period under review, the National Intellectual Property Management Office (NIPMO) finalised its first NIPMO Incentive Guideline for Intellectual Property (IP) Creators, which resulted in over 360 IP creators being awarded a certificate of recognition for their role in the creation of an invention for which a South African patent was granted. This is a positive development, because a strong IP regime gives rise to investor confidence, as investors take comfort from the knowledge that their rights as IP-holders will not be infringed.

NIPMO also launched its Office of Technology Transfer Framework and its Technology Transfer Manual, in line with its legislative mandate to provide best practices to National System of Innovation stakeholders.

A total of 251 new IP Status and Commercialisation Reports (IP7 forms) were received from institutions. This has increased the database of IP outputs generated following a research and development activity to 814 in the five years since the Intellectual Property Rights from Publicly Financed Research and Development Act was effected. This is, of course, excellent news – our ability to protect IP gives public institutions an opportunity to increase the sourcing of funds and provides incentives to researchers to produce innovations.

### Energy

South Africa made the bold commitment to a 34% reduction in greenhouse gas emissions by 2020. This can only be achieved through a radical shift towards the use of clean and renewable energy. A number of key partnership agreements signed during the period under review points

to the Department's commitment to meeting the target. Agreements signed with the South African Post Office and Transnet, will see these organisations deploying fuel cell technology developed by the three Department of Science and Technology-supported Hydrogen South Africa (HySA) centres of competence (CoCs).

Another achievement in this area was the launch of the 2,5 kW hydrogen fuel cell power generator prototype unit at the University of the Western Cape Nature Reserve, which is expected to lower its energy bills and carbon footprint.

Furthermore, the HySA CoCs have jointly resulted in 32 articles being published in peer-reviewed journals and two patent applications being filed. A total of 142 postgraduate students were supported in energy-related research, development and innovation initiatives.

### Advanced manufacturing

During the period under review, the Department commissioned the development of technology roadmaps in the areas of smart and affordable automation, advanced photonics, advanced electronics, aerospace initiatives and additive manufacturing. These will provide intelligence that will greatly assist in guiding the Department's advanced manufacturing investment priorities over the next 10 years. Also in the year under review, South Africa, through the Department, became a member of the Intelligent Manufacturing Systems programme. The international programme supports (among other things) the development of innovative and relevant manufacturing technology through global collaboration in the areas of sustainable manufacturing and occupational safety, standards and interoperability. This membership will create a platform for local advanced manufacturing players (public and private) to cooperate in efforts to improve competitiveness in the country's manufacturing sector, and to create new knowledge and technology-based enterprises.

### South African green technologies report

During the 2014/15 reporting period, the Department, in partnership with the Academy of Science of South Africa, launched a report on the state of green technologies in South Africa. The findings of the report take us forward in identifying solutions and addressing questions pertaining to the green technologies currently available in the country.

## 4. Statement by the Deputy Minister (continued)

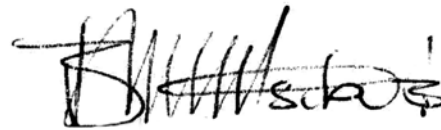
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The report also made recommendations that would promote the growth of green technologies in a wide variety of areas, including sanitation, waste, manufacturing, mining and construction.

### Conclusion

We would not have been able to realise our goals without our dedicated scientists and researchers, who continue to work diligently in their respective areas of expertise. The hallmark of all the achievements listed above has definitely been collaboration and partnership with our stakeholders in the National System of Innovation, as well as a deep and abiding commitment to serving our country.

I would like to thank Minister Pandor for her sterling leadership and the Director-General, Dr Mjwara, and his executives for their passion and drive in ensuring that we achieve the highest possible standards.



**Zanele kaMagwaza-Msibi**  
**Deputy Minister of Science and Technology**  
**31 July 2015**





## 5. Report of the Accounting Officer

**Phil Mjwara**  
Director-General

### 1. Introduction

The mandate of the Department of Science and Technology (DST) is to develop, coordinate and manage the national system of innovation by providing policy leadership and creating an enabling environment. The implementation of the National Research and Development Strategy and the Ten-Year Innovation Plan continued to be the primary focus of the DST in the 2014/15 financial year, and financial resources were committed to the attainment of the Department's strategic objectives.

### 2. Overview of the operations of the Department

During the 2014/15 financial year, the DST continued to implement its key strategic priorities, which fully embraced the government's outcomes-based approach, and which contribute meaningfully to a skilled and capable science and technology workforce to support an inclusive growth path, and to decent employment through inclusive growth.

### 3. Significant developments and major projects undertaken

#### (a) Research and innovation infrastructure

In the 2014/15 financial year, the DST's ring-fenced infrastructure allocation of R551,9m enabled it to achieve

the following:

- The award of 69 research infrastructure grants. Approximately 84% of the grants were managed directly by the National Research Foundation (NRF) through the National Equipment and National Nanotechnology Equipment Programmes for scientific equipment grants to universities, science councils and museums, access to global infrastructure and support to the national research facilities.
- Continued support towards the development of a titanium additive manufacturing plant.
- Continued support for the establishment of a lithium-ion battery development laboratory.
- Continued support for the National Recordal System for the capturing, storage and management of indigenous knowledge.
- The establishment of a national drug development platform at North-West University.

The DST continued to make significant investment in the development and implementation of the components of the National Cyberinfrastructure System by supporting the Centre for High Performance Computing, the South African National Research Network, the Data Intensive Research Initiative of South Africa, and the acquisition of international broadband connectivity on the West Africa Cable System (WACS). A major achievement was the activation of the first international capacity of about 20

## 5. Report of the Accounting Officer

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gigabits per second on WACS, to complement connectivity on SEACOM.

### **(b) Human capital and science promotion**

The Department finalised the Strategy for Human Capital Development for Research, Innovation and Scholarship. The number of postgraduate students supported increased from 7 712 in 2012/13 to 11 335 in the 2014/15 financial year. The number of researchers supported with grants increased from 3 079 in 2012/13 to 4 064 in 2014/15.

During the reporting period the Department supported a total of 1 021 students and postgraduate students as interns in workplace preparation programmes, through which they learn skills relevant to their future careers. The number of research chairs awarded grew from 92 in 2010/11 to 153, while the number of centres of excellence increased from eight in 2010/11 to 14 in 2014/15.

The Programme launched five new centres of excellence at the beginning of the 2014/15 financial year and a call for 23 new research chairs was opened. The Programme commissioned a study on the retention of students in the postgraduate pipeline and their continued studies, including a focus on the factors that inform the decisions by students to enrol or not to enrol for further postgraduate studies. The draft report for this study has been compiled.

Minister Pandor approved the Science Engagement Framework, which provides an overarching strategy to advance science engagement in South Africa. It is intended to guide the coordination of science promotion activities by the DST, its entities and both public and private-sector partners, including other government departments. The framework is committed to integrating the natural sciences, engineering, and social sciences and humanities.

### **(c) African Very Long Baseline Interferometry Network and SKA**

The Department provided support to global research infrastructure partnerships, most notably the SKA radio telescope project and the work of the African-European Radio Astronomy Platform, to access funding for bi-

regional cooperation initiatives and programmes such as the African Very Long Baseline Interferometry Network (AVN). The SKA/AVN Readiness Strategy was approved for implementation at the 2nd SKA African Partner Countries Ministerial Meeting in Pretoria on 25 March 2015.

The SKA SA human capital development programme has been successful in bringing young people into astronomy and engineering, and strengthening university teaching and research. In total 699 grants and bursaries have been provided. A draft Multiwavelength Astronomy Strategy has been approved and is being refined before submission to Cabinet for noting.

### **(d) Industry innovation partnerships**

The DST is encouraging industry innovation partnerships as part of a broader government effort to support industrial competitiveness. The main objective is to create an environment in which government can effectively partner with industry and support co-investments in research, development and innovation (RDI) in key strategic sectors of the economy.

During the 2014/15 financial year nine sector-specific innovation funds were established. They are managed in a co-funding arrangement with a number of identified industry sector associations, i.e. the Fresh Produce Exporters' Forum, Forestry South Africa, the South African Minerals to Metals Research Institute, the Marine Industry Association of South Africa, the Sugar Milling Research Institute, the Paper Manufacturers Association of South Africa, Citrus Research International, Marine Finfish Farmers Association of South Africa, and the Wine Industry Network for Expertise and Technology.

### **(e) Hydrogen fuel cell technology**

In the year under review, the Department signed key partnership agreements that will see technology developed by the three Hydrogen South Africa centres of competence (CoCs) used to reduce the energy bills and carbon emissions of Transnet and the South African Post Office. The CoCs have produced 32 publications in peer-reviewed journals, and two patent applications.

Funding to the value of £101 000 over three years (£37 000 per annum) has been secured by HySA Catalysis from SuperGEN and the Newton Fellowship through the University of Southampton to support fuel cell development activities over a three-year period. Dr Steven Chiuta of HySA Infrastructure was given a Leaders in Innovation Fellowship by the Royal Academy of Engineering, in partnership with the Technology Innovation Agency, to visit the United Kingdom for a training course on technology commercialisation from 16 to 25 March 2015.

#### **(f) The ICT RDI Roadmap**

The aim of the ICT RDI Roadmap is to direct investments in our national ICT RDI capability leading to the harnessing of significant socio-economic benefits for South Africa, enabling the country to become more than a distribution market by competing globally through capturing the increasing value of the new digital value chain. This will also allow the South African government to become a smart buyer of technologies.

Since its approval by Cabinet in 2013, the ICT RDI Roadmap has allowed the DST investment into ICT RDI to grow significantly and be aligned to national priorities, creating an ICT RDI ecosystem that is attractive to foreign direct investment. During the 2014/15 period, multinational ICT companies such as IBM (R373 million over 10 years) and Cisco (a three-year partnership worth R66,6 million) have seen the strength of the South African ICT RDI ecosystem and decided to partner with DST to substantially increase their investment in R&D in this country, with their research agendas directed by and aligned to the ICT RDI Roadmap.

Initiatives such as the Health Patient Registration System with the Department of Health have been implemented at 38 facilities across eight provinces, allowing 328 639 registered patients to benefit from improved healthcare information systems.

#### **(g) The Nkowankowa Demonstration Centre**

The DST established the Nkowankowa Demonstration Centre as a pilot for creating employment through a local product beneficiation process with funding from the European Union's Sector Budget Support. The initial

objective of beneficiating available commercial and wild fruit through the extraction of oils for cosmetic formulations was revised to meet a market gap for pulping and processing the surplus mangoes, bananas and guavas grown in the area.

The centre is now registered as Wolkberg Fruit Processors (Pty) Ltd, with the project becoming a financially sustainable entity. Production has increased by 300%, trebling the economic benefit accruing to farmers, households and employees in the Greater Tzaneen local economy.

#### **Future plans of the Department**

Future plans in the medium term include a greater focus on the implementation of aspects of the Bio-economy Strategy. Activities/projects will be coordinated with broader government and industry users of the technologies, and investments will give due consideration to the entire value chain as well as existing challenges.

The Ketlaphela Project is to be incubated as a government-owned pharmaceutical company that will initially enter into agreements with the companies awarded the 2015-2017 tender to supply antiretrovirals. The agreements will involve these companies ceding a portion of their tender allocation to Ketlaphela. This will enable the supply of ARV tablets to the Department of Health from mid-2016 onwards through full toll procurement, i.e. procuring the finished product (tablets and packaging) from the supplier with Ketla-branding (supplier rebranded product).

In terms of vaccines, a combination of active pharmaceutical ingredient and formulation and filling opportunities are under consideration. These involve both technology transfer and product development activities within Biovac. Technology transfer agreements are being implemented with, among others, Sanofi Pasteur (France) for hexavalent vaccines, CSL in Australia for influenza vaccines, and with Pfizer for their 13-valent pneumococcal vaccine (including Pfizer carrying some of the costs).

In the energy space, the key focus will be on strengthening public-private partnerships with a view to building innovation-supporting infrastructure, and fast-tracking the uptake of technologies from existing strategic initiatives like the Hydrogen South Africa centres of competence, and the

## 5. Report of the Accounting Officer (continued)

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hubs for renewable energy, advanced battery technology, and energy-efficiency and demand-side management. There will be emphasis on communicating the work done by the Department in the energy space with other government departments, and increasing public awareness.

The Department seeks to influence long-term energy and mineral policy and decision making, and has made critical and reliable data available for the finalisation of the Department of Energy's Integrated Energy Plan (IEP). Influencing energy policy also involves advocating specific policy interventions and technologies to be included in the IEP (for example, hydrogen fuel cells) on the basis of R&D.

Fast-tracking the commercialisation of technologies developed will be a priority. The hydrogen fuel cell generators currently on trial will be extended to more schools and households. The intention is to develop solutions for local and global energy security problems, and to enhance economic growth through the creation of new industries by developing appropriate competitive advantages and human capital.

The coordination role of the South African National Space Agency for all national space activities will be strengthened as the development of nascent satellite technology platforms and infrastructure is intensified. This will include the acquisition and upgrading of core facilities like the assembly, integration and testing facility at Houwteq. The Department will continue to engage with relevant departments, government agencies and state-owned enterprises in this regard. The development of the indigenous satellite programme is expected to spark growth and enhance the viability of the national space industry. Rigorous, targeted human capital development programmes for satellite engineering and space applications will be pursued. Space science and technology will also play a critical role in Operation Phakisa, currently looking at the role of the ocean economy in South Africa.

In terms of innovation and commercialisation activities, the Technology Innovation Agency will continue to make funding (often high risk) available to assist in the development of technologies to a "close to market" stage, an area in which venture capitalists and angel investors typically do not want to operate.

Similarly, a good pipeline will be developed for the realisation of R&D outputs with socio-economic impact. The transition of research along the various technology readiness levels to commercialisation, and the accompanying support measures implemented to achieve this, will be assessed and the information used towards the development and implementation of a framework or methodology quantifying the actual and potential impact of science and technology innovation on economic growth and development. The incentives, support, funding and compliance requirements of the National Intellectual Property Management Office will play a key role in this context by supporting six offices of technology transfer for capacity development annually, training candidates in intellectual property (IP) matters and specialised technology transfer skills, awarding a rebate to eligible claims from institutions annually from the IP Fund in line with the requirements of the IP Fund Guideline, and encouraging the receipt of disclosures from publicly funded institutions.

A key focus will be on strengthening the connections and partnerships between business, government, science councils, higher education institutions and society, to ensure that South African innovations impact positively on the lives of South Africans.

Complementary to public-private partnerships, the implementation of key policy initiatives like the Emerging Industries Action Plan and the Commercialisation Framework/Technology Commercialisation Strategy will be championed and coordinated, as will DST actions under IPAP.

### Highlights

The Department's efforts to develop and implement international partnerships to support South Africa's national system of innovation included securing R634,5 million in foreign funds for investment in and cooperation with South African research and technology organisations. Human capital development was a major focus, with 2 143 South African researchers and students participating in various international training and mobility programmes. The Department's geographic priority for international partnerships remained Africa, and 18 international partnerships were brokered to support science, technology and innovation capacity-building in

Africa. As the custodian of science diplomacy in South Africa, the Department supported 24 international engagements initiated by the Presidency and the Department of International Relations and Cooperation through science and technology cooperation partnerships with other countries.

The Department's success in attracting science, technology and innovation-orientated foreign investment to South Africa can be attributed largely to its vibrant partnerships with the European Union and philanthropic funders such as the Bill & Melinda Gates Foundation. The DST launched important new bilateral initiatives, under which South Africa and partner countries committed significant funding

for cooperation programmes. The United Kingdom-South Africa Newton Fund cooperation, for example, saw a joint annual investment commitment of up to R140 million to support bilateral projects. March 2015 also saw the signature of the Brazil, Russia, India, China and South Africa (BRICS) Memorandum of Understanding on Cooperation in Science, Technology and Innovation, which created a strategic framework for multilateral partnerships between the BRICS countries. In Africa, new bilateral relations of note include agreements concluded with Ethiopia and Sudan. The Department continued to play a leadership role in multilateral science forums, with several South Africans elected to leadership positions in the International Council for Science (ICSU).

#### 4. Departmental receipts

The table below highlights receipts collected by the Department in the financial year under review (2014/15) and the previous financial year (2013/14).

Departmental receipts	2013/14			2014/15		
	Estimate	Actual amount collected	(Over)/ Under collection	Estimate	Actual amount collected	(Over)/ Under collection
	R'000					
Sale of goods and services other than capital assets	28	47	(19)	28	50	(22)
Interest, dividends and rent on land	12	8	4	2	3	(1)
Financial transactions in assets and liabilities	1 752	1 604	148	1 277	1 549	(272)
<b>Total</b>	<b>1 792</b>	<b>1 659</b>	<b>133</b>	<b>1 307</b>	<b>1 602</b>	<b>(295)</b>

The Department does not generate revenue on a recoverable basis from the general public. The revenue generated was mainly from commission on Persal transactions, interest received from deposit accounts held with a commercial bank, payments of bursary debts by officials, and other recoverable expenditure.

The overcollection for 2014/15 was due to an increase in the number of officials who paid commission for their insurance policies, interest received from deposits made to a commercial bank, and surpluses on project funds that were refunded to the Department.

#### 5. Spending trends

The Department's appropriation for the year under review was R6,480 billion, compared to R6,198 billion in 2013/14, which was a 5% inflationary adjustment for all the Programmes.

The table below shows budget and actual expenditure per Programme for the financial year under review (2014/15) and the previous financial year (2013/14).



## 5. Report of the Accounting Officer (continued)

Programme	2014/15			2013/14		
	Final appropriation	Actual expenditure	(Over)/ Underexpenditure	Final appropriation	Actual expenditure	(Over)/ Underexpenditure
	R'000					
Administration	284 070	278 412	5 378	258 926	257 471	1 455
Technology Innovation	1 049 150	974 040	75 410	1 671 041	1 669 678	1 363
International Cooperation and Resources	111 519	107 589	3 930	141 430	139 783	1 647
Research Development and Support	3 492 889	3 489 837	3 052	2 473 173	2 462 721	10 452
Socio-Economic Innovation Partnerships	1 542 262	1 539 166	3 076	1 653 585	1 639 836	13 749
<b>Total</b>	<b>6 479 890</b>	<b>6 389 044</b>	<b>90 846</b>	<b>6 198 155</b>	<b>6 169 489</b>	<b>28 666</b>

The Department's spending performance has been consistently above 90% since its inception. It was 98,6% for the 2014/15 financial year.

Summary of budget expenditure analysis per economic classification:

Details	2014/15 R'000	2014/15 %
Amount voted	6 479 890	100
Actual expenditure	6 389 044	98,6
Unspent funds	90 846	1,4
<b>Economic classification</b>		
Current expenditure	445 850	7,0
Transfer payments	5 936 872	92,9
Payments for capital assets	6 230	0,1
<b>Total payments</b>	<b>6 389 044</b>	<b>98,6</b>

### Virements

The Department effected virements amounting to R64,2 million after the Adjusted Estimates of National Expenditure process, which represents 1% of the adjusted budget. An amount of R35,4 million was moved between major items and R40,2 million was moved between Programmes.

Transfers and subsidies received the largest share (R31,4 million) released from goods and services, and these funds were mainly redirected to International Centre for Genetic Engineering and Biotechnology research and training activities, the Intellectual Property Fund, and capacitating offices of technology transfer (under Technology Innovation). Some of the funds from goods and services were redirected to payments for capital assets.

### 6. Supply chain management

The Department developed, approved and implemented supply chain management guidelines. The Department has complied with National Treasury instruction notes on enhancing and monitoring performance. The Department has submitted the procurement plan for 2014/15 financial year as required by the prescripts.

The Department ensured that suppliers submitted SBD 4, 8 and 9 forms during procurement, and instituted mechanisms to ensure that payments were made within 30 days. Irregular expenditure identified was dealt with in terms of National Treasury prescripts. Supply chain management guidelines and prescripts assisted in reducing irregular expenditure. The Department has a Bid Adjudication Committee, and appoints a Bid Evaluation Committee on an ad-hoc basis, depending on the goods or services required.

## **7. Gifts and donations received in kind from non-related parties**

No gifts or donations were received in kind from non-related parties.

## **8. Standing Committee on Public Accounts (SCOPA) resolutions**

There were no SCOPA resolutions.

## **9. Prior modifications to audit reports**

The Auditor-General found no matters of significance regarding the administration of the Department.

## **10. Exemptions and deviations received from the National Treasury**

The Department requested exemption not to use its database owing to irregularities that were discovered during the period under review.

## **11. Events after the reporting date**

No significant events occurred after the reporting date.

## **12. Other**

The Department acquired the Biological and Vaccines Institute of Southern Africa Proprietary Limited (Biovac) shares from the national Department of Health. Members were therefore appointed to serve on the Biovac board

on behalf of the Department. The value of these shares is disclosed in detail in Part E: Annexure 2B to the Annual Financial Statements.

## **13. Acknowledgements and appreciation**

I would like to express my sincere appreciation to the DST staff and the members of the various committees for their dedication in ensuring that the Department's mandate was carried out. I would also like to express my sincere appreciation for the support and leadership of the Minister and Deputy Minister during the period under review.

## **14. Approval and sign off**

The Annual Financial Statements set out on pages 149 to 240 have been approved by the Accounting Officer.



**Phil Mjwara**  
**Director-General**  
**Department of Science and Technology**  
**Date: 31 July 2015**

## 6. Statement of responsibility and confirmation of accuracy for the annual report

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I confirm that to the best of my knowledge and belief:

- All information and amounts disclosed throughout the Annual Report are consistent.
- The Annual Report is complete, accurate and free from any omissions.
- The Annual Report has been prepared in accordance with the Guidelines on Annual Reports issued by National Treasury.
- The Annual Financial Statements have been prepared in accordance with the modified cash standard and the relevant frameworks and guidelines issued by National Treasury.
- The Accounting Officer is responsible for the preparation of the Annual Financial Statements and for the judgements made in this information.
- The Accounting Officer is responsible for establishing and implementing a system of internal control that has been designed to provide reasonable assurance as to the integrity and reliability of the performance information, the human resources information and the Annual Financial Statements.
- External auditors are engaged to express an independent opinion on the Annual Financial Statements.

In my opinion, the Annual Report fairly reflects the operations, the performance information, the human resources information and the financial affairs of the Department for the financial year ended 31 March 2015.



**Phil Mjwara**  
**Director-General**  
**Department of Technology**  
**Date: 31 July 2015**



## 7. Strategic overview

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### 7.1 Vision

To create a prosperous society that derives enduring and equitable benefits from science and technology.

### 7.2 Mission

To develop, coordinate and manage a National System of Innovation that will bring about maximum human capital, sustainable economic growth and improved quality of life for all.

### 7.3 Values

#### **Professionalism**

The Department is professional and delivers high-quality performance to both internal and external stakeholders.

#### **Innovation**

The Department is innovative in solving problems and enhancing effectiveness and efficiency.

#### **Ethical behaviour**

The Department and its employees are consistent in their actions, and accountable and transparent in dealing with public funds and other resources.

#### **Knowledge sharing**

The Department and its employees share and use knowledge constructively to ensure it contributes to the building of a robust and productive knowledge economy.

## 8. Legislative and other mandates

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### 8.1 Science and Technology Laws Amendment Act, 2014 (Act No. 7 of 2014)

The purpose of the Act is to amend the Scientific Research Council Act, 1988 (Act No. 46 of 1988), the National Research Foundation Act, 1998 (Act No. 23 of 1998), the Academy of Science of South Africa Act, 2001 (Act No. 67 of 2001), the Natural Scientific Professions Act, 2003 (Act No. 27 of 2003), the Human Sciences Research Council Act, 2008 (Act No. 17 of 2008), the Technology Innovation Agency Act, 2008 (Act No. 26 of 2008), and the South African National Space Agency Act, 2008 (Act No. 36 of 2008), so as to harmonise the processes for the appointment of the chairpersons of the boards of the entities reporting to the Minister; to streamline the processes for the appointment of members of the boards and the chief executive officers of the entities; to provide for the filling of vacancies of members of the boards; to provide for the qualification requirements for membership of the boards and the disqualification of

members of the boards; to provide for extension of the terms of office of members of the boards; and to provide for the dissolution and reconstitution of the boards and for matters connected therewith.

### 8.2 Intellectual Property Rights from Publicly Financed Research and Development Act (IPR Act), 2008 (Act No. 51 of 2008)

This Act provides for the more effective use of intellectual property (IP) emanating from publicly financed research and development, through the establishment of the National Intellectual Property Management Office (NIPMO), the IP Fund, and offices of technology transfer (OTTs) at institutions.

### 8.3 Technology Innovation Agency, 2008 (Act No. 26 of 2008)

This Act is intended to promote the development and exploitation, in the public interest, of discoveries, inventions,

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innovations and improvements, and for that purpose establishes the Technology Innovation Agency (TIA).

#### **8.4 South African National Space Agency Act, 2008 (Act No. 36 of 2008)**

This Act establishes the South African National Space Agency (SANSA) to promote space science research, cooperation in space-related activities, and the creation of an environment conducive to the development of space technologies by industry.

#### **8.5 Natural Scientific Professions Act, 2003 (Act No. 27 of 2003)**

This Act establishes the South African Council for Natural Scientific Professions (SACNASP) and legislates the registration of professional natural scientists, natural scientists-in-training, natural science technologists and natural science technologists-in-training.

#### **8.6 National Research Foundation Act, 1998 (Act No. 23 of 1998)**

This Act establishes the National Research Foundation (NRF) to promote basic and applied research, as well as the extension and transfer of knowledge in the various fields of science and technology.

#### **8.7 National Advisory Council on Innovation Act, 1997 (Act No. 55 of 1997)**

This Act establishes the National Advisory Council on Innovation (NACI) to advise the Minister of Science and Technology on the role and contribution of science, mathematics, innovation and technology to promoting and achieving national objectives.

#### **8.8 Human Sciences Research Council Act, 2008 (Act No. 17 of 2008)**

This Act provides for the continued existence of the Human Sciences Research Council (HSRC), which carries out research that generates critical and independent knowledge relative to all aspects of human and social development.

#### **8.9 The Scientific Research Council Act, 1988 (Act No. 46 of 1988)**

This Act establishes the Council for Scientific and Industrial Research (CSIR), which undertakes directed research and development for socio-economic growth in areas that include the built environment, defence, the environmental sciences, and biological, chemical and laser technology.

#### **8.10 The Academy of Science of South Africa Act, 2001 (Act No. 67 of 2001)**

This Act establishes the Academy of Science of South Africa (ASSAf), which provides evidence-based scientific advice on issues of public interest to government and other stakeholders. ASSAf regularly publishes its findings and recommendations. It acknowledges the achievements of South African scientists in order to develop the intellectual capacity of the nation and promote innovative, scholarly thinking.

#### **8.11 Section IID of the Income Tax Act, 1962 (Act No. 58 1962)**

Section IID of the Income Tax Act gives the Minister of Science and Technology the authority to approve any research and development undertaken or funded in the South Africa for a tax deduction in order to promote private sector research and development (R&D) activities in the country. The Department of Science and Technology (DST) shares the responsibilities for implementing this provision with the National Treasury and the South African Revenue Service.

## 9. Organisational structure

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The Minister of Science  
and Technology,  
Mrs Naledi Pandor



Deputy Minister of Science  
and Technology,  
Mrs Zanele kaMagwaza-Msibi



Director-General,  
Dr Phil Mjwara



Deputy Director-General:  
Institutional Support  
and Planning (Acting),  
Mr Tommy Makhode



Deputy Director-General:  
Corporate Services,  
Ms Nombuyiselo Mokoena



Deputy Director-General:  
International Cooperation  
and Resources,  
Mr Daan du Toit



Deputy Director-General:  
Technology Innovation,  
Mr Mmboneni Muofhe



Deputy Director-General:  
Research Development  
and Support,  
Dr Thomas Auf Der Heyde



Deputy Director-General:  
Socio-Economic Innovation  
Partnerships,  
Mr Imraan Patel

## 10. Entities reporting to the Minister

### Council for Science and Industrial Research (CSIR)



#### Overview of objectives

The CSIR is one of the leading scientific and technological research, development and innovation organisations in Africa. It undertakes directed R&D for socio-economic growth in areas including the built environment; defence; the environmental sciences; and biological, chemical and laser technology. Below are some of the highlights for the period under review.

#### Health

##### *Support for national health insurance initiative*

The CSIR has continued to support the implementation of the National Health Insurance system through its work on health information systems. For example, the Health Normative Standards Framework for e-Health was gazetted in April 2014, with the Health Patient Registration System deployed in 38 National Health Insurance clinics across eight provinces.

##### *Health technology*

The CSIR continued to work on the development and deployment of health technologies that will improve access to and delivery of primary health care, particularly in under-served areas. The pre-production of the Umbiflow system (low-cost Doppler ultrasound device for better primary health care services for pregnant women) is almost complete, and further clinical studies have been initiated, in partnership with the Medical Research Council. A national haematology database was developed in collaboration with the National Health Laboratory Service.

### Defence and Security

#### *Defence Review*

Over the past three years, the CSIR has provided significant inputs into the Defence Review process regarding the role of science, engineering and technology in the future of the South African Defence Force. The CSIR's support to combat formations and arms of service in respect of strategic decision making is now recognised as fundamental to the formation of the South African Defence Evaluation and Research Institute.

#### *Inundu Pod Development*

The Inundu Pod was developed by the CSIR to serve as an airborne electronics test and evaluation facility. The Pod will provide the critical infrastructure required by the CSIR for its scientific R&D into radar and electronic warfare technologies, and will provide a test and evaluation facility to support the local aerospace and defence industry in the development of airborne payloads for various applications.

#### *Simulation-based training systems for the South African Navy*

In collaboration with an industrial partner, Cybicom Atlas Defence, the CSIR has developed a distributed, integrated simulation and training platform for naval operations. The simulation system was developed to aid procedural training for deck landing officers on frigates. A deck landing officer on a frigate is responsible for guiding helicopter pilots safely onto the deck, and well-trained deck landing officers and pilots are especially necessary in difficult sea conditions, where there are large variations in deck orientation.

#### **The natural environment**

##### *Climate change*

In collaboration with South African National Parks (SAN-Parks), the CSIR has produced the first locally calibrated map of woody plant cover. This capability will be used to provide information for application in forest inventory, the sustainable use of wood for fuel, planning for the removal of alien plants, and monitoring bush encroachment.

The CSIR hosted 40 delegates from the Southern African Development Community (SADC) at a training workshop to build capacity for undertaking ecosystem assessments in the region.

### **Green economy**

In the year under review, the CSIR completed the National Waste Pricing Strategy for the Department of Environmental Affairs. The strategy draws on international research and practice to present a range of fiscal options (including fees, incentives, taxes, levies and deposit schemes), which will enable government to catalyse the waste economy.

### **Environmental management systems**

The CSIR is working on a number of critical strategic environmental impact assessments for large wind and solar photovoltaic projects, including those related to the expansion of the electricity grid and the assessment of shale gas extraction in the Karoo.

### **Industry**

#### **Polymer nanocomposites**

A nanoclay manufacturing process has been licensed to an industrial partner, which will produce approximately 20 tons of material per month.

The CSIR nanocomposite processing facility is being extensively used by industry, producing 10 tons per month of CSIR-developed nanocomposite materials.

#### **Aerospace Industry Support Initiative**

Three highly innovative local aerospace technologies that are showing great promise for successful commercialisation were developed through local SMEs.

#### **Agri-business innovation centre in Mozambique**

The CSIR is part of an international consortium (with institutions from Italy, Germany and Mozambique) involved in the development of an agri-business innovation centre in Mozambique. The objective of the centre is to stimulate, support and promote the commercial agrarian and agro-industrial sector in the country. As part of the CSIR's role in this project, the CSIR-developed inTouch Africa technology package was transferred to the agri-business centre.

### **The built environment**

#### **Support to local government**

The CSIR delivered a smart city implementation plan for the City of Johannesburg, and is supporting various projects to support local government service delivery through science and technology solutions. UrbanSim (a spatial planning

tool) is being applied in the Nelson Mandela and City of Tshwane Metropolitan Municipalities for long-term financial sustainability and infrastructure investment planning.

### **Building science and technology**

Twenty-nine national norms and standards in respect of the design and operation of health facilities infrastructure were completed and gazetted by the Department of Health.

### **Transport infrastructure engineering**

The CSIR is assisting the Tanzanian Road Agency with an investigation into the cause and mechanism of premature rutting on the country's national roads.

### **Information and communication technology (ICT)**

#### **Broadband**

The proposed model regulations developed by the CSIR, in collaboration with Google, were ratified by the Board of the Dynamic Spectrum Alliance (a global organisation advocating for laws and regulations that will lead to more efficient and effective spectrum utilisation) as a blueprint for an internationally harmonised approach to television white space regulations.

The Centre for Broadband Communication was launched in March 2015 at Nelson Mandela Metropolitan University as a result of a partnership involving the university, the CSIR, the DST, Cisco and the Square Kilometre Array project.

#### **Earth observation services**

A commercial agreement was signed with Firefight Trust in Zimbabwe to provide an Advanced Fire Information System (AFIS) service in Zimbabwe. A commercial agreement is being negotiated with Kishugu International to provide AFIS to its clients in Argentina, Uruguay and Chile.

### **Energy**

#### **Energy materials**

The synthesis of core-shell metal-organic frameworks (MOFs) with improved hydrogen storage properties in individual MOFs was accomplished. Hydrogen storage materials comprising composites of chromium-based MOFs and zeolite-templated carbons were synthesised.

Three South African coals of interest to Eskom have been combusted under oxy-fuel conditions.



## 10. Entities reporting to the Minister (continued)

### **National cleaner production centre**

In an attempt to address the energy efficiency issue in the country, the CSIR realised actual energy savings of 866 GWh in 80 companies through the Industrial Energy Efficiency Project (a collaboration with UNIDO and others). These savings equate to the energy required to power 120 000 South African homes for 12 months or financial savings of R759 million.

### **National Research Foundation (NRF)**



#### **Overview of objectives**

To contribute to the improvement of the quality of life of all the people of the country, the NRF promotes and supports research in all fields of science and technology; develops the pipeline of human capacity towards creating critical mass in high-end skills; advances research infrastructure development; and provides researchers and institutions with access to these research facilities to create new knowledge. Below are some of the highlights for the period under review.

#### **Science engagement**

The South African Agency for Science and Technology Advancement (SAASTA) and the national research facilities reached 18 525 educators in interactions focusing on mathematics, technology and science.

A total of 77 450 learners, 1 348 educators and 10 facilitators were reached through science education projects such as role modelling campaigns, undergraduate support, the National Youth Volunteer Service and National Science Week.

Approximately 1,3 million members of the public were reached through science engagement activities such as science festivals and visits to the Johannesburg Observatory and its set of exhibitions and laboratories, and through the science centres. SAASTA manages programmatic support grants for science centres, and a science centre capacity-building programme on behalf of the DST.

### **Research and Innovation Support and Advancement**

#### **Support for students and researchers**

Support for doctoral students increased by 26%, and for master's students by 15%. The overall number of black and female researchers supported increased by 23% and 18%, respectively.

#### **South African Research Chairs Initiative (SARChI)**

The DST and NRF announced a further 20 new chairs, targeted at women researchers specifically. Funding was made available through cost savings from rescinded chairs.

#### **Centres of excellence**

Over the reporting period, five new DST-NRF centres of excellence were established and awarded.

#### **International cooperation**

15 joint calls have been published covering a range of directed themes in support of South Africa's international research framework. Of ISI publications by South African authors, 52,4% were co-published with international partners, which indicates the success of these collaborations and their positive effect on the South African national system of innovation (NSI).

The NRF undertook a study visit to the Research Council of Norway to exchange knowledge and best practice in grant management processes and procedures. The visit also provided an opportunity to visit projects in Norway funded by the South Africa-Norway Research Cooperation Programme.

#### **Nanotechnology research**

The Centre for High Resolution Transmission Electron Microscopy at Nelson Mandela Metropolitan University has partnered with the newly opened facility in the Rhodes/DST Centre for Nanotechnology Innovation to make the Eastern Cape the national hub for nanotechnology.

#### **Internship programme**

A total of 711 interns were placed at participating institutions throughout the country to be trained under the guidance of experienced mentors. This is the highest number of interns placed since the inception of the programme.

### **Astronomy**

The Deputy CEO for Astronomy was appointed on 1 October 2014 to head the Astronomy Sub-agency and lead the implementation of the National Strategy for Multi-wavelength Astronomy. Over the reporting period the sub-agency produced 134 peer-reviewed papers, of which 32 were contributed by SKA SA, mainly the result of work using the KAT-7 array.

A 22 GHz cryogenic receiver developed and manufactured at the Hartebeesthoek Radio Astronomy Observatory (HartRAO) was installed and commissioned in time for the first 22 GHz astrometric very long baseline interferometer in May 2014. This receiver improves the sensitivity of the previous uncooled test receiver by a factor of 4 to 5.

The new satellite lunar ranger at HartRAO was commissioned. Initial investigations have revealed that the lighting for the proposed Wind Energy Facility in the Karoo will not affect the night sky brightness at Sutherland.

A new contract was signed between the South African Astronomical Observatory and the Lomonosov Moscow State University for the hosting of an automated telescope at Sutherland. Installation was completed in December 2014.

### **Human Sciences Research Council (HSRC)**



#### **Overview of objectives**

The Human Sciences Research Council (HSRC) is mandated to initiate, undertake and foster strategic basic and applied research in the human sciences, and to gather, analyse and publish data relevant to developmental challenges in South Africa, elsewhere in Africa and in the rest of the world. The Africa Institute of South Africa (AISA) was incorporated into the HSRC as of 1 April 2014, as stipulated in the AISA Repeal Act, 2013. Below are some of the highlights for the period under review.

### **SA BRICS Think Tank**

The five BRICS countries – Brazil, Russia, India, China and South Africa – established the BRICS Think Tanks Council (BTTC) in March 2013. At the request of the Departments of Higher Education and International Relations and Cooperation, the HSRC served as an incubator for the South African BRICS Think Tank. In this capacity, the HSRC played a leading role in preparing the BRICS Vision and Long Term Strategy on behalf of the BTTC. It also took responsibility for South Africa's analysis of the third pillar of the strategy (Social Justice, Sustainable Development and Quality of Life) that was submitted to the BTTC consultative workshop in Beijing in November 2014.

### **National HIV survey**

Research findings from the fourth South African National HIV Prevalence, Incidence and Behaviour Survey were released on 1 April 2014 by the Ministers of Health and Science and Technology. The findings highlighted that, while South Africa is on the right track with the provision of antiretroviral treatment, more targeted prevention interventions are needed to reduce the high rate of new HIV infections. The data from this survey will serve as critical benchmark for the evaluation of the National Strategic Plan on HIV, Sexually Transmitted Infections and TB (2012-2016), and will be useful for monitoring progress in implementing the Medium Term Strategic Framework and the National Development Plan.

### **Annual National Assessments**

The Annual National Assessments (ANA) are standardised national assessments for languages and mathematics in the intermediate phase, and in literacy and numeracy for the foundation phase. They are managed and overseen by the national Department of Basic Education, but the HSRC assists with verification and quality assurance. During 2014, the HSRC analysed and verified ANA data after another service provider had finalised scoring and data capturing. This is critical for supporting the accuracy and reliability of ANA results.

## 10. Entities reporting to the Minister (continued)

### State of the Nation

Local academics, policy makers, diplomats and interested citizens attended the launch of the seventh edition of the State of the Nation series from HSRC Press, *State of the Nation: South Africa 1994-2014: A twenty-year review of freedom and democracy*.

The book offers perspectives on topics of national importance such as the governability of the state, the National Development Plan, constitutional rights, employment creation, HIV and Aids, media freedom, and South Africa's position in BRICS.

### South African Social Attitudes Survey (SASAS)

SASAS measures trends and changes in attitudes over time, providing valuable insights for researchers and government planners. Topics relating to the public understanding of science are featuring increasingly in SASAS. These include commissioned modules on attitudes towards nuclear energy and technology, astronomy and the Square Kilometre Array, as well as attitudes towards biotechnology.

### Centre for Science, Technology and Innovation (CeSTII)

CeSTII is dedicated to the measurement, production and statistical analysis of STI indicators as well as carrying out policy-relevant research in the same field. During 2014/15 the 11th national survey on research and experimental development was completed and published.

### Immigration

South Africa is an attractive destination for cross-border migration because its economy is stronger than that of other countries in the region. The Department of Home Affairs commissioned the HSRC to profile the pattern of immigration and the status of international laws, conventions and policies. Findings from the study suggest that South Africa could reap greater economic benefits if it adopted a more holistic approach to immigration. A stronger evidence base of immigration monitoring and impact evaluation could play a significant role in improving decision-making in this sensitive field.

### Rural development

A pilot study was undertaken in collaboration with the Agricultural Research Council and Onderstepoort Veterinary Institute. It studied the introduction of a new-generation vaccine programme in rural communities along the Limpopo/Mpumalanga border where livestock farming is an integral part of social and economic life. It considered challenges faced by these communities in terms of animal health care and disease prevention, and some of the gendered implications of these challenges. The pilot study also examined the relationship between the social dimension of rural small-scale livestock farming systems and household food security, socio-economic development and intra-household decision making. This pilot study has since been scaled up to a multi-year project, with additional funding from the Canadian International Development Research Centre.

### Knowledge generation and innovation in the humanities

The HSRC, in conjunction with the Department of Science and Technology, organised two high-level seminars (attended by the NRF, CSIR and humanities researchers from various universities) to respond to recent initiatives to assess the state of the humanities in South Africa and make recommendations for the future development of the humanities in the context of the NSI.

### Health and Nutrition Examination Survey

The 2014/15 financial year saw further analysis and interpretation of data from the first South African National Health and Nutrition Examination Survey. One of the aims of the survey was to determine infant feeding practices in the country. South Africa adopted World Health Organization feeding guidelines, which recommend that infants should be exclusively breastfed until they are six months old.

In collaboration with the United Nations Children's Fund (UNICEF), the survey analysed information on breastfeeding practices nationally as well as in specific areas, e.g. urban informal areas. The survey findings call for nutrition-specific and nutrition-sensitive interventions to address chronic undernutrition among younger children in the country, and supports the National Development Plan's proposal for the introduction of a nutrition programme for pregnant women and young children.



## Press and publications

Sixteen new titles were published and HSRC Press continues to make its publications available in open access. During 2014/15 there were over 23 000 downloads and 200 000 page views of HSRC Press titles, across 200 countries, with Africa being the biggest growth centre. Book sales continued, with 3 886 units sold in Africa, 473 in the USA and 252 in Europe, with a total of 4 611 units worldwide. Approximately 3 000 books were disseminated to stakeholders and 2 000 books were donated to libraries and institutes.

## Academy of Science of South Africa (ASSAf)



### Overview of objectives

ASSAf, as the only national science academy to be officially recognised by the South African government, recognises and rewards excellence; promotes innovation and scholarly activity; provides effective, evidence-based scientific advice to government and other stakeholders; promotes public interest in and awareness of science and science education; and promotes national, regional and international linkages. Below are some of the highlights for the period under review.

### Membership

The core function of a national science academy is to honour the country's most outstanding scholars by electing them to membership of the academy. ASSAf members are drawn from all disciplines. Of these, 25% are women and 28% black. During the year under review a total of 23 new members were elected. Another round of nominations and elections will be conducted in mid-2015. The total membership of ASSAf at the end of March 2015 was 443.

### Policy Advisory Programme

In order for ASSAf to fulfil its science advisory role in support of policy development regarding key challenges facing the

nation, a variety of consensus studies were undertaken. In the past year, ASSAf produced two consensus study reports, on the state of green technologies and the state of energy research in South Africa.

In addition to the in-depth consensus studies, ASSAf produces concise policymakers' booklets and reports on symposium proceedings, the latter the products of various convening activities of the Academy, which in 2014/15 covered topics such as nuclear energy; mental, neurological and substance use disorders; and green technologies.

Studies generally fall into broad categories related to health; education; climate change; energy; the science-policy nexus; biosafety and biosecurity; and science for the reduction of poverty and inequality. Once concluded, considerable effort is expended in disseminating the findings and ensuring effective uptake of the recommendations.

An international conference entitled "On being Controversial: The Humanities Reach Out" was held from 26 to 27 June 2014 with Prof. Craig Calhoun, Director of the London School of Economics and Political Science, as keynote speaker.

### Scholarly Publishing Programme

The Scholarly Publishing Programme is regarded as a major intervention in the NSI, aimed at enhancing the national capacity to produce and publish research, as well as to increase the quality and visibility of South African research publications.

### Open access platform

During the year under review, steady progress was made in the implementation of the open access platform, SciELO SA, for high-quality South African scholarly journals. The project is inspired by a global movement towards online journals, pioneered by the SciELO project, based in Brazil. During the reporting period, visits to the site increased by 48% and over 100 000 articles on the SciELO SA platform were viewed globally.

### South African Journal of Science

The *South African Journal of Science*, now in its 110th year of publication, is a multidisciplinary journal published by ASSAf every two months. Research contributions, which are peer-reviewed, are of three kinds: review articles, research

## 10. Entities reporting to the Minister (continued)

articles and research letters. The visibility of the journal has increased markedly since its availability on the SciELO SA platform. It is currently the second most frequently accessed journal on the SciELO SA platform, after the *South African Medical Journal*.

### **Liaison Programme**

The purpose of this programme is to establish, strengthen and sustain productive collaborations with African and overseas organisations with a view to enhancing capacity in science and technology, and its application in the NSI.

### **International Strategic Partnerships**

ASSAf participates in and maintains effective relations with international science academy networks to enhance global and continental policy advisory activities and to facilitate funding opportunities.

ASSAf is a member of the executive bodies of the InterAcademy Partnership, the InterAcademy Council (IAC), the InterAcademy Medical Panel, and the Network of African Science Academies.

### **British Academy Nayef Al-Rodhan Prize on Transcultural Understanding**

ASSAf nominated Prof. Jonathan Jansen for this prize, which he was awarded at a prize-giving ceremony at the British Academy on 30 September 2014.

### **Annual Meeting of African Science Academies**

The Annual Meeting of African Science Academies continues to play an important role in bringing together representatives of African academies to share experiences and provide a platform for round-tables and engagement with policymakers and other stakeholders on issues of critical interest for the region.

An IAC review of the African Science Academy Development Initiative gave rise to Africa's Science Academies Development Agenda (ASADA) programme, which aims to make the voice of science heard by policy and decision-makers in Africa and ultimately worldwide. ASADA is a plan to enhance capacity for existing African academies of science and to champion the creation of new ones. This

portfolio works with the whole of Africa, including with regional bodies such as the African Union (AU) and SADC, to ensure science advice to policymakers through national academies or networks. ASSAf, along with the DST, played a leading role in the initiation of the programme.

### **Recognition of excellence through awards**

ASSAf Science-for-Society gold medals recognise outstanding achievements in scientific thinking for the benefit of society.

In 2014/15 Prof. Quarraisha Abdool Karim, Associate Director of the Centre for the AIDS Programme of Research in South Africa, and Prof. Jonathan Jansen, Vice-Chancellor and Rector of the University of the Free State and President of the South African Institute of Race Relations, received awards.

### **AU-The World Academy of Sciences (TWAS) Prize for Young Scientists**

The AU-TWAS award scheme aims to recognise and reward talented young scientists in Africa. The AU-TWAS Prize for Young Scientists in South Africa is managed by ASSAf, on behalf of its partners, the AU Commission, TWAS and the DST. The prize in Life and Earth Sciences was awarded to Dr Keren Middelkoop of the University of Cape Town. Prof. De Wet Swanepoel of the University of Pretoria received the prize for Basic Science, Technology and Innovation.

### **Young scientists**

The fourth ASSAf Annual South African Young Scientists' Conference was held from 14 to 16 October 2014 in Pretoria with the theme "Agriculture and Food Security", matters which remain high on the policy agenda at national, regional and continental level. The conference attracted primarily PhD, postdoctoral, and young, early-career researchers and scientists.

### **Women for Science**

The Gender in Science, Innovation, Technology and Engineering (GenderInSITE) campaign is one of the ASSAf's Women in Science activities. The global campaign was established to promote awareness among decision-makers that STI policy and planning would be more effective, equitable and sustainable if they reflected the vision, aims, con-

cerns, perspectives, knowledge and abilities of both women and men. ASSAf successfully won the bid to host the southern African focal point for GenderInSITE.

## South African National Space Agency (SANSA)



### Overview of objectives

SANSA is mandated to promote the peaceful use of space; support the creation of an environment conducive to industrial development in space technology; foster research in space science, communications, navigation and space physics; advance scientific, engineering and technological competencies and capabilities through human capital development, outreach programmes and infrastructure development; and foster international cooperation in space-related activities. Below are some of the highlights for the period under review.

### Essential Earth observation services for socio-economic benefit

With increasing awareness and appreciation of the efficiency and productivity gains that can be derived from the use and application of satellite imagery for government service delivery, SANSA is seeing a huge demand for its products and services. Satellite imagery is increasingly applied in addressing challenges in agriculture, water resource monitoring, mapping of natural disaster areas, the effects of climate change over time and the planning of human settlements. To meet this demand, SANSA added 55 000 satellite images to its extensive satellite data archive this financial year. In addition, approximately 72 000 satellite images were distributed to various key stakeholders.

More than 20 000 satellite data images were distributed on Fundisa disks for research purposes. The Fundisa disks provide a unique resource for students to visualise, share,

interact, analyse and interpret Earth observation data and serve to enhance R&D in space science and engineering.

### Providing satellite launch services to the global space industry and international governments

Satellite communication and broadcasting represent a significant market for the space industry. The increasing growth in the launch of communication satellites is primarily driven by the number of households around the world who are direct satellite broadcast subscribers. SANSA offers various satellite launch support services to a number of global manufacturers and governments around the world. Altogether, SANSA supported 21 satellite launches and satellite in-orbit tests this year.

### Conducting cutting-edge research, development and innovation in space science

SANSA is making a contribution to the performance of the South African science system by progressively improving its high impact research outputs. In this current financial year, SANSA contributed 29 ISI publications. This demonstrates the Agency's continuous efforts to develop emerging researchers and contribute to the country's world share of ISI publications. Space science research is critical in building a knowledge economy and gaining a deeper understanding of the space environment to advance society. For instance, this knowledge assists in protecting various technologies that are sometimes severely affected by space weather. These technologies include communication systems, navigation systems, electrical power grids, and satellite systems.

### Advancing SET competencies and capabilities

One of SANSA's key objectives is to advance science, engineering and technology (SET) competencies and capabilities through human capital development and science outreach programmes. SANSA continues to use space science and technology as an ideal instrument for promoting interest in and public engagement with SET. Nearly 11 500 learners were reached through space science initiatives during the year.

## 10. Entities reporting to the Minister (continued)

### Stimulating a sustainable local space industry

SANSA made an active contribution to the South African space industry through local technology development, the advancement of know-how and technology transfer. The Agency provided nine space science end-user services and products to industry clients and partners. In addition, SANSA provided 2% of the Parliamentary Grant for the Earth Observation programme to Earth observation industry partners through contract work. The satellite engineering programme directly supported 36 jobs during the year under review.

### South Africa as an emerging space-faring nation

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 various international partners during the financial year, hosted various foreign visitors, and continued to participate in a number of multinational projects, such as the European Space Agency's TIGER initiative, the European Union's Earth Observation for Economic Empowerment, the Group on Earth Observations' Global Human Settlements Working Group, and the Committee on Earth Observation Satellites Working Group on Capacity Building and Data.

### National Advisory Council on Innovation (NACI)



#### Overview of objectives

The National Advisory Council on Innovation (NACI) is a legislative entity, established to provide advisory services to the Minister for Science and Technology in respect of the role and contribution of STI to national objectives and other matters involving the NSI. NACI's primary objective is to leverage STI to further economic competitiveness.

Below are some of the highlights for the period under review.

NACI's key priorities in the year under review included skills and infrastructure for research and innovation, bioeconomy policies and strategies, gender mainstreaming in STI, and innovation for economic development and social upliftment.

In the year under review the NACI Council was reconstituted so that it could strengthen the institution's advisory role to the Minister of Science and Technology and Cabinet, as recommended in the 2012 report on the Ministerial Review of the STI Landscape in South Africa. This involved a broadening of sectoral representation on the Council to include business executives from the financial services, information technology, economic sectors, science councils and the not-for-profit sector.

NACI cut down on the number of meetings (and their associated costs) in 2014/15, strengthened independent and objective analysis, and aligned its advisory programme to pertinent national policy questions. The overall output of the different NACI subcommittees was particularly pleasing. NACI produced a new edition of the STI indicators booklet, providing an assessment of the status and health of the science system.

The Council started working on a framework for an innovation portal to bridge information gaps in innovation policy planning within the NSI.

Further policy investigations were initiated to assess, among other things, (a) skills sustainability in government planning for flagship projects, with the investigation focused on the concept of the development of skills ecosystems; (b) promising indigenous knowledge technologies that have potential to complement scientific solutions and assist the country to realise the National Development Plan targets in specific sectors; and (c) a diagnostic assessment of the availability of specific categories of science, engineering and technology skills against the needs of public sector institutions in the NSI.

NACI's advisory programme is supported by a small team of secretariat staff. Its policy investigations are financed by the Department's budget. NACI's research reports, publications and discussion documents on various topics are available on the NACI website.

## Technology Innovation Agency (TIA)



### Overview

TIA is a national public entity that is intended to serve as the key institutional intervention to bridge the innovation chasm and promote the development and exploitation, in the public interest, of discoveries, inventions, innovations and improvements. Below are some of the highlights for the period under review.

### International partnerships

TIA secured matched funding of R3,6 million from the British Council under the UK-SA Newton Fund. A call for proposals was made at the end of 2014 under the Institutional Links Programme to facilitate joint technology development projects between South African and UK partners. Eighteen proposals were received and a preliminary assessment meeting to shortlist the projects was held. Under the Leaders in Innovation Programme with the Royal Academy of Engineering, TIA sent a cohort of 15 participants on two weeks of commercialisation training in the UK.

### Global Cleantech Innovation Programme (GCIP)

The GCIP for SMEs in South Africa has contributed to developing a pipeline of fundable projects through the technology stations and the TIA Technology Development Fund. Awards are made to acknowledge the inventive work of small businesses and start-ups towards addressing energy, environmental and economic challenges with green technology. In 2014, first place went to Clear Sky Energy (in the field of medical waste treatment), with runners-up Lightspere (automated meter reading and billing for water, electricity and carbon gas emissions) and Water Hygiene Convenience (using the Leak-Less valve to prevent the waste of water).

Since then a relationship with the WWF's Climate Solver has been established. While the Climate Solver aims to promote clean technology SMEs, GCIP-SA is a key partner, identifying and supporting them to a level where the Climate Solver can assist with marketing and promoting the products and technologies. The Department of Trade and Industry requested a list of the finalists so that it could assist them to access various support schemes.

### Support to biotechnology, health and industrial SMEs

**BioDx (Pty) Ltd** is implementing a project focused on developing biocides to supply an industrial client. TIA funding has assisted BioDx to make progress with the project, which has enabled the company to sign a supply agreement with Westerblend (Europe).

**PST Sensors (Pty) Ltd** (PST) uses advanced printed thermistors in printed temperature sensing devices. The Venture Capital unit of the Industrial Development Corporation is evaluating R7,5 million in funding for PST following TIA approval of a second round of funding of R5,3m to PST. The TIA second round funding is aimed at funding patent maintenance fees, thereby reducing the investment risk level of PST. This funding was significant as it improved the attractiveness of investment in PST.

**AgriProtein Technologies (Pty) Ltd** is a technology start-up company that has, at its own cost, successfully developed and piloted a nutrient recycling technology (converting organic waste to animal feed protein) as part of its goal to commercialise an insect-based protein feed in the animal feed industry. This is in response to an unmet market need in the animal feed and livestock industries to bring sustainable and affordable alternatives to fishmeal and soy meal to market. Following TIA's commitment of R11,9 million in March 2014, the company has successfully raised R90 million from local and international investors for the next phase of the project, thus demonstrating the risk-lowering value of TIA's investment.

**Enzyme Technologies (Pty) Ltd** is a TIA-funded company that has developed an improved process for the extraction of bromelain from pineapple stumps. Bromelain is an enzyme that has applications in food and ancillary health. Enzyme Technologies has succeeded in improving the quality and efficacy of their bromelain and is targeting the veterinary health market for their product. The



## 10. Entities reporting to the Minister (continued)

company has signed a non-disclosure agreement with a veterinary pharmaceutical company, Virbac, to co-develop further products, and another with Comercializadora Gosan GSG, a producing company based in Costa Rica, in order to open up discussions on the commercialisation of the product.

**MABU Casing Soils (Pty) Ltd** is a technology start-up company located in Bapsfontein. Since 2010 the company has been involved in the further development of the University of Pretoria's intellectual property in respect of the conversion of sugarcane bagasse waste to pith casing soil under commercial licence. This casing soil is a greener alternative for the local mushroom farming industry, which needs locally sourced casing to displace the currently imported and non-renewable peat casing.

**The Beef Cattle Breeding and Reproduction Technology Innovation Programme** focuses on deploying the most recent advances in genomics technology towards improving various heritable traits of economic importance. The programme will enable South Africa to develop the information infrastructure to apply genomic technologies effectively for improved breeding strategies, ensuring a more transparent system for commercial trading in stud animals, improvements in meat product quality, and improvement in beef production profits.

### Youth Technology Innovation Programme

With assistance from TIA, Jared Pillai (age 24) secured funding of R4m from the Dragons' Den SA television programme for his three-in-one Tod-Pod. Through the Youth Technology Innovation Programme, TIA helped Mr Pillai with the development and enhancement of computer-assisted designs. The designs were then used to develop a master product design on a prototyping machine known as the EOS for 3D printing, and 10 prototypes were then manufactured.

### Capacity building in the NSI

Of the 17 interns selected in 2014, four have found permanent positions. The South African National Energy Development Institute absorbed one intern into its Clean Energy Solutions portfolio, one has been employed by Invo Tech, and two from the Bioprocessing Platform have found permanent placement in industry.

Two trainees from the CHUMA commercialisation programme (which offers mentored internship comprising a range of interventions, tailored to fast-track the development of mainly black South African scientists and engineers) found permanent placement, one at NMMU's office of technology transfer, and one at the Innovation Hub.

### Technology Innovation Awards

TIA selected companies it had supported to attend the Department of Science and Technology's inaugural Innovation Bridge Technology Showcase and Matchmaking event in February 2015, with positive results.

Of the companies discussed above, BioDx won the award for the innovation most likely to find widespread markets internationally, and Enzyme Technologies won as the company that developed the best prototype, while MABU Casing Soils secured funding of R4,32 million from AFGRI and the Industrial Development Corporation to scale up commercialisation of their innovative casing soil for use in mushroom production.

The Electric Power Sentry, funded by TIA for R3,2 million in 2012 has completed development and field installations of their power circuits used to manage and promote safe electricity usage in the low-cost housing sector. The circuits are being installed by the City of Tshwane Metropolitan Municipality in Soshanguve.

SLIEK (Pty) Ltd won an award for presenting the best pitch to a panel of evaluators at the Innovation Bridge event. SLIEK is a company that is focused on developing processes to produce lactose-free dairy products. The company is making progress in securing funding to progress the innovation, as well as to purchase a farm that will enable the commercialisation of their products. SLIEK is working with eGoliBio to produce a business marketing plan, and has been accepted to receive assistance in technology development, scale-up and purification of the lactase enzyme from the CSIR's Biomanufacturing Industry Development Centre.

CEO of SA Cardiosynthetics, Dr Murray Legg, received a Mavericks Award on behalf of the company as a young entrepreneur in a technology start-up. SA Cardiosynthetics achieved a critical milestone in successfully demonstrating that their design for a polymer heart valve works in a pulse duplicator.

## South African Council for Natural Scientific Professions (SACNASP)



### Overview of objectives

SACNASP is mandated to legislate the registration of professional natural scientists, natural scientists-in-training, natural science technologists and natural science technologists-in-training. Below is a synopsis of SACNASP's activities for the period under review.

### Registration of professionals

In 2014/15 SACNASP continued with its primary objective of reaching out to more natural scientists in South Africa and increasing the number of registered professionals.

The number of registered professionals in 2014 was 1 196 (up from 1 068 in 2013, and 743 in 2012). The number of applications received was 1 728 in 2014 (compared to 1 240 in 2013 and 1 141 in 2012).

The year under review saw SACNASP undertaking various projects to raise awareness of the legal requirement for registration, including a project in collaboration with Department of Agriculture, Forestry and Fisheries, and the South African Society for Agricultural Extension Scientists, to register extension scientists. Roadshows directed specifically at extension scientists were held throughout South Africa. A total of 3 055 applications were received and entered on the SACNASP database between June 2014 and March 2015.

### Critical skills visas

As a South African Qualifications Authority-accredited body, SACNASP has been able to assist foreign experts who want to work in South Africa to obtain critical skills visas. A process was implemented so that SACNASP could verify the skills or qualifications of an applicant. The process takes on average 30 days from the application to the final decision. In the period under review 80 applications were received and reviewed, and 70 applicants received a positive outcome.

### New fields of practice

As part of SACNASP's ever broadening horizons an additional field of practice, Conservation Science, was recommended to be added to the schedule and is awaiting gazetting.

### SACNASP staff

The increasing numbers of scientists registering has meant growing opportunity for employment within SACNASP. Six positions were created to capture the data for the extension science project. SACNASP now has a staff of 24. Its policy is to support young South Africans in the early stages of their career.

### Social responsibility

SACNASP believes that the well-being and development of South African children is the only way to sustain South Africa's future. In the year under review SACNASP initiated a social responsibility programme with a small day-care centre in Mamelodi, Pretoria. The centre supports 50 children from underprivileged families. SACNASP is currently providing food and other basics, but the long-term goal is to assist the centre to obtain accreditation so that it can receive a social development grant.



## PART B: PERFORMANCE INFORMATION





# I. Auditor-General's report: Predetermined objectives

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

Refer to page 147 of the Report of the Auditor-General, published in Part E: Financial Information.

## 2. Overview of departmental performance

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### 2.1 Service delivery environment

The DST derives its mandate from the 1996 White Paper on Science and Technology, which introduced the concept of the National System of Innovation (NSI). The NSI concept is an enabling framework for the development of science, technology and innovation (STI) at the national level. The NSI can be understood as a set of functioning institutions, organisations and policies that interact constructively in the pursuit of a common set of social and economic goals and objectives, seeking to promote change through the introduction of innovations.

The DST, as the custodial coordinator for the development of the NSI, influences it through key strategies such as the 2002 National Research and Development Strategy (NRDS) and the 2008 Ten-Year Innovation Plan (TYIP). The latter, particularly, seeks to contribute to the transformation of the South African economy into a knowledge-based economy, in which the production and dissemination of knowledge lead to economic benefits and enrich all fields of human endeavour. In this regard, the measure of success will be the level to which STI plays a driving role in enhancing productivity, economic growth and socio-economic development.

Innovation, in particular, will be the basis for future growth and can provide South Africa with the necessary foundation for long-term and sustainable socio-economic development. If South Africa's economy is to advance along the trajectory set out in the National Development Plan (NDP) and reduce poverty, it will require a strong, coherent and effective NSI. One of the eight proposals that the NDP makes with regard to increasing employment and growth is that South Africa must increase the size and effectiveness of the innovation system and ensure closer

alignment with companies operating in sectors consistent with the growth strategy.

Innovation has been attributed to productivity growth, competitiveness, the shift to higher value-added activities, and improvement of quality of life in the recently industrialised countries (such as South Korea and Finland) and emerging economic powers (China, India and Brazil). Innovation introduces new ways of doing things, producing and exchanging goods or improving services and processes. It provides new solutions and helps firms to differentiate themselves from other – often more traditional – firms. Innovation challenges long-held mindsets and social values. Innovation is central to economic performance and social welfare and can contribute to addressing urgent global and social challenges, such as climate change, health, food security, poverty and access to clean water, in an affordable and timely manner.

The global economic crisis and national challenges of inequality, poverty and unemployment have affected the national innovation policy agenda in various ways. There is increasing demand for STI to maximise its impact on socio-economic development and conserving resources. The national STI policies are expected to be relevant (to address socio-economic goals), aligned (with each other and with other policies), and inclusive in terms of scope and of the relevant actors.

A lesson learnt from the recent global economic turmoil is that countries begin to recognise innovation as a source of long-term growth. The DST has put policies into place to improve scientific infrastructure, basic science and research, development and innovation (RDI), strengthen human capital, promote green technology, and foster entrepreneurship; for example, stimulus package

## 2. Overview of departmental performance (continued)

initiatives such as technology assistance packages (TAPs). Consequently, a total of 143 companies are on a register of companies that are receiving or have received TAPs.

In developed countries, more than 50% of economic growth is attributable to technological progress (according to the Organisation for Economic Co-operation and Development (OECD), 2009). South Africa is competitive in many areas, but has specific challenges that require interventions. These include the following:

- Achieving critical mass in a small number of long-term, large-scale, high-impact, priority areas that have been identified over the past few years.
- Ensuring that high-level human capital is developed and employed in long-term productive research careers in South Africa.
- Introducing and strengthening efforts that enhance South Africa's ability to exploit knowledge effectively for economic and social benefit.
- Improving the ability of government investment to leverage private sector and international funding.
- Building the knowledge-generation and knowledge-exploitation capabilities of rural and historically disadvantaged higher education institutions (HEIs).
- Providing and maintaining state-of-the-art STI infrastructure.
- Creating coordinated and integrated NSI governance and robust monitoring and evaluation.
- Developing and strengthening regional and provincial innovation systems and capabilities to meet community and industry demands.
- Using the cluster system to facilitate alignment of the DST programmes to the NDP.
- Resourcing of the system by achieving and going beyond gross expenditure on research and development (GERD) equal to 1% of gross domestic product (GDP).

### 2.2 Alignment with broad policies of government

The NDP provides a long-term vision for dealing with the challenges of unemployment, inequality and poverty, and creating a more inclusive society. Central to meeting the vision enshrined in the NDP is the implementation of the New Growth Path (NGP), the Industrial Policy Action Plan (IPAP) and the National Infrastructure Plan, which have now been consolidated into the NDP.

The Medium Term Strategic Framework (MTSF) places emphasis on addressing unnecessary blockages to investment, providing opportunities for the unemployed, especially young people, to contribute to the economy, ensuring greater income equality by addressing the position of the working poor (who are mostly in domestic work, farm labour and the informal sector), supporting more equitable workplaces and increasing investment in new sources of growth and employment. Achieving this aim will depend to a large extent on the following:

- Implementing the National Infrastructure Plan in ways that include productive investment, both by users of the infrastructure and by suppliers of inputs.
- Driving growth in the productive sectors, especially by addressing the main regulatory, infrastructural and skills constraints to growth, while ensuring policy certainty as far as possible through the implementation of the NDP and sector-based action plans for agriculture and mining.
- Supporting exports and African regional development, taking into account the constraints and the opportunities arising from the structural shifts now taking place in the global economy.
- Maintaining a counter-cyclical fiscal and monetary stance.
- Improving the ability of the education and skills systems to meet the needs of the economy, especially by enhancing language, numeracy, computer and design skills, improving access to post-secondary education and training, and expanding life-long learning in ways that support career mobility and equality.
- Expanding public employment schemes as far as possible in ways that empower communities and support the involvement of youth in serving them.
- Supporting rural development as far as possible given economic realities, based above all on programmes to expand the role of smallholdings in production, for both food security and sale to formal retailers and processors.
- Strengthening the ability of the NSI to identify, prioritise and adequately invest in new sources of growth and employment, including higher levels of government investment in RDI and diffusion, especially to smaller emerging enterprises and poor communities.

The Department continues to implement specific national STI policies that are guiding and influencing its work, including the NRDS, the TYIP, and the Bio-economy Strategy.

### 2.3 Significant developments and major projects undertaken

#### (a) Research and innovation infrastructure

In the 2014/15 financial year, the DST's ring-fenced infrastructure allocation of R551,9 million enabled the DST to support the following:

- The awarding of 69 research infrastructure grants. About 84% of the grants were directly managed by the NRF through the National Equipment Programme and the National Nanotechnology Equipment Programme for scientific equipment grants to universities, science councils and museums, access to global infrastructure and support to the national research facilities.
- Continued support for the development of a titanium additive-manufacturing system.
- Continued support for the establishment of a battery development laboratory.
- Continued support for the establishment of a National Recordal System for the capturing, storage and management of indigenous knowledge (IK).
- The establishment of a national drug development platform at North-West University.

With regard to the development and implementation of the components of the national cyberinfrastructure initiative, the DST continued to make significant investments in this area by supporting the Centre for High Performance Computing (CHPC), the South African National Research Network (SANReN), the Data Intensive Research Initiative for South Africa, and the acquisition of international broadband connectivity on the West Africa Cable System (WACS). A major achievement was the activation of the first international capacity of about 20 gigabits per second on WACS (to complement the connectivity on SEACOM).

#### (b) Human capital and science promotion

The DST finalised the Human Capital Development Strategy for Research, Innovation and Scholarship. Support for postgraduate students increased from 7 712 in 2012/13

to 11 335 students in the 2014/15 financial year. The number of researchers supported with grants increased from 3 079 in 2012/13 to 4 064 in 2014/15.

During the reporting period, the Department supported a total of 1 021 students and postgraduate students as interns in workplace preparation programmes, where they learnt skills relevant to their future careers. The 92 awarded research chairs in 2010/11 have now increased to 153 awarded research chairs. The number of centres of excellence (CoEs) increased from eight in 2010/11 to 14 in 2014/15.

The Department also launched five new centres of competence (CoCs) at the beginning of the 2014/15 financial year, and a call for 23 new research chairs was opened. A study on the retention and conversion of students in the postgraduate pipeline has been commissioned to provide an understanding of the factors that inform the decisions by students to enrol or not to enrol for further postgraduate studies. The draft report for this study has been compiled.

In addition, the Science Engagement Framework was approved by Minister Pandor. This provides an overarching strategy to advance science engagement in South Africa. It is intended to improve the coordination of and encourage science promotion, communication and engagement activities across the Department, its entities, universities, other government departments, science councils, museums, and partners outside the public sector. The Framework is inclusive and integrative of all knowledge fields. As such, the Framework is committed to integrating the natural sciences, engineering sciences, and social sciences and humanities, aiming to foster better, more valuable science engagements.

#### (c) Square Kilometre Array

On 28 February 2015, the Deputy President inaugurated the second of the 64 MeerKAT antennas. This dish was named in honour of Dr Bernie Fanaroff, who will officially retire from the project. By the end of the year, four dishes had been erected.

The Board of the international Square Kilometre Array (SKA) Organisation agreed in March 2015 on the key design elements of the first phase of the SKA, called SKA1, which will fit into the €650 million budgeted for its construction. The detailed design is now proceeding and construction of

## 2. Overview of departmental performance (continued)

SKA1 is expected to start in 2018. The radio receivers, designed and built by a South African company for the MeerKAT, performed better than the specifications required. In effect, this means that South Africa is getting at least twice as much telescope utility in terms of survey speed and sensitivity for the same investment. Colleagues in Canada have independently confirmed the measurements, and congratulated the South African team on the excellent engineering of the receivers.

The SKA SA team has also developed other innovative technologies, including fast and flexible computer boards and tools. These are being used around the world, including in the National Aeronautics and Space Administration (NASA) Deep Space Programme. The SKA project team is working on innovative high-performance computing hardware and algorithms for fast computing power with low energy demand.

The SKA SA Human Capital Development Programme has been successful in bringing young people into astronomy and engineering and strengthening university teaching and research. In total, 699 grants and bursaries have been provided. A draft Multwavelength Astronomy Strategy has been approved. It is being refined and will be taken to Cabinet for noting.

### **(d) Industry innovation partnerships**

The DST is encouraging industry innovation partnerships as part of a broader government effort to support industry competitiveness. The main objective is to create an environment where government can effectively partner with industry and support co-investments in RDI in key strategic sectors of the economy.

During the 2014/15 financial year, nine sector-specific innovation funds were established and are running in a co-funding arrangement with a number of identified industry sector associations, namely, the Fresh Produce Exporters' Forum, Forestry South Africa, the South African Minerals to Metals Research Institute, the Marine Industry Association South Africa, the Sugar Milling Research Institute, the Paper Manufacturers Association of South Africa, Citrus Research International, the Marine Finfish Farmers Association of South Africa, and the Wine Industry Network for Expertise and Technology.

### **(e) Fluorochemical Expansion Initiative**

The final phases of the multipurpose fluorination pilot plan were completed in 2013/14 and Exco approved a follow-on grant of R46,4 million for the period 1 October 2015 to 30 September 2018 for the purpose of supporting the third phase of a fluorochemical research and development programme, which has the potential to yield further economic impact in niche areas.

### **(f) The Information and Communication Technology Research, Development and Innovation Roadmap**

The aim of the Information and Communication Technology (ICT) Research, Development and Innovation (RDI) Roadmap is to direct investments into our national ICT RDI capability to harness the socio-economic benefits for South Africa and to become more than a distribution market by competing globally through capturing the increasing value of the new digital value chain. This will enable the South African government to become a smart buyer of technology.

The ICT RDI Roadmap has allowed DST investments into ICT RDI to grow significantly and to be aligned to national priorities, creating an ICT RDI ecosystem that is attractive to foreign direct investment. During the 2014/15 period, ICT multinational companies committed to investing in ICT RDI (e.g. IBM committed R373 million over 10 years, and Cisco entered into a three-year partnership worth R66,6 million, substantially increasing their investment in R&D in this country), with their research agendas directed by and aligned to the ICT RDI Roadmap.

Apart from the direct DST investment benefits, the ICT RDI Roadmap has also influenced other developments within the ecosystem. The NRF has approved three related research chairs, namely, Innovative Small Satellite Technology and Applications for Africa at the Cape Peninsula University of Technology; Enabled Environments for Assisted Living at the Tshwane University of Technology; and Advanced Sensor Networks at the University of Pretoria. Universities such as the University of the Witwatersrand and Sol Plaatjies University have both set up Data Science programmes, with the latter the first institute on the continent to offer an undergraduate degree in Data Science. Initiatives such as the Health Patient Registration System with the Department of Health have been implemented at 38 facilities across eight provinces, allowing 328 639 registered patients to benefit from improved healthcare information systems.

#### (g) National Water Research, Development and Innovation Roadmap

The DST Exco approved the national Water RDI Roadmap. The DST recognised that water is a basic human right, and, in particular, is important in the transition to a green economy; it is a fundamental “connector” and, as such, is a key driver in the economy and wider socio-economic development paradigm.

The vision of the Roadmap is for South Africa to be a leader among middle-income countries in the development and deployment of water management practices and technologies, and to compete with leading countries in providing sustainable water solutions.

#### (h) The Nkowankowa Demonstration Centre

The Nkowankowa Demonstration Centre was established by the DST to create employment through a local product beneficiation process with funding from the Sector Budget Support Programme of the European Union (EU). The initial objective of beneficiating the available commercial and wild fruit through the extraction of oils for cosmetic formulations was revised to meet a market gap for pulping and processing the surplus mangoes, bananas and guavas grown in the area.

The Nkowankowa Demonstration Centre project is now registered as a propriety limited company under the name Wolkberg Fruit Processors. The project is advancing towards becoming a financially sustainable entity and has increased production by 300%, thus tripling the economic benefit accruing to farmers, households and employees in the Greater Tzaneen Local Municipality area.

## 2.4 Service Delivery Improvement Plan

The Department has completed a Service Delivery Improvement Plan. The tables below highlight the plan and the achievements to date.

**Table 1: Main services and standards**

Main services	Beneficiaries	Current/actual standard of service	Desired standard of service	Actual achievement
Public awareness.	Target stakeholders in waste, water and environmental services.	Embed DST as a preferred partner for RDI in waste, water and environmental services.	Partnerships lead to the leveraged co-investment in environmental services and technologies programmes.	National conferences. National workshops Steering committees. Reference groups.
	General public.	Exposition (EXPO).	Raised awareness of IKS.	IKS Interface Conference held.
Postgraduate bursary support.	University students (honours, master's and doctoral) and postdoctoral fellows.	Capacity in niche emerging environmental opportunities.  Support provided to about 8% of total enrolled postgraduate students in universities.	Capacity in the NSI to drive emerging areas such as biomimicry.  Doubling the percentage of postgraduate students supported.	Total number of postgraduate students supported was 11 335 in 2014/15.

## 2. Overview of departmental performance (continued)

Main services	Beneficiaries	Current/actual standard of service	Desired standard of service	Actual achievement
Provide funding to institutions and agencies to support technology solutions in the areas of waste management, water research and environmental services.	Public research institutions, science councils, universities and entities.	All funding transferred by the end of the financial year.	All funding transferred by the end of October of each financial year.	90% of all funds transferred.
Provide funding to institutions and agencies to support technology solutions in the areas of space science, energy and biosciences.	Public research institutions, science councils, universities and entities.	All funding transferred by the end of the financial year.	All funding transferred by the end of October of each financial year.	All funding was transferred by the end of the financial year.
Financially support offices of technology transfer (OTTs) located at higher education institutions (HEIs) and science councils.	Recipients include 23 HEIs and 10 statutory science councils.	All OTTs financially supported by the end of the financial year.	All OTTs financially supported by the end of October of each financial year.	All OTTs financially supported by the end of the financial year.
Conduct space outreach and awareness campaigns through public engagements, exhibitions and media interviews.	The target audience is learners and the general public.	One space outreach and awareness campaign conducted by the end of the financial year.	One space outreach and awareness campaign conducted by the end of the financial year.	Two space outreach and awareness campaigns were conducted by the end of the financial year.
Placement of graduate and postgraduate students in science, engineering, technology and innovation institutions for workplace experience.	Graduate and postgraduate students.	Support provided to about 15% of qualifying graduates.	Providing support to about 30% of qualifying graduates.	Support provided to approximately 100% of qualifying graduates in 2014/15.
Research grants to researchers.	Researchers in universities, science councils and other national research facilities.	Support provided to about 3 569 qualifying researchers.	Double the support to about six out of 10 qualifying researchers.	4 064 researchers supported in 2014/15.  The support was therefore increased to more than 10 qualifying researchers.
Promotion of public engagement with science, technology and innovation.	General public and the youth.	One national mass participation and 11 regional science awareness and engagement campaigns per annum.	All nine provinces covered by the campaign.	National Science Week conducted in all nine provinces. Each province hosted at least one science festival.
Provide funding to institutions and agencies to support technology solutions in the areas of space science, energy, biosciences, aerospace, advanced manufacturing, chemical-related industries, Advanced Metals Initiative, mining and ICT industries.	Public research institutions, science councils, universities and entities.	All funding transferred by the end of the financial year.	All funding transferred by the end of October of each financial year.	All funding was transferred by the end of the financial year.



**Table 2: Batho Pele arrangements with beneficiaries (consultation access)**

Current/actual arrangements	Desired arrangements	Actual achievements
Partnership with traditional health practitioners (THPs).	Regulation of THPs in the formal sector.	Constitution of Gauteng THP Council approved.
Stakeholders and role players in STI-awareness and engagement invited to submit project proposals.  Advocacy communication strategy.  Exhibits and media.	Award grant funding to organisations to organise activities throughout the country.	76 organisations awarded grants to conduct National Science Week 2014 and science festivals.
R&D project proposals and business plans are submitted by institutions and agencies. These are evaluated and approved or not by the Department; ad hoc funding is transferred once approval has been obtained.	No changes required.	R&D project proposals and business plans were submitted by institutions and agencies. These were evaluated and approved by the Department and funding was transferred once approval was obtained.
Proposals are received from OTTs for financial support and evaluated. Approval is obtained from the DST and funding agreements between NIPMO and the institutions are signed before funding is transferred to the institutions.	No changes required.	Proposals were received from OTTs for financial support and evaluated. Approval was obtained from the DST and funding agreements between NIPMO and the institutions were signed before funding was transferred to the institutions.
Engage with the Science Communication unit and relevant stakeholders like SANSA to develop a project plan for the outreach and awareness campaign. Obtain DST approval and embark on the particular outreach and awareness campaign.	No changes required.	There were engagements with the Science Communication unit and relevant stakeholders like SANSA to develop a project plan for the outreach and awareness campaigns. Obtained DST approval and embarked on the particular outreach and awareness campaigns.

**Table 3: Service delivery information tool**

Current/actual information tools	Desired information tools	Actual achievements
Advocacy communication strategy.	Implementation plan for dissemination.	Strategy approved by Exco.
Ministerial guidelines on awarding bursaries.	A reporting framework for ministerial guidelines.	Annual reporting on progress with the implementation of the ministerial guidelines.
Ministerial guidelines on awarding research grants.	A reporting framework for ministerial guidelines.	Annual reporting on progress with the implementation of the ministerial guidelines.
Advocacy communication.  Exhibitions and media.	Implementation plan for dissemination.  Exhibitions and media.	Strategy approved by Exco.  Exhibitions were held at all public participation programmes; full public broadcasts used to disseminate STI information.

## 2. Overview of departmental performance (continued)

Current/actual information tools	Desired information tools	Actual achievements
The following tools are used, as appropriate: <ul style="list-style-type: none"> <li>• STI Summit.</li> <li>• Internet and intranet.</li> <li>• Pamphlets and brochures.</li> <li>• Print media.</li> <li>• Electronic media.</li> </ul>	The following tools will be used, as appropriate: <ul style="list-style-type: none"> <li>• STI Summit.</li> <li>• Internet and intranet.</li> <li>• Pamphlets and brochures</li> <li>• Print media.</li> <li>• Electronic media.</li> </ul>	All of the following tools were used, as appropriate: <ul style="list-style-type: none"> <li>• STI Summit.</li> <li>• Internet and intranet.</li> <li>• Pamphlets and brochures.</li> <li>• Print media.</li> <li>• Electronic media.</li> </ul>

**Table 4: Complaints mechanism**

Current/actual complaints mechanism	Desired complaints mechanism	Actual achievements
<ul style="list-style-type: none"> <li>• National Indigenous Knowledge Systems Office.</li> <li>• Quarterly project meetings held with the implementing agency.</li> </ul>	<ul style="list-style-type: none"> <li>• Council comprising practitioners.</li> <li>• Discussion and consensus-based solutions.</li> </ul>	<ul style="list-style-type: none"> <li>• Accreditation and certification framework by Exco.</li> <li>• Quarterly review meetings held as planned.</li> </ul>
The NRF has an appeal process for postgraduate students.	Panel of experts.	Framework for review by the NRF.
No appeal process at the NRF; selection of interns conducted by host institutions.	No change desired.	As per the current/actual arrangements.
The NRF has an appeal process for researchers.	Panel of experts.	Framework for review by the NRF.

### 2.5 Strategic Outcome-Oriented Goals

In order to achieve its overall objectives, the DST has set five strategic goals that guide all its actions. These are as follows:

**Goal 1:** To develop the innovation capacity of the National System of Innovation (NSI) and thereby contribute to socio-economic development.

**Goal 2:** To enhance South Africa's knowledge generation capacity in order to produce world-class research papers and turn some advanced findings into innovative products and processes.

**Goal 3:** To develop appropriate science, technology and innovation (STI) human capital to meet the needs of society.

**Goal 4:** To build world-class STI infrastructure to extend the frontiers of knowledge, train the next generation of researchers, and enable technology development and transfer, as well as knowledge interchange.

**Goal 5:** To position South Africa as a strategic international research, development and innovation (RDI) partner and destination through the exchange of knowledge, capacity and resources between South Africa, the region and other international partners, thereby steering the NSI.

### 2.6 The DST's contributions to Government Outcomes

In 2009, Cabinet approved an outcomes approach, which sets out 12 Outcomes that needed to be addressed within the term of office of the 2009-2014 administration. The DST is contributing to the delivery of Outcomes 2, 4, 5, 6, 7, and 10. Some of the initiatives referred to above also contributed to the Outcomes. The below are significant highlights relating to the Outcomes for the reporting period.

#### OUTCOME 2: A LONG AND HEALTHY LIFE FOR ALL SOUTH AFRICANS

The DST has made progress in a number of groundbreaking health initiatives.

Several successful health-related projects led by the DST, such as the Malaria Drug Discovery Programme and a mobile triage app, have received international recognition. The Malaria Drug Discovery Programme is the flagship drug discovery project of South Africa and Africa. The South African Malaria Initiative has supported the programme over the years with assays and technology transfer from the Swiss Tropical Institute.

The antimalarial compound MMV390048 has become the first drug discovered and developed in Africa. In 2014, the compound entered human volunteer studies at the University of Cape Town (UCT). This is the first time that a new chemical entity has been tested in a first-in-human trial in Africa. This study has confirmed that MMV390048 is safe and well-tolerated.

The M-Triage app is a software application for smartphones or tablets that helps emergency room nurses to more accurately and efficiently triage patients to ensure rapid care for those with the most urgent needs. The system at Khayelitsha Hospital showed a high adoption rate among nurses, a significant improvement in triage completion and accuracy, and a reduction in triage times.

Additionally, the free version of the application has been downloaded in over 20 different countries, and is used by the National Sea Rescue Institute and nursing colleges for training purposes. The mobile triage won the international “Big Impact Award” at the largest mobile app competition in the world, the Mobile Premier Awards in March 2015. It is the intention to implement the M-Triage solution in every emergency centre throughout South Africa and into Africa. Building on the success of the app, it is planned to develop the technical solution further to create a comprehensive, smart and safe clinical management system for emergency centres, and similar solutions for other clinical areas.

#### **OUTCOME 4: DECENT EMPLOYMENT THROUGH INCLUSIVE ECONOMIC GROWTH**

In order to support local suppliers for the National Infrastructure Programme, a new pipeline of interventions was reviewed for approval. Consequently, a total of 143 companies are on a register of companies that are receiving or have received TAPs.

Regarding support for small-scale producers (agriculture, forestry and fisheries), a review of existing ICT platforms in agriculture was initiated. In this regard, engagements have been held with KwaZulu-Natal to secure cooperation and co-funding for the implementation of the ICT-Enabled Agriculture Model.

In relation to emerging or new industry strategies aligned with the IPAP and the Emerging Industries Action Plan (EIAP), a concept note was circulated and debated at two workshops. A proposal to address EIAP development and implementation resource constraints was presented to Exco. A decision is pending.

In investment and research, modelling has been done to determine the implications of achieving the set target for GERD of 1,5% of GDP by 2019. So far, this target has been incorporated into the 2014-1019 MTSF and the draft Strategic Plan of the DST. The DST has evaluated the baseline GERD performance, and estimated the required level of additional investment to achieve this target under various scenarios.

The information is being used as part of the consultations with National Treasury to determine the feasibility of some of the proposed actions, especially where additional public funding is needed. A preliminary modelling exercise has been completed and has produced two scenarios, namely, 1,5% or 1,2%, depending on the level of investment. A draft presentation has been developed and constitutes the basis of engagement with different stakeholders. It contains initial thoughts on the strategy, including the identification of provinces and municipalities as potential sources of funding, and it has been discussed by the task teams of the DST and National Treasury.

#### **OUTCOME 5: A SKILLED AND CAPABLE WORKFORCE TO SUPPORT AN INCLUSIVE GROWTH PATH**

The DST plays an essential role in enhancing research, development and innovation human capital for a growing knowledge economy by contributing to Outcome 5. The main aim is to improve graduate output and efficiency, and the quality of scarce and critical skills. The DST can be commended for a number of achievements in the area of human capital development (HCD) during the reporting period.

The Department strives to increase the proportion of students receiving financial support for studying for bachelor's, honours master's and doctoral degrees, as well as for postdoctoral fellows. The total number of honours, master's and doctoral students and postdoctoral fellows supported by the DST in the 2014/15 financial year was 11 335.

## 2. Overview of departmental performance (continued)

Another emerging research career instrument is the Research Career Advancement Fellowship, which is aimed at creating a career path and retention mechanism for early career researchers, while affording them an opportunity to become established researchers and scholars. In 2014/15, 64 researchers were supported, of 40% were black people and 61% women. The Sabbatical Grants to Complete Doctoral Degrees Funding Instrument, as the name suggests, provides funding for emerging researchers at public universities and research institutions to enable these individuals to have access to sabbatical leave in order to complete their PhD degrees. In 2014/15, 88 grants were awarded, 57% of which were for black people and 88% for women.

### **OUTCOME 6: AN EFFICIENT, COMPETITIVE AND RESPONSIVE ECONOMIC INFRASTRUCTURE NETWORK**

The outstanding reputation of the SKA SA team and of the MeerKAT project has led Germany's Max Planck Society for the Advancement of Science (MPG) to invest €11 million to build S-Band receivers and fund all the necessary ancillary equipment for the MeerKAT. They will be used primarily for pulsar research.

Big data is a spin-off from the SKA and provides an opportunity to develop South Africa and Africa's capacity to compete in the big data industry, which is estimated at trillions of dollars within the next decade. In this regard, a new project has been started with the SKA African partner countries to build big data capacity in each of these countries. This initiative will be rolled out over the next two years through CHPC at the CSIR. As a further contribution to this Outcome, the following projects were undertaken:

- The second phase of the development of a South African Research Infrastructure Roadmap (SARIR) was undertaken.
- A framework for the establishment of a National Integrated Cyberinfrastructure System (NICIS) was finalised. The framework emanated from an analysis of the recommendations put forward in the NICIS Report of 2013.

### **OUTCOME 7: VIBRANT, EQUITABLE AND SUSTAINABLE RURAL COMMUNITIES AND FOOD SECURITY FOR ALL**

The wireless Mesh Network Project forms part of the Innovation for Poverty Alleviation programme – a partnership between the Department and the EU that aims to reduce poverty through job creation, economic growth and better quality of life. This network uses low-cost, locally owned equipment to create clusters of wireless nodes that connect to each other via radio signals, removing the need for a central signal tower. The DST, in collaboration with the CSIR, has deployed a novel ecosystem using wireless mesh networks for delivering broadband infrastructure in under-served areas. Instead of the traditional multi-point communication, it is based on peer-to-peer communication between network nodes.

As part of the wireless mesh network initiatives, 55 government facilities (including schools, further education and training institutions, education district and circuit offices and a resource centre) have been connected to the Internet in the John Taolo Gaetsewe District Municipality in the Northern Cape. Of these facilities, 50 are public schools, and approximately 27 410 learners and 772 teachers are benefiting from the project. In addition to ongoing support for the wireless mesh network project in the Northern Cape, discussions are at an advanced stage with a private sector mining company in the Northern Cape to provide further funding for the expansion of the network to other areas in the province, with small, and medium enterprises (SMEs) having taken over the maintenance of the project.

With regard to the provision of access to sanitation services in rural areas, an innovative sanitation technologies agreement was finalised between the DST and the Bill & Melinda Gates Foundation (BMGF). Through this agreement, a variety of innovative sanitation technologies have been selected for piloting in rural schools in the Eastern Cape (Phase I). A pilot project is ongoing and is focusing on an innovative off-grid sanitation technology initiative in the Eastern Cape. The launch meeting took place from 27 to 31 October 2014, and the BMGF sent a delegation to South Africa for this purpose.

Five innovative sanitation technologies were selected for demonstration in the Eastern Cape. On 27 and 28 October 2014, BMGF and DST delegates and other stakeholders conducted a site visit to the Eastern Cape rural schools and peri-urban areas. On 30 October 2014, a National Sanitation Technology Demonstration Seminar was held in Pretoria, where technology developers presented their technologies to various stakeholders. In addition, arrangements have been finalised with some of the technology demonstrators and a selection process has been initiated in 27 district municipalities. The technology demonstrations in some Nciba Circuit schools are in progress.

## **OUTCOME 10: TO PROTECT AND ENHANCE OUR ENVIRONMENTAL ASSETS AND NATURAL RESOURCES**

With regard to research in climate services, through a review of a number of relevant research programmes, the DST is able to get a sense of the number of programmes and organisations involved in climate change research. The second National Conference on Global Change was held from 2 to 4 December 2014 at Nelson Mandela Metropolitan University. The Conference further provided a deeper insight into and indication of the nature and kind of research partnerships, collaborations and networks that exist. The DST and global change-related programmes also participated in the National Climate Change Dialogue that was held in November, where research outputs from various research collaborations were presented.

The DST continued to fund a number of global change programmes and initiatives that are involved in climate change-related research, including the Applied Centre for Climate and Earth Systems Science (ACCESS), the South African Environmental Observation Network, the risk and vulnerability science centres, the Global Change, Society and Sustainability Research Programme, the Southern Ocean Carbon-Climate Observatory, as well as three Earth systems science-related research chairs.

A process of repositioning ACCESS is currently under way and will be completed by December 2015; the idea is to reorganise ACCESS to be a key component around which the envisaged functional climate change research network will be built. A report on the National Climate Change Research Networks is due to be tabled at the DST Exco before it is shared with the Outcome 10 Coordinating

Department (Department of Environmental Affairs (DEA)). A second conference report on Global Change has been prepared. A process is under way to issue a book on the Second National Global Change Conference proceedings and to publish the top scientific papers presented at the Conference in a special edition of the *South African Journal of Science*.

In terms of biennial reports to Cabinet on the state of climate change science and technology, a concept document outlining a process that will be followed to compile the reports is due to be tabled at the DST Exco before it is shared with the Outcome 10 Coordinating Department (DEA). The document includes the proposed layout of the reports. The Academy of Science of South Africa (ASSAf) is to be formally tasked with the compilation of the reports. They will work closely with other key role players, such as the Committee on the Science of Climate Change and other groupings in the research and technology or innovation domains. Terms of reference are being finalised.

In support of the transition to a green economy, the Trade and Industrial Policy Strategies (TIPS), a non-profit organisation, was contracted by the DST in January 2015 to establish a baseline for investment in green economy RDI. The project is on track to be completed by the end of June 2015. TIPS hosted a Policy Dialogue Workshop in March 2015 to unpack the definitions of the green economy, green growth, and RDI, as well as to determine various potential data sources for the study. The workshop included participation by the DST, the DEA, National Treasury, the Department of Trade and Industry, and the National Business Initiative.

### **2.7 Highlights and overall achievements for the 2014/15 financial year**

Various initiatives and programmes continued to be supported during the year under review in the bioeconomy arena. These resulted in South Africa being ranked number 36 among 54 countries in the World Review of Biotechnology (2014). One of the key achievements was the signing of a memorandum of understanding (MoU) between Pfizer Inc. and the North-West University (NWU) in June 2014 for the potential use of Pfizer's genetically modified animal models for evaluations in oncology, inflammation and immunology, as well as central nervous system and cardiovascular system disorders.

## 2. Overview of departmental performance (continued)

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This is expected to contribute towards the development of the pharmaceutical sector in South Africa in terms of the Bio-economy Strategy and the Industrial Policy Action Plan (IPAP). Preclinical testing is a crucial step in the establishment of this sector, as it forms part of the development and registration of any therapeutic product. A national Preclinical Drug Development Programme for South Africa was instituted by the Department; it includes the establishment of a national preclinical drug development platform for small animals at the NWU. This platform is meant to serve all researchers and companies involved in drug development in South Africa and beyond.

In terms of the Bio-economy Strategy, three coordinating committees were also set up for the three key themes of the Strategy, namely, agriculture, health, and industry and environment. These committees have overseen the finalisation of their respective implementation plans; however, they are yet to be approved by Exco.

The year also saw the initiation of seed-funded projects aligned with the implementation of the Agricultural Bio-economy Plan, including that of a pre-breeding platform for wheat. A new tripartite Bio-entrepreneur Programme aligned with the Industrial Bio-economy Plan was also initiated and supported.

Other initiatives implemented by the Department continued to generate significant research interest, as evidenced by the publication of an article on the Eucalyptus Genome Platform collaboration between the University of Pretoria, the Forestry and Agricultural Biotechnology Institute and the Department in *Nature*, a prestigious scientific journal. As part of the Indigenous Knowledge Systems (IKS) Bioprospecting and Product Development Platform's cosmeceuticals flagship project, an access and benefit-sharing agreement was signed for a skin-tone candidate product between a cosmeceuticals consortium and the community of kuNdabakazi in the Eastern Cape in September 2014.

This agreement underpins the commitment of the bioprospecting platform programme to compliance with national legislation that regulates bioprospecting work for a pipeline of innovative products. This watershed signing event symbolises the efforts to reduce biopiracy, while strengthening indigenous knowledge associated with national biodiversity. These bioeconomy RDI initiatives

have also resulted in the generation of four publications in journals and one copyright (Moringa Vitamin Water). In addition, a total of 154 postgraduate students were supported in bioeconomy-related RDI initiatives.

In the energy domain, key partnership agreements were signed between the Department, the South African Post Office and Transnet. These agreements are expected to see these organisations deploying fuel cell technologies that are developed by the three Hydrogen South Africa (HySA) centres of competence (CoCs) towards reducing their energy bills and carbon footprint by virtue of their vast and geographically dispersed infrastructure (including buildings and large vehicle fleets, mostly diesel and petrol operated).

The year also saw the launch of an innovative 2,5 kW hydrogen fuel cell power generator prototype unit at the University of the Western Cape (UWC) Nature Reserve, which is also expected to lower its energy bills and carbon footprint.

These HySA CoCs have also resulted in the generation of 32 publications in peer-reviewed journals and two patent applications being filed (one on a hydrogen storage and supply system integrated with a fuel cell power pack that comprises liquid gas and one on a metal hydride storage container). In addition, a total of 142 postgraduate students were supported in the energy-related RDI initiatives. TIA also approved R9 987 114 for the nine-month HySA Telco Project being undertaken by HySA Catalysis, together with local and international partners. The project involves providing a methanol-based fuel cell for providing power to a telecommunications base station.

Funding to the value of £101 000,00 over three years (£37 000,00 per annum) has been secured by HySA Catalysis from SuperGEN and the Newton Fellowship through the University of Southampton to support fuel cell development activities over a three-year period. The Royal Academy of Engineering, in partnership with TIA, awarded the Leaders in Innovation Fellowship to Dr Steven Chiuta of HySA Infrastructure to visit the United Kingdom for a training course on technology commercialisation from 16 to 25 March 2015. The fellowship brings the leading technology entrepreneurs from the Newton Fund partner countries to the United Kingdom (UK) for an intensive training course on innovation, while also building business-to-business networks with similar enterprises in the UK.



The year also saw the development of various policy documents relevant to the space science sector: the Human Capital Development Plan for Space Science, the plans for Optronics and Synthetic Aperture Radar CoCs, the plan to upgrade the Houwteq Facility and the National Space Programme. However, these documents are yet to be finalised by the DST Exco. The space-related RDI initiatives have also resulted in a total of 38 postgraduate students being supported in their studies.

A number of initiatives were also implemented to foster a suitable environment for innovation and commercialisation. The inaugural Innovation Bridge technology matchmaking and showcase event was held from 2 to 3 February 2015. The key aim of the event was to provide an opportunity for national and international technology-based companies, technology entrepreneurs, investors, financiers and commercialisation partners to access publicly funded technology offerings from South Africa's universities, science councils and companies supported by TIA.

Over 90 innovations from more than 35 publicly funded organisations were exhibited at the event. These included technologies from some of South Africa's top research and technology development support institutions, comprising 16 universities, 14 TIA-supported companies, six science councils, and the South African National Space Agency (SANSA). The event attracted over 750 participants and visitors from large companies and SMEs, as well as entrepreneurs and representatives from a wide range of sectors. Large companies that participated included Pfizer, Tiger Brands, Eskom, the Industrial Development Corporation (IDC), Microsoft and Adams & Adams. The initiative also saw the development of an Innovation Bridge portal that seeks to bring together all these stakeholders in pursuit of their common interests.

The Department's Commercialisation Framework was approved during the reporting period. Advanced plans to implement the Framework in terms of proposals received from the CSIR are under way. Part of this work will include plans on implementing the EIAP concept note as developed by the DST. This included the hosting of the South Africa-Taiwan Innovation and Commercialisation Workshop that was held in Taiwan. The South African delegation attended the South Africa-Taiwan Joint Committee Meeting on Science and Technology (S&T) Cooperation.

A total of 65 interns were assigned to work for host companies as part of the DST-Technology Top 100 (TT100) Workplace Internship Programme.

The Nanotechnology Vision 2014 for South Africa, a roadmap for nanotechnology innovation, was approved during the reporting period. Agreements were also concluded for the Nanotechnology Health, Safety and Environment Platform and Code of Conduct, and support was provided to the Mintek Nanotechnology Innovation Centre (NIC) for the implementation of the South Africa-Russia Cooperation in Nanotechnology Research Agreement. Additional infrastructure funding was provided to the CSIR's NIC for their nanotechnology pilot facility. The photonics and robotics initiatives managed by the CSIR were both resuscitated.

A call for proposals in the emerging research area (ERA) of photonics was issued, resulting in numerous projects identified for funding, while plans for a call for proposals supporting robotics RDI progressed to an advanced stage. These ERA RDI initiatives have also resulted in the generation of 40 publications in peer-reviewed journals and one patent application being filed (one Patent Cooperation Treaty patent granted in the TB nano-drug delivery project). In addition, a total of 111 postgraduate students were supported in the ERA-related RDI initiatives, with 18 graduating during the year.

2014/15 was a watershed year for NIPMO in terms of promoting, protecting and commercialising IP emanating from publicly financed research and development in higher education institutions and science councils. The financial constraints under which NIPMO normally operates were overcome with the transfer of funds via the Adjusted Estimates of Expenditure and Reprioritisation, which enabled NIPMO to transfer all the necessary funds to the qualifying institutions. This meant that the eight institutions that applied for support from the OTT Support Fund and the nine institutions that have three-year funding agreements received their contractually agreed-upon funding to facilitate the provision of capacity and development at OTTs. In addition, all the institutions that applied for a rebate from the IP Fund received the maximum 50% rebate for IP prosecution and maintenance costs incurred during the previous financial year.

## 2. Overview of departmental performance (continued)

A significant achievement for the period under review was the completion of the first NIPMO Incentive Scheme Guideline for Intellectual Property Creators, seeing over 360 IP creators being awarded a certificate of recognition for their role in the creation of an invention for which a South African patent was granted. Key guidelines, practice notes and interpretation notes developed included the

Guidelines for the Operation of the NIPMO Incentive Scheme and Guidelines for the IP Fund, as well as the long-awaited Guideline on IP Ownership. NIPMO also launched its OTT Framework and Technology Transfer Manual, in line with the legislative mandate for NIPMO to provide best practices to the Department's stakeholders.

## 3. Performance information by Programme



### 3.1 PROGRAMME I: ADMINISTRATION

The purpose of this Programme is to conduct the overall management and administration of the Department; to ensure that organisations funded by the Department comply with good corporate governance standards; to ensure that their activities are aligned with the strategic focus of the NSI; and to monitor and evaluate the performance of the science councils.

The Programme consists of the following chief directorates:

**The Ministry and Office of the Director-General** support the Minister, Deputy Minister and Director-General by providing effective and efficient professional and executive support. The chief directorate is responsible for the development of systems and mechanisms for handling parliamentary questions and replies, cabinet matters, correspondence, submissions and memoranda. It also coordinates activities within the Department to assist in

steering the NSI towards the development of a knowledge-intensive economy with higher productivity levels.

**Policy, Planning, Governance, Monitoring and Evaluation** supports the DST leadership in steering the NSI.

**Internal Audit Activity** performs internal appraisal activities to improve the effectiveness of control and governance processes to help the Department achieve its strategic, operational, financial and compliance objectives.

**Enterprise Risk Management** ensures that a risk management culture is embedded effectively and efficiently within the Department by creating risk management awareness and elevating risk management to a strategic level in the Department in order to improve the DST's risk maturity level. The component's secondary role is to ensure that countering fraud is made an integral part of strategy, operations and administration in the Department (i.e. to promote a fraud risk management culture in the DST).

**Human Resources** ensures that the Department is able to (i) provide a professional service through accurate, consistent and best employment practices in all its activities, which are aimed at supporting the achievement of the DST's strategic and operational objectives; (ii) attract and retain employees who share the same organisational vision; (iii) champion change and transition, with a view to being a catalyst in the transition of people and the organisation to embrace and implement change; (iv) set performance standards and manage performance against them; and (v) promote an environment that supports the personal and career development of all employees so that they can reach their full potential and more effectively contribute to the achievement of the Department's strategic objectives, instilling a culture of service excellence.

**Finance** ensures effective, efficient and economic utilisation of financial resources in line with financial prescripts through the development and effective implementation of financial systems, policies, frameworks and procedures. This includes budget planning, expenditure monitoring, and the management of procurement, acquisition, logistics, assets and financial transactions.

**Information Systems and Knowledge Management** is responsible for the delivery of services that support the Department's Strategic Plan and individual units' objectives through the effective use of information technology (IT). Its purpose is to align the IT Strategy with the business strategy to ensure that the Department uses its resources optimally.

**Science Communication** is responsible for ensuring effective communication between the Department and its key stakeholders, and creating awareness of the Department's key objectives and activities. The chief directorate raises the profile of the work done by the Programmes in line with the vision and mission of the Department. It also facilitates the preparation of information so that the Minister and the Deputy Minister can communicate effectively externally.

**Legal Services** is responsible for providing effective and efficient legal services to the Department in order to ensure that the interests of the Department are protected against any legal risk. The chief directorate ensures that the Department complies with relevant legislation and takes a proactive approach to dealing with matters that have the potential to give rise to conflict or legal challenges

The main objectives of the Programme are the following:

- To coordinate the identification, formulation and implementation of strategic initiatives and ensure that the DST and its entities' priorities are aligned to the national priorities.
- To develop and maintain good corporate governance systems for the Department and its entities.
- To make the DST an employer of choice and retain appropriately trained personnel.
- To provide an efficient and effective IT service.
- To ensure effective and efficient financial and procurement services.

## Key highlights of 2014/15

During the period under review, the Chief Directorate: Science Communication developed and implemented communication, media and marketing strategies for the Budget Vote, Africa Engineering Week, National Science Week, the Women in Science Awards, and Public Service Week. Science Communication also hosted six public participation programmes. In addition, a draft language policy for the Department was developed after consultation with the entities.

The DST MTEF Infrastructure and Non-Infrastructure Bids were submitted to National Treasury on 28 July 2014. The Chief Directorate: Policy, Planning, Governance, Monitoring and Evaluation facilitated the National Treasury-DST bilateral discussions and assisted with the presentations on 17 July 2014. The first drafts of the Strategic Plan for 2015-2020 and the Annual Performance Plan (APP) for 2015/16 were submitted to National Treasury and the Presidency on 29 August 2014. The Annual Report of the Department was finalised and submitted to National Treasury and the Department of Performance Monitoring and Evaluation by 31 May 2014. The performance of the Department improved from 67% in the 2011/12 financial year to 77% in the 2013/14 financial year. In addition, the Department has shown remarkable improvement in compliance with data dimensions in relation to the validity, relevance, integrity and usefulness of performance information.

The term of office of the NRF Board expired on 30 September 2014. During the reporting period, the process of reconstituting the Board was undertaken to ensure that the new Board took office with effect from 1 October 2014. The Governance unit duly facilitated the appointment of the new NRF Board, which took office from 1 October 2014.

The Minister appointed the new SANSA Board with effect from 1 September 2014 to 31 August 2018.

The Governance unit also facilitated the appointment of the new CSIR Board, which took office from 1 January 2015.

### 3. Performance information by Programme (continued)

**Table 5: Programme 1: Performance information for the 2014/15 financial year**

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To coordinate the identification, formulation and implementation of strategic initiatives and ensure that the DST and its public entities' priorities are aligned to the national priorities.	Percentage alignment of DST planning documents (Strategic Plan and Annual Performance Plan (APP) submitted to Parliament).	DST APP submitted to Parliament; Estimates of National Expenditure (ENE) chapter input submitted to Finance.	Minimum of 90% alignment in 2015/16 across/of DST planning documents (Strategic Plan aligned to APP and APP aligned to ENE) submitted to Parliament by 31 March 2015.	Minimum of 100% alignment between the 2015/16 APP and 2015-2020 Strategic Plan was achieved. APP and Strategic Plan submitted to Parliament on 12 March 2015.	+10%	Achieved	The Strategic Plan and APP were fully aligned since it was the first year of the Strategic Plan.
		100% alignment of DST APP and ENE (performance indicators).	90% alignment between the 2015 DST ENE and the 2015/16 APP by 31 March 2015.	71.4% alignment between APP and ENE.	-18.6%	Partially achieved	The ENE and APP have a lower percentage alignment because the ENE was finalised prior to the finalisation and approval of the Strategic Plan and APP.
To develop and maintain good corporate governance systems for the Department and its entities.	DST public entities' strategic plans and APPs approved by the Minister and shareholders' compacts signed.	The APPs of entities for 2014/15 and shareholder compacts were approved by the Minister prior to the start of the 2014/15 financial year. They were tabled in Parliament on 12 March 2014.	Approved 2015/16 DST public entities' strategic plans and APPs and signed shareholder compact by 31 March 2015.	Strategic plans and APPs for DST public entities (HSRC, SANSa, TIA, ASSAf, NRF, CSIR and NACI) were approved by the Minister by 5 March 2015 and shareholder compacts were then signed.	No deviations.	Achieved	

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
	Number of DST performance reports (quarterly reports and Annual Reports) approved by Exco and signed by the Director-General (DG) (quarterly reports approved and signed within 60 days after the end of each quarter).	Four DST 2013/14 quarterly performance reports approved by Exco and signed by the DG within 60 days after each quarter.	Four DST 2014/15 quarterly performance reports approved by Exco and signed by the DG within 60 days after each quarter.	Four DST 2014/15 quarterly performance reports approved by Exco and signed by the DG within 60 days after each quarter.	No deviations.	Achieved	
		One DST Annual Report approved by Exco and signed by the DG by 31 May 2013.	One DST 2013/14 Annual Report approved by Exco and signed by the DG by 31 May 2014.	One DST 2013/14 Annual Report approved by Exco and signed by the DG by 31 May 2014.	No deviations.	Achieved	
	Number of DST public entities' reports submitted to Parliament.	Nine DST public entities' 2013/14 annual reports submitted to Parliament by 30 September 2013.	Nine DST public entities' 2013/14 annual reports (AISA, ASSAF, CSIR, HSRC, SACNASP, SANSA and TIA) submitted to Parliament by 30 September 2014.	Nine DST public entities' 2013/14 annual reports submitted to Parliament by 30 September 2014.	No deviations.	Achieved	
	Number of DST communication, marketing and/or media plans developed for DST Programmes to profile the Department and to inform the citizenry approved by Exco.	Six media plans developed for DST Programmes to profile the Department approved by Exco by 31 March 2014.	Six communication, marketing and/or media plans developed for DST Programmes to profile the Department approved by Exco by 31 March 2015.	A total of 24 communication, marketing and/or media plans developed for DST Programmes to profile the Department approved by Exco.	+18	Achieved	More requests received than originally planned.
To proactively position the Department positively, both internally and externally, to ensure informed employees and citizenry.							



### 3. Performance information by Programme (continued)

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To make the DST an employer of choice and retain skilled personnel.	Number of S&T media coverage monitoring reports approved by Exco.	Four S&T media coverage monitoring reports approved by Exco by 31 March 2014.	Four S&T media coverage monitoring reports approved by Exco by 31 March 2015.	10 S&T media coverage monitoring report approved by Exco by 31 March 2015.	+6	Achieved	There were more media coverage monitoring reports, due to events that were not planned for.
	Number of public participation programmes conducted.	13 public participation programmes conducted by 31 March 2014.	10 public participation programmes conducted by 31 March 2015.	Seven public participation programmes conducted by 31 March 2015.	-3	Partially achieved	This indicator was partially achieved due to the changes in the political leadership of the DST.
	Turnaround time to fill vacancies.	New indicator.	90 days to fill vacancy after date of advertisement by 31 March 2015.	73 days to fill vacancy after date of advertisement by 31 March 2015.	Target achieved before 90 days.	Achieved	Faster recruitment practices of the Department.
	Vacancy rate reduced to a set rate.	Vacancy rate reduced to 6% by 31 March 2014.	Vacancy rate reduced to 6% by 31 March 2015.	Vacancy rate reduced to 5.6% by 31 March 2015.	+0.4%	Achieved	Faster recruitment practices of the Department.
To provide an efficient and effective information technology (IT) service.	Percentage of DST personnel submitting performance contracts and reviews on time.	New indicator.	Minimum 90% DST personnel submitting performance contracts and reviews on time by 31 March 2015.	98% of DST personnel submitted half yearly and probation review reports by 31 March 2015.	+8%	Achieved	Reasonable level of compliance by DST officials.
	Number of enterprise architecture development lifecycle steps developed and implemented.	Two enterprise architecture development lifecycle steps developed and implemented by 31 March 2014.	Two enterprise architecture development lifecycle steps developed and implemented by 31 March 2015.	Two enterprise architecture development lifecycle steps were developed and implemented by 31 March 2015.	No deviations.	Achieved	
	Number of IT Governance Framework components implemented.	Three IT Governance Framework components implemented by 31 March 2014.	Three IT Governance Framework components implemented by 31 March 2015.	Three IT Governance Framework components implemented as planned.	No deviations.	Achieved	

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To ensure effective and efficient financial and procurement services.	Budget planning reports (MTEF and ENE) submitted to National Treasury.	ENE chapter and database submitted to National Treasury by 31 January 2014.	2015 MTEF planning submission submitted to National Treasury by 31 August 2014 and 2015 ENE submitted to National Treasury by 31 January 2015.	2015 ENE chapter and database submitted to National Treasury on 5 January 2015.	No deviations.	Achieved	
	Suppliers paid within 30 days after date of invoice, and tender process completed within 90-day period.	Suppliers paid within 30 days after date of invoice, and tender process completed within 90-day period.	Suppliers paid within 30 days after date of invoice, and tender process completed within 90-day period.	Suppliers paid within 30 days after date of invoice. Tender process completed within 90-day period.	No deviations.	Achieved	
	Unqualified audit report of financial matters issued by the Auditor-General.	Unqualified audit report of financial matters issued by the Auditor-General.	Unqualified audit report of financial matters issued by the Auditor-General by 30 September 2014.	Unqualified audit report of financial matters issued by the Auditor-General.	No deviations.	Achieved	

### 3. Performance information by Programme (continued)



#### 3.2 PROGRAMME 2: TECHNOLOGY INNOVATION

The purpose of the Programme: Technology Innovation is to enable research and development in strategic and emerging research areas (ERAs) to promote the realisation of commercial products, processes and services from R&D outputs through the implementation of enabling policy instruments. The Programme will contribute to the realisation of enhanced outputs of science, technology and innovation across the National System of Innovation (NSI), leading to enhanced competitiveness of the South African economy and an improved quality of life for all.

The Programme provides policy leadership in the DST's long-term cross-cutting RDI initiatives through the following five chief directorates:

**Bioeconomy** (including the Indigenous Knowledge-based Technology Innovation unit) leads the DST's implementation of the national Bio-economy Strategy, which was approved by Cabinet in 2013. The Bio-economy Strategy was developed in response to challenges encountered during the implementation of the 2001 Biotechnology Strategy and differs from the National Biotechnology Strategy in that its primary focus is the socio-economic outcomes of biotechnology and the strengthening of research and innovation competencies that form the strategic foundation of the bio-based NSI. It is a national strategy, incorporating the innovation needs of other departments and industry.

**Hydrogen and Energy** provides policy leadership in RDI initiatives in the energy sector that are of a cross-cutting nature and have long-term impacts. It plays a key role in developing a sustainable and globally competitive South African energy knowledge base and industry, especially as this relates to the nascent global hydrogen economy, by informing and co-shaping the national energy policy in coordination with the Department of Minerals and Energy and other key stakeholders. In particular, it plays an advisory role in the broader energy landscape, specifically in the development of the Integrated Energy Plan and the Integrated Resource Plan, with special emphasis on the technologies to be used in addressing the country's energy needs, the deployment of these technologies, and the incentives required to facilitate successful deployment.

**Space Science and Technology** is a cross-cutting and user-driven chief directorate, which supports the creation of an environment conducive to the implementation of the National Space Strategy and the South African Earth Observation Strategy under the overarching guidelines of the National Space Policy, an instrument of the Department of Trade and Industry. The National Space Strategy was a response to the Ten-Year Innovation Plan (TYIP), which identified a few key outcomes that must be realised over the long term in order for South Africa to leverage the opportunities that the space value chain presents.

**Innovation Priorities and Instruments (including ERAs)** supports and strengthens the innovation policy package (and related interventions) aimed at creating and sustaining an enabling environment for innovation, technology development and commercialisation of publicly funded R&D initiatives. In performing this function, the chief directorate supports the overall objectives of Programme 2 through the identification, development, creation and support of policy and institutional structures that facilitate technology development and its progression into national and international markets.

With effect from 1 April 2014, the ERA unit was incorporated into this chief directorate. The ERAs are defined as S&T research fields that are multidisciplinary in nature, have not been covered by conventional disciplines, and offer the potential to affect social and economic development positively. The ERA unit's focus includes the development of nanotechnology, photonics, synthetic biology and robotics through the roll-out of approved strategies and implementation plans.

**The National Intellectual Property Management Office (NIPMO)** is the national implementing agency for the Intellectual Property (IP) from Publicly Financed Research and Development Act, which provides for more effective utilisation of IP emanating from publicly financed R&D, the IP Fund, and the establishment of offices of technology transfer (OTTs) at institutions.

The strategic objectives of the Programme are the following:

- To lead, inform and influence policy development in areas of strategic science and technology innovation focus.
- To oversee, monitor and regulate key policy instruments, including institutional arrangements and support interventions in the strategic and emerging S&T areas of space science, energy, biotechnology, nanotechnology, robotics, photonics, IKS, IP management, technology transfer and technology commercialisation.
- To coordinate and support research and high-end skills development in the strategic and emerging S&T areas of space science, energy, biotechnology, nanotechnology, robotics, photonics, IKS, IP management, technology transfer and technology commercialisation.
- To support, promote and advocate for the development and translation of scientific R&D outputs into commercial products, processes and services that will contribute towards economic growth and a better quality of life.

## KEY HIGHLIGHTS OF 2014/15

Various initiatives continued to be supported during the year under review in the bioeconomy arena. These have resulted in South Africa being ranked number 36 among 54 countries in the World Review of Biotechnology (2014). One of the key achievements was the signing of a MoU between Pfizer Inc. and the North-West University (NWU) in June 2014 towards the potential use of Pfizer's genetically modified animal models for evaluations in oncology, inflammation and immunology, as well as central nervous system and cardiovascular system disorders.

The MoU is expected to contribute towards the development of the pharmaceutical sector in South Africa in terms of the Bio-economy Strategy and IPAP. Preclinical testing is a crucial step in the establishment of this sector, as it forms part of the development and registration of

any therapeutic product. A national Preclinical Drug Development Programme for South Africa was instituted by the Department and includes the establishment of a national preclinical drug development platform for small animals at the NWU. This platform is meant to serve all researchers and companies involved in drug development in South Africa and beyond.

Regarding the Bio-economy Strategy, three coordinating committees were set up for the three key themes of the Strategy, namely, agriculture, health, and industry and environment. These committees have overseen the finalisation of their respective implementation plans; they have yet to be approved by Exco.

The year also saw the initiation of seed-funded projects aligned with the implementation of the Agricultural Bio-economy Plan, including that of a pre-breeding platform for wheat. A new tripartite bio-entrepreneur programme aligned to the Industrial Bio-economy Plan was also initiated and supported.

Other initiatives implemented by the Department continued to generate significant research interest, as evidenced by the publication of an article on the Eucalyptus Genome Platform collaboration between the University of Pretoria, the Forestry and Agricultural Biotechnology Institute and the Department in *Nature*.

As part of the Indigenous Knowledge Systems (IKS) Bioprospecting and Product Development Platform's cosmeceuticals flagship project, an access and benefit-sharing agreement was signed for a skin-tone candidate product between a cosmeceuticals consortium and the community of kuNdabakazi in the Eastern Cape in September 2014.

This agreement underpins the commitment of the bioprospecting platform programme to compliance with national legislation that regulates bioprospecting work for a pipeline of innovative products. This watershed signing event symbolises the efforts to reduce biopiracy, while strengthening IP associated with national biodiversity.

These bioeconomy RDI initiatives have also resulted in the generation of four publications in journals and one copyright (Moringa Vitamin Water). In addition, a total of 154 postgraduate students were supported in the bioeconomy-related RDI initiatives.

### 3. Performance information by Programme (continued)

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In the energy domain, key partnership agreements were signed between the Department, the South African Post Office and Transnet.

The year also saw the launch of an innovative 2,5 kW hydrogen fuel cell power generator prototype unit at the University of the Western Cape's (UWC) Nature Reserve, which was also expected to lower its energy bills and carbon footprint. These HySA CoCs have also resulted in the generation of 32 publications in peer-reviewed journals and two patent applications being filed (one on a hydrogen storage and supply system integrated with a fuel cell power pack that comprises liquid gas, and one on a metal hydride storage container).

In addition, a total of 142 postgraduate students were supported in the energy-related RDI initiatives.

TIA also approved R9 987 114 for the nine-month HySA Telco Project being undertaken by HySA Catalysis, together with local and international partners. The project involves providing a methanol-based fuel cell for providing power to a telecommunications base station.

The Department's Commercialisation Framework was approved during the reporting period. Advanced plans are under way to implement the Framework in terms of proposals received from the CSIR. Part of this work will include plans on implementing the Emerging Industries Action Plan (EIAP) concept note as developed by the DST. This included the hosting of the South Africa-Taiwan Innovation and Commercialisation Workshop that was held in Taiwan. The South African delegation attended the South Africa-Taiwan Joint Committee Meeting on S&T Cooperation.

A total of 65 interns were assigned to work in host companies as part of the DST-Technology Top 100 (TT100) Workplace Internship Programme.

A call for proposals in the photonics ERA was issued, resulting in numerous projects identified for funding, while plans for a call for proposals supporting robotics RDI progressed to an advanced stage. These ERA-RDI initiatives have also resulted in the generation of 40 publications in peer-reviewed journals and one patent application being filed (one patent cooperation treaty patent granted in the TB nano-drug delivery project). In addition, a total of 111

postgraduate students were supported in the ERA-related RDI initiatives, with 18 graduating during the year.

2014/15 was a watershed year for NIPMO in terms of promoting, protecting and commercialising IP emanating from publicly financed research and development in higher education institutions and science councils. The financial constraints under which NIPMO normally operates were overcome with the transfer of funds via the adjusted estimates of expenditure and reprioritisation, which enabled NIPMO to transfer all the necessary funds to the qualifying institutions.

NIPMO hosted the World Intellectual Property Organization Summer School on Intellectual Property and Technology Transfer, and also implemented technology and innovation support centres through the OTTs at interested institutions. In terms of growing the pipeline of publicly financed R&D projects for commercial application/ utilisation in the coming years, a total of 251 new IP status and commercialisation reports (IP7 forms) were received from institutions, growing the database of IP outputs generated following an R&D activity to 814 over the five years that the IPR Act has been in effect.

A significant achievement for the period under review was the completion of the first NIPMO Incentive Scheme Guideline for Intellectual Property Creators, seeing over 360 IP creators being awarded a certificate of recognition for their role in the creation of an invention for which a South African patent was granted. Key guidelines, practice notes and interpretation notes developed included the Guidelines for the Operation of the NIPMO Incentive Scheme, Guidelines for the IP Fund, and the Guideline on IP Ownership. NIPMO also launched its Office of Technology Transfer Framework and Technology Transfer Manual, in line with the legislative mandate for NIPMO to provide best practices to the Department's stakeholders.



**Table 6: Programme 2: Performance information for the 2014/15 financial year**

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/2015	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To lead, inform and influence policy development in areas of strategic S&T innovation focus.	Number of policy instruments <sup>1</sup> developed/ implemented to strengthen S&T innovation.	Four policy instruments developed/ implemented by 31 March 2014.	16 policy instruments developed/ implemented by 31 March 2015.	A total of nine policy instruments/ developed by 31 March 2015.	-7	Partially achieved	The three Bioeconomy Implementation plans, the National Space Programme, the Space Human Capital Development Plan, the plan for the upgrade of the Houwteq Facility and the plans for the two CoCs in Space Science were submitted for Exco approval. However, Exco has recommended that changes be made to the documents before resubmitting for approval.
	Number of institutional arrangements <sup>2</sup> overseen, monitored and regulated to strengthen S&T innovation.	Two institutional arrangements overseen, monitored and regulated.	Seven institutional arrangements overseen, monitored and regulated to strengthen S&T innovation by 31 March 2015.	Nine institutional arrangements overseen, monitored and regulated.	+2	Achieved	More requests to support new partnerships were received during the year, following engagements with key stakeholders.
	Number of innovation support interventions <sup>3</sup> developed/ supported in key strategic areas.	50 innovation support interventions developed/ supported in key strategic areas.	285 innovation support interventions developed/ supported in key strategic areas by 31 March 2015.	A total of 38 innovation support interventions developed/ supported as planned.	-247	Not achieved	The IP creator intervention was delayed this year due to the lack of funds to incentivise the IP creators as per the recommendation of the NIPMO Advisory Board. It is expected that, if funds are made available for this incentive scheme, the incentives could be paid from next year onwards in a phased manner.

1. The term "policy instruments" refers to policies, Acts, regulations, strategies, implementation plans, policy briefs, and research/technical reports.

2. The term "institutional arrangements" refers to institutional arrangements such as coordinating committees, partnerships, joint ventures and other strategic arrangements undertaken to drive the implementation of national and, specifically, DST policies and strategies.

3. The term "innovation support interventions" refers to interventions that support technology innovation, such as CoCs, CoEs, CoEs, research chairs, technology platforms, technology incubators, OTTs and technology matchmaking programmes.

### 3. Performance information by Programme (continued)

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/2015	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To oversee, monitor and regulate key policy instruments, including institutional arrangements and support interventions in the strategic and emerging S&T areas of space science, energy, biotechnology, nanotechnology, robotics, photonics, IKS, IP management, technology transfer and technology commercialisation.	Number of oversight instruments <sup>4</sup> developed/reviewed to strengthen S&T innovation.	New indicator:	18 oversight instruments developed/reviewed to strengthen S&T innovation by 31 March 2015.	13 oversight instruments developed/reviewed.	-5	Partially achieved	There were delays in reviewing certain documents, which resulted in the non-achievement.
To coordinate and support research and high-end skills development in the strategic and emerging S&T areas of space science, biotechnology, nanotechnology, robotics, photonics, IKS, IP management, technology transfer and technology commercialisation.	Number of postgraduate students (MSc, PhD) financially supported in key strategic areas.	296 undergraduate and postgraduate students and technicians funded.	352 postgraduate students (MSc, PhD) financially supported in key strategic areas by 31 March 2015.	A total of 406 postgraduate students (MSc, PhD) financially supported in key strategic areas by 31 March 2015.	+54	Achieved	The targets are based on previous years' estimates and may vary on a yearly basis, especially as some students may complete their courses faster or slower than their expected period of completion.
	Number of postgraduate students (MSc, PhD) produced in key strategic areas.	New indicator:	Six postgraduate students (MSc, PhD) produced in key strategic areas by 31 March 2015.	A total of 10 postgraduate students produced.	+4	Achieved	The targets are based on previous years' estimates and may vary on a yearly basis, especially as some students may complete their courses faster or slower than their stipulated period of completion.

4. The term "oversight instruments" refers to quarterly and annual reports produced and reviewed for institutional entities such as the NRF, CSIR, SANSA, TIA and NIPMO to drive the implementation of national, and is specifically, DST policies and strategies.

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/2015	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To support, promote, and advocate for the development and translation of scientific R&D outputs into commercial products, processes and services that will contribute towards economic growth and a better quality of life.	Number of trainees <sup>5</sup> supported <sup>6</sup> in key strategic areas.	55 trainees supported.	340 trainees supported in key strategic areas by 31 March 2015.	364 trainees supported in key strategic areas.	+24	Achieved	There was a greater interest in and participation by individuals in workshops conducted and hosted by the Department.
	Number of publications <sup>7</sup> in key strategic areas.	Six publications resulting from funded R&D initiatives.	28 publications in key strategic areas by 31 March 2015.	105 publications in key strategic areas.	+77	Achieved	The results of R&D are difficult to predict; hence the variation.
	Number of new technology innovation <sup>8</sup> products <sup>9</sup> developed/supported in key strategic areas.	Four new technology innovation products developed/supported by 31 March 2015.	Six new technology innovation products developed/supported in key strategic areas by 31 March 2015.	Six new technology innovation products developed/supported in key strategic areas.	No deviations.	Achieved	
	Number of new patents in key strategic areas registered/granted.	Three new patents in key strategic areas registered/granted by 31 March 2014.	Three new patents in key strategic areas registered/granted by 31 March 2015.	A total of three new patents in the key strategic areas registered and granted.	No deviations.	Achieved	
	Number of trademarks, designs, copyrights, plant breeders' rights in key strategic areas.	New indicator.	One trademark, design, copyright, plant breeder right in key strategic areas by 31 March 2015.	No trademark, design, copyright, plant breeder rights in the key strategic areas.	-1	Not achieved	Given the nature of research and development, it is difficult to accurately predict the granting of trademarks.

5. The term "trainees" refers to students, interns, technicians, mentors, academics, researchers, innovators and entrepreneurs.

6. The term "trainees supported" refers to support in the form of bursaries, internships and high-end skills development initiatives, including the provision of facilities, resources and equipment, and attendance of conferences and workshops. Most of the support listed above is provided by entities reporting to the Department.

7. The term "publications" refers to academic/scientific work published in journal, book or thesis form, or edited volumes where each chapter is the responsibility of a different author or set of authors, or presentations at academic conferences, especially those organised by learned societies, or technical reports and working papers issued by individual researchers or research organisations on their own initiative.

8. The term "new technology innovation products" refers to products developed/supported in terms of the development and translation of scientific research and development outputs into commercial products, processes and services.

9. The term "technology innovation products" refers to prototypes, technology demonstrators or technology transfer packages developed as a result of technological innovation.

### 3. Performance information by Programme (continued)

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/2015	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
	Number of disclosures reported by publicly funded institutions.	250 disclosures reported by publicly funded institutions by 31 March 2014.	250 disclosures reported by publicly funded institutions by 31 March 2015.	251 new IP status and commercialisation reports received.	+1	Achieved	The targets are based on previous years' estimates and may vary on a yearly basis.
	Number of new technologies <sup>10</sup> commercialised in strategic areas.	15 new technologies commercialised in strategic areas by 31 March 2015.	One new technology commercialised in strategic areas 31 March 2015.	No new technology commercialised as planned.	-1	Not achieved	There were project delays in ensuring the finalisation of the ZA-ARMC satellite design. Remedial measures are being taken.
	Number of dissemination outputs <sup>11</sup> .	New indicator.	10 dissemination outputs by 31 March 2015.	28 dissemination outputs by 31 March 2015.	+18	Achieved	The target was exceeded due to World Space Week initiatives.

10. The term "new technologies" refers to technology-based products, services and processes transferred, licensed, or sold to non-profit organisations, government departments or private-sector organisations.

11. The term "dissemination outputs" refers to dissemination materials (brochures, pamphlets) peer-reviewed articles, conferences, workshops, seminar publications in popular media, public announcements, speeches, radio and television appearances, websites, newsletters, blogs, success stories, social media campaigns (Twitter, Facebook, LinkedIn, MXIt).



### 3.3 Programme 3: International Cooperation and Resources

The purpose of the Programme: International Cooperation and Resources is to strategically develop, promote and manage international relationships, opportunities and S&T agreements that strengthen the NSI and enable an exchange of knowledge, capacity and resources between South Africa and its regional and international partners. It also supports South African foreign policy through science diplomacy. It has the following three chief directorates:

**International Resources** works to increase the flow of international resources into the country by creating conditions for access to international STI skills and global projects.

**Multilateral Cooperation and Africa** advances and facilitates South Africa's participation in strategic African bilateral agreements and multilateral organisations on STI, so as to strengthen the NSI and to achieve shared economic and social development in the region and on the continent.

**Overseas Bilateral Cooperation** promotes and facilitates collaborative activities and leverages resources in support of the NSI from countries outside Africa, with a specific focus on developing a knowledge-driven economy.

**The strategic objectives of the Programme are as follows:**

- To secure STI funds to stimulate knowledge production, technology transfer, enhanced innovation and STI human capital development in pursuit of STI-based socio-economic development in South Africa.
- To increase South Africa's international exposure to regional, continental and global knowledge and STI networks that will result in knowledge production, technology transfer and enhanced innovation in support of the NSI.
- To contribute towards the shaping of the regional, continental and global STI discourse, decision-making and policy-formulation, using science diplomacy to ensure the representation of the interests of South Africa.
- To support STI capacity on the African continent to create conditions for the development of a knowledge-based economy in Africa.
- To increase participation by South Africans in international human capital development opportunities to strengthen the South African NSI.

## KEY HIGHLIGHTS OF 2014/15

### Overseas Bilateral Cooperation

Overseas Bilateral Cooperation successfully managed a diverse portfolio of bilateral relations with countries in the Americas, Asia, Australasia and Europe to develop and implement cooperation initiatives, which especially benefited South Africa by facilitating access to international experience and expertise.

The second Science, Technology and Innovation Ministerial Meeting of the Brazil, Russia, India, China and South Africa (BRICS) group on 18 March 2015, which saw the signing of the first BRICS MoU on cooperation in STI. This agreement, the preparation of which was initiated by South Africa, will provide a strategic framework for valuable cooperation opportunities with these major partners. South Africa is leading the preparation of a dedicated BRICS cooperation initiative in astronomy.

### 3. Performance information by Programme (continued)

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Individual relations with BRICS partners were also strengthened; for example, through the signing of a new cooperation agreement with the Russian Federation during Minister Pandor's visit to that country in October 2014.

STI also featured prominently in the new Five-to-Ten Year Strategic Programme for Cooperation concluded with the People's Republic of China during President Zuma's state visit to China. The Department was entrusted with the leadership of a flagship initiative to develop science park cooperation.

Minister Pandor's visit to Brazil in March 2014 provided new impetus for the revival of bilateral cooperation, including in the domain of bioenergy.

Asian cooperation highlights included the conclusion of a new cooperation agreement with Malaysia and a series of events to celebrate 10 years of successful bilateral science and technology relations with Japan.

In the Americas, new initiatives were launched with Argentina (for example, in the marine sciences), while biotechnology cooperation with Jamaica was initiated in the Caribbean.

In February 2015, Minister Pandor, by invitation, addressed probably the most important public science event in the United States, namely, the annual meeting of the American Association for the Advancement of Science, held in San Jose, California. A series of engagements undertaken during her visit to the United States strengthened cooperation with public and private sector research and technology organisations located in innovation hotbeds such as Silicon Valley in California. The Minister's engagements during a series of high-level events associated with the United States-Africa Leaders Summit, hosted by President Obama in August 2014, contributed significantly to highlighting the crucial role to be played by STI in the United States' future partnership initiatives with Africa.

Cooperation with European countries remained a strategic priority for the Department, with new cooperation programmes agreed to with, among others, Germany, Italy, Norway and Sweden. An ambitious new cooperation programme with the United Kingdom (UK), the Newton Fund, was launched in September 2014, and will see joint investment by South Africa and the UK of approximately

R140 million annually. This will advance research and innovation partnerships targeting societal challenges, such as public health and food security, with a focus on capacity-building.

#### Multilateral Cooperation and Africa

Multilateral Cooperation and Africa registered significant progress in strengthening South Africa's participation in STI partnerships with other African countries, including the regional Southern African Development Community (SADC) and continental African Union (AU) frameworks. Active engagement with a range of multilateral organisations especially benefited South Africa through providing access for South African researchers and students to human capital development opportunities.

In November 2014 Minister Pandor concluded new cooperation agreements with Ethiopia and Sudan, significantly strengthening the Department's cooperation with East and North Africa. New partnership initiatives were also agreed upon with Algeria, Angola, Botswana, Ghana, Namibia, Mauritius, Zambia and Zimbabwe, among others.

Within the SADC context, the Minister participated in the joint ministerial meeting of SADC ministers responsible for STI, education and training, held in June 2014, which agreed on an ambitious work programme to intensify regional cooperation. These initiatives are concertedly supported by the Department, notably through the secondment of an official to the SADC Secretariat in Gaborone, to create dedicated capacity for cooperation in STI at the Secretariat.

In July 2014, heads of state of the AU adopted the comprehensive new Science, Technology and Innovation Strategy for Africa (STISA), a 10-year framework for enhancing continental cooperation and integration. The Department is at the forefront of preparing implementation plans for STISA, an engagement agreed upon during the visit to South Africa by the AU Commissioner for Human Resources, Science and Technology, Prof. Paul Ikounga. Important progress was also made in advancing preparations for South Africa's hosting of the space science component of the Pan-African University.

South Africa's influence in multilateral forums for STI, which the chief directorate works to promote, was further



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boosted by the election in August 2014 of prominent South Africans to leadership positions in the influential International Council for Science (ICSU). Prof. Daya Reddy, President of ASSAf, will assume the ICSU presidency in 2015, while the Vice-Chancellor of the University of Pretoria, Prof. Cheryl de la Rey, was elected to the ICSU Executive Committee.

High-level multilateral engagements included Minister Pandor's address in October 2014 to the United Nations in New York at a special event on science for peace and development, which marked the 60th anniversary of one of the world's foremost international science organisations, namely, CERN (the European Organization for Nuclear Research).

As testament to South Africa's respected scientific standing, in January 2015 the Minister addressed the launch event of the International Year of Light and Light-based Technologies of the United Nations Educational, Scientific and Cultural Organization (UNESCO). She also addressed the United Nations Commission on the Status of Women on the importance of eliminating gender imbalances in research and innovation.

The Department partnered successfully with UNESCO in September 2014 to organise a series of outreach events as part of the UNESCO Africa Engineering Week to promote interest in engineering studies and careers among South African learners.

As part of South Africa's presidency of the Centre for Science and Technology of the Non-Aligned Movement and Other Developing Countries, a course on minerals processing and beneficiation was presented in South Africa. This saw the enrolment of not only South African students, but also students from several other developing nations.

The annual Southern African Young Scientists Summer Program (SA-YSSP), presented with the International Institute for Applied Systems Analysis (IIASA), was another highlight, affording young South African and other developing country researchers access to leading international experts in the field of systems research for sustainable development.

## International Resources

Through various strategic partnerships, most notably with the EU and philanthropic organisations such as the Bill & Melinda Gates Foundation, the chief directorate delivered on its principal mission of attracting foreign investment in South African STI. For example, it facilitated new joint funding programmes with the Bill & Melinda Gates Foundation in the areas of water and sanitation technology, as well as the health of women and children.

The chief directorate's work positioned the Department as a trusted partner for countries with development cooperation programmes in South Africa. The Department often works with development partners to support regional initiatives, for example BioFISA, a Finnish-South African Partnership Programme that strengthens the biosciences programme of the New Partnership for Africa's Development (NEPAD) in Southern Africa. A new funding programme for the next phase of BioFISA was agreed on in 2014, as was a new cooperation programme with France to reinforce capacity for training and research in the agricultural sciences at South Africa's historically disadvantaged institutions.

A strategic framework is being developed to guide the Department's efforts to attract STI-orientated foreign investment in South Africa, such as promoting South Africa as an attractive destination for multinational companies to locate their corporate R&D facilities.

Promoting public-private partnerships in innovation is also a focus area of the Department's engagement with the World Bank, which includes a number of technical exchange platforms to access international experience and expertise.

Support was also provided to global research infrastructure partnerships, most notably the SKA radio telescope project and the work of the African-European Radio Astronomy Platform, to access funding for bi-regional cooperation initiatives and programmes such as the African Very Long Baseline Interferometry Network (AVN).

The privileged nature of South Africa's STI partnership with the EU was underlined by the visit to South Africa in December 2014 by the new EU Commissioner for Research, Innovation and Science, Carlos Moedas. It was Commissioner Moedas' first visit outside Europe following

### 3. Performance information by Programme (continued)

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his appointment. In a series of bilateral meetings with Minister Pandor, agreement was reached on new South Africa-EU cooperation initiatives, for example in health innovation, marine science, and minerals and mining technology.

The next phase of the multibillion rand European and Developing Countries Clinical Trials Partnership, involving the participation of several European and African countries, was launched in December 2014 in Cape Town during the Commissioner's visit. The programme will strive to accelerate the development of new drugs, vaccines and other interventions in the fight against infectious diseases, especially neglected diseases.

In June 2014, South Africa became formally associated with EUREKA, an intergovernmental pan-European network for market-orientated industrial research and development. The association will create valuable cooperation opportunities for research and technology-intensive South African companies, including small and medium enterprises.

South Africa's profile as an STI partner of choice was promoted within the EU, most notably at the prestigious biennial EuroScience Open Forum, held in Copenhagen, Denmark, in June 2015, with Minister Pandor a keynote speaker at several sessions. These efforts were rewarded with significant success during the first rounds of the EU's new Horizon 2020 Framework Programme for Research and Innovation, which saw funding of more than R150 million allocated to South Africa following competitive calls for proposals.

**Table 7: Programme 3: Performance information for the 2014/15 financial year**

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To secure STI funds to stimulate knowledge production, technology transfer, enhanced innovation and STI human capital development in pursuit of STI-based socio-economic development in South Africa.	Amount of foreign STI funds secured from international partners through agreed instruments for knowledge production, technology transfer, enhanced innovation, and STI human capital development.	R436 380 000 foreign STI funds leveraged by 31 March 2014.	R 354 600 000 foreign STI funds secured from international partners through agreed instruments for knowledge production, technology transfer, enhanced innovation, and STI human capital development by 31 March 2015.	R634 436 204 foreign STI funds secured by 31 March 2015.	+R279 836 204	Achieved	The over-achievement was due to an increase in funding from international partners because of the successes of NSI partners in competitive STI initiatives.
	Amount of national STI funds secured for knowledge production, technology transfer, enhanced innovation, and STI human capital development.	R39 000 000 South African and foreign funds secured.	R84 300 000 national STI funds secured for knowledge production, technology transfer, enhanced innovation, and STI human capital development by 31 March 2015.	R119 552 773 national STI funds secured for knowledge production, technology transfer, enhanced innovation, and STI human capital development by 31 March 2015.	+R35 252 773	Achieved	The over-achievement was due to increased participation by African partners, increased multilateral organisational participation and improvements in the quality of reporting.
To increase South Africa's international exposure to regional, continental and global knowledge and STI networks that will result in knowledge production, technology transfer and enhanced innovation in support of the NSI.	Number of specialist or joint technical workshops, policy dialogues, symposia or conferences accessed, hosted, facilitated or contributed to for participation by South African researchers and students.	New indicator.	32 specialist or joint technical workshops, policy dialogues, symposia or conferences accessed, hosted, facilitated or contributed to for participation by South African researchers and students by 31 March 2015.	A total of 56 specialist or joint technical workshops, policy dialogues, symposia or conferences accessed, hosted, facilitated, or contributed to for participation by South African researchers and students by 31 March 2015.	+24	Achieved	The over-achievement was as a result of increased activities with EU partners, as well as strengthening partner relationships on the African continent.

### 3. Performance information by Programme (continued)

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To contribute towards the shaping of regional, continental and global STI discourse, decision making and policy formulation using science diplomacy to ensure the representation of South Africa's interests.	Number of regional and/or global initiatives led by South Africa.	New indicator.	19 regional continental and/or global initiatives led by South Africa by 31 March 2015.	A total of 26 regional continental and/or global initiatives led by South Africa by 31 March 2015.	+7	Achieved	An additional three multilateral engagements that were not anticipated were supported.
	Number of Department of International Relations and Cooperation (DIRCO) and/or Presidency-led initiatives supported <sup>12</sup> .	New indicator.	24 initiatives led by DIRCO and/or the Presidency supported by 31 March 2015.	24 initiatives led by DIRCO and/or the Presidency supported.	No deviations.	Achieved	
	Number of recommendations from engagements with multilateral organisations to shape national, regional and continental STI discourse and policy formulations submitted to Exco.	New indicator.	Five recommendations from engagements with multilateral organisations to shape national, regional and continental STI discourse and policy formulations submitted to Exco by 31 March 2015.	Five recommendations from engagements with multilateral organisations to shape national, regional and continental STI discourse and policy formulations submitted to Exco by 31 March 2015.	No deviations.	Achieved	
To support STI capacity on the African continent to create conditions for the development of a knowledge-based economy in Africa.	Number of regional, continental and/or multilateral governance systems supported by means of capacity building.	New indicator.	Six regional, continental and/or multilateral governance systems supported by means of capacity building by 31 March 2015.	Seven regional, continental and/or multilateral governance systems supported by means of capacity building by 31 March 2015.	+1	Achieved	Multilateral Cooperation and Africa participated in the African Higher Education Summit, which was a request received from Rwanda and was therefore not included during the planning process.

12. "DIRCO and/or Presidency-led initiatives" are international engagements like binational commissions, joint permanent cooperation commissions, the South Africa-EU Summit and other initiatives that advance South Africa's foreign policy agenda engagements, which may include participation in incoming or outgoing delegations, participation in South African negotiation teams, the preparation of specific documents and presentations, or organising "side events" at these high-level engagements.

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
	Number of regional and/or continental initiatives promoted to strengthen STI engagement with Africa.	New indicator:	Eight regional and/or continental initiatives promoted to strengthen STI engagement with Africa by 31 March 2015.	18 regional and/or continental initiatives promoted to strengthen STI engagement with Africa by 31 March 2015.	+10	Achieved	The over-achievement is due to increased participation in EU-Africa initiatives, as well as an increase in joint committees with African partner countries.
To increase participation by South Africans in international human capital development opportunities to strengthen the South African NSI.	Number of international human capital development opportunities accessed for participation by South African researchers and students.	New indicator:	44 international human capital development opportunities accessed for participation by South African researchers and students by 31 March 2015.	67 international human capital development opportunities accessed for participation by South African researchers and students by 31 March 2015.	+23	Achieved	The over-achievement is due to the success rate of South African participants in the EU programmes, as well as an increase in opportunities with bilateral partners.
	Number of South African researcher and student participants in international human capital development opportunities.	New indicator:	1 456 South African researcher and student participants in international human capital development opportunities by 31 March 2015.	2 143 South African researcher and student participants in international human capital development opportunities by 31 March 2015.	+687	Achieved	There were more joint projects approved with international partners, e.g. Japan, India, Argentina and Korea, than was anticipated during the planning phase.

### 3. Performance information by Programme (continued)



#### 3.4 PROGRAMME 4: RESEARCH, DEVELOPMENT AND SUPPORT

The purpose of the Programme is to provide an enabling environment for research and knowledge production that promotes strategic development of basic sciences and priority science areas through science promotion, human capital development, the provision of research infrastructure and relevant research support, in pursuit of South Africa's transition to a knowledge economy.

The Programme has the following chief directorates:

**Human Capital and Science Promotion** focuses on developing and renewing science, engineering and technological human capital to promote knowledge generation, protection and exploitation, and to develop science platforms that exploit South Africa's geographical advantages. The chief directorate also promotes science, technology, engineering, mathematics and innovation literacy and awareness. Funding is provided to the NRF for programmes to develop research and human capital.

**Basic Sciences and Infrastructure** facilitates the strategic implementation of research and innovation equipment and infrastructure to promote knowledge production in areas of national priority and to sustain R&D-led innovation. The chief directorate also promotes the development and strengthening of basic or foundational sciences, such as physics, chemistry, biological and life

sciences, geographic and geological sciences, and the human and social sciences.

**Science Missions** promotes the development of research, the production of scientific knowledge and human capital development within science areas in which South Africa enjoys a geographic advantage. These areas include the dynamics of climate change and its impact on Earth systems, Antarctic and marine research, palaeosciences, and IKS.

**Astronomy** supports the development of astronomical sciences around a multiwavelength research strategy, and provides strategic guidance and support to relevant astronomy institutions in the implementation of DST astronomy programmes. Of particular relevance are the Southern African Large Telescope, the MeerKAT, the High Energy Stereoscopic System, the AVN, and the SKA projects.

The strategic objectives of the Programme are as follows:

- To contribute to the development of representative, high-level human capital able to pursue locally relevant, globally competitive research and innovation activities.
- To ensure the availability of and access to internationally comparable research and innovation infrastructure in order to generate new knowledge and train new researchers.
- To support and promote research that develops basic sciences through the production of new knowledge and relevant training opportunities.
- To strategically develop priority science areas in which South Africa enjoys a competitive advantage, by promoting internationally competitive research and training activities and outputs.
- To promote public engagement with STI.

#### KEY HIGHLIGHTS OF 2014/15

##### Science Missions

A review by an international panel of the Applied Centre for Climate and Earth Systems Science (ACCESS) under the leadership of the NRF was successfully completed by October 2014. It recommended the repositioning of ACCESS as a centre of excellence (CoE).

On the continental front, the chief directorate finalised and presented the SADC Science, Technology and Innovation



Implementation Framework for Climate Change (SADC/STI-IFCC 2020) at the joint ministerial meeting of SADC ministers responsible for STI, education and training held in Maputo, Mozambique, from 16 to 20 June 2014. The implementation of the Southern African Science Service Centre for Climate Change and Adaptive Land Management work programme has taken off and progress in this regard was presented at the Maputo meeting.

In April 2014, a Future Earth Summit was organised by the NRF, and fruitful discussions were held on how South Africa could establish possible links and synergies with global initiatives. The NRF was mandated to represent the country in Future Earth initiatives to ensure that South Africa was part of the global knowledge agenda driven through this initiative.

A very successful 2nd National Global Change Conference was co-hosted with the Department of Environmental Affairs, the NRF and Nelson Mandela Metropolitan University in Port Elizabeth from 2 to 4 December 2014. Over 300 participants took part and more than 130 scientific and technical papers were presented and exhibited.

In respect of IKS interventions, an evaluation of the implementation of the IKS Policy was selected for inclusion in the National Evaluation Plan. This is a joint evaluation between the DST and the Department of Planning, Monitoring and Evaluation for which a service provider has been appointed; the outcome of the evaluation will assist in charting the future course of IKS.

Toward the end of the financial year, Cabinet approved the publication of the draft Bill for the Protection, Promotion, Development and Management of Indigenous Knowledge Systems (IKS Bill) for comment for a period of 60 days. The IKS Bill will formally establish and define the functions and role of the National Indigenous Knowledge Systems Office. Another important regulatory intervention will come to fruition when the Accreditation and Certification Policy Framework is approved by Cabinet.

This framework aims to foster the recognition, standardisation and professionalisation of the various forms of indigenous knowledge (IK) practices through a process of accreditation and certification. It proposes the creation of a mechanism to allow operability between the National Qualifications Framework and IK. The framework

was completed to the satisfaction of the DST Exco, and will now be submitted to Cabinet before it is gazetted for public comment.

The IKS units also successfully scheduled a series of important consultative workshops and conferences. For example, in conjunction with the Indigenous Knowledge Systems of South Africa Trust and the University of South Africa (UNISA), the Department jointly hosted a national IKS workshop in September 2014 to develop a roadmap for the deployment of IKS for development and innovation. Also in September 2014, in partnership with the Mothong African Heritage Trust, the Gauteng Department of Agriculture and Rural Development, the City of Tshwane and UNISA, indigenous science and heritage were celebrated at the Mothong African Heritage Site in Mamelodi.

The DST/NRF South African Research Chair in Development Education at UNISA, in collaboration with the Programme: Research Development and Support, hosted the Third National IKS Interface from 27 February to 1 March 2015 in Pretoria. Delegates who added their voices to the proceedings included NRF-funded researchers/scientists from science councils and 17 universities around South Africa, IK holders, community members, postgraduate students and leaders of academic institutions, as well as policy makers from national government. This was a valuable forum for recipients of IKS ring-fenced funding from the NRF.

The second IKS Documentation Centres (IKSDCs) Knowledge Sharing Forum was held on 16 and 17 February 2015 at Cala in the Eastern Cape, with the theme "IKSDCs 2015 and beyond: Sharing best practices". Fifty-one people belonging to IKSDC teams from Limpopo, the Eastern Cape, the Free State, KwaZulu-Natal, North West and the Western Cape participated in the Forum. This event has been introduced on an annual basis as a method of supporting established IKSDCs through a knowledge-sharing forum.

### Astronomy

An important aspect of this unit's work concerns the protection of astronomy areas under the Astronomy Geographic Advantage (AGA) Act. In September 2014, through the AGA Act and publication in the *Government Gazette*, the Minister assigned the Management Authority

### 3. Performance information by Programme (continued)

of the Karoo and Sutherland Central Astronomy Advantage Areas to the DST. Authority was received from the Independent Communications Authority of South Africa and National Treasury on several schedules. Regulations pertaining to electromagnetic interference, radio frequency protection and procedural matters have been drafted and will be promulgated in the next financial year. A contract has also been signed with the NRF to carry out a study on the characterisation of the light quality in Sutherland to inform appropriate protection measures for the Sutherland astronomical site.

On the human capital development front, more than 700 students and postdoctoral fellows have been supported through the SKA SA Bursary and Scholarship Programme and the National Astrophysics and Space Physics Programme. With specific reference to the SKA Bursary Programme, 500 students have been supported at undergraduate and postgraduate levels; 443 have graduated. This graduation rate (89%) is considerably higher than the national average for the same levels of study, which is below 50%. Of the 443 students who graduated, 161 have pursued higher levels of study, and this retention rate of 36% is also considerably higher than the national average. Interventions to attract students into the astronomy pipeline from historically disadvantaged institutions have begun.

The first four MeerKAT dishes with sub-reflectors have been installed at the Karoo site. The dishes will now be commissioned and tested for full operation. The South African SKA Project Office has also developed a building block for digital signal processing, called the SKA Reconfigurable Architecture Boards (SKARAB), which enables highly specialised and high-performance computing to be used in the next-generation radio telescopes. A tender has been awarded to build the local manufacturing capability for printed circuit boards that will allow for the local manufacture of the SKARAB. This manufacturing capability will also be used for manufacturing another platform developed by the South African SKA Project Office, called the Real-Time Transient Analyser (RATTY) hardware.

Following on the work done by the Astronomy Desk, the DST, together with a drafting team, finalised a National Multiwavelength Astronomy Strategy, which was approved by Exco. The strategy will be tabled at Cabinet for endorsement in the next financial year. In terms of strategic

partnerships, astronomy-specific bilateral relations have been forged with the Netherlands, India, China, the United Kingdom and the United States of America.

The Programme also realised foreign investment in astronomy; the Max Planck Institute invested approximately R150 million for the S-Band Receivers for the MeerKAT; IBM launched a research centre at the University of the Witwatersrand with an investment of R700 million, focused on developing skills in big data in partial support of the SKA; and Cisco invested R50 million in a Centre for Broadband Research at the Nelson Mandela Metropolitan University, also in support of the SKA.

Minister Pandor hosted a successful 2nd SKA African Partner Countries Ministerial Meeting in Pretoria on 25 March 2015, where the SKA/AVN Readiness Strategy was approved for implementation and the draft MoU was endorsed for final legal scrutiny by the member countries. The Readiness Strategy highlights the key areas of focus in which capacity must be built in the SKA African partner countries. The MoU is essential for establishing a joint cooperation framework that defines roles and responsibilities, the scope of work and principles to be adhered to by all parties. Both of these instruments are crucial for ensuring that Africa is ready to host Phase 2 of the SKA project.

In addition, the meeting also approved the Big Data Africa Programme, with a focus on astronomy, for the SKA African partner countries. This will ensure that the requisite big data capacity, both human and institutional, is developed in the partner countries that require such computing capacity. In this regard, progress has already been made in Botswana and Zambia.

#### Human Capital and Science Promotion

The National Research Foundation (NRF) is the government entity mandated to develop human capital for research and development. The draft NRF Amendment Bill was completed after consultation with the new NRF Board and senior NRF management. The draft Bill provides for a more comprehensive codification of the NRF's current mandate, and clarification of the Minister's authority over the NRF, and explicitly spells out the NRF's responsibilities in respect of science engagement. The draft Bill has been submitted to the State Law Advisor. Following the incorporation of the

State Law Advisor's inputs and those of the Department's Exco, the draft Bill will be submitted to the Minister for tabling in Cabinet.

The Minister approved the Human Capital Development (HCD) Strategy for Research, Innovation and Scholarship. Its implementation plan is being developed and will include projections of the financial resources required to address the HCD needs of the NDP.

Progress has been made regarding the next generation of researchers over the reporting period. The number of students funded through the NRF increased to 11 335 in the 2014/15 financial year, up by 1 564 from the previous financial year. The percentages for funded black and women students were 62% and 53%, respectively. Plans to disburse a new injection of R300 million per annum to increase bursary values and the number of students awarded bursaries were completed during the reporting period.

A trend of declining proportions of black students progressing to higher postgraduate studies has been observed, and the Department has commissioned a study to establish the reasons for this trend. Equally, a study will be commissioned to determine the socio-economic impact of the DST's investments in postgraduate training and ways in which the Department can improve the efficiency of its investments in this regard. A postgraduate tracking system will be developed, and the terms of reference for this work were approved by Exco during the reporting period.

Progress has been made regarding the emerging researchers category. The Research Professional Development Programme supports young scientists and professionals to undertake basic and applied research and to promote innovation in science councils and national research facilities. In the 2014/15 financial year, 126 researchers were supported through this programme – 56% black and 54% women.

The Thuthuka Research Grant was established to provide support for emerging researchers in full-time, permanent or fixed-term contract appointments at public universities and research institutions. In 2014/15, 477 grants were provided – 52% to black people and 64% to women. Regarding established researchers, the number of researchers funded through the NRF increased by 118

from the previous year to 464 during the reporting period. The percentages for funded black and women researchers were 30% and 37%, respectively, an increase of 2% and 1% from the previous year.

An observation was made that the average grant values for established researchers has been decreasing over the years. To ameliorate this situation, the Minister approved the reprioritisation of an amount of R88 million during the financial year, and an amount of R100 million from 2015/16 onwards, which will be used to increase the aggregate value of the grants to established researchers.

Two of the major instruments for supporting established researchers are the South African Research Chairs Initiative (SARChI) and the DST-NRF Centres of Excellence (CoEs) programme. It has been observed that there is an alignment between CoEs with focus areas in the NDP and the resultant provision of policy and service advice, for example in environment and health.

Regarding the SARChI programme, 153 research chairs have been awarded, with 150 of them filled to date. Of the filled positions, 23% are for women and 30% for black people. During the 2014/15 financial year, the Minister approved the awarding of at least 20 more research chairs, reserved for the appointment of female South African citizens and permanent residents. In addition, under the SARChI programme, the Minister approved the establishment of a community of practice initiative on strategies to overcome poverty and inequality in South Africa. This adds to the community of practice on mathematics, numeracy and education.

During the reporting period, the Minister approved the Science Engagement Framework; this is an implementation framework for a plan of action and has since been approved by Exco. This implementation framework outlines activities that will be conducted and/or led by the DST in response to the four strategic aims of the Science Engagement Framework. A much more detailed plan with clear baselines, targets and usage of centralised funds for science engagement activities will be developed.

In collaboration with the Department of Higher Education and Training (DHET), 125 entry-level positions have been advertised at local universities for a period of five years.

### 3. Performance information by Programme (continued)

The incumbents will be absorbed by the host institutions. Agreements have been reached on aligning DST/NRF and DHET-funding instruments around the DHET programme and the NRF Emerging Researchers Programme.

#### Basic Sciences and Infrastructure

This unit's development of national plans for research infrastructure (RI) investment continued, focusing on the South African Research Infrastructure Roadmap (SARIR) and the National Integrated Cyberinfrastructure System (NICIS). Through extensive consultation with the research community, six scientific infrastructure domains were identified for coverage by SARIR, namely, humans and society; health, biology and food security; Earth and environment; energy; materials and manufacturing; and physical sciences and engineering.

With the emphasis on medium and large-scale RIs and in line with the above scientific domains, 17 RIs were identified through a consultative process to constitute the framework for a roadmap. This project is facilitated by a steering committee composed of experts from industry and the above domains, as well as 17 researchers (referred to as "champions") who develop the science and technical cases for each of the 17 RIs. On the basis of set of criteria and the proposals developed by the champions, the steering committee in December 2014 selected 13 RIs for further consideration to constitute the first version of a SARIR.

Regarding the work on NICIS, the Department's response to the recommendations of the NICIS report of 2013 was finalised. The key principles that will govern NICIS are joint planning and budgeting; good governance; visibility of cyberinfrastructure services; sustainability; and constructive stakeholder engagement.

In the 2014/15 financial year, the DST's ring-fenced infrastructure allocation of R551,9 million allowed the Programme to support the following:

- A total of 69 RI grants. About 84% of the grants were directly managed by the NRF through the National Equipment Programme and the National Nanotechnology Equipment Programme for scientific equipment grants to universities, science councils and museums, access to global infrastructure and support to the national research facilities.

- Continued support towards the development of a titanium additive-manufacturing system.
- Continued support for the establishment of a lithium-ion battery development laboratory.
- Continued support for the establishment of a National Recordal System to capture, store and manage indigenous knowledge.
- The establishment of a National Preclinical Drug Development Platform at North-West University.

With regard to the development and implementation of the components of NICIS, the DST continued to make significant investments in this area by supporting the Centre for High Performance Computing (CHPC), the South African National Research Network (SANReN), the Data Intensive Research Initiative of South Africa (DIRISA) and the acquisition of international broadband connectivity on the West Africa Cable System (WACS).

A major achievement was the activation of the first international capacity of about 20 gigabits per second on WACS, to complement the connectivity on SEACOM.

Funding interventions in support of the basic sciences are currently unstructured and require a review for the coordination and consolidation of existing interventions and the introduction of new interventions that support a sustainable value chain. A draft Framework for the Development and Support of the Basic Sciences, which includes inputs from a multi-stakeholder consultative workshop, was developed and approved by the DST Exco. The two key themes of the Framework are the elements (funding and content) required for the development and support of the basic sciences, and the establishment of a national coordinating structure to implement the Framework.

The HSRC has convened 10 human and social dynamics research seminars for the DST. The research seminars focused on knowledge generation and innovation in the humanities; indices of multiple deprivation at a small area level in South Africa; the current state of the HIV/AIDS epidemic in South Africa; critical perspectives on the ASSAf Humanities report; substance abuse, harm reduction and harm prevention; spatial inequality at a small area level in South Africa; the role of the social sciences in science engagement; the role of the humanities in public

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engagement for good governance; (un)healthy diets: (a tale of misinformation or competing interests); and food, nutrition and care security during the first 1 000 days of a child's life.

The research seminars aimed to (i) support research excellence in the human and social sciences; (ii) create platforms that yield “actionable information” for decision-

makers and enable policy-makers to gain access to research evidence and improve evidence-informed policymaking; and (iii) identify research gaps and suggest new research agendas in the human and social sciences with a view to forging closer links between the research communities in these fields.

### 3. Performance information by Programme (continued))

**Table 8: Programme 4: Performance information for the 2014/15 financial year**

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To contribute to the development of representative, high-level human capital able to pursue locally relevant and globally competitive research and innovation activities.	Total number of postgraduate students (BTech, honours, master's and PhD students) and postdoctoral fellows awarded bursaries as reflected in the NRF project reports.	9 771 postgraduate students awarded bursaries through the NRF-managed programmes.	11 440 postgraduate students (3 414 BTech and honours, 4 671 master's and 2 665 PhD students) and 690 postdoctoral fellows awarded bursaries through NRF-managed programmes by 31 March 2015).	11 335 postgraduate students and postdoctoral fellows (3 448 honours, 4 263 master's, 2 845 PhD students) and 779 postdoctoral fellows awarded bursaries as reflected in the NRF reports.	-105	Partially achieved	The target was under-achieved by 1%. It is difficult to project the target exactly, given that postgraduate students at different study levels (honours, master's, PhD and postdoctoral) are awarded different amounts.
	Total number of graduates and students placed in DST-funded work-preparation programmes in science, engineering, technology and innovation (SETI) institutions.	1 010 graduates and students placed in DST-funded work-preparation programmes in SETI institutions by 31 March 2014.	1 000 graduates and students placed in DST-funded work-preparation programmes in SETI institutions.	1 021 graduates and students placed in DST-funded work-preparation programmes.	+21	Achieved	The value of the individual internships depends on the qualification levels of the individual interns, and the number of awards made at the different levels is thus dependent on the distribution of qualification levels across the pool of interns. Since this cannot be predicted with 100% accuracy, it follows that the distribution of internships across the different qualification levels also cannot be predicted with 100% accuracy. This means that the exact number of internships cannot be determined beforehand, leading to some variability in the results.



Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To ensure the availability of and access to internationally-comparable research and innovation infrastructure in order to generate new knowledge and train new researchers.	Number of research infrastructure grants awarded as per award letters.	61 research infrastructure grants were awarded by NRF and DST internal processes and as per the award letters by 31 March 2014.	60 research infrastructure grants awarded as per award letters by 31 March 2015.	69 grants have been awarded in four categories of research infrastructure.	+9	Achieved	Because the individual grants awarded were smaller than anticipated, the overall allocation could be spread across a larger number of proposals, hence the positive deviation.
	Average amount of bandwidth per SANReN site per annum.	2 200 mbps average bandwidth capacity is available per SANReN site by 31 March 2014.	2 800 mbps average bandwidth capacity availability per SANReN site by 31 March 2015.	2 820 mbps average bandwidth capacity availability per SANReN site.	+20	Achieved	Broadband capacity upgrades at various existing SANReN sites increased the network's average bandwidth available per site.
To support and promote research that develops basic sciences through the production of new knowledge and relevant training opportunities.	Total number of researchers awarded research grants through NRF-managed programmes as reflected in the NRF project reports.	3 569 researchers awarded research grants through NRF-managed programmes as reflected in the NRF project reports by 31 March 2014.	3 876 researchers awarded research grants through NRF-managed programmes as reflected in the NRF project reports by 31 March 2015.	4 064 researchers awarded research grants through NRF-managed programmes as reflected in the NRF reports.	+180	Achieved	Target was exceeded by 5%. It is difficult to project this target with accuracy, given the differing research grant sizes for the researchers, thus leading to some uncertainty (i.e. variability) in the number of grants awarded.

### 3. Performance information by Programme (continued)

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
	Number of ISI-accredited research articles published by NRF-funded researchers as reflected in the NRF project reports.	5 641 ISI-accredited research articles published by NRF-funded researchers by 31 March 2014.	5 700 ISI-accredited research articles published by NRF-funded researchers by 31 March 2015.	6 470 ISI-accredited research articles published by NRF-funded researchers as reflected in the NRF project reports.	+770	Achieved	This target is dependent on some factors that cannot be determined by the NRF and DST. Specifically, the extent to which researchers leverage additional income from other sources can influence the number of papers produced. Secondly, the time lag between the NRF/DST-funding of a research project and the publishing of the project's outcomes is very variable, meaning that it is not possible to produce a model of the number of expected papers with 100% accuracy on the basis of previous research grants awarded.
To strategically develop priority science areas in which South Africa enjoys a competitive advantage, by promoting internationally competitive research and training activities and outputs.	MeerKAT antennas installed as per SKA specifications.	One MeerKAT antenna designed and installed as per SKA specifications by 31 March 2014.	Four new MeerKAT antennas installed as per SKA specifications by 31 March 2015.	Three MeerKAT antennas installed as per SKA specifications by 31 March 2015.	-1	Partially achieved	The original plan was to install four antennas by the end of 2014/15. This was therefore a cumulative indicator that includes the one antenna installed by the end of the 2013/14 financial year.

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
	Number of strategy documents approved by Exco.	A total of five strategy documents approved by Exco.	One implementation plan for science, technology, engineering, mathematics and innovation promotion and the Science Engagement Strategy for the NSI approved by Exco by 31 March 2015.	Implementation plan of the Science Engagement Strategy approved.	No deviation.	Achieved	
			One Marine and Antarctic Research Strategy approved by Exco by 31 March 2015.	One Marine and Antarctic Research Strategy approved.	No deviation.	Achieved	
			Draft Basic Sciences Development Framework approved by Exco by 31 March 2015.	Draft Basic Sciences Development Framework approved.	No deviation.	Achieved	
			A Bill for the Protection, Promotion, Development And Management of IKS (IKS Bill) tabled before Parliament by 31 March 2015.	The Bill was tabled with Cabinet (and approved for publication in the <i>Government Gazette</i> ), as the necessary first step in tabling it in Parliament.	The target was not achieved.	Not achieved	While the Bill was not tabled in Parliament, it was tabled with Cabinet (and approved for publication in the <i>Government Gazette</i> ), as the necessary first step to tabling it in Parliament. The delay in submitting the Bill arose out of delayed inputs from cognate departments and the introduction of new administrative steps in the submission of draft Bills.

### 3. Performance information by Programme (continued)

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To promote public engagement on STI.			Multiwavelength Astronomy Strategy approved by Exco by 31 December 2014.	Consultation was undertaken and the Multiwavelength Astronomy Strategy was approved by Exco by 31 December 2014.	No deviation.	Achieved	
	Total number of participants in science awareness and engagement programmes as reflected in the NRF project reports and those of other service providers.	1 108 759 people directly participated in science awareness and engagement programmes by 31 March 2014.	942 160 participants in science awareness and engagement programmes by 31 March 2015.	1 247 667 people participated in science awareness and engagement programmes supported by the DST.	+305 507	Achieved	The participation level slightly increased due to in-kind support that the DST provided to activities organised by independent stakeholders and/or role players.



### 3.5 PROGRAMME 5: SOCIO-ECONOMIC INNOVATION PARTNERSHIPS

This Programme enhances the growth and development priorities of government through targeted S&T-based innovation interventions and the development of strategic partnerships with other government departments, industry, research institutions and communities. The Programme has the following four chief directorates:

**Technology Localisation Beneficiation and Advanced Manufacturing** advances strategic medium and long-term sustainable economic growth and sector development priorities, as well as government service delivery.

**Sector Innovation and Green Economy** provides policy, strategy and direction-setting support for R&D-led growth of strategic sectors of the economy and enhances S&T capacity to support a transition to a green economy.

**Innovation for Inclusive Development** supports experimental S&T-based innovations for tackling poverty, including the creation of sustainable job and wealth opportunities, building sustainable human settlements, and enhancing the delivery of basic services.

**Science and Technology Investment** leads and supports the development of indicators and instruments for measuring and monitoring investments in S&T and the

performance of the NSI, and ways of strengthening the NSI and innovation policies.

The Programme has the following strategic objectives:

- Through knowledge, evidence and learning, to inform and influence how S&T can be used to achieve inclusive development.
- To identify, grow and sustain niche high-potential STI capabilities for sustainable development and the greening of society and the economy.
- To identify, grow and sustain niche high-potential STI capabilities that improve the competitiveness of existing and emerging economic sectors and that facilitate the development of new targeted industries with growth potential in aerospace, advanced manufacturing, chemicals, mining, advanced metals and ICT.
- To enhance understanding and analysis that support improvements in the functioning and performance of the NSI.

### KEY HIGHLIGHTS OF 2014/15

#### SECTOR INNOVATION AND GREEN ECONOMY

##### National Water Research, Development and Innovation Roadmap

In March 2015, the Exco approved the National Water Research, Development and Innovation (RDI) Roadmap. The DST embarked on a process in 2013 to develop a national Water RDI Roadmap for South Africa and, in so doing, recognised that water is particularly important in the transition to a green economy, as it is a fundamental “connector” and, as such, is a key driver in the economy and wider socio-economic development paradigm.

The vision of the roadmap is that South Africa becomes a leader among middle-income countries in the development and deployment of water management practices and technologies, and competes with leading countries in providing sustainable solutions. This must be achieved by means of a water research, development and deployment programme focused on (i) the delivery of at least one breakthrough technology every five years; (ii) increasing the number of small and medium-sized enterprises operating in the water sector; and (iii) increasing access to water for

### 3. Performance information by Programme (continued)

rural communities, including the provision of sanitation for all in a sustainable manner. Together, this creates significant economic, health, social and environmental benefits that are articulated in the roadmap.

The development of the roadmap involved aspects of basic research, but was also highly consultative. It included engagements with 62 organisations at 32 work sessions with professionals in the water community. These engagements were divided into four categories, namely, agriculture, industry, the public sector, and environmental protection. Through this engagement process, a set of strategic RDI action-plans and an implementation framework were developed to guide, plan, coordinate and manage South Africa's investment portfolio in water RDI activity over the next 10 years developed.

The roadmap has two broad focus areas, namely, water supply and water demand. Within this context, a set of seven plans or clusters are identified. Over the period 2015-2025, the clusters will articulate pathways to progress from the 2015 situation to a much improved future state, by implementing interventions in research, development, testing, demonstration and deployment of new technologies and know-how, as well as the demonstration and deployment of emerging technologies. The seven clusters are as follows:

#### **Water supply**

1. Increase the ability to make use of more sources of water, including alternatives.
2. Improve the governance, planning and management of supply and delivery.
3. Improve the adequacy and performance of supply infrastructure.
4. Manage water as a financially sustainable "business" by improving operational performance.

#### **Water demand**

5. Improve the governance, planning and management of demand and use.
6. Reduce losses and increase efficiency of productive use.
7. Improve the performance of pricing, monitoring, billing, metering and collection.

Developing, strengthening and embedding South Africa's water research, development and deployment capability and capacity within and between research institutions, academic institutions, industry and government, will enable faster and more effective deployment of context-appropriate technologies and create opportunities for the export of know-how and technology into the African continent and beyond.

The Water RDI Roadmap thus provides a set of research, development and deployment clusters (focal areas) and associated high-level action plans to guide investments over a 10-year period, and sets out an investment ambition to achieve these plans. This Roadmap is a high-level planning tool that facilitates and guides the refocusing of research, the reprioritisation of funds, the synergising of existing initiatives and the ring-fencing of new resources in order to facilitate a more optimal water innovation system.

The exciting work will begin in 2015/16. The DST, in partnership with the Department of Water and Sanitation, will put an implementation office in place to manage the roll-out of the Water RDI Roadmap and start working on ring-fencing funding to achieve the Roadmap's ambitions.

#### **Waste Research, Development and Innovation Roadmap**

In March 2015, the DST Exco approved the National Waste RDI Roadmap. In 2012 the DST embarked the process of developing a national Waste RDI Roadmap for South Africa in order to support a paradigm shift away from the idea of "waste", to thinking of waste as a secondary resources economy, with the potential for significant social, economic and environmental benefits.

The assessment in the roadmap is that at least R25 billion worth of value is locked up in South Africa's waste streams, of which R17 billion is currently being sent to landfills. The innovation goal of the Waste RDI roadmap is thus to achieve a 20% reduction (by weight) in industrial waste to landfill and a 60% reduction (by weight) in domestic waste to landfill by 2025.

The DST contracted the CSIR to manage the development of the roadmap. The process involved aspects of basic research in evidencing the roadmap, as well as a participatory process with key stakeholders from industry, universities



and science councils, which saw the development of a set of strategic RDI action plans and an implementation framework to guide, plan, coordinate and manage South Africa's investment portfolio in waste RDI activity over the next 10 years.

The roadmap identifies six clusters that frame the RDI activity within the roadmap. These are RDI in strategic planning; modelling and analytics; technology solutions; waste logistics performance; waste and environment; and waste and society. Working towards the goal of developing and deploying performance improvements in waste management that have delivered a significant contribution to the strengthening of a sustainable, regional, secondary resources economy in South Africa, the roadmap is set to create opportunities for more effective decision-making, faster insertion of context-appropriate technology, export of know-how and technology, and strengthened RDI capability and capacity for the South African waste and secondary resources economy.

In March 2015, the DST appointed the CSIR as the official implementing agency. The DST, in partnership with the Department of Environmental Affairs and other key role players in government and industry, will now start to implement the roadmap and work on ring-fencing funding to achieve the roadmap's ambitions.

### **Biomimicry Human Capital Development Programme**

Biomimicry is an approach to innovation that seeks sustainable solutions to human challenges by emulating nature's time-tested patterns and strategies. The goal is to create products, processes, and policies – new ways of living – that are well-adapted to life on Earth in the long term. Biomimicry is a rapidly growing sector worldwide and has huge potential to provide innovative, appropriate and sustainable solutions to challenges in the water, waste, climate change and sustainability management space, globally and in South Africa.

Importantly, the development of biomimicry capacity in South Africa will support sustainable development and green economy transition targets and, particularly, support the DST's Strategic Objective 2 (Programme 5), which aims to "identify, grow and sustain a portfolio of niche, high-potential science, technology and innovation capabilities

for sustainable development and the greening of society and the economy". South Africa, however, has very limited expert capacity in this area at present.

In light of this potential, the DST has seeded the development of a HCD programme in biomimicry, in partnership with the Water Research Commission (WRC). In February 2015, five postgraduate students enrolled in degrees that will explore different aspects of water-related biomimicry opportunities. The intention is to start gradually maturing and growing biomimicry capacity and skills in South Africa as an essential driver in the development of this field.

The DST and the WRC are also in the process of establishing a biomimicry collaborative platform that will support the sharing of ideas, the refining of skills and strengthening of the biomimicry community of practice in South Africa. The idea is to start with a water-centred focus, in line with the Water RDI Roadmap, but to expand the programme to other fields of application in future years.

### **Citizen Science for Sustainable Development**

An exciting partnership between the DST, the WRC, mLab, GroundTruth (focusing on environmental engineering) and the Wildlife and Environment Society of South Africa (is breaking new ground in terms of refining citizen science tools that promote the active engagement of all people in the sustainable management of natural resources. The current focus of activity is the development of a mobile application for the Mini Stream Assessment Scoring System (miniSASS) a user-friendly citizen science tool, for river-health monitoring.

The miniSASS initiative is the development of a simplified method of biomonitoring based on tried and tested SASS techniques. This involves reducing the taxonomic complexity of SASS to a few aquatic invertebrate groupings, which act as surrogates for the complete suite of SASS taxa. The miniSASS method is an easy-to-learn river health biomonitoring tool that is ideal as an environmental education tool for learners, but can even be used by non-technical, private persons to monitor the health of rivers in their communities. As a result, the miniSASS method is ideal for use by community-based NGOs and environmental conservation clubs/conservancies to monitor and create education and awareness of river health in their communities.

### 3. Performance information by Programme (continued)

Over the last few years, GroundTruth and partners, through funding from the WRC, developed an award-winning geospatial database and website supporting the miniSASS river health monitoring tool. Through the website and database, users can learn how to sample the health of rivers using the miniSASS method, how to gather the basic field tools required, and then how to upload their river health results to the interactive, online map (with Google Earth imagery as a background). In this way, the aim is to get as much of South Africa's population as possible (particularly school learners) engaging with and learning about rivers, while collecting valuable river-health data as a form of citizen science.

The development of the mobile miniSASS application, through the introduction of the DST and mLab partnership, is the next phase in the development of this remarkable tool. A limitation of the website and database is that currently it is only accessible to the minority of South Africans who have access to a personal computer with Internet connection. The next development phase will allow users to access the database and upload results through mobile phones, opening the use of the database to a broader spectrum of society.

This multi-institutional partnership, resulting in the ongoing development of miniSASS, means that the citizen science tool is receiving significant attention. In November 2014, mLab, through its relationship with the Ministry of Foreign Affairs of Finland, was selected as a sourcing partner, along with RLabs (which provides people with skills training and economic and social support services), for local innovative and impact projects to participate in a new stream for emerging markets at the annual Slush event hosted in Helsinki (a two-day start-up conference). A number of start-ups were entered by mLab, and ultimately two projects were selected by the organisers for an all expenses paid trip to Helsinki and to participate in the Slush event. One of these was miniSASS, which was showcased as an African innovation, along with 15 other projects from Africa. In March 2015, miniSASS also won the UN Water for Life Award in the category Best Participatory, Communication, Awareness-raising and Education Practices.

#### South African Green Technologies Report

In February 2015, the DST, in partnership with ASSAf, launched the "State of Green Technologies in South Africa" report. ASSAf was tasked by the DST to conduct a study

to document green technologies currently used in South Africa, to identify gaps and opportunities for the use of these technologies, and to make recommendations to promote the growth of green technologies. The key questions that the report addressed are the following:

- What are the green technologies currently available and in use in South Africa and how does South Africa compete globally in terms of the uptake of green technologies?
- What are the political, economic, sociological, technological, legal and environmental factors that influence and impact on the implementation of green technologies in the South African context?
- In which sectors/areas are there gaps in the availability and/or implementation of technologies and potential for future growth?
- How best can new technologies be identified for transfer to South Africa and how should this be done to ensure that skills transfer is included?
- Are there opportunities for new innovative green technologies that can be implemented sustainably?
- Is there a set of indicators that can be used to measure the successful implementation of green technologies?
- What is needed to promote and increase the use and development of local green technologies?
- What recommendations are there for policies that would assist in promoting efficient and sustainable green technologies in South Africa?

All of these questions were addressed in a sector-based approach by considering opportunities in energy, water, sanitation, waste, manufacturing, mining, agriculture, ICT, health, transport and the built environment.

#### Innovation for Inclusive Development

The Nkowankowa Demonstration Centre project is now registered under the name Wolkberg Fruit Processors (Pty) Ltd. This project has advanced towards becoming a financially sustainable entity. It has increased production by 300%, tripling the economic benefit accruing to farmers, households and employees in the Greater Tzaneen Municipality local economy.

The Rose Geranium Essential Oil portfolio has been successfully transferred to the South African Essential Oil Business Incubator for management, thereby strengthening and consolidating government's efforts to build an

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inclusive essential oils industry and increasing the project's contribution to local economic development.

The DST hosted strategic seminars, such as ICT in Basic Education and a seminar series in support of the e-Education White Paper. The Innovative Sanitation Technologies seminar was attended by key stakeholders in the delivery of sanitation services in South Africa.

As part of its contribution to the NDP priorities, the DST published a policy brief on accelerating sustainable water service delivery, and engagements were finalised for a partnership project focused on the use of innovative technologies for creating sustainable human settlements.

### **Technology Localisation, Beneficiation and Advanced Manufacturing**

In order to guide the DST's advanced manufacturing investment priorities over the next 10 years, the CSIR was commissioned to develop technology roadmaps (TRMs) in the areas of smart and affordable automation, advanced photonics, advanced electronics, aerostructures and additive manufacturing. Capacity development in the theory and practice of TRM took place in October 2014 with 25 individuals from South African public and private sector institutions through a masterclass delivered by an international TRM expert. The additive-manufacturing TRM has been completed and will be approved and launched by the Minister in the 2015/16 financial year, while another four TRMs will commence in April 2015.

Through DST support, South Africa is now a member of the Intelligent Manufacturing Systems (IMS) programme, a international programme that seeks to support the development of innovative and relevant manufacturing technologies through global collaboration in the areas of sustainable manufacturing and occupational safety, standards and interoperability, energy efficiency, key technologies and education. South Africa's membership of the IMS will create a platform for advanced manufacturing public and private sector players to cooperate and collaborate to improve the competitiveness of South Africa's manufacturing sector and to create new knowledge and technology-based enterprises.

The Aeroswift Project is a partnership between the DST, the CSIR National Laser Centre and Aerosud, which aims to develop the fastest laser-based metal additive-manufacturing system of its kind in the world. The design and construction of the Aeroswift system was completed in 2014/15 and work commenced to evaluate and optimise the process. From 2015/16 on, the project team will undertake component selection, design and manufacture, and also undertake the necessary qualification, industrialisation and commercialisation steps, primarily focused on the aerospace sector. It is expected that the Minister will launch Aeroswift in the 2015/16 financial year.

### 3. Performance information by Programme (continued)

**Table 9: Programme 5: Performance information for the 2013/14 financial year**

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
Through knowledge, evidence and learning, to inform and influence how science and technology can be used to achieve inclusive development.	Number of knowledge products <sup>13</sup> on technology-led opportunities for sustainable livelihoods published.	Two policy briefs were published on the DST website by 31 March 2014.	Two knowledge products on technology-led opportunities for sustainable livelihoods published on DST website by 31 March 2015.	Two knowledge products (two case studies) were completed and published on the DST website by 31 March 2015.	No deviation.	Achieved	
	Number of knowledge products for government planning, service delivery and the building of sustainable human settlements through innovation.	A policy brief on water services delivery was published on the DST website by 31 March 2014.	One knowledge product for government planning and service delivery improvement in water delivery published by 31 March 2015.	One knowledge product (the final version of the Policy Brief on Point-of-Use Water Treatment Technologies) published on the DST website by 31 March 2015.	No deviation.	Achieved	
	Number of decision-support interventions introduced and maintained.	Two additional decision support systems for improving sanitation and basic education service delivery introduced, and two existing decision support systems (StepSA and R&V Atlas) maintained by 31 March 2014.	One additional decision-support system introduced and four-existing decision support systems maintained and improved by 31 March 2015.	Four decision-support systems maintained and two introduced by 31 March 2015.	+3	Achieved	Additional STEP SA submissions were approved through the Corrective Action Request and Report System
	Number of learning interventions <sup>14</sup> (seminars, briefs, policy papers) generated.	16 learning interventions generated by 31 March 2014.	Nine learning interventions (seminars, briefs and policy papers) generated by 31 March 2015.	11 learning interventions generated by 31 March 2015.	+2	Achieved	Two additional sessions held (i) to support the development of the e-Education Strategy and (ii) to unpack and clarify the role of STI in the establishment of the National Observatory for Spatial Data Assembly and Analysis as per NDP objectives.

13. The term "knowledge products" refers to case studies, policy briefs and technology briefs. Different knowledge products may be required to provide the knowledge and evidence required by decision-makers in order to adopt a new technology-based approach.

14. In this context, a "learning intervention" refers to a communication tool produced by policy analysts in the form of either a seminar, policy brief or policy paper, which serves as an impetus for acting for the policy audience, such as the Cabinet or Parliament, etc. The intervention may also be used to support broader advocacy initiatives targeting a wide but knowledgeable audience, e.g. clusters, decision makers, researchers and administrators.

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To identify, grow and sustain niche high-potential STI capabilities for sustainable development and the greening of society and the economy.	Number of high-level research graduates (master's and doctoral students) fully funded or co-funded in designated niche areas (sustainable development, the greening of society and the economy).	247 master's and doctoral students fully funded or co-funded in global change sciences and Earth systems science by 31 March 2014.	10 master's and doctoral students fully funded or co-funded in designated niche global change areas (sustainable development, the greening of society and the economy) by 31 March 2015.	11 master's and doctoral students fully funded or co-funded in designated niche areas by 31 March 2015.	+1	Achieved	The demand for bursaries is high and the DST allocation is therefore distributed in such a way that most of the recipients are co-funded from other sources, e.g. international partners and the private sector.
	Number of knowledge and innovation products (patents, prototypes, technology demonstrators or technology transfer packages) added to the innovation products portfolio through fully funded or co-funded research initiatives.	Two additions to the IP portfolio achieved by 31 March 2014.	One knowledge and innovation product (patent, prototype, technology demonstrator or technology transfer package) added to the innovation products portfolio by 31 March 2015.	One demonstrator added to the innovation products portfolio by 31 March 2015.	No deviation.	Achieved	

### 3. Performance information by Programme (continued)

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To identify, grow and sustain niche high-potential STI capabilities that improve the competitiveness of existing and emerging economic sectors and that facilitate the development of new targeted industries with growth potential in aerospace, advanced manufacturing, chemicals, mining, advanced metals and ICT.	Number of high-level research graduates (master's and doctoral students) fully funded or co-funded in designated niche areas (advanced aerospace, chemicals, manufacturing, mining, advanced metals and ICT).	264 master's and doctoral students fully funded or co-funded in designated niche areas (advanced aerospace, chemicals, mining, advanced metals and ICT) by 31 March 2014.	255 master's and doctoral students fully funded or co-funded in designated niche areas (advanced manufacturing, aerospace, chemicals, mining, advanced metals and ICT) by 31 March 2015.	353 master's and doctoral students fully funded or co-funded in designated niche areas by 31 March 2015.	+98	Achieved	The demand for bursaries is high and the DST allocation is therefore distributed in such a way that most of the recipients are co-funded from other sources, e.g. international partners and the private sector.
	Number of interns fully funded or co-funded in R&D relating to design, manufacturing and product development.	190 interns fully funded or co-funded in R&D relating to design, manufacturing and product development by 31 March 2014.	150 interns fully funded or co-funded in R&D relating to design, manufacturing and product development by 31 March 2015.	358 interns fully funded or co-funded by 31 March 2015.	+208	Achieved	The addition of the Technology Localisation Implementing Unit-funded interns was intentional, as a transition to simplifying the internship contracting arrangements. These arrangements will be finalised in the 2015/16 financial year.



Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
	Number of knowledge and innovation products (patents, prototypes, technology demonstrators or packages) added to the innovation products portfolio through fully funded or co-funded research initiatives.	15 knowledge and innovation products (patents, technology demonstrators, technology transfer packages or prototypes) added to the innovation products portfolio by 31 March 2015.	20 knowledge and innovation products (patents, technology demonstrators, technology transfer packages or prototypes) added to the innovation products portfolio by 31 March 2015.	29 knowledge and innovation products added to the innovation products portfolio by 31 March 2015.	+9	Achieved	Additions to the innovation products portfolio are difficult to anticipate due to the risk and complexity of the work being done, as it is also based on market demand.
	Number of instruments <sup>15</sup> funded in support of increased localisation, competitiveness and R&D-led industry development.	New indicator.	Eight instruments funded in support of increased localisation, competitiveness and R&D-led industry development by 31 March 2015.	Eight instruments funded by 31 March 2015.	No deviation.	Achieved	

15. The term "instrument" refers to a formally established (by contract) entity (also virtual) that is used in support of R&D-led industry development.

### 3. Performance information by Programme (continued)

Strategic objective	Performance indicator	Actual achievement 2013/14	Planned target 2014/15	Actual achievement 2014/15	Deviation from planned target to actual achievement for 2014/15	Status	Comment on deviations
To enhance understanding and analysis that support improvements in the functioning and performance of the NSI.	Number of reports and policy briefs <sup>16</sup> on the innovation system and innovation policy approved by the DST Exco/ published on the DST website.	Three reports/ policy briefs approved by Exco and published by 31 March 2014.	Five reports and policy briefs approved by Exco and/ or published on the DST website by 31 March 2015.	The report was approved by Exco on 9 February 2015 and the findings disseminated through a stakeholder workshop on 27 March 2015; also published on the DST website.	No deviation.	Achieved	
				The 2013/14 Report on the Performance of the R&D Tax Incentives was finalised and published on the DST website. Monitoring data on R&D administration was compiled and presented through the 4th quarter status update report.	No deviation.	Achieved	
				The 2012/13 R&D Survey Report and the Cabinet Memorandum on R&D Expenditure Trends were disseminated in quarter three. Draft report/policy brief on innovation in the manufacturing sector was produced (based on revised annual target), but not yet approved, by 31 March 2015.	No deviation.	Achieved	
					The target was partially achieved.	Partially achieved	The report was received late from CeSTII and required further work to finalise.

16. The term "policy brief" in this context refers to a communication tool produced by policy analysts in the form of either a Cabinet memorandum or evidence-based report or strategy, which serves as an input for action by a defined policy audience, such as the Cabinet, Parliament or Portfolio Committee, the Minister of Science and Technology, provincial government, or another government department. The briefing or report may also be used to support broader advocacy initiatives targeting a wide but knowledgeable audience, e.g. the Economic Sectors and Infrastructure Development Cluster, decision-makers, researchers, and administrators

## Annexure: Targets adjusted during the 2014/15 financial year

**Table 10 : Adjusted targets as per National Treasury prescripts.**

Original target	Adjusted target	Responsible institution/ agency
One trademark, design, copyright, plant breeder right in the key strategic areas.	No trademark, design, copyright, plant breeder rights in the key strategic areas.	National Intellectual Property Management Office (NIPMO).
Four new MeerKAT antennas installed as per SKA specifications by 31 March 2015.	Three MeerKAT antennas installed as per SKA specifications by 31 March 2015.	Department of Science and Technology.

### Approval

This is to confirm that the Executive Committee (Exco) of the Department of Science and Technology discussed the Department's Performance Information Report for the 2014/15 financial year at its meeting held on 11 May 2015 and that Exco is satisfied that the contents of the report reflect the DST's performance for the period covered in the report.



**Phil Mjwara**  
**Director-General**  
**Date: 31 July 2015**

## 4. Transfer payments

The Department transfers funds to various entities in pursuit of its mandate. These entities assisted the Department in achieving its objectives. The table below highlight the entities and the reasons transfers were made. The detailed information regarding the entities to whom the transfers were made is disclosed fully in the Annexures to the Annual Financial Statements in Part E.

### Programme 1: Administration

Organisation/theme	Budget R'000	Actual expenditure R'000	Reasons for transfer payment
Institutional and programme support	12,087	9,691	Assistance for research activities
<b>Total</b>	<b>12,087</b>	<b>9,691</b>	

### Programme 2: Technology Innovation

Organisation/theme	Budget R'000	Actual expenditure R'000	Reasons for transfer payment
Biotechnology Strategy	33,556	32,928	Implementation of the Bioeconomy Strategy
Energy Security Grand Challenge	33,796	33,796	Support R&D in the renewable energy sector
Health innovation	41,706	41,700	R&D for new health products and services
HIV/Aids prevention and treatment technologies	22,596	22,596	Research into technologies to combat and prevent HIV/Aids
Hydrogen strategy (Capital)	60,772	60,772	Support research infrastructure in the hydrogen and energy sector
Hydrogen strategy (Current)	34,428	34,428	Support R&D in the hydrogen and energy sector
Indigenous knowledge systems	3,790	3,790	Implementation of IKS initiatives
Innovation projects	28,640	9,861	To promote IP management, regulation and commercialisation
International Centre for Genetic Engineering and Biotechnology	36,280	36,280	R&D of new health products
South African National Space Agency	119,298	118,298	To support the creation of an environment conducive to industrial development and space technology
Space science	40,000	40,000	R&D to support space science initiatives
Technology Innovation Agency	385,386	338,386	To stimulate and intensify technology innovation and commercialisation output
Technology Top 100	3,353	3,353	To promote technological advancement for private sector with focus on SMEs
Biofuels	6,205	6,000	Biofuels research
Emerging research areas	52,576	51,736	R&D into emerging research areas
National Nanotechnology Centre	39,775	34,715	R&D into nanotechnology initiatives
Offices of Technology Transfer	53,539	53,406	Intellectual Property Fund and capacitating technology transfer offices
<b>Total</b>	<b>994,696</b>	<b>922,045</b>	

### Programme 3: International Cooperation and Resources

Organisation/theme	Budget R'000	Actual expenditure R'000	Reasons for transfer payment
Global Science: Bilateral Cooperation	12,935	12,935	Growing international partnerships with the aim of leveraging resources for R&D and human development
Global Science: International Resources	33,549	33,549	Growing international partnerships with the aim of leveraging resources for R&D and human development
Global Science: Multilateral Cooperation	4,320	4320	Growing international partnerships with the aim of leveraging resources for R&D and human development
<b>Total</b>	<b>50,804</b>	<b>50,804</b>	

### Programme 4: Research Development and Support

Organisation/theme	Budget R'000	Actual expenditure R'000	Reasons for transfer payment
Academy of Science of South Africa	21,577	21,577	To promote innovative and independence scientific thinking
Astronomy	13,319	13,319	
Human and social dynamics in development	9,976	9,963	Policy and institution building (10 year plan and centres of excellence)
Human resource development	470,678	470,678	Implementation of human capital development initiatives
National Research Foundation	851,286	851,286	To support and promote research through funding human resource development
Science awareness	65,955	65,955	Research and initiatives towards youth involvement in the science arena
Square Kilometre Array (Current)	13,205	9,123	R&D for the SKA project
South African Research Chairs Initiative	451,779	451,779	To fund research chairs in higher education institutions
Strategic science platforms	147,578	147,411	Support for human capital development and knowledge generation, policy implementation and infrastructure development.
Cyberinfrastructure	204,045	204,045	Operation and management of CHPC initiatives and connectivity of research institutions
Research and development infrastructure	561,628	561,628	Infrastructure development
Square Kilometre Array (Capital)	641,635	645,199	Infrastructure for the SKA project
<b>Total</b>	<b>3,452,661</b>	<b>3,181,963</b>	

## 4. Transfer payments (continued)

### Programme 5: Socio-Economic Innovation Partnerships

Organisation/theme	Budget R'000	Actual expenditure R'000	Reasons for transfer payment
Advanced Manufacturing Technology Strategy	28,319	28,069	Implementation of the Advanced Manufacturing Technology Strategy.
Council for Scientific and Industrial Research	825,740	825,740	Parliamentary Grant as per the Estimates of National Expenditure. To provide science and technology services and solutions and identify opportunities where new technologies can be further developed and exploited in the private and public sectors for commercial and social benefit.
Environmental innovation	16,315	15,538	Identifying and initiating S&T programmes that support the growth of the environmental technologies and services sector in South Africa.
Human Sciences Research Council	276,010	276,010	Parliamentary Grant as per the Estimates of National Expenditure. To conduct large-scale, policy-relevant, social-scientific research.
Information communication technology	24,258	24,208	Implementation of the South African ICT RDI Roadmap. Facilitating policy and strategy development on R&D interventions that support the growth of the ICT sector (excluding the ICT retail sector).
Local manufacturing capacity	112,494	112,494	To support technology localisation.  To assist local companies to develop their technology capabilities to enable them to leverage the procurement opportunities from the infrastructure build programmes of the state-owned enterprises.  To fund technology stations to render technology support to small and medium-sized enterprises.
Local systems of innovation	100,185	100,185	Support local innovation interventions and science parks.  Support industry innovation partnerships.
Research Information Management System	6,850	6,850	Information access for decision making. Continued development and maintenance of the RIMS system.
Resource-based industries	42,217	41,717	S&T policy, strategy and direction-setting support to harness value from South Africa's natural resources.
S&T indicators	9,657	9,657	Development of indicators and instruments for measuring and monitoring investments in S&T and the performance of the NSI.
Technology for poverty alleviation	25,395	25,028	Development of indicators and instruments for measuring and monitoring investments in S&T and the performance of the NSI.
Technology for sustainable livelihoods	32,751	32,751	Supports the experimentation of S&T-based innovations for tackling unemployment, poverty and inequality through the creation of sustainable job and wealth opportunities and enhancing the delivery of basic services.
<b>Total</b>	<b>1,500,191</b>	<b>1,498,247</b>	



## 5. Donor funds

### 5.1 Donor funds received

#### 5.1.1 Donor funds received in cash

The DST received official development assistance (ODA) from the European Community, Ireland, the United States Agency for International Development (USAID) and Portugal. Below is a brief summary of the activities supported by these ODA partners in science and technology.

<b>Name of donor</b>	<b>European Union</b>
<b>Full amount of the funding (R'000)</b>	2 735
<b>Period of the commitment</b>	4 years
<b>Purpose of the funding</b>	INCONTACT - One World
<b>Expected outputs</b>	Cooperation with the EU associated member states and 3rd countries on STI.
<b>Actual outputs achieved</b>	INCO Conference and INCONTACT project meeting attended on 2 to 4 June 2014 in Athens, Greece.  Horizon 2020 information sessions held in Pretoria on 18 September 2014.  INCONTACT 2020 project meeting attended in Rome, Italy on 9 February 2015.
<b>Amount received in current period (R'000)</b>	200
<b>Amount spent by the Department (R'000)</b>	47
<b>Reasons for the funds unspent</b>	The unspent funds will be used for: The INCONTACT Africa Regional event to be held in Ghana on 28 and 29 May 2015. Funds committed amount to R28 000;  The 6th INCO conference in China will be attended from 17 to 18 June 2015.  Funds committed amount to R21 000.
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

<b>Name of donor</b>	<b>European Union</b>
<b>Full amount of the funding (R'000)</b>	636
<b>Period of the commitment</b>	3 years
<b>Purpose of the funding</b>	SAccess
<b>Expected outputs</b>	To provide European researchers with access to South African innovation programmes and promotes collaboration with SA researchers in order to develop a skilled and capable workforce.
<b>Actual outputs achieved</b>	ESOF event that took place on 11 to 15 July 2014 in Dublin, Ireland.
<b>Amount received in current period (R'000)</b>	626
<b>Amount spent by the Department (R'000)</b>	-
<b>Reasons for the funds unspent</b>	Services were rendered however invoices were still outstanding at year end
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

## 5. Donor funds (continued)

<b>Name of donor</b>	<b>European Union</b>
<b>Full amount of the funding (R'000)</b>	120 000
<b>Period of the commitment</b>	3 years
<b>Purpose of the funding</b>	ICT innovation programme to support development and government delivery.
<b>Expected outputs</b>	To achieve high end results in the area of ICT with a focus on the knowledge economy in order to create a better South Africa, a better Africa and a better world.
<b>Actual outputs achieved</b>	Two 3-year ICT-related contracts were signed with CSIR: One with the CSIR Meraka Institute and the other with the CSIR Modelling and Digital Science Unit.
<b>Amount received in current period (R'000)</b>	42 787
<b>Amount spent by the Department (R'000)</b>	42 185
<b>Reasons for the funds unspent</b>	Not applicable
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

<b>Name of donor</b>	<b>European Union</b>
<b>Full amount of the funding (R'000)</b>	661
<b>Period of the commitment</b>	3 years
<b>Purpose of the funding</b>	IST Africa
<b>Expected outputs</b>	To improve the overall ICT policies and create systems for each African country to ensure a consolidated, effective regional impact through information society in Africa.
<b>Actual outputs achieved</b>	IST-Africa project meeting, Living Lab Workshop and IST-Africa conference attended from 4 to 10 May 2014 in Mauritius.  IST-Africa Workshop and e-Challenges workshop were attended in Dublin.
<b>Amount received in current period (R'000)</b>	210
<b>Amount spent by the Department (R'000)</b>	22
<b>Reasons for the funds unspent</b>	There are invoices for services rendered that were still outstanding at year end.  Some of the funds have been committed to pay for the IST Africa conference which will be held from 4 to 8 May 2015 in Malawi.  The e-Challenges conference will be held later in the year and some of the funds will be used for logistical arrangements for the official who will be representing the Department.
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

<b>Name of donor</b>	<b>European Union</b>
<b>Full amount of the funding (R'000)</b>	300 000
<b>Period of the commitment</b>	3 years
<b>Purpose of the funding</b>	Sector Budget Support
<b>Expected outputs</b>	To contribute to South Africa's harmonious and sustained economic and social development through programmes and measures designed to reduce poverty and encourage economic growth which benefits the poor.
<b>Actual outputs achieved</b>	<p>The funds were used for the following existing projects;</p> <ul style="list-style-type: none"> <li>• New essential oils</li> <li>• Rosa Damascena</li> <li>• Development of herbal and botanical products</li> <li>• Renewable energy.</li> </ul> <p>The funds were also used for the following new projects:</p> <ul style="list-style-type: none"> <li>• Honeybush improved genetic material</li> <li>• Traditional health practioners</li> <li>• New skin tone products</li> <li>• Launch of KwaNobuhle project.</li> </ul>
<b>Amount received in current period (R'000)</b>	69 409
<b>Amount spent by the Department (R'000)</b>	65 050
<b>Reasons for the funds unspent</b>	There were invoices and payments that were outstanding at year end. The payments will be processed in the new financial year.
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

<b>Name of donor</b>	<b>European Union</b>
<b>Full amount of the funding (R'000)</b>	143 500
<b>Period of the commitment</b>	3 years
<b>Purpose of the funding</b>	General Budget Support.
<b>Expected outputs</b>	To establish a link: Science and technology opportunities for practical policy influence.
<b>Actual outputs achieved</b>	The funds were used for projects such as the Corrective Actions Request and Report System, SAASTA's Science and Technology Journalist.
<b>Amount received in current period (R'000)</b>	40 000
<b>Amount spent by the Department (R'000)</b>	34 794
<b>Reasons for the funds unspent</b>	There were payments that were outstanding at year end due to contracting and reporting requirements. The payments will be processed in the new financial year.
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

## 5. Donor funds (continued)

<b>Name of donor</b>	<b>European Union</b>
<b>Full amount of the funding (R'000)</b>	5 000
<b>Period of the commitment</b>	3 years
<b>Purpose of the funding</b>	ESASTAP 2
<b>Expected outputs</b>	Advancement of South Africa-European Union collaboration
<b>Actual outputs achieved</b>	<p>ESASTAP Plus second annual project meeting took place on 25 and 26 September 2014 in Rome, Italy.</p> <p>Participation in the Atlantic Ocean Research Cooperation workshop and EurOcean conference in Italy, Science-Business Summit on 6-7 October in Germany. In addition three researchers were supported by the project to attend the Global Innovation Award ceremony which was held on the margins of the Science-Business Summit;</p> <p>The project supported a number of recommendations/activities from the Joint Science and Technology Cooperation Committee which took place on 1-3 December 2014:</p> <p>The project supported four researchers that travelled to Rome, Italy, to attend the Energy Workshop on 10-11 December 2014;</p> <p>ESASTAP Plus Space Workshop on the margins of the SA-EU Space Dialogue on 26 February 2015 in Cape Town;</p> <p>Participation at the American Association for the Advancement of Science Annual Meeting and Bilateral Engagements 12-17 February 2015, San Jose USA;</p> <p>ESASTAP Plus supported European Union delegation who visited the SKA site on the margins of the SA-EU Space Dialogue on 25 February 2015.</p>
<b>Amount received in current period (R'000)</b>	525
<b>Amount spent by the Department (R'000)</b>	418
<b>Reasons for the funds unspent</b>	<p>There are funds that are committed for the ESASTAP Plus support for 3 South African researchers for the SA-EU Marine Workshop to be held on 15-18 April 2015 in Brussels, Belgium.</p> <p>Some of the unspent funds will also be used for the upcoming ESASTAP Plus Innovation conference to be held during the margins of the SA Science Forum in October 2015, South Africa.</p> <p>There were also payments that were outstanding at year end.</p>
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

<b>Name of donor</b>	<b>European Union</b>
<b>Full amount of the funding (R'000)</b>	2 055
<b>Period of the commitment</b>	4 years
<b>Purpose of the funding</b>	CAAST-Net
<b>Expected outputs</b>	To promote mutual understanding of Africa-EU cooperation on critical science and technology areas of mutual interest.
<b>Actual outputs achieved</b>	<p>CAAST-Net Plus side event during the EDCTP programme, January 2015.</p> <p>CAAST-Net Plus Stakeholders Forum on Transferring Knowledge into Solutions held in Entebbe, Uganda November 2014.</p> <p>CAAST-Net Plus Development Research Uptake in Sub-Saharan Africa (DRUSSA) South Africa Session held in London, January 2015.</p> <p>CAAST-Net Plus/DRUSSA Stakeholders forum held in South Africa on Pathways for research uptake.</p>
<b>Amount received in current period (R'000)</b>	150
<b>Amount spent by the department (R'000)</b>	7
<b>Reasons for the funds unspent</b>	The remaining funds will be budgeted for activities planned in 2015 with the RECS, monitoring and analysis and discussion papers.
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

<b>Name of donor</b>	<b>European Union</b>
<b>Full amount of the funding (R'000)</b>	3 694
<b>Period of the commitment</b>	3 years
<b>Purpose of the funding</b>	ERAfrica
<b>Expected outputs</b>	Implementing wide dialogue with the aim of reaching consensus among EU and Africa programme owners.
<b>Actual outputs achieved</b>	ERAfrica closing conference held in Pretoria on 17 to 18 September 2014
<b>Amount received in current period (R'000)</b>	353
<b>Amount spent by the Department (R'000)</b>	353
<b>Reasons for the funds unspent</b>	Not applicable
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

<b>Name of donor</b>	<b>Ireland</b>
<b>Full amount of the funding (R'000)</b>	1 932
<b>Period of the commitment</b>	3 years
<b>Purpose of the funding</b>	Potato Tissue Culture Project in Lesotho
<b>Expected outputs</b>	Potato Tissue Culture Project in Lesotho
<b>Actual outputs achieved</b>	<p>Training and capacity building for the current Lesotho project team including the tissue culture laboratory technician and lecturer at the National University of Lesotho, and the Marakabei farmers. The training was in respect of in growing good quality potatoes, the management and maintenance of the laboratory and greenhouse, skills development on certification standards appropriate for Lesotho. Technical assistance was also provided.</p> <p>The lab and greenhouse were refurbished. An audit of the facilities carried out by the Potato Certification Services in July 2014 found that the potatoes were in a poor state and could not be certified.</p> <p>Successful planting of material procured from South Africa.</p>
<b>Amount received in current period (R'000)</b>	340
<b>Amount spent by the Department (R'000)</b>	267
<b>Reasons for the funds unspent</b>	Funds were withheld pending corrective action plans after the findings of the audit and Production Plan that takes into consideration the planting date in November 2015.
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

## 5. Donor funds (continued)

<b>Name of donor</b>	<b>Portugal</b>
<b>Full amount of the funding (R'000)</b>	232
<b>Period of the commitment</b>	2 years
<b>Purpose of the funding</b>	Bridging Actions for GMES and Africa (BRAGMA)
<b>Expected outputs</b>	Bridging Actions for GMES and Africa (BRAGMA)
<b>Actual outputs achieved</b>	<p>DST submitted the deliverables (reports) on (i) reconomendations concerning relevant syergies and harmonisation of initiatives, and (ii) Reports on How GMES services could fulfill GMES &amp; Africa.</p> <p>The other deliverable was organising and hosting the GMES and Africa Consolidation and Validation worksop in South Africa which invited African Member States to validates the three chapters of the GMES and Africa Action Plan (Natural Resources Mnagement, Marine and Coastal Mangement, and Water Resources Management).</p>
<b>Amount received in current period (R'000)</b>	617
<b>Amount spent by the Department (R'000)</b>	400
<b>Reasons for the funds unspent</b>	The funding requested was based on the initial proposal that the consortium submitted in November 2010. However, at the first meeting of BRAGMA project in January 2012, the project funders requested a shift in some of the deliverables which affected the overall budget. BRAGMA was now to focus on developing the first three chapters of the GMES and Africa Action Plan instead of assisting in the implementation of the plan which was supposed to have had nine chapters. This was going to include road shows, more workshops, etc.
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

<b>Name of donor</b>	<b>USAID</b>
<b>Full amount of the funding (R'000)</b>	1 168
<b>Period of the commitment</b>	2 years
<b>Purpose of the funding</b>	SADC capacity building in relation to the Risk and Vulnerability (R&V) Atlas
<b>Expected outputs</b>	To build capacity in SADC member states to understanding information on climate change impact and risk in the context of the SADC early warning machanisms.
<b>Actual outputs achieved</b>	<p>A project implementation plan and budget was developed and signed off. The project website has been kept up to date. User needs assessments have been completed for Zambia, Mozambique, Namibia and Zimbabwe.</p> <p>Material, including presentations and supplementary information, for the each in-country training course was developed in line with the use needs assessment. A training course was successfully carried out in Mozambique, Namibia and Zimbabwe.</p> <p>Published and distributed the SADC R&amp;V Handbook and working on publishing a 2nd edition.</p>
<b>Amount received in current period (R'000)</b>	456
<b>Amount spent by the Department (R'000)</b>	456
<b>Reasons for the funds unspent</b>	Not applicable
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

<b>Name of donor</b>	<b>USAID</b>
<b>Full amount of the funding (R'000)</b>	1 724
<b>Period of the commitment</b>	2 years
<b>Purpose of the funding</b>	Human health risk and coping mechanisms to environmental pollution in the lower Olifants River with Mozambique.
<b>Expected outputs</b>	To determine the extent to which water and air pollution may impact on the health of two communities in the lower Olifants River catchment area.



<b>Actual outputs achieved</b>	<p>Local communities, researchers and decision-makers in Mozambique and South Africa have benefited from the work of the project. Fieldworkers were recruited from the local communities thereby building skills.</p> <p>Researchers benefited as research collaboration between South African and Mozambican scientists strengthened the understanding of developing world issues pertaining to environmental pollution, public health and transboundary impacts.</p> <p>Scientific evidence was collected for the first time in the two study areas and educational material (posters and playing cards) were produced and distributed across the community in order to encourage uptake of the coping strategies.</p>
<b>Amount received in current period (R'000)</b>	479
<b>Amount spent by the Department (R'000)</b>	479
<b>Reasons for the funds unspent</b>	Not applicable
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

<b>Name of donor</b>	<b>USAID</b>
<b>Full amount of the funding (R'000)</b>	3 600
<b>Period of the commitment</b>	3 years
<b>Purpose of the funding</b>	Indigenous Knowledge Standard development and capacity building.
<b>Expected outputs</b>	Indigenous Knowledge Standard development and capacity building in order to develop skills and knowledge regarding IKS.
<b>Actual outputs achieved</b>	<p>Project implementation plan developed and signed off, including the management of the project, accountability, flow of funds, reporting, etc.</p> <p>Approval received by the SADC Cooperation in Standardisation Standards Management Committee and SABS Standards Approval Committee for the establishment of a technical committee on African traditional medicines. The technical committee was established and has held several meetings. A finalised business plan for the technical committee has been submitted to USAID.</p> <p>A SADC capacity building workshop was held in South Africa in May 2013.</p>
<b>Amount received in current period (R'000)</b>	660
<b>Amount spent by the department (R'000)</b>	660
<b>Reasons for the funds unspent</b>	Not applicable
<b>Monitoring mechanism by the donor</b>	These funds are audited by the Auditor-General or external auditors at the request of the donor.

### 5.1.2 Donor funds received in kind

The Department received in-kind contributions from the Bill & Melinda Gates Foundation, Canada, the United Kingdom Medical Research Council and Wellcome Trust. The details of these in-kind contributions were disclosed fully in Annexure II to the Annual Financial Statements in Part E.

## 6. Capital investment

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The Department has asset management policies and procedures in place. The Department conducted four asset verifications in the review period to ensure that the asset register was up to date and all assets of the Department were accounted for. The Department will continue with four asset verifications in the next financial year.

During the period under review the Department acquired assets of R7 983 million for major assets and R1 986 million for minor assets. The Department also disposed of major assets amounting to R4,102 million in the period under review; these assets include assets that were obsolete, or damaged and assets that were transferred to the Department of Tourism with the former Minister. The Department also disposed of minor assets amounting to R148 000 in the same period.



## PART C: GOVERNANCE

# 1. Introduction

The Department is committed to maintaining the highest standards of corporate governance, which is fundamental to the management of public finances and resources. The corporate governance frameworks below form the main pillars of the Department's corporate governance arrangements, which are

## 2. Risk management

The Department views enterprise risk management (ERM) as imperative for the successful delivery of its mandate. The Department believes that identifying, understanding and managing risks in an enterprise-wide context will ensure accountability and sustainability, and that ERM will direct the Department to address negative events in a proactive and timely manner, while exploiting the possible opportunities presented by future uncertainties.

There are various processes to ensure the commitment of the entire Department to ERM (e.g. awareness sessions at induction and ongoing, regular risk assessments and subsequent follow-up), as well as the definition of clear risk management roles and responsibilities.

The Department has appointed a Chief Risk Officer (CRO) and has in place effective management systems (policy, framework, strategy, guidebooks and an annual implementation plan) for ERM.

To ensure the quality, integrity and reliability of the Department's ERM processes and responses, the Department, has an ERM Committee (ERMC) comprising of four independent members and four ex-officio members. The Audit Committee Chairperson is a standing invitee to the ERMC. The ERMC has played an integral part in ensuring that the Department maintains and enhances the maturity level of risk management. The following table indicates the members of the ERMC and the meetings they have attended during the period under review:

Name	Member status	Meetings attended	Notes
Z Fihlani	Independent member (Chairperson)	3 of 3	Appointed as Chairperson 15 April 2014. Term of office ended 3 January 2015
C Boltman	Independent member (Chairperson)	4 of 4	Appointed as member 15 May 2014 and as Chairperson 1 February 2015
L Kaplan	Independent member	4 of 4	
J Fick	Independent member	3 of 4	New appointment 4 February 2014
M Karedi	Independent member	1 of 1	New appointment – 1 February 2015
N Mokoena	Ex-officio member	0 of 4	As DDG: Corporate Services and Acting CFO
W Ngoma	Ex-officio member	2 of 3	Resigned – September 2014
N January	Ex-officio member	2 of 2	New appointment – 1 October 2014 (Head: Legal Services)
T Makhode	Ex-officio member	1 of 1	In place of W Ngoma (former acting DDG: Institutional Planning and Support)
G Zulu	Ex-officio member	1 of 1	New appointment
N Madwe	Interim ex-officio member	2 of 2	In place of BT Mavuso
S Moonsamy	Interim ex-officio member	2 of 2	In place of B Muthwa (former Head: Legal Services)
S Machaba	Audit Committee Chairperson – Standing Invitee	1 of 4	
H Maritz	Audit Committee member	3 of 3	Attended on behalf of S Machaba

## 2. Risk management (continued)

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The Department's Internal Audit Activity and the Audit Committee provide independent assurance of the Department's ERM processes, and advise on the effectiveness of risk management controls and risk mitigation initiatives.

Strategic, operational and functional risk profiles were finalised for the period under review and risk mitigation was monitored quarterly by the ERM.

In the period under review, the risk assessments for key projects were conducted. These include projects that are managed on behalf of the Department by its entities.

The Department has noted that although improvement in the management of risks has translated into improvement in performance, there remains room for further improvement. In this regard, the Department will continue drive the process of performing project risk assessments.

## 3. Fraud and corruption

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The Department has in place an effective management system (fraud risk management and whistle-blowing policies, framework, strategy and an annual fraud prevention and detection plan) for fraud risk management.

For the period under review the fraud risk profile was finalised. This formed the basis for the formulation of the annual fraud prevention and detection plan. Implementation of the plan is driven by the ERM unit and progress is monitored quarterly by the ERM and Audit Committee.

Using various mediums of communication, the Department actively promotes awareness on fraud and corruption, and the use of the National Anti-Corruption Hotline – 0800 701 701. The Department has designated mid-November to mid-December of each year as Anti-Corruption Month and hosts its annual Anti-Corruption Day in this period, the

objective being to heighten awareness among staff of fraud, corruption and ethical conduct.

The veracity of allegations of fraud and corruption are thoroughly investigated using internal and/or external resources. The outcome of an investigation guides the Accounting Officer on the steps (disciplinary action, recovery of state resources, criminal investigation) to be taken to finalise the matter. Should it be warranted, the Department will report a matter to the appropriate law enforcement authority (e.g. South African Police Service, Special Investigation Unit, and/or the Office of the Public Protector) for further investigation. For the period under review, this was not necessary. The progress of investigations is reported on "in committee" at all ERM meetings.

## 4. Minimising conflict of interest

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No conflict of interest was identified in the year under review.

## 5. Code of conduct

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This document seeks to promote and maintain a high standard of professional ethics throughout the Public Service. If an employee breaches the Code of Conduct he/she is subjected to a disciplinary process in terms of the Disciplinary Code and Procedures for the Public Service to correct his/her behaviour as stipulated.

## 6. Health safety and environmental issues

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The Department's Occupational Health and Safety (OHS) strategy focused on four objectives, which are to (i) create a healthy and safe working environment through the identification, recognition, evaluation of hazards and proactive implementation of appropriate risk control measures, (ii) implement OHS risk management strategies in order to effectively and efficiently manage and reduce OHS Risks. (iii) reduce the frequency and severity of risks affecting employees health and safety. (iv) create OHS awareness by providing information and education in order to generate and maintain a vigilant OHS culture, thereby creating a healthy and safe environment, and (v) to comply with OHS legislation and relevant standards. Inspections, a ventilation assessment and a biological assessment were conducted and the findings are being addressed. The Department has a functional Health and Safety Committee in place. The Committee has been trained in OHS legal obligations to equip them to execute their responsibilities. OHS incidents such as injuries and

near misses were analysed and addressed quarterly. Information awareness notices were placed at various points to heighten awareness on OHS risks and compliance. In terms of compliance, the following guidelines have been put in place: OHS policy, procedures for working on heights; Incident management guide; Management of medical emergencies guide; Evacuation procedure.

In-house training was provided to the Emergency Response Team and Health and Safety Committee on how to respond efficiently and effectively in case of any emergency arising at the Department. Emergency evacuation drills were conducted accordingly.



## 7. Portfolio Committee

### PORTFOLIO COMMITTEE BRIEFINGS FROM 1 APRIL 2014 TO 31 MARCH 2015

Date	Subject	Matters raised by the Portfolio Committee (highlights)	How the matters have been addressed
2 July 2014	Briefing by the Department of Science and Technology (DST) on its 2014/15 Annual Performance Plan and Budget Vote 34	<ul style="list-style-type: none"> <li>Members would like to know the correct allocations to the public entities.</li> <li>Members asked questions on the measurement of returns on investment in research, indigenous knowledge, South African scientists, identifying talent, and gross expenditure on research and development (R&amp;D) sector.</li> </ul>	<p>The corrected figures were sent to the Portfolio Committee.</p> <p>The matter was addressed satisfactorily and recorded on the Parliamentary Monitoring Group website (<a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a>)</p>
9 July 2014	Briefing by the DST on its 2014/15 Annual Performance Plan and financial breakdown	<ul style="list-style-type: none"> <li>Members expressed the need to do oversight visits to the DST, its public entities and facilities.</li> <li>All the other questions were answered and no follow-up questions were raised.</li> </ul>	Oversight visits to the DST, its public entities and facilities will be initiated by the Portfolio Committee.
30 July 2014	Briefing on mandates and programmes by National Research Foundation (NRF)	All the questions were answered and no follow-up questions were raised.	Matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
30 July 2014	Briefing on mandates and programmes by Council for Scientific and Industrial Research (CSIR)	All the questions were answered and no follow-up questions were raised.	Matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
30 July 2014	Briefing on mandates and programmes by South African National Space Agency (SANSA)	All the questions were answered and no follow-up questions were raised.	Matters were addressed satisfactorily.
30 July 2014	Briefing on mandates and programmes by the Human Sciences Research Council (HSRC)	<ul style="list-style-type: none"> <li>Members wanted to know how many jobs would be created through the Green Economy programmes.</li> <li>Members wanted to know how the HSRC was capacitating Parliament.</li> <li>Members urged the HSRC to do more research on employment to inform policy.</li> </ul>	Matters were addressed satisfactorily.

## 7. Portfolio Committee (continued)

Date	Subject	Matters raised by the Portfolio Committee (highlights)	How the matters have been addressed
31 July 2014	Briefing on mandates and programmes by the Technology Innovation Agency (TIA)	<ul style="list-style-type: none"> <li>Members asked about the possibility of TIA liaising with small and medium enterprises that could benefit from scientific innovations.</li> <li>Members asked for more detail on some TIA projects.</li> </ul>	All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
31 July 2014	Briefing on mandates and programmes by the National Council on Innovation (NACI)	All the questions were answered and no follow-up questions were raised.	All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
31 July 2014	Briefing on mandates and programmes by the Academy of Science of South Africa (ASSAf)	<ul style="list-style-type: none"> <li>All the questions were answered and no follow-up questions were raised.</li> </ul>	All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
20 Aug. 2014	Briefing by DST on its roles and responsibilities in implementing the Indigenous Knowledge Systems (IKS) Policy	<ul style="list-style-type: none"> <li>Members were generally satisfied with the innovation in IKS, but raised concern about budget constraints for the IKS activities.</li> <li>A workshop should be arranged to familiarise the Portfolio Committee with various aspects of IKS.</li> <li>Members requested clarity on mainstreaming thiyake, a traditional vegetable, in the Bioprospecting Consortium.</li> <li>Members requested clarity on the marketing of imifino, which has significant nutritional value.</li> <li>The DST was urged to advertise bursaries so that students interested in IKS could apply.</li> </ul>	<p>The Committee will consider ways of increasing the budget.</p> <p>The DST will brief the Portfolio Committee in the 2015/16 financial year.</p> <p>The DST has already investigated eight traditional vegetables, including thiyake, lerutu and dinawa. Commercialisation activities are already under way in several communities.</p> <p>An international company, Nestlé, was interested in the exploitation of these vegetables owing to their nutritional values.</p> <p>Bursaries were advertised and managed through the NRF. Criteria for the awarding of bursaries included representativity and the quality of the applications. Other modalities for awarding bursaries such as research grants were also considered.</p>

Date	Subject	Matters raised by the Portfolio Committee (highlights)	How the matters have been addressed
27 Aug. 2014	Briefing by the DST on the expenditure and performance report for the 1st quarter of 2014/15	All the questions were answered and no follow-up questions were raised.	All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
27 Aug. 2014	Briefing by the DST on the R&D Tax Incentive Programme as part of implementing the National Research and Development Strategy	The Portfolio Committee expressed concern about the cumbersome nature of the tax incentive application process and the need for better mechanisms to raise awareness, as this cross-cutting initiative could definitely empower many sectors to conduct R&D in South Africa.	<p>All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website (<a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a>).</p> <p>The following interventions were introduced that directly address matters raised by the Portfolio Committee:</p> <p>Amendments to section IID of the Income Tax Act were introduced (effective from 1 January 2015) to provide for eligibility of R&amp;D in multisource pharmaceutical products and clinical trials. This was one of the critical areas of concern.</p> <p>A service provider was appointed to develop a new IT system to enable online submission of applications. The new IT system is undergoing testing and is planned to be rolled out in September 2015.</p> <p>New draft guidelines on the R&amp;D Tax Incentive Programme were published for public comment. The comments were used to review the application form. The final guidelines and application form will be published on the DST website once they have been fully aligned with the new IT system.</p> <p>The DST has continued to meet directly with companies to explain the application process and the nature of information required when applying.</p>

## 7. Portfolio Committee (continued)

Date	Subject	Matters raised by the Portfolio Committee (highlights)	How the matters have been addressed
3 Sept. 2014	Briefing by the DST on the Square Kilometre Array (SKA) and the MeerKAT (Karoo Array Telescope) radio telescope projects.	<ul style="list-style-type: none"> <li>Portfolio Committee asked to visit the MeerKAT site to get a better understanding of the project.</li> <li>Members raised a concern around delays with the SKA project.</li> <li>The Portfolio Committee asked how local communities were being affected by the implementation of the Astronomy Geographic Advantage (AGA) Act.</li> <li>Members wanted to know the numbers for black and female students supported through the SKA Bursary Programme.</li> </ul>	<p>The Portfolio Committee visited the project core site near Carnarvon.</p> <p>The SKA Project Office negotiated a revised time frame for completion with the contractor.</p> <p>The AGA Act. provides three levels of protection, but in cases where communities are affected, alternatives are being developed.</p> <p>The information was provided to the members during the Portfolio Committee visit to the SKA Project.</p>
10 Sept. 2014	Briefing by the DST on its human capital development initiatives to ensure that the necessary skills are produced to meet the needs of the science, engineering, technology and innovation agenda	<ul style="list-style-type: none"> <li>Members asked for the exact number and location of the centres of excellence. The establishment of more centres of excellence should be a priority for the DST.</li> <li>Members asked about the extent of the DST's consultation with the Department of Basic Education and the Department of Higher Education and Training.</li> <li>Members asked for elaboration on the two or three research chairs that would be co-funded by industry, and what the private sector's contribution would be.</li> <li>Members asked if the research grants had been properly advertised, because the numbers needed to increase.</li> <li>Members asked to be provided with the distribution list of universities in terms of the bursary grants awarded to black female students.</li> </ul>	All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).

Date	Subject	Matters raised by the Portfolio Committee (highlights)	How the matters have been addressed
15 Oct. 2014	Presentation of the DST Annual Report (Portfolio Committee)	<ul style="list-style-type: none"> <li>Members requested a breakdown of the DST's administration budget.</li> <li>Members asked why there had been no improvement since the Auditor-General findings on Supply Chain Management (SCM) in the previous financial year.</li> <li>All other questions were answered and no follow-up questions were raised.</li> </ul>	<p>Future presentations will include a budget breakdown.</p> <p>A CFO has been appointed to correct the situation and has made changes to staff in the SCM unit.</p> <p>All other matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website (<a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a>).</p>
15 Oct. 2014	2013/14 Annual Report briefings:  1. NACI 2013/14 Annual Report presentation.	<ul style="list-style-type: none"> <li>Members wanted to know if the Minister used NACI's advice.</li> <li>All other questions were answered and no follow-up questions were raised.</li> </ul>	<p>The Minister has proposed direct formal interaction between herself and NACI to deliberate on policy reports produced by NACI. This will improve the use of NACI's advice.</p> <p>All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website (<a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a>).</p>
15 Oct. 2014	2. SANSA 2013/14 Annual Report presentation.	<ul style="list-style-type: none"> <li>Members asked why SANSA was not employing permanent staff from designated groups in management positions?</li> <li>Members asked why water shortages and earthquakes in Gauteng had not been detected in satellite data?</li> <li>Members asked why the attainment of targets had decreased from the previous financial years.</li> </ul>	<p>SANSA prioritises persons from designated groups for management positions. However, there is a challenge in technical, engineering and science areas.</p> <p>SANSA provides the Department of Water and Sanitation with the tools to combat water shortages. It has two magnetic detectors for the earthquakes. The Department of Energy may use these SANSA resources.</p> <p>SANSA is continuously improving in setting its targets. This will reduce the failure to achieve.</p> <p>All other matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website (<a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a>).</p>

## 7. Portfolio Committee (continued)

Date	Subject	Matters raised by the Portfolio Committee (highlights)	How the matters have been addressed
15 Oct. 2014	3. TIA 2013/14 Annual Report presentation	<ul style="list-style-type: none"> <li>Members asked why the attainment of targets had decreased from the previous financial year, and whether there were any corrective measures in place.</li> <li>AG had raised concerns about internal control, leadership, monitoring of internal policies and matters related to tax certificates.</li> <li>All questions were answered and no follow-up questions were asked.</li> </ul>	<p>The new TIA leadership implemented a new strategy based on the recommendations made by a review panel appointed by the Minister. The mechanisms that have been put in place by the new Board and support from the DST will assist the TIA to improve its performance.</p> <p>The new Board has taken active measures to address the AG's findings.</p> <p>All other matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website (<a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a>).</p>
15 Oct. 2014	4. HSRC 2013/14 Annual Report presentation	<ul style="list-style-type: none"> <li>All questions were answered and there were no follow-up.</li> </ul>	<p>The matter was addressed satisfactorily and recorded on the Parliamentary Monitoring Group website (<a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a>).</p>
15 Oct. 2014	5. AISA 2013/14 Annual Report presentation	<ul style="list-style-type: none"> <li>All questions were answered and there were no follow-up questions.</li> </ul>	<p>All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website (<a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a>).</p>
16 Oct. 2014	1. ASSAf 2013/14 Annual Report presentation	<ul style="list-style-type: none"> <li>Members asked what mentoring programmes were in place for young science students, and whether there was any collaboration with the Department of Basic Education in this regard.</li> <li>All questions were answered and there were no follow-up.</li> </ul>	<p>There is a strong interest in promoting the academic activities of young scientists. ASSAf honoured young professionals/ scientists. An annual conference for young scientists is held. During 2013/14, the annual conference was attended by 120 young scientists from South Africa.</p> <p>All other matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website (<a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a>).</p>



Date	Subject	Matters raised by the Portfolio Committee (highlights)	How the matters have been addressed
16 Oct. 2014	2. CSIR 2013/14 Annual Performance presentation	<ul style="list-style-type: none"> <li>All questions were answered and there were no follow-up.</li> </ul>	The matter was addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
16 Oct. 2014	3. NRF 2013/14 Annual Performance Report presentation	<ul style="list-style-type: none"> <li>All questions were answered and there were no follow-up.</li> </ul>	All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
19 Nov. 2014	Presentation of the DST Annual Report (Select Committee)	<ul style="list-style-type: none"> <li>The Committee asked to have a workshop on the activities of the DST.</li> <li>The Committee needed a narrative for the Annual Report.</li> <li>Members asked what is the geographical spread of the interns, maths and science programmes, and the 23 municipalities receiving sanitation technologies.</li> </ul>	<p>This has been addressed by various portfolio briefings.</p> <p>Copies of the Annual Report have been submitted to the Portfolio Committee for internal distribution.</p> <p>The DST made a presentation on its Human Capital Development Strategy for Research, Innovation and Scholarship on 10 Sept. 2014.</p>
25 Feb. 2015	Briefing by the DST on its financial and non-financial performance in the 2nd and 3rd quarters of 2014/15	All questions were answered and there were no follow-up.	All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
4 Mar. 2015	DST centres of competence	All questions were answered and there were no follow-up.	All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
11 Mar. 2015	Health research, development and innovation (RDI)	All questions were answered and there were no follow-up.	All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).
18 Mar. 2015	Health RDI – visit to Strategic Health Innovation Partnerships (SHIP) at the Medical Research Council	<ul style="list-style-type: none"> <li>The Portfolio Committee expressed the need to have oversight of the activities of SHIP, since it was funded by the DST.</li> </ul>	All matters were addressed satisfactorily and recorded on the Parliamentary Monitoring Group website ( <a href="http://www.pmg.org.za/minutes">www.pmg.org.za/minutes</a> ).

## 8. SCOPA resolutions

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There were no Standing Committee on Public Accounts (SCOPA) resolutions.

## 9. Prior modifications to audit reports

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There were no prior modifications to the audit reports.

## 10. Internal Control Unit

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The Internal Audit Unit of the Department is responsible for ensuring that the systems of internal control are adequate and effective by conducting various internal audit activities that assist in identifying areas that need management attention. The internal audit activities conducted in the period under review are mentioned in the next section.

## 11. Internal audit and audit committees

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### Key activities and objectives of the Internal Audit Activity

Internal Audit Activity evaluates and provides reasonable assurance that risk management, control, and governance systems are functioning as intended. Two primary auditing services are provided to the DST, namely, assurance and consulting services. Internal Audit Activity is one of the corporate governance cornerstones in the Department and performs an independent and objective evaluation of the internal controls, risk management and governance. The purpose, authority and responsibility of internal auditing is stated in the Internal Audit Charter, which is approved by the DG and the Audit Committee. Internal Audit Activity reports functionally to the Audit Committee.

### Specify summary of audit work done

Internal Audit Activity executed the risk-based audit plan during the year, consisting primarily of internal audits, project audits and consulting engagements. Internal Audit Activity selected and prioritised the audit engagements for the year based on risk exposure, external audit reports, Management Performance Assessment Tool results, complexity of the area, management priority (which reflects the level of interest in an area expressed during consultation with senior management), and lack of previous coverage. Included in areas audited are performance information, procurement processes, IT audits, and financial statement reviews.

### Key activities and objectives of the Audit Committee

The Audit Committee is constituted as a statutory committee of the DST to fulfil its statutory duties in terms of section 77 of the Public Finance Management Act (PFMA) Act I of 1999 and Treasury Regulations issued in terms of the PFMA. The Audit Committee is established as an oversight body, providing independent oversight over governance, risk management and control processes of the Department. Their mandate and responsibilities are clearly defined in the Audit Committee charter and 4 Audit Committee meetings were convened for the year in accordance to the charter.

## Attendance of audit committee meetings by Audit Committee members

The table below discloses relevant information on the Audit Committee members:

Name	Qualifications	Internal or external	If internal, position in the Department	Date appointed	Date resigned	No. of meetings attended
Shirley Machaba	CA (SA)	External		1 Oct. 2012	n/a	2
Prof Roy Marcus	MSc (Mechanical Engineering) & PhD	External		1 May 2013	n/a	4
Hendrikus Maritz	B Com	External		1 Oct. 2010	n/a	4

## 12. Audit Committee report

**We are pleased to present our report for the financial year ended 31 March 2015.**

### Audit Committee Responsibility

The Audit Committee reports that it has complied with its responsibilities arising from Section 38(1)(a)(ii) of the Public Finance Management Act and Treasury Regulation 3.1.13. The Audit Committee also reports that it has adopted appropriate formal terms of reference as its Audit Committee Charter, has regulated its affairs in compliance with this charter and has discharged all its responsibilities as contained therein.

### The effectiveness of the Internal Audit Activity

The Internal Audit Activity has a direct line of reporting to the Audit Committee. Its audit charters and annual coverage plan are reviewed and approved annually by the Audit Committee to ensure it operates independently. The results of the Internal Quality Assurance and Improvement Programme are presented to the Audit Committee annually. The Audit Committee is satisfied that the Internal Audit Activity is operating effectively and has addressed the risks pertinent to the DST through its audits.

### The effectiveness of internal control

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

Areas selected for audit included

- performance information;
- procurement processes;
- financial statement reviews;
- IT audits;
- human resource management;
- Risk management;
- follow-up of previous audit findings of the Auditor-General and Internal Audit;
- projects funded by the Department;
- the Management Performance Assessment Tool.

### The following is an area of concern:

- Control weaknesses in supply chain management, with non-compliance with laws and regulations.

### In-year management and monthly/quarterly report

The Audit Committee is satisfied with the content and quality of monthly and quarterly reports prepared and issued by the Accounting Officer and management during the year under review.

### Evaluation of financial statements

The Audit Committee:

- reviewed and discussed, with the Auditor-General South Africa (AGSA) and the Accounting Officer, the audited annual financial statements to be included in the annual report;

## 12. Audit Committee report (continued)

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- reviewed the Department's compliance with legal and regulatory provisions;
- reviewed significant adjustments resulting from the audit;
- reviewed the AGSA's management letter and management's response to it;
- reviewed information on predetermined objectives to be included in the annual report;
- is satisfied with the submission and quality of both the interim and annual financial statements prepared by the Department.

### Enterprise Risk Management

The Department has an effective and adequate enterprise risk management system which focuses on the identification, assessment, management and monitoring of risk. In addition, the Executive Authority and the Accounting Officer are supported by a fully functional Enterprise Risk Management Committee, which exercises oversight and reports on the adequacy and effectiveness of the Department's enterprise risk management system. Based on the information provided by management, the Committee monitored the significant risks faced by the Department and is satisfied that these risks were reduced to an acceptable level. The Department implements strategies for enterprise risk management and fraud risk management. The fraud risk management strategy is supported by a fraud prevention and detection plan. For the purposes of coordination and close working relationship, the chairpersons of the Audit and ERM Committees are standing invitees to the other committee; the same practice is applied to the Chief Audit Executive and the Chief Risk Officer. In the period under review the Department has made progress in implementing and maturing combined assurance within the Department.

### Annual Performance Review

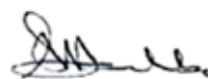
The Committee has considered the performance information reports submitted to AGSA for review and is satisfied with the measures that management has put in place to manage performance.

### Auditor General's Report

We have reviewed the Department's implementation plan for audit issues raised in the previous year and we are satisfied that the matters have been adequately resolved except for the following:

- Control weaknesses in the area of supply chain management.

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



Ms Shirley Machaba  
Chairperson of the Audit Committee  
Department of Science and Technology  
Date: 7 August 2015



## PART D: HUMAN RESOURCE MANAGEMENT

# 1. Introduction

The information contained in this part of the annual report has been prescribed by the Minister for the Public Service and Administration for all departments in the public service.

## 2. Overview of human resources

The objectives of the Strategic Human Resource Plan (HR Plan) for the Department of Science and Technology (DST) are as follows:

- (a) To ensure that the Department has adequate, appropriate, efficient and sustainable capacity for enhanced performance and service delivery.
- (b) To ensure the effective and appropriate utilisation of human resources in order to achieve the Department's strategic objectives.
- (c) To ensure that the development initiatives (mentoring and coaching, capacity building and shadowing programmes) in the DST are informed by realistic, actual and envisaged capacity needs.
- (d) To ensure that identified health, wellness and safety risks are addressed.
- (e) To ensure the implementation of policies and strategies to drive gender and disability mainstreaming.

The Human Resources priorities identified are contained in the table below:

Priorities area	Approach to mitigate risk and achieve targets
Recruitment/Staffing	Address recruitment and staffing methods to widen the pool of potential candidates, particularly for critical and scarce skills positions.
Talent management	Develop comprehensive approach to managing and retaining current talent, particularly critical and scarce skills.
Employment equity	Address targets for females at SMS level and people with disability.
Training and development	Develop comprehensive approach to developing current staff to fill critical and scarce skills positions.

### Human resource challenges

The following are some of HR challenges faced by the Department:

- (a) The current systems for managing HR planning information are inadequate and Persal is generally seen as a system that is not ideal for the management of HR information. However, it is envisaged that the Department of Public Service and Administration (DPSA) will develop an integrated HR Information Management System that will ease this burden. In the short term, however, not all the data required to execute HR planning effectively is freely available and this may affect the ability of the Department to plan effective interventions.
- (b) The environment within which the Department operates is constantly changing, which means that the Department has to be prepared to effect key strategic changes, including decisions related to human resources, in record time. The capacity to collect and analyse relevant data and its implications on HR requirements is therefore critical. The Department will thus, in addition to improving its information management capability, have to adopt a more robust system for identifying and managing risks, challenges and opportunities that may arise from these environmental changes.
- (c) The Department has challenges in attracting and retaining critical skills (specifically technical skills and financial management skills) for a variety of reasons. Perhaps the most important of these is that the skills required to carry out the Department's mandate are scarce and therefore in high demand both locally and globally.
- (d) Employment equity issues (specifically related to gender and disability) continue to be addressed by the Department through a number of initiatives, policies and strategies. Creating an enabling environment for women and disabled people is key to managing diversity.



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- (e) Generally, the Department has a young workforce which places particular pressure on the Department to consider and adopt robust institutional knowledge management practices to mitigate the risks associated with a generally young, and therefore more mobile, workforce.

### Employee health and wellness

As employee wellness issues significantly impact on the productivity of the workforce, as well as the retention of potentially critical skills, it is imperative that these are addressed during HR planning interventions. The department provided a variety of interventions to assist employees to manage their health risks, including the following:

- Quarterly health screenings.
- Sport initiatives (zumba, aerobics, soccer, netball, volley ball, walking and running), and access to health and wellness information.
- Access to online health professionals.
- Access to legal and financial advisors.
- Executive wellness programmes.
- Employee assistance programme.

### 3. Human resources oversight statistics

The Department must provide the following key information on its human resources. All the financial amounts must agree with the amounts disclosed in the annual financial statements. Reasons must be provided for any variances.

#### 3.1 Personnel-related expenditure

The following tables summarises the final audited personnel related expenditure by programme and by salary bands. In particular, it provides an indication of the following:

- amount spent on personnel
- amount spent on salaries, overtime, homeowner's allowances and medical aid.

**Table 3.1.1 Personnel expenditure by Programme for the period 1 April 2014 and 31 March 2015**

Programme	Total expenditure (R'000)	Personnel expenditure (R'000)	Training expenditure (R'000)	Professional and special services expenditure (R'000)	Personnel expenditure as a % of total expenditure	Average personnel cost per employee (R'000)
Administration	278411	140318	3350	2858	50.40%	538
Technology Innovation	974039	35690	0	0	3.66%	615
International Cooperation and Resources	187223	36847	0	0	19.68%	585
Research Development and Support	3489836	29485	0	0	0.84%	614
Socio-Economic Innovation Partnerships	1604672	35815	0	87	2.23%	628
<b>Total</b>	<b>6534181</b>	<b>278155</b>	<b>3350</b>	<b>2945</b>	<b>4.26%</b>	<b>571</b>

**Table 3.1.2 Personnel costs by salary band for the period 1 April 2014 and 31 March 2015**

Salary band	Personnel expenditure (R'000)	% of total personnel cost	No. of employees	Average personnel cost per employee (R'000)
Lower skilled (Levels 1-2)	0	0.00%	0	0
Skilled (level 3-5)	2087	0.75%	13	161
Highly skilled production (levels 6-8)	35158	12.64%	122	288
Highly skilled supervision (levels 9-12)	116981	42.06%	228	513
Senior and top management (levels 13-16)	123928	44.55%	124	999
<b>Total</b>	<b>278155</b>	<b>100.00%</b>	<b>487</b>	<b>571</b>

**Table 3.1.3 Salaries, overtime, home owners allowances and medical aid by Programme for the period 1 April 2014 and 31 March 2015**

Programme	Salaries		Overtime		Home owners allowances		Medical aid	
	Amount (R'000)	Salaries as a % of personnel costs	Amount	Overtime as a % of personnel costs	Amount	HOA as a % of personnel costs	Amount	Medical aid as a % of personnel costs
Administration	140318	50.45%	603	0.43%	1975	1.41%	3191	2.27%
Technology Innovation	35690	12.83%	0	0.00%	585	1.64%	397	1.11%
International Cooperation and Resources	36847	13.25%	0	0.00%	432	1.17%	759	2.06%
Research Development and Support	29485	10.60%	29	0.10%	732	2.48%	472	1.60%
Socio-Economic Innovation Partnerships	35815	12.88%	0	0.00%	688	1.92%	487	1.36%
<b>Total</b>	<b>278155</b>	<b>50.45%</b>	<b>632</b>	<b>0.43%</b>	<b>5628</b>	<b>2.27%</b>	<b>4090</b>	<b>1.41%</b>

**Table 3.1.4 Salaries, overtime, home owners allowances and medical aid by salary band for the period 1 April 2014 and 31 March 2015**

Salary band	Salaries		Overtime		Home owners allowances		Medical aid	
	Amount (R'000)	Salaries as a % of personnel costs	Amount (R'000)	Overtime as a % of personnel costs	Amount (R'000)	HOA as a % of personnel costs	Amount (R'000)	Medical aid as a % of personnel costs
Skilled (level 1-2)	0	0	0	0	0	0	0	0
Skilled (level 3-5)	8712	3.13%	99	0.04%	592	0.15%	431	0.15%
Highly skilled production (levels 6-8)	15822	5.69%	278	0.10%	1989	0.52%	1445	0.52%
Highly skilled supervision (levels 9-12)	128810	46.31%	255	0.09%	3047	1.10%	2214	0.80%
Senior management (level 13-16)	67828	24.39%	0	0	0	0.00%	0	0.00%
<b>Total</b>	<b>278155</b>	<b>100.00%</b>	<b>632</b>	<b>0.23%</b>	<b>5628</b>	<b>2.02%</b>	<b>4090</b>	<b>1.47%</b>

## 3.2 Employment and vacancies

The tables in this section summarise the position with regard to employment and vacancies.

The following tables summarise the number of posts on the establishment, the number of employees, the vacancy rate, and whether there are any staff that are additional to the establishment.

This information is presented in terms of three key variables:

- Programme
- Salary band
- Critical occupations (see definition in notes below).

### 3. Human resources oversight statistics (continued)

Departments have identified critical occupations that need to be monitored. In terms of current regulations, it is possible to create a post on the establishment that can be occupied by more than one employee. Therefore, the vacancy rate reflects the percentage of posts that are not filled.

**Table 3.2.1 Employment and vacancies by Programme as on 31 March 2015**

Programme	Number of posts on approved establishment	Number of posts filled	Vacancy rate	Number of employees additional to the establishment
Administration	261	247	5.36%	3
Technology Innovation	58	54	6.90%	0
International Cooperation and Resources	63	58	7.94%	0
Research Development and Support	48	44	8.33%	0
Socio-Economic Innovation Partnerships	57	54	5.26%	0
<b>Total</b>	<b>487</b>	<b>457</b>	<b>6.16%</b>	<b>3</b>

**Table 3.2.2 Employment and vacancies by salary band as on 31 March 2015**

Salary band	Number of posts on approved establishment	Number of posts filled	Vacancy rate	Number of employees additional to the establishment
Lower skilled ( 1-2)	0	0	0.00%	3
Skilled(3-5)	13	14	-7.69%	0
Highly skilled production (6-8)	122	117	4.10%	0
Highly skilled supervision (9-12)	228	213	6.58%	0
Senior management (13-16)	124	113	8.87%	0
<b>Total</b>	<b>487</b>	<b>457</b>	<b>6.16%</b>	<b>3</b>

**Table 3.2.3 Employment and vacancies by critical occupations as on 31 March 2015**

Critical occupation	Number of posts on approved establishment	Number of posts filled	Vacancy rate	Number of employees additional to the establishment
N/A				
Total				

#### Notes

- The CORE classification, as prescribed by the DPSA, should be used for completion of this table.
- Critical occupations are defined as occupations or sub-categories within an occupation –
  - in which there is a scarcity of qualified and experienced persons currently or anticipated in the future, either because such skilled persons are not available or they are available but do not meet the applicable employment criteria;
  - for which persons require advanced knowledge in a specified subject area or science or learning field and such knowledge is acquired by a prolonged course of study and/or specialised instruction;
  - where the inherent nature of the occupation requires consistent exercise of discretion and is predominantly intellectual in nature; and
  - in respect of which a department experiences a high degree of difficulty to recruit or retain the services of employees.

### 3.3 Filling of SMS posts

The tables in this section provide information on employment and vacancies as it relates to members of the Senior Management Service by salary level. It also provides information on advertising and filling of SMS posts, reasons for not complying with prescribed time frames, and disciplinary steps taken.

**Table 3.3.1 SMS post information as at 31 March 2015**

SMS Level	Total number of funded SMS posts	Total number of SMS posts filled	% of SMS posts filled	Total number of SMS posts vacant	% of SMS posts vacant
Director-General/ Head of Department	1	1	100.00%	0	0.00%
Salary Level 16	0	0	0.00%	0	0.00%
Salary Level 15	9	7	77.78%	2	22.22%
Salary Level 14	27	26	96.30%	1	3.70%
Salary Level 13	87	79	90.80%	8	9.20%
<b>Total</b>	<b>124</b>	<b>109</b>	<b>87.90%</b>	<b>11</b>	<b>8.87%</b>

**Table 3.3.2 SMS post information as at 30 September 2014**

SMS Level	Total number of funded SMS posts	Total number of SMS posts filled	% of SMS posts filled	Total number of SMS posts vacant	% of SMS posts vacant
Director-General/ Head of Department	1	1	100.00%	0	0.00%
Salary Level 16	0	0	0.00%	0	0.00%
Salary Level 15	9	7	77.78%	2	22.22%
Salary Level 14	27	25	92.59%	2	7.41%
Salary Level 13	87	77	88.51%	11	12.64%
<b>Total</b>	<b>124</b>	<b>110</b>	<b>88.71%</b>	<b>15</b>	<b>12.10%</b>

**Table 3.3.3 Advertising and filling of SMS posts for the period 1 April 2014 and 31 March 2015**

SMS Level	Total number of funded SMS posts	Total number of SMS posts filled	% of SMS posts filled	Total number of SMS posts vacant	% of SMS posts vacant
Director-General/ Head of Department	1	1	100.00%	0	0.00%
Salary Level 16	0	0	0.00%	0	0.00%
Salary Level 15	9	7	77.78%	2	22.22%
Salary Level 14	27	26	96.30%	1	3.70%
Salary Level 13	87	79	90.80%	8	9.20%
<b>Total</b>	<b>124</b>	<b>109</b>	<b>87.90%</b>	<b>11</b>	<b>8.87%</b>

**Table 3.3.4 Reasons for not having complied with the filling of funded vacant SMS - Advertised within 6 months and filled within 12 months after becoming vacant for the period 1 April 2014 and 31 March 2015**

#### Reasons for vacancies not advertised within six months

Two positions of Senior Science and Technology Representative to Brazil and Russia were not advertised. The Department is revaluating the positions.

#### Reasons for vacancies not filled within six months

The Head: National Advisory Council on Innovation post was advertised and no suitable candidate was recommended for appointment. The position has been readvertised.

The positions of Deputy Director-General: Institutional Planning and Support and Director: Sustainable Livelihoods were advertised and no suitable candidates were recommended for appointment. The positions have been readvertised.

Lastly a Senior Science and Technology Representative to Russia post was advertised and no suitable candidate was recommended. The Department is re valuating the position.

### 3. Human resources oversight statistics (continued)

#### Notes

- In terms of the Public Service Regulations Chapter 1, Part VII C.1A.3, departments must indicate good cause or reason for not having complied with the filling of SMS posts within the prescribed time frames.

**Table 3.3.5 Disciplinary steps taken for not complying with the prescribed timeframes for filling SMS posts within 12 months for the period 1 April 2014 and 31 March 2015**

Reasons for vacancies not advertised within six months
No disciplinary action was taken against SMS members. The members work closely with Human Resources and a quarterly report is submitted to Exco for discussion.
Reasons for vacancies not filled within six months
No disciplinary action was taken against SMS members. The members work closely with Human Resources and a quarterly report is submitted to Exco for discussion.

#### Notes

- In terms of the Public Service Regulations Chapter 1, Part VII C.1A.2, departments must indicate good cause or reason for not having complied with the filling of SMS posts within the prescribed time frames. In the event of non-compliance with this regulation, the relevant executive authority or head of department must take appropriate disciplinary steps in terms of section 16A(1) or (2) of the Public Service Act.

### 3.4 Job evaluation

Within a nationally determined framework, executing authorities may evaluate or re-evaluate any job in his or her organisation. In terms of the Regulations all vacancies on salary levels 9 and higher must be evaluated before they are filled. The following table summarises the number of jobs that were evaluated during the year under review. The table also provides statistics on the number of posts that were upgraded or downgraded.

**Table 3.4.1 Job evaluation by salary band for the period 1 April 2014 and 31 March 2015**

Salary band	Number of posts on approved establishment	Number of Jobs Evaluated	% of posts evaluated by salary bands	Posts Upgraded		Posts downgraded	
				Number	% of posts evaluated	Number	% of posts evaluated
Lower skilled (Levels 1-2)	0	0	0.00%	0	0	0.00%	0
Skilled (Levels 3-5)	13	0	0.00%	0	0	0.00%	0
Highly skilled production (Levels 6-8)	122	14	11.47%	0	0	0.00%	0
Highly skilled supervision (Levels 9-12)	228	4	1.75%	1	0.4%	0.00%	0
Senior Management Service Band A	87	5	5.74%	0	0	0.00%	0
Senior Management Service Band B	27	0	0.00%	0	0	0.00%	0
Senior Management Service Band C	9	0	0.00%	0	0	0.00%	0
Senior Management Service Band D	1	0	0.00%	0	0	0.00%	0
<b>Total</b>	<b>487</b>	<b>23</b>	<b>4.72%</b>	<b>1</b>	<b>0.21%</b>	<b>0.00%</b>	<b>0</b>



The following table provides a summary of the number of employees whose positions were upgraded due to their post being upgraded. The number of employees might differ from the number of posts upgraded since not all employees are automatically absorbed into the new posts and some of the posts upgraded could also be vacant.

**Table 3.4.2 Profile of employees whose positions were upgraded due to their posts being upgraded for the period 1 April 2014 and 31 March 2015**

Gender	African	Asian	Coloured	White	Total
Female					
Male	1				1
Total	1				1

**Employees with a disability**

The following table summarises the number of cases where remuneration bands exceeded the grade determined by job evaluation. Reasons for the deviation are provided in each case.

**Table 3.4.3 Employees with salary levels higher than those determined by job evaluation by occupation for the period 1 April 2014 and 31 March 2015**

Occupation	Number of employees	Job evaluation level	Remuneration level	Reason for deviation
N/A				
Total number of employees whose salaries exceeded the level determined by job evaluation				
Percentage of total employed				

The following table summarises the beneficiaries of the above in terms of race, gender, and disability.

**Table 3.4.4 Profile of employees who have salary levels higher than those determined by job evaluation for the period 1 April 2014 and 31 March 2015**

Gender	African	Asian	Coloured	White	Total
Female	N/A				
Male					
Total					

**Employees with a disability**

Total number of Employees whose salaries exceeded the grades determine by job evaluation	None
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### 3. Human resources oversight statistics (continued)

#### 3.5 Employment changes

This section provides information on changes in employment over the financial year. Turnover rates provide an indication of trends in the employment profile of the Department. The following tables provide a summary of turnover rates by salary band and critical occupations (see definition in notes below).

**Table 3.5.1 Annual turnover rates by salary band for the period 1 April 2014 and 31 March 2015**

Salary band	Number of employees at beginning of period-1 April 2014	Appointments and transfers into the department	Terminations and transfers out of the department	Turnover rate
Lower skilled ( Levels 1-2)	0	0	0	0.00%
Skilled (Levels3-5)	11	1	0	0.00%
Highly skilled production (Levels 6-8)	112	15	7	6.25%
Highly skilled supervision (Levels 9-12)	208	36	23	11.06%
Senior Management Service Band A	77	12	3	3.90%
Senior Management Service Band B	25	5	0	0.00%
Senior Management Service Band C	7	0	0	0.00%
Senior Management Service Band D	1	0	0	0.00%
Contracts	16	17	3	
<b>Total</b>	<b>457</b>	<b>86</b>	<b>36</b>	<b>7.88%</b>

**Table 3.5.2 Annual turnover rates by critical occupation for the period 1 April 2014 and 31 March 2015**

Critical occupation	Number of employees at beginning of period-April 2014	Appointments and transfers into the department	Terminations and transfers out of the department	Turnover rate
N/A				
<b>Total</b>				

#### Notes

- The CORE classification, as prescribed by the DPSA, should be used for completion of this table.
- Critical occupations are defined as occupations or sub-categories within an occupation –
  - in which there is a scarcity of qualified and experienced persons currently or anticipated in the future, either because such skilled persons are not available or they are available but do not meet the applicable employment criteria;
  - for which persons require advanced knowledge in a specified subject area or science or learning field and such knowledge is acquired by a prolonged course of study and/or specialised instruction;
  - where the inherent nature of the occupation requires consistent exercise of discretion and is predominantly intellectual in nature; and
  - in respect of which a department experiences a high degree of difficulty to recruit or retain the services of employees.

The table below identifies the major reasons why staff left the Department.

**Table 3.5.3 Reasons why staff left the department for the period 1 April 2014 and 31 March 2015**

Termination Type	Number	% of total resignations
Death	1	2.78%
Resignation	19	52.78%
Expiry of contract	3	8.33%
Dismissal – operational changes		0.00%
Dismissal – misconduct		0.00%
Dismissal – inefficiency		0.00%
Discharged due to ill-health		0.00%
Retirement	1	2.78%
Transfer to other public service departments	12	33.33%
Other		0.00%
<b>Total</b>	<b>36</b>	<b>100.00%</b>
<b>Total number of employees who left as a % of total employment</b>		<b>7.88%</b>

**Table 3.5.4 Promotions by critical occupation for the period 1 April 2014 and 31 March 2015**

Occupation	Employees 1 April 2014	Promotions to another salary level	Salary level promotions as a % of employees by occupation	Progressions to another notch within a salary level	Notch progression as a % of employees by occupation
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N/A

**Table 3.5.5 Promotions by salary band for the period 1 April 2014 and 31 March 2015**

Salary Band	Employees 1 April 2014	Promotions to another salary level	Salary band promotions as a % of employees by salary level	Progressions to another notch within a salary level	Notch progression as a % of employees by salary bands
Lower skilled (Levels 1-2)	0	0	0.00%	0	0.00%
Skilled (Levels 3-5)	11	0	0.00%	10	90.9
Highly skilled production (Levels 6-8)	112	0	0.00%	77	68.75
Highly skilled supervision (Levels 9-12)	208	2	0.96%	142	68.27
Senior management (Level 13-16)	126	6	4.76%	70	55.56
<b>Total</b>	<b>457</b>	<b>8</b>	<b>1.75%</b>	<b>299</b>	<b>65.43</b>

### 3. Human resources oversight statistics (continued)

#### 3.6 Employment equity

**Table 3.6.1 Total number of employees (including employees with disabilities) in each of the following occupational categories as on 31 March 2015**

Occupational category	Male				Female				Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Legislators, senior officials and managers	42	4	6	7	33	3	7	11	113
Professionals	79	2	2	5	107	4	3	11	213
Technicians and associate professionals	26	2	0	1	78	4	1	5	117
Clerks	8	0	0	0	6	0	0	0	14
Service and sales workers	0	0	0	0	0	0	0	0	0
Skilled agriculture and fishery workers	0	0	0	0	0	0	0	0	0
Craft and related trades workers	0	0	0	0	0	0	0	0	0
Plant and machine operators and assemblers	0	0	0	0	0	0	0	0	0
Elementary occupations	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>155</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>224</b>	<b>11</b>	<b>11</b>	<b>27</b>	<b>457</b>
Employees with disabilities	3	0	0	1	6	1	0	3	14

**Table 3.6.2 Total number of employees (including employees with disabilities) in each of the following occupational bands as on 31 March 2015**

Occupational band	Male				Female				Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Top management	3	0	1	2	2	0	0	0	8
Senior management	39	4	5	5	31	3	7	11	105
Professionally qualified and experienced specialists and mid-management	79	2	2	5	107	4	3	11	213
Skilled technical and academically qualified workers, junior management, supervisors, foreman and superintendents	26	2	0	1	78	4	1	5	117
Semi-skilled and discretionary decision making	8	0	0	0	6	0	0	0	14
Unskilled and defined decision making	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>155</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>224</b>	<b>11</b>	<b>11</b>	<b>27</b>	<b>457</b>

**Table 3.6.3 Recruitment for the period 1 April 2014 to 31 March 2015**

Occupational band	Male				Female				Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Top management	1	0	0	0	1	0	0	0	2
Senior management	7	0	0	3	7	0	0	2	19
Professionally qualified and experienced specialists and mid-management	17	0	0	1	21	0	1	1	41
Skilled technical and academically qualified workers, junior management, supervisors, foreman and superintendents	7	0	0	0	11	0	0	1	19
Semi-skilled and discretionary decision making	3	0	0	0	0	0	0	0	3
Unskilled and defined decision making	1	0	0	0	1	0	0	0	2
<b>Total</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>41</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>86</b>
<b>Employees with disabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

**Table 3.6.4 Promotions for the period 1 April 2014 to 31 March 2015**

Occupational band	Male				Female				Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Top management	0	0	0	0	0	0	0	0	0
Senior management	3	0	0	1	1	0	1	0	6
Professionally qualified and experienced specialists and mid-management	1	0	0	0	1	0	0	0	2
Skilled technical and academically qualified workers, junior management, supervisors, foreman and superintendents	0	0	0	0	0	0	0	0	0
Semi-skilled and discretionary decision making	0	0	0	0	0	0	0	0	0
Unskilled and defined decision making									0
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>8</b>
<b>Employees with disabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### 3. Human resources oversight statistics (continued)

**Table 3.6.5 Terminations for the period 1 April 2014 to 31 March 2015**

Occupational band	Male				Female				Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Top management	0	0	0	0	0	0	0	0	0
Senior management	2	0	0	0	3	0	0	0	5
Professionally qualified and experienced specialists and mid-management	14	3	0	0	5	0	1	0	23
Skilled technical and academically qualified workers, junior management, supervisors, foreman and superintendents	1	0	0	0	6	0	0	0	7
Semi-skilled and discretionary decision making	1	0	0	0		0	0	0	1
Unskilled and defined decision making	0	0	0	0		0	0	0	0
<b>Total</b>	<b>18</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>36</b>
<b>Employees with disabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

**Table 3.6.6 Disciplinary action for the period 1 April 2014 to 31 March 2015**

Disciplinary action	Male				Female				Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
	0	0	0	0	4	0	0	0	4

**Table 3.6.7 Skills development for the period 1 April 2014 to 31 March 2015**

Occupational category	Male				Female				Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Legislators, senior officials and managers	15	3	4	1	6	1	1	5	36
Professionals	40	2	1	3	68	3	0	4	121
Technicians and associate professionals	0	0	0	0	2	0	0	0	2
Clerks	4	0	0	0	40	1	0	0	45
Service and sales workers	1	0	0	0	3	0	0	0	4
Skilled agriculture and fishery workers	0	0	0	0	0	0	0	0	0
Craft and related trades workers	0	0	0	0	0	0	0	0	0
Plant and machine operators and assemblers	2	0	0	0	0	0	0	0	2
Elementary occupations	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>62</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>119</b>	<b>5</b>	<b>1</b>	<b>9</b>	<b>210</b>
<b>Employees with disabilities</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>5</b>

### 3.7 Signing of performance agreements by SMS members

All members of the SMS must conclude and sign performance agreements within specific time frames. Information regarding the signing of performance agreements by SMS members, the reasons for not complying within the prescribed timeframes and disciplinary steps taken is presented here.

**Table 3.7.1 Signing of performance agreements by SMS members as on 31 May 2014**

SMS Level	Total number of funded SMS posts	Total number of SMS members	Total number of signed performance agreements	Signed performance agreements as % of total number of SMS members
Director-General/ Head of Department	1	1	1	100
Salary Level 16				
Salary Level 15	9	7	7	100
Salary Level 14	27	25	25	100
Salary Level 13	87	80	79	99
Total	124	113	112	99

#### Notes

- In the event of a national or provincial election occurring within the first three months of a financial year all members of the SMS must conclude and sign their performance agreements for that financial year within three months following the month in which the elections took place. For example if elections took place in April, the reporting date in the heading of the table above should change to 31 August 2014.

**Table 3.7.2 Reasons for not having concluded performance agreements for all SMS members as on 31 March 2015**

#### Reasons

SL 13: Appointed on 27 June 2014 and took sick leave thereafter.

#### Notes

- The reporting date in the heading of this table should be aligned with that of Table 3.7.1.

**Table 3.7.3 Disciplinary steps taken against SMS members for not having concluded performance agreements as on 31 March 2014**

#### Reasons

SL: 13: Appointed on 27 June 2014 and took sick leave thereafter.

#### Notes

- The reporting date in the heading of this table should be aligned with that of Table 3.7.1.



### 3. Human resources oversight statistics (continued)

#### 3.8 Performance rewards

To encourage good performance, the Department granted the following performance rewards during the year under review. The information is presented in terms of race, gender, disability, salary bands and critical occupations (see definition in notes below).

**Table 3.8.1 Performance Rewards by race, gender and disability for the period 1 April 2013 to 31 March 2014**

Race and Gender	Beneficiary profile			Cost	
	Number of beneficiaries	Number of employees	% of total within group	Cost (R'000)	Average cost per employee
<b>African</b>					
Male	89	148	60	1341	15.07
Female	166	214	78	1821	10.97
<b>Asian</b>					
Male	6	9	67	142	23.67
Female	9	12	75	185	20.56
<b>Coloured</b>					
Male	4	10	40	66	16.5
Female	8	13	62	115	14.37
<b>White</b>					
Male	7	13	54	152	21.71
Female	17	23	74	348	20.47
<b>Total</b>	<b>306</b>	<b>442</b>	<b>69</b>	<b>4170</b>	<b>13.63</b>

**Table 3.8.2 Performance Rewards by salary band for personnel below Senior Management Service for the period 1 April 2013 to 31 March 2014**

Salary band	Beneficiary profile			Cost		Total cost as a % of the total personnel expenditure
	Number of beneficiaries	Number of employees	% of total within salary bands	Total Cost (R'000)	Average cost per employee	
Lower skilled (Levels 1-2)	0	0	0	0	0	0
Skilled (level 3-5)	10	15	66.67	33	3.33	0.01
Highly skilled production (level 6-8)	89	112	79.46	468	5.26	0.2
Highly skilled supervision (level 9-12)	163	212	76.89	2288	14.04	1
<b>Total</b>	<b>262</b>	<b>339</b>	<b>77.29</b>	<b>2789</b>	<b>10.65</b>	<b>1.21</b>

**Table 3.8.3 Performance rewards by critical occupation for the period 1 April 2013 to 31 March 2014**

Critical occupation	Beneficiary Profile		Cost		
	Number of beneficiaries	Number of employees	% of total within occupation	Total Cost (R'000)	Average cost per employee
N/A					
<b>Total</b>					

Notes

- The CORE classification, as prescribed by the DPSA, should be used for completion of this table.
- Critical occupations are defined as occupations or sub-categories within an occupation –
  - (a) in which there is a scarcity of qualified and experienced persons currently or anticipated in the future, either because such skilled persons are not available or they are available but do not meet the applicable employment criteria;
  - (b) for which persons require advanced knowledge in a specified subject area or science or learning field and such knowledge is acquired by a prolonged course of study and/or specialised instruction;
  - (c) where the inherent nature of the occupation requires consistent exercise of discretion and is predominantly intellectual in nature; and
  - (d) in respect of which a department experiences a high degree of difficulty to recruit or retain the services of employees;

**Table 3.8.4 Performance related rewards (cash bonus), by salary band for Senior Management Service for the period 1 April 2013 to 31 March 2014**

Salary band	Beneficiary profile			Cost		Total cost as a % of the total personnel expenditure
	Number of beneficiaries	Number of employees	% of total within salary bands	Total cost (R'000)	Average cost per employee	
Band A	30	71	42.25	888	29.6	0.4
Band B	12	25	48	408	34	0.2
Band C	2	6	33.33	85	42.5	0.04
Band D	0	1	0	0	0	0
<b>Total</b>	<b>44</b>	<b>103</b>	<b>42.72</b>	<b>1381</b>	<b>31.39</b>	<b>0.64</b>

### 3. Human resources oversight statistics (continued)

#### 3.9 Foreign workers

The tables below summarise the employment of foreign nationals in the Department in terms of salary band and major occupation.

**Table 3.9.1 Foreign workers by salary band for the period 1 April 2014 and 31 March 2015**

Salary band	01 April 20YY		31 March 2015		Change	
	Number	% of total	Number	% of total	Number	% Change
Lower skilled	N/A					
Highly skilled production (Lev. 6-8)						
Highly skilled supervision (Lev. 9-12)						
Contract (level 9-12)						
Contract (level 13-16)						
<b>Total</b>						

**Table 3.9.2 Foreign workers by major occupation for the period 1 April 2014 and 31 March 2015**

Major occupation	01 April 20YY		31 March 2015		Change	
	Number	% of total	Number	% of total	Number	% Change
	N/A					

#### 3.10 Leave utilisation

The Public Service Commission identified the need for careful monitoring of sick leave within the Public Service. The following tables provide an indication of the use of sick leave and disability leave. In both cases, the estimated cost of the leave is also provided.

**Table 3.10.1 Sick leave for the period 1 January 2014 to 31 December 2014**

Salary band	Total days	% days with medical certification	Number of employees using sick leave	% of total employees using sick leave	Average days per employee	Estimated Cost (R'000)
Lower skills (Level 1-2)	0	0.00%	0	0.00%	0	0
Skilled (levels 3-5)	100	3.39%	12	86%	8	65
Highly skilled production (levels 6-8)	952	32.32%	113	97%	8	968
Highly skilled supervision (levels 9-12)	1455	49.39%	183	88%	8	3099
Top and senior management (levels 13-16)	439	14.90%	70	64%	6	1567
<b>Total</b>	<b>2946</b>		<b>378</b>	<b>84%</b>	<b>8</b>	<b>5699</b>

**Table 3.10.2 Disability leave (temporary and permanent) for the period 1 January 2014 to 31 December 2014**

Salary band	Total days	% days with medical certification	Number of employees using disability leave	% of total employees using disability leave	Average days per employee	Estimated cost (R'000)
Lower skilled (Levels 1-2)	0	0	0	0	0	0
Skilled (Levels 3-5)	27	100%	1	0.87%	0	1
Highly skilled production (Levels 6-8)	284	100%	3	2.61%	95	59
Highly skilled supervision (Levels 9-12)	100	100%	7	3.23%	0	590
Senior management (Levels 13-16)	10	100%	2	1.68%	5	4
<b>Total</b>	<b>421</b>	<b>100%</b>	<b>13</b>	<b>3.16%</b>	<b>32</b>	<b>164</b>

The table below summarises the utilisation of annual leave. The wage agreement concluded with trade unions in the PSCBC in 2000 requires management of annual leave to prevent high levels of accrued leave being paid at the time of termination of service.

**Table 3.10.3 Annual leave for the period 1 January 2014 to 31 December 2014**

Salary band	Total days taken	Number of employees using annual leave	Average per employee
Lower skilled (Levels 1-2)	0	0	0
Skilled (Levels 3-5)	278	17	17
Highly skilled production (Levels 6-8)	2396	19	19
Highly skilled supervision (Levels 9-12)	4549	19	19
Senior management (Levels 13-16)	2533	22	22
<b>Total</b>	<b>9756</b>	<b>20</b>	<b>20</b>

**Table 3.10.4 Capped leave for the period 1 January 2014 to 31 December 2014**

Salary band	Total days of capped leave taken	Number of employees using capped leave	Average number of days taken per employee	Average capped leave per employee as on 31 March 2015
Lower skilled (Levels 1-2)	0	0	0	0
Skilled (Levels 3-5)	0	0	0	14
Highly skilled production (Levels 6-8)	10	1	10	31
Highly skilled supervision (Levels 9-12)	0	0	00	36
Senior management (Levels 13-16)	15	1	15	17
<b>Total</b>	<b>25</b>	<b>2</b>	<b>15</b>	<b>29</b>

### 3. Human resources oversight statistics (continued)

The following table summarise payments made to employees as a result of leave that was not taken.

**Table 3.10.5 Leave payouts for the period 1 April 2014 and 31 March 2015**

Reason	Total amount (R'000)	Number of employees	Average per employee (R'000)
Leave payout for 2014/15 due to non-utilisation of leave for the previous cycle	0	0	0
Capped leave payouts on termination of service for 2014/15	0	0	0
Current leave payout on termination of service for 2014/15	339	18	19
<b>Total</b>	<b>339</b>	<b>18</b>	<b>19</b>

#### 3.11 HIV/Aids and Health Promotion Programmes

**Table 3.11.1 Steps taken to reduce the risk of occupational exposure**

Units/categories of employees identified to be at high risk of contracting HIV & related diseases (if any)	Key steps taken to reduce the risk
None	

**Table 3.11.2 Details of health promotion and HIV/Aids programmes**

Question	Yes	No	Details, if yes
1. Has the department designated a member of the SMS to implement the provisions contained in Part VI E of Chapter I of the Public Service Regulations, 2001? If so, provide her/his name and position.	X		Chief Director: Human Resources, (Ms Naledi Modibedi) and Director: Gender and Special Programmes, (Ms Sipiwe Mthombeni).
2. Does the department have a dedicated unit or has it designated specific staff members to promote the health and well-being of your employees? If so, indicate the number of employees who are involved in this task and the annual budget that is available for this purpose.	X		Special Programmes Unit which has five employees. The budget for the Unit is R1 856 000 which also covers the HIV, Aids and TB programme.
3. Has the department introduced an Employee Assistance or Health Promotion Programme for your employees? If so, indicate the key elements/services of this Programme.	X		Employee Assistance Programme, health risksassessments, HIV counselling and testing, TB screenings, executive wellness programme, access to health information and professionals and sporting initiatives (zumba, aerobics, soccer, netball, volley ball, walking and running).

Question	Yes	No	Details, if yes
4. Has the department established (a committee(s) as contemplated in Part VI E.5 (e) of Chapter I of the Public Service Regulations, 2001? If so, please provide the names of the members of the committee and the stakeholder(s) that they represent.	X		<ol style="list-style-type: none"> <li>1. Mr. Azwi Phuravathu- Employee Health and Wellness</li> <li>2. Mr Sphiwe Shange- Occupational Health and Safety</li> <li>3. Ms Loretta Pillay- Employee Health and Wellness</li> <li>4. Ms Tumisang Sebitloane- Programme 2</li> <li>5. Ms Truelove Mnguni- Facilities</li> <li>6. Ms Nombulelo Dlalisa- Facilities</li> <li>7. Ms. Sphiwe Mthombeni- Senior Manager</li> <li>8. Ms Mary-Ann Mokoena- Employee Health and Wellness</li> <li>9. Ms Vivienne Gondwe – Programme 5</li> <li>10. Mr Wiseman Ndlela – Programme 1</li> <li>11. Ms Caroline Mohlamonyane – Programme 1</li> <li>12. Ms Jeanet Masiuana – Programme 1</li> <li>13. Ms Martie Spies – Internal Audit</li> <li>14. Ms Ncumisa Runeyi – Office of the Director-General</li> <li>15. Ms Nontobeko Nkosi – Human Resources</li> <li>16. Ms Pertunia Mphato – Auxiliary Services</li> <li>17. Ms Phumelele Higgins – Programme 3</li> <li>18. Ms Tidimalo Boemo – Office of the Director-General.</li> </ol>
5. Has the department reviewed its employment policies and practices to ensure that these do not unfairly discriminate against employees on the basis of their HIV status? If so, list the employment policies/practices so reviewed.			<ol style="list-style-type: none"> <li>1. DST policy on HIV/AIDS &amp; TB in the workplace</li> <li>2. DST Policy on Reasonable Accommodation</li> <li>3. DST Policy on Support on the Death of an Employee</li> <li>4. DST Policy on Occupational Health and Safety</li> <li>5. DST expression of appreciation, Condolences and congratulations.</li> </ol>
6. Has the department introduced measures to protect HIV-positive employees or those perceived to be HIV-positive from discrimination? If so, list the key elements of these measures.	X		<ol style="list-style-type: none"> <li>1. Annual candlelight memorial which seeks to fight against any form of discrimination or stigma attached to HIV or TB.</li> <li>2. Distribution of male and female condoms.</li> <li>3. HIV, AIDS and TB policy, with clause on non tolerance of discrimination.</li> <li>4. Awareness campaigns around Worlds AIDS Day.</li> <li>5. Provision of information on intranet.</li> </ol>
7. Does the department encourage its employees to undergo Voluntary Counselling and Testing? If so, list the results that you have you achieved.	X		The Department conducts quarterly HIV counselling and testing drives. The percentage of employees tested has been 27%.
8. Has the department developed measures/ indicators to monitor & evaluate the impact of its health promotion programme? If so, list these measures/indicators.	X		The Department monitors the health screening results from quarterly health screening reports. The Department has also initiated a pilot project specifically for employees identified with high health risks. This project has been rolled out to all employees.

### 3. Human resources oversight statistics (continued)

#### 3.12 Labour Relations

**Table 3.12.1 Collective agreements for the period 1 April 2014 and 31 March 2015**

<b>Total number of collective agreements</b>	<b>None</b>
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The following table summarises the outcome of disciplinary hearings conducted within the Department for the year under review.

**Table 3.12.2 Misconduct and disciplinary hearings finalised for the period 1 April 2014 and 31 March 2015**

<b>Outcomes of disciplinary hearings</b>	<b>Number</b>	<b>% of total</b>
Correctional counselling	0	0.00%
Verbal warning	0	0.00%
Written warning	0	0.00%
Final written warning	1	100%
Suspended without pay	0	0.00%
Fine	0	0.00%
Demotion	0	0.00%
Dismissal	0	0.00%
Not guilty	0	0.00%
Case withdrawn	1	100%
<b>Total</b>	<b>2</b>	<b>100%</b>

<b>Total number of disciplinary hearings finalised</b>	<b>1</b>
--	----------

**Table 3.12.3 Types of misconduct addressed at disciplinary hearings for the period 1 April 2014 and 31 March 2015**

<b>Type of misconduct</b>	<b>Number</b>	<b>% of total</b>
Theft	1	100%
Fraud	3	100%
<b>Total</b>	<b>4</b>	<b>100%</b>

**Table 3.12.4 Grievances logged for the period 1 April 2014 and 31 March 2015**

<b>Grievances</b>	<b>Number</b>	<b>% of Total</b>
<b>Number of grievances resolved</b>	<b>2</b>	<b>100%</b>
<b>Number of grievances not resolved</b>	<b>0</b>	<b>0%</b>
<b>Total number of grievances lodged</b>	<b>2</b>	<b>100%</b>

**Table 3.12.5 Disputes logged with councils for the period 1 April 2014 and 31 March 2015**

<b>Disputes</b>	<b>Number</b>	<b>% of Total</b>
Number of disputes upheld	2	100%
Number of disputes dismissed	1	100%
<b>Total number of disputes lodged</b>	<b>3</b>	<b>100%</b>



**Table 3.12.6 Strike actions for the period 1 April 2014 and 31 March 2015**

<b>Total number of persons working days lost</b>	<b>0</b>
<b>Total costs working days lost</b>	<b>0</b>
<b>Amount recovered as a result of no work no pay (R'000)</b>	<b>R0.00</b>

**Table 3.12.7 Precautionary suspensions for the period 1 April 2014 and 31 March 2015**

Number of people suspended	6
Number of people whose suspension exceeded 30 days	6
Average number of days suspended	84
<b>Cost of suspension</b>	<b>R161 338.16</b>

### 3.13 Skills development

This section highlights the efforts of the department with regard to skills development.

**Table 3.13.1 Training needs identified for the period 1 April 2014 and 31 March 2015**

Occupational category	Gender	Number of employees as at 1 April 2014	Training needs identified at start of the reporting period			
			Learnerships	Skills Programmes & other short courses	Other forms of training	Total
Legislators, senior officials and managers	Female	51	0	5	3	8
	Male	54	0	5	8	13
Professionals	Female	107	0	10	11	21
	Male	87	0	10	13	23
Technicians and associate professionals	Female	4	0	2	0	2
	Male	3	0	2	0	2
Clerks	Female	79	0	7	7	14
	Male	14	0	6	6	12
Service and sales workers	Female	3	0	3	2	5
	Male	12	0	3	2	5
Skilled agriculture and fishery workers	Female	0	0	0	0	0
	Male	0	0	0	0	0
Craft and related trades workers	Female	0	0	0	0	0
	Male	0	0	0	0	0
Plant and machine operators and assemblers	Female	0	0	0	0	0
	Male	4	0	3	1	4
Elementary occupations	Female	5	0	2	0	2
	Male	1	0	1	0	1
Sub Total	Female	249	0	29	23	52
	Male	175	0	30	30	60
<b>Total</b>		<b>424</b>	<b>0</b>	<b>59</b>	<b>53</b>	<b>112</b>

### 3. Human resources oversight statistics (continued)

**Table 3.13.2 Training provided for the period 1 April 2014 and 31 March 2015**

Occupational category	Gender	Number of employees as at 1 April 2014	Training provided within the reporting period			
			Learnerships	Skills Programmes & other short courses	Other forms of training	Total
Legislators, senior officials and managers	Female	51	0	19	3	22
	Male	54	0	16	8	24
Professionals	Female	107	0	20	11	31
	Male	87	0	22	13	25
Technicians and associate professionals	Female	4	0	2	0	2
	Male	3	0	0	0	0
Clerks	Female	79	0	10	7	17
	Male	14	0	0	6	6
Service and sales workers	Female	3	0	2	2	4
	Male	12	0	1	2	3
Skilled agriculture and fishery workers	Female	0	0	0	0	0
	Male	0	0	0	0	0
Craft and related trades workers	Female	0	0	0	0	0
	Male	0	0	0	0	0
Plant and machine operators and assemblers	Female	0	0	0	0	0
	Male	4	0	2	1	3
Elementary occupations	Female	5	0	0	0	0
	Male	1	0	0	0	0
Sub Total	Female	249	0	53	23	76
	Male	175	0	41	30	71
<b>Total</b>		<b>424</b>	<b>0</b>	<b>94</b>	<b>53</b>	<b>147</b>

#### 3.14 Injury on duty

The following tables provide basic information on injury on duty.

**Table 3.14.1 Injury on duty for the period 1 April 2014 and 31 March 2015**

Nature of injury on duty	Number	% of total
Required basic medical attention only	2	0.43
Temporary total disablement	0	0
Permanent disablement	0	0
Fatal	0	0
<b>Total</b>	<b>2</b>	<b>0.43</b>

### 3.15 Utilisation of consultants

The following tables relates information on the utilisation of consultants in the Department. In terms of the Public Service Regulations “consultant” means a natural or juristic person or a partnership who or which provides in terms of a specific contract on an ad hoc basis any of the following professional services to a department against remuneration received from any source:

- (a) The rendering of expert advice;
- (b) The drafting of proposals for the execution of specific tasks; and
- (c) The execution of a specific task which is of a technical or intellectual nature, but excludes an employee of a department.

**Table 3.15.1 Report on consultant appointments using appropriated funds for the period 1 April 2014 and 31 March 2015**

Project title	Total number of consultants that worked on project	Duration (work days)	Contract value in Rand
N/A			
Total number of projects	Total individual consultants	Total duration Work days	Total contract value in Rand
N/A			

**Table 3.15.2 Analysis of consultant appointments using appropriated funds, in terms of historically disadvantaged individuals (HDIs) for the period 1 April 2014 and 31 March 2015**

Project title	Percentage ownership by HDI groups	Percentage management by HDI groups	Number of consultants from HDI groups that work on the project
N/A			

**Table 3.15.3 Report on consultant appointments using donor funds for the period 1 April 2014 and 31 March 2015**

Project title	Total Number of consultants that worked on project	Duration (Work days)	Donor and contract value in Rand
N/A			
Total number of projects	Total individual consultants	Total duration Work days	Total contract value in Rand
N/A			

**Table 3.15.4 Analysis of consultant appointments using Donor funds, in terms of Historically Disadvantaged Individuals (HDIs) for the period 1 April 2014 and 31 March 2015**

Project title	Percentage ownership by HDI groups	Percentage management by HDI groups	Number of consultants from HDI groups that work on the project
N/A			

### 3. Human resources oversight statistics (continued)

#### 3.16 Severance packages

**Table 3.16.1 Granting of employee initiated severance packages for the period 1 April 2014 and 31 March 2015**

Salary band	Number of applications received	Number of applications referred to the MPSA	Number of applications supported by MPSA	Number of packages approved by department
Lower skilled (levels 1-2)	N/A			
Skilled Levels 3-5)				
Highly skilled production (Levels 6-8)				
Highly skilled supervision(Llevels 9-12)				
Senior management (Levels 13-16)				
<b>Total</b>				

The background of the entire page features a stylized, light-colored DNA double helix structure against a dark blue gradient. The helix is shown in multiple overlapping, slightly blurred instances, creating a sense of depth and scientific complexity. A solid orange horizontal band is positioned across the middle of the page, containing the section title.

## PART E: FINANCIAL INFORMATION

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# Report of the Auditor-General to Parliament on Vote 34: Department of Science and Technology

for the year ended 31 March 2015

## Report on the financial statements

### Introduction

1. I have audited the financial statements of the Department of Science and Technology set out on pages 149 to 240, which comprise the appropriation statement, the statement of financial position as at 31 March 2015, the statement of financial performance, the statement of changes in net assets and the cash flow statement for the year then ended, as well as the notes, comprising a summary of significant accounting policies and other explanatory information.

### The accounting officer's responsibility for the financial statements

2. The accounting officer is responsible for the preparation and fair presentation of these financial statements in accordance with Modified Cash Standard (MCS) prescribed by the National Treasury and the requirements of the Public Finance Management Act of South Africa, 1999 (Act No. 1 of 1999) (PFMA), and for such internal control as the accounting officer determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor-General's responsibility

3. My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with International Standards on Auditing. Those standards require that I comply with ethical requirements, and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.
4. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness

of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

### Opinion

6. In my opinion, the financial statements present fairly, in all material respects, the financial position of the Department of Science and Technology as at 31 March 2015 and its financial performance and cash flows for the year then ended, in accordance with MCS and the requirements of the PFMA.

### Additional matter

7. I draw attention to the matter below. My opinion is not modified in respect of this matter.

### Unaudited supplementary schedules

8. The supplementary information set out on pages 241 to 259 does not form part of the financial statements and is presented as additional information. I have not audited these schedules and, accordingly, I do not express an opinion thereon.

## Report on other legal and regulatory requirements

9. In accordance with the Public Audit Act of South Africa, 2004 (Act No. 25 of 2004), and the general notice issued in terms thereof, I have a responsibility to report findings on the reported performance information against predetermined objectives for selected programmes presented in the annual performance report, compliance with legislation and internal control. The objective of my tests was to identify reportable findings as described under each subheading but not to gather evidence to express assurance on these matters. Accordingly, I do not express an opinion or conclusion on these matters.

### Predetermined objectives

10. I performed procedures to obtain evidence about the usefulness and reliability of the reported performance



# Report of the Auditor-General to Parliament on Vote 34: Department of Science and Technology

for the year ended 31 March 2015 (continued)

information for the following selected programmes presented in the annual performance report of the department for the year ended 31 March 2015:

- Programme 2: Technology Innovation on pages 61 to 64
- Programme 4: Research Development and Support on pages 78 to 82

11. I evaluated the reported performance information against the overall criteria of usefulness and reliability.

12. I evaluated the usefulness of the reported performance information to determine whether it was presented in accordance with the National Treasury's annual reporting principles and whether the reported performance was consistent with the planned programmes. I further performed tests to determine whether indicators and targets were well defined, verifiable, specific, measurable, time bound and relevant, as required by the National Treasury's Framework for Managing Programme Performance Information (FMPPi).

13. I assessed the reliability of the reported performance information to determine whether it was valid, accurate and complete.

14. I did not identify any material findings on the usefulness and reliability of the reported performance information for the following programmes:

- Programme 2: Technology Innovation on pages 61 to 64
- Programme 4: Research Development and Support on pages 78 to 82

## Additional matters

15. Although I identified no material findings on the usefulness and reliability of the reported performance information for the selected programmes, I draw attention to the following matters:

## Achievement of planned targets

16. Refer to the annual performance report on page(s) 52 to 92 for information on the achievement of the planned targets for the year.

## Adjustment of material misstatements

17. I identified material misstatements in the annual

performance report submitted for auditing on the reported performance information of Programme 02: Technology innovation. The performance information provided supporting two indicators within that Programme was not valid and accurate. As management subsequently corrected the misstatements, I did not raise any material findings on the reliability of the reported performance information.

## Compliance with legislation

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

## Internal control

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

## Other reports

### Investigations

20. An independent private firm performed an investigation at the request of the department, which covered the period 1 April 2014 to 31 March 2015. The investigation was initiated based on an allegation of possible misappropriation of the department's assets and abuse of supply chain management procedures. The investigation was concluded and resulted in a disciplinary hearing being instituted against one employee and the dismissal of another employee. The disciplinary hearing proceeding is currently in progress.

*Auditor-General*

Pretoria

31 July 2015



AUDITOR-GENERAL  
SOUTH AFRICA

*Auditing to build public confidence*

# Vote 34 Appropriation Statement

for the year ended 31 March 2015

Appropriation per Programme										
APPROPRIATION STATEMENT	2014/15					2013/14				
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure	
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
1. Administration	291,940	-	(8,150)	283,790	278,412	5,378	98.1%	258,926	257,471	
2. Technology Innovation	1,008,923	-	40,527	1,049,450	974,040	75,410	92.8%	1,671,041	1,669,678	
3. International Cooperation and Resources	119,319	-	(7,800)	107,589	107,589	3,930	96.5%	141,430	139,783	
4. Research Development and Support	3,496,947	-	(4,058)	3,489,837	3,489,837	3,052	99.9%	2,473,172	2,462,720	
5. Socio-Economic Innovation Partnerships	3,496,947	-	(20,519)	1,539,166	1,542,242	3,076	99.8%	1,653,586	1,639,837	
<b>TOTAL</b>	<b>1,562,761</b>	<b>-</b>	<b>-</b>	<b>6,389,044</b>	<b>6,479,890</b>	<b>90,846</b>	<b>98,6%</b>	<b>6,198,155</b>	<b>6,169,489</b>	
<b>Reconciliation with Statement of Financial Performance</b>										
<b>ADD:</b>										
Departmental receipts				1,602				1,658		
NRF receipts				-				-		
Aid assistance				156,814				109,335		
<b>Actual amounts per Statement of Financial Performance (Total revenue)</b>				<b>6,638,306</b>				<b>6,309,148</b>		
<b>ADD:</b>										
Aid assistance					145,139				107,284	
Prior year unauthorised expenditure approved without funding					-				-	
<b>Actual amounts per Statement of financial performance</b>					<b>6,534,183</b>				<b>6,276,773</b>	

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Appropriation per Economic classification									
APPROPRIATION STATEMENT	2014/15					2013/14			
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
<b>Economic classification</b>									
<b>Current payments</b>	<b>494,512</b>	-	<b>(35,483)</b>	<b>459,029</b>	<b>445,850</b>	<b>13,179</b>	<b>97,1%</b>	<b>409,776</b>	<b>402,595</b>
<b>Compensation of employee</b>	<b>284,872</b>	-	-	<b>284,872</b>	<b>276,001</b>	<b>8,871</b>	<b>96,9%</b>	<b>242,856</b>	<b>241,621</b>
Salaries and wages	253,662	1,032	570	255,284	247,815	7,469	97,1%	217,900	217,048
Social contributions	31,210	(1,052)	(570)	29,588	28,186	1,402	95,3%	24,956	24,573
<b>Goods and services</b>	<b>209,640</b>	-	<b>(35,483)</b>	<b>174,157</b>	<b>169,849</b>	<b>4,308</b>	<b>97,5%</b>	<b>166,920</b>	<b>160,974</b>
Administrative fees	6,176	1,212	(3,127)	4,261	3,826	435	89,8%	7,096	3,264
Advertising	16,501	7,682	(674)	23,509	23,223	286	98,8%	16,640	16,466
Minor assets	554	244	(152)	646	630	16	97,5%	306	293
Audit costs: External	6,021	(1,200)	(30)	4,791	4,761	30	99,4%	4,558	4,548
Bursaries: Employees	2,351	(820)	(200)	1,331	1,256	75	94,4%	1,205	1,201
Catering: Departmental activities	3,031	1,166	(673)	3,524	3,221	303	91,4%	2,998	2,753
Communication (G&S)	9,777	(1,463)	(2,705)	5,609	5,064	545	90,3%	5,826	5,366
Computer services	7,680	3,928	1,238	12,846	12,728	118	99,1%	7,420	7,410
Consultants: Business and advisory services	22,612	(6,269)	(10,260)	6,083	5,603	480	92,1%	8,139	7,272
Legal services	1,374	1,567	(3)	2,938	2,801	137	95,3%	2,732	2,707
Contractors	11,430	(4,068)	(580)	6,782	6,771	11	99,8%	4,512	4,446
Agency and support/outsourced Services	14,419	(4,180)	(1,898)	8,341	8,053	288	96,5%	13,862	13,539
Entertainment	2,974	179	(2,171)	982	735	247	74,8%	813	707
Fleet services (incl government motor transport)	11	983	(9)	985	978	7	99,3%	545	542
Inventory: Clothing, material & accessories	-	1,030	-	1,030	1,028	2	99,8%	300	286
Inventory: Fuel, oil and gas	123	(84)	-	39	10	29	25,6%	-	-
Inventory: Material and supplies	-	322	-	322	319	3	99,1%	36	31
Inventory: Other supplies	1,037	(750)	(166)	121	-	121	-	12	-
Consumable supplies	18	1,944	(11)	1,951	1,940	11	99,4%	2,793	2,712

Appropriation per Programme									
APPROPRIATION STATEMENT	2014/15					2013/14			
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Consumable: Stationary, printing and office supplies	3,833	86	(515)	3,404	3,244	160	95.3%	4,498	4,437
Operating leases	3,528	2,643	(622)	5,549	5,488	61	98.9%	5,616	5,409
Property payments	6,189	1,955	(830)	7,314	8,368	(1,054)	114.4%	2,665	5,818
Travel and subsistence	47,374	(2,225)	(3,356)	41,793	41,566	227	99.5%	42,019	40,418
Training and development	5,047	(1,605)	-	3,442	3,411	31	99.1%	6,080	6,073
Operating payments	6,843	2,673	2,022	11,538	11,438	100	99.1%	9,890	9,642
Venues and facilities	30,412	(7,080)	(10,761)	12,571	12,141	430	96.6%	15,345	14,633
Rental and hiring	325	926	-	1,251	1,246	5	99.6%	1,014	1,001
<b>Transfers and subsidies</b>	<b>5,983,069</b>	<b>-</b>	<b>31,425</b>	<b>6,014,494</b>	<b>5,936,872</b>	<b>77,622</b>	<b>98.7%</b>	<b>5,725,237</b>	<b>5,703,875</b>
Departmental agencies and accounts	4,492,412	-	17,582	4,509,994	4,011,036	498,958	88.9%	4,161,090	3,762,926
Higher education institutions	127,700	-	21,039	148,739	228,033	(79,294)	153.3%	-	156,163
Foreign governments and international organisations	-	-	-	-	-	-	-	-	452
<b>Public corporations and private enterprises</b>	<b>1,261,730</b>	<b>-</b>	<b>(11,251)</b>	<b>1,250,479</b>	<b>1,573,066</b>	<b>(322,587)</b>	<b>125.8%</b>	<b>1,029,684</b>	<b>1,697,975</b>
<b>Public corporations</b>	<b>1,261,730</b>	<b>-</b>	<b>(11,251)</b>	<b>1,250,479</b>	<b>1,550,991</b>	<b>(300,512)</b>	<b>124.0%</b>	<b>1,029,684</b>	<b>1,636,029</b>
Subsidies on products	825,740	-	-	825,740	825,740	-	100.0%	781,996	1,375,318
Other transfers to public corporations	435,990	-	(11,251)	424,739	725,251	(300,512)	170.8%	247,688	260,711
<b>Private enterprises</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>22,075</b>	<b>(22,075)</b>	<b>-</b>	<b>-</b>	<b>61,946</b>
Other transfers to private enterprises	-	-	-	-	22,075	(22,075)	-	-	61,946
Non-profit institutions	101,227	-	-	101,227	120,289	(19,062)	118.8%	533,502	84,701
<b>Households</b>	<b>-</b>	<b>-</b>	<b>4,055</b>	<b>4,055</b>	<b>4,448</b>	<b>(393)</b>	<b>109.7%</b>	<b>961</b>	<b>1,658</b>
Social benefits	-	-	491	491	559	(68)	113.8%	495	1,067
Other transfers to households	-	-	3,564	3,564	3,889	(325)	109.1%	466	591
<b>Payments for capital assets</b>	<b>2,309</b>	<b>-</b>	<b>3,966</b>	<b>6,275</b>	<b>6,230</b>	<b>45</b>	<b>99.3%</b>	<b>63,142</b>	<b>63,019</b>

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Appropriation per Programme									
APPROPRIATION STATEMENT	2014/15						2013/14		
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	<b>2,309</b>	<b>-</b>	<b>3,966</b>	<b>6,275</b>	<b>6,230</b>	<b>45</b>	<b>99.3%</b>	<b>8,260</b>	<b>8,156</b>
Transport equipment	-	-	250	250	250	-	100.0%	1,841	1,813
Other machinery and equipment	2,309	-	3,716	6,025	5,980	45	99.3%	6,419	6,343
Biological assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	54,882	54,863
<b>Payments for financial assets</b>	<b>-</b>	<b>-</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>-</b>	<b>100.0%</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>6,479,890</b>	<b>-</b>	<b>-</b>	<b>6,479,890</b>	<b>6,389,044</b>	<b>90,846</b>	<b>98.6%</b>	<b>6,198,155</b>	<b>6,169,489</b>

Detail per Programme I – Administration for the year ended 31 March 2015									
Detail per subprogramme	2014/15					2013/14			
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
<b>I.1 Ministry</b>	4,065	-	-	4,065	3,972	93	97.7%	3,503	3,403
<b>I.2 Management</b>	101,698	-	(16,044)	85,654	81,736	3,918	95.4%	79,369	78,510
<b>I.3 Corporate Services</b>	172,497	-	11,949	184,446	183,897	549	99.7%	164,750	164,571
<b>I.4 Governance</b>	9,001	-	(1,055)	7,946	7,550	396	95.0%	8,040	7,827
<b>I.5 Office Accommodation</b>	4,679	-	(3,000)	1,679	1,257	422	74.9%	3,264	3,160
<b>Total</b>	<b>291,940</b>	<b>-</b>	<b>(8,150)</b>	<b>283,790</b>	<b>278,412</b>	<b>5,378</b>	<b>98.1%</b>	<b>258,926</b>	<b>257,471</b>

<b>Economic Classification</b>									
<b>Current payments</b>	<b>277,544</b>	<b>-</b>	<b>(12,366)</b>	<b>265,178</b>	<b>262,193</b>	<b>2,985</b>	<b>98.9%</b>	<b>236,482</b>	<b>235,147</b>
<b>Compensation of employees</b>	<b>137,041</b>	<b>-</b>	<b>4,500</b>	<b>141,541</b>	<b>140,072</b>	<b>1,469</b>	<b>99.0%</b>	<b>123,369</b>	<b>122,972</b>
Salaries and wages	120,505	440	5,482	126,427	125,267	1,160	99.1%	110,219	110,004
Social contributions	16,536	(440)	(982)	15,114	14,805	309	98.0%	13,150	12,968
<b>Goods and services</b>	<b>140,503</b>	<b>-</b>	<b>(16,866)</b>	<b>123,637</b>	<b>122,121</b>	<b>1,516</b>	<b>98.8%</b>	<b>113,113</b>	<b>112,175</b>
Administrative fees	5,123	10	(3,000)	2,133	1,750	383	82.0%	5,241	1,723
Advertising	15,455	8,086	(400)	23,141	23,075	66	99.7%	15,611	15,572
Minor assets	549	240	(151)	638	627	11	98.3%	276	275
Audit costs: External	6,021	(1,200)	(30)	4,791	4,761	30	99.4%	4,518	4,518
Bursaries: Employees	2,351	(820)	(200)	1,331	1,256	75	94.4%	1,205	1,201
Catering: Departmental activities	1,394	1,420	(285)	2,529	2,453	76	97.0%	1,765	1,697
Communication (G&S)	5,860	(1,046)	(1,198)	3,616	3,511	105	97.1%	3,096	3,089
Computer services	7,403	3,500	1,430	12,333	12,300	33	99.7%	7,400	7,384
Consultants: Business & advisory services	10,461	(3,695)	(3,380)	(3,386)	3,312	74	97.8%	3,977	3,953
Legal services	740	1,719	(2)	2,457	2,452	5	99.8%	900	894
Contractors	11,350	(4,077)	(500)	6,773	6,762	11	99.8%	4,267	4,267
Agency and support/outsourced services	7,804	(3,820)	(700)	3,284	3,207	77	97.7%	10,467	10,367
Entertainment	597	200	(250)	547	478	69	87.4%	477	471
Fleet services (incl. government motor transport)	-	983	-	983	978	5	99.5%	545	542
Inventory: Clothing, material and accessories	-	1,030	-	1,030	1,028	2	99.8%	300	286
Inventory: Fuel, oil and gas	123	(86)	-	37	9	28	24.3%	-	-

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Detail per Programme I – Administration for the year ended 31 March 2015									
Detail per subprogramme	2014/15					2013/14			
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Inventory: Material and supplies	-	322	-	322	319	3	99.1%	36	31
Inventory: Other supplies	835	(750)	-	85	-	85	-	-	-
Consumable supplies	-	1,946	-	1,946	1,937	9	99.5%	2,672	2,648
Consumable: Stationary, printing and office supplies	3,682	135	(500)	3,317	3,243	74	97.8%	4,288	4,276
Operating leases	3,496	2,120	(600)	5,016	4,965	51	99.0%	4,369	4,325
Property payments	5,726	1,756	(400)	7,082	8,169	(1,087)	115.3%	2,515	5,668
Travel and subsistence	25,032	(5,616)	-	19,416	19,393	23	99.9%	17,210	17,169
Training and development	5,047	(1,670)	-	3,377	3,350	27	99.2%	6,080	6,073
Operating payments	5,207	864	1,500	7,571	7,564	7	99.9%	7,150	7,130
Venues and facilities	16,247	(3,640)	(8,200)	4,407	4,341	66	98.5%	7,777	7,658
Rental and hiring	-	885	-	885	881	4	99.5%	971	958
<b>Transfers and subsidies</b>	<b>12,087</b>	<b>-</b>	<b>483</b>	<b>12,570</b>	<b>10,222</b>	<b>2,348</b>	<b>81.3%</b>	<b>14,302</b>	<b>14,286</b>
Departmental agencies and accounts	-	-	-	-	3,500	(3,500)	-	-	11,231
Higher education institutions	-	-	-	-	410	(410)	-	-	1,324
Foreign governments and international organisations	-	-	-	-	-	-	-	-	452
Public corporations and private enterprises	-	-	-	-	1,425	(1,425)	-	-	300
<b>Public corporations</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,300</b>	<b>(1,300)</b>	<b>-</b>	<b>-</b>	<b>300</b>
Subsidies on products	-	-	-	-	1,300	(1,300)	-	-	300
Other transfers to public corporations	-	-	-	-	-	-	-	-	-
<b>Private enterprises</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>125</b>	<b>(125)</b>	<b>-</b>	<b>-</b>	<b>-</b>
Other transfers to private enterprises	-	-	-	-	-	-	-	-	-
Non-profit institutions	12,087	-	-	12,087	4,356	7,731	36.0%	13,551	228
<b>Households</b>	<b>-</b>	<b>-</b>	<b>483</b>	<b>483</b>	<b>531</b>	<b>(48)</b>	<b>109.9%</b>	<b>751</b>	<b>751</b>
Social benefits	-	-	198	198	246	(48)	124.2%	351	351
Other transfers to households	-	-	285	285	285	-	100.0%	400	400
<b>Payment for capital assets</b>	<b>2,309</b>	<b>-</b>	<b>3,700</b>	<b>6,009</b>	<b>5,964</b>	<b>45</b>	<b>99.3%</b>	<b>8,142</b>	<b>8,038</b>



Detail per Programme I – Administration for the year ended 31 March 2015										
Detail per subprogramme	2014/15						2013/14			
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure	
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	<b>2,309</b>	<b>-</b>	<b>3,700</b>	<b>6,009</b>	<b>5,964</b>	<b>45</b>	<b>99.3%</b>	<b>8,142</b>	<b>8,038</b>	
Transport equipment	-	-	250	250	250	-	100.0%	1,841	1,813	
Other machinery and equipment	2,309	-	3,450	5,759	5,714	45	99.2%	6,301	6,225	
Biological assets	-	-	-	-	-	-	-	-	-	
Software and other intangible assets	-	-	-	-	-	-	-	-	-	
Land and subsoil assets	-	-	-	-	-	-	-	-	-	
<b>Payment for financial assets</b>	<b>-</b>	<b>-</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>-</b>	<b>100.0%</b>	<b>-</b>	<b>-</b>	
<b>Total</b>	<b>291,940</b>	<b>-</b>	<b>(8,150)</b>	<b>283,790</b>	<b>278,412</b>	<b>5,378</b>	<b>98.1%</b>	<b>258,926</b>	<b>257,471</b>	

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Detail per programme 1 – Administration for the year ended 31 March 2015										
Subprogramme 1.1: Ministry	2014/15					2013/14				
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure	
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	
<b>Current payments</b>	<b>4,065</b>	-	-	<b>4,065</b>	<b>3,972</b>	<b>93</b>	<b>97.7%</b>	<b>3,503</b>	<b>3,403</b>	
<b>Compensation of employees</b>	<b>4,065</b>	-	-	<b>4,065</b>	<b>3,972</b>	<b>93</b>	<b>97.7%</b>	<b>3,503</b>	<b>3,403</b>	
Salaries and wages	3,643	(140)	-	3,503	3,414	89	97.5%	3,462	3,362	
Social contributions	422	140	-	562	558	4	99.3%	41	41	
<b>Goods and services</b>	-	-	-	-	-	-	-	-	-	
Administrative fees	-	-	-	-	-	-	-	-	-	
Advertising	-	-	-	-	-	-	-	-	-	
Minor assets	-	-	-	-	-	-	-	-	-	
Audit costs: External	-	-	-	-	-	-	-	-	-	
Bursaries: Employees	-	-	-	-	-	-	-	-	-	
Catering: Departmental activities	-	-	-	-	-	-	-	-	-	
Communication (G&S)	-	-	-	-	-	-	-	-	-	
Computer services	-	-	-	-	-	-	-	-	-	
Consultants: Business & advisory services	-	-	-	-	-	-	-	-	-	
Legal services	-	-	-	-	-	-	-	-	-	
Contractors	-	-	-	-	-	-	-	-	-	
Agency and support/ outsourced services	-	-	-	-	-	-	-	-	-	
Entertainment	-	-	-	-	-	-	-	-	-	
Fleet services (inc. government motor transport)	-	-	-	-	-	-	-	-	-	
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-	
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-	
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-	
Inventory: Other supplies	-	-	-	-	-	-	-	-	-	
Consumable supplies	-	-	-	-	-	-	-	-	-	
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	-	-	
Operating leases	-	-	-	-	-	-	-	-	-	
Property payments	-	-	-	-	-	-	-	-	-	
Travel and subsistence	-	-	-	-	-	-	-	-	-	
Training and development	-	-	-	-	-	-	-	-	-	

Detail per programme 1 – Administration for the year ended 31 March 2015									
Subprogramme 1.1: Ministry	2014/15					2013/14			
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Operating payments	-	-	-	-	-	-	-	-	-
Venues and facilities	-	-	-	-	-	-	-	-	-
Rental and hiring	-	-	-	-	-	-	-	-	-
<b>Transfers and subsidies</b>	-	-	-	-	-	-	-	-	-
Departmental agencies and accounts	-	-	-	-	-	-	-	-	-
Higher education institutions	-	-	-	-	-	-	-	-	-
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Public corporations</b>	-	-	-	-	-	-	-	-	-
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	-	-	-	-	-	-	-	-	-
<b>Private enterprises</b>	-	-	-	-	-	-	-	-	-
Other transfers to private enterprises	-	-	-	-	-	-	-	-	-
Non-profit institutions	-	-	-	-	-	-	-	-	-
<b>Households</b>	-	-	-	-	-	-	-	-	-
Other transfers to households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>4,065</b>	<b>-</b>	<b>-</b>	<b>4,065</b>	<b>3,972</b>	<b>93</b>	<b>97.7%</b>	<b>3,503</b>	<b>3,403</b>

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: I.2 : Management	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>88,667</b>	-	<b>(15,388)</b>	<b>73,279</b>	<b>71,709</b>	<b>1,570</b>	<b>97.9%</b>	<b>64,048</b>	<b>63,233</b>
<b>Compensation of employees</b>	<b>57,292</b>	-	<b>(8,100)</b>	<b>49,192</b>	<b>48,219</b>	<b>973</b>	<b>98.0%</b>	<b>42,038</b>	<b>41,597</b>
Salaries and wages	51,619	-	(7,100)	44,519	43,849	670	98.5%	37,830	37,723
Social contributions	5,673	-	(1,000)	4,673	4,370	303	93.5%	4,208	3,874
<b>Goods and services</b>	<b>31,375</b>	-	<b>(7,288)</b>	<b>24,087</b>	<b>23,490</b>	<b>597</b>	<b>97.5%</b>	<b>22,010</b>	<b>21,636</b>
Administrative fees	153	630	-	783	783	-	100.0%	912	662
Advertising	164	106	-	270	270	-	100.0%	155	118
Minor assets	164	-	(151)	13	5	8	38.5%	1	1
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	381	-	(285)	96	49	47	51.0%	200	192
Communication (G&S)	2,084	-	(1,000)	1,084	987	97	91.1%	1,255	1,252
Computer services	1,718	-	(1,000)	718	688	30	95.8%	-	-
Consultants: Business & advisory services	2,535	-	(1,500)	1,035	1,005	30	97.1%	1,505	1,503
Legal services	-	79	(2)	77	79	(2)	102.6%	-	-
Contractors	519	-	(500)	19	8	11	42.1%	4	4
Agency and support/outsourced Services	1,538	-	(700)	838	774	64	92.4%	1,267	1,267
Entertainment	376	-	(250)	126	74	52	58.7%	75	71
Fleet services (incl. government motor transport)	-	693	-	693	693	-	100.0%	380	377
Inventory: Clothing, material & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	28	-	-	28	-	28	-	-	-
Inventory: Material and supplies	-	2	-	2	2	-	100.0%	21	21
Inventory: Other supplies	61	-	-	61	-	61	-	-	-
Consumable supplies	-	41	-	41	41	-	100.0%	47	47
Consumable: Stationary, printing and office supplies	565	-	(500)	65	21	44	32.3%	53	53
Operating leases	1,223	-	(600)	623	578	45	92.8%	580	579
Property payments	2,961	(2,359)	(400)	202	146	56	72.3%	135	134
Travel and subsistence	14,141	124	-	14,265	14,265	-	100.0%	12,490	12,482
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	1,578	684	-	2,262	2,262	-	100.0%	1,130	1,130
Venues and facilities	1,186	-	(400)	786	760	26	96.7%	1,800	1,743

Subprogramme: I.2 : Management	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
Rental and hiring	-	-	-	-	-	-	-	-	-
<b>Transfers and subsidies</b>	<b>12,087</b>	-	<b>285</b>	<b>12,372</b>	<b>10,024</b>	<b>2,348</b>	<b>81.0%</b>	<b>13,616</b>	<b>13,600</b>
Departmental agencies and accounts	-	-	-	-	3,500	(3,500)	-	-	11,231
Higher education institutions	-	-	-	-	410	(410)	-	-	1,324
Foreign governments and international organisations	-	-	-	-	-	-	-	-	452
<b>Public corporations and private enterprises</b>	-	-	-	-	<b>1,425</b>	<b>(1,425)</b>	-	-	<b>300</b>
<b>Public corporations</b>	-	-	-	-	<b>1,300</b>	<b>(1,300)</b>	-	-	<b>300</b>
Subsidies	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	-	-	-	-	1,300	(1,300)	-	-	300
<b>Private enterprises</b>	-	-	-	-	-	-	-	-	-
Other transfers to private enterprises	-	-	-	-	125	(125)	-	-	-
Non-profit institutions	12,087	-	-	12,087	4,356	7,731	36.0%	13,551	228
<b>Households</b>	-	-	<b>285</b>	<b>285</b>	<b>333</b>	<b>(48)</b>	<b>116.8%</b>	<b>65</b>	<b>65</b>
Social benefits	-	-	-	-	48	(48)	-	65	65
Other transfers to households	-	-	285	285	285	-	100.0%	-	-
<b>Payment for capital assets</b>	<b>944</b>	-	<b>(944)</b>	-	-	-	-	<b>1,705</b>	<b>1,677</b>
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	<b>944</b>	-	<b>(944)</b>	-	-	-	-	<b>1,705</b>	<b>1,677</b>
Transport equipment	-	-	-	-	-	-	-	1,664	1,636
Other machinery and equipment	944	-	(944)	-	-	-	-	41	41
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	<b>3</b>	<b>3</b>	<b>3</b>	-	<b>100.0%</b>	-	-
<b>Total</b>	<b>101,698</b>	-	<b>(16,044)</b>	<b>85,654</b>	<b>81,736</b>	<b>3,918</b>	<b>95.4%</b>	<b>79,369</b>	<b>78,510</b>

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: I.3: Corporate Services	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>171,307</b>	-	<b>6,902</b>	<b>178,209</b>	<b>177,705</b>	<b>504</b>	<b>99.7%</b>	<b>157,629</b>	<b>157,526</b>
<b>Compensation of employees</b>	<b>69,873</b>	-	<b>11,200</b>	<b>81,073</b>	<b>80,880</b>	<b>193</b>	<b>99.8%</b>	<b>71,576</b>	<b>71,757</b>
Salaries and wages	60,769	-	11,182	71,951	71,758	193	99.7%	63,336	63,337
Social contributions	9,104	-	18	9,122	9,122	-	100.0%	8,240	8,420
<b>Goods and services</b>	<b>101,434</b>	-	<b>(4,298)</b>	<b>97,136</b>	<b>96,825</b>	<b>311</b>	<b>99.7%</b>	<b>86,053</b>	<b>85,769</b>
Administrative fees	281	580	-	861	859	2	99.8%	1,030	1,028
Advertising	14,799	7,980	-	22,779	22,774	5	100.0%	15,201	15,201
Minor assets	385	240	-	625	622	3	99.5%	275	274
Audit costs: External	6,021	(1,200)	(30)	4,791	4,761	30	99.4%	4,518	4,518
Bursaries: Employees	2,351	(820)	(200)	1,331	1,256	75	94.4%	1,205	1,201
Catering: Departmental activities	958	1,420	-	2,378	2,372	6	99.7%	1,400	1,353
Communication (G&S)	3,642	(1,046)	(198)	2,398	2,398	-	100.0%	1,696	1,696
Computer services	5,685	3,500	2,430	11,615	11,612	3	100.0%	7,400	7,384
Consultants: Business & advisory services	5,820	(3,500)	-	2,320	2,279	41	98.2%	2,292	2,292
Legal services	740	1,640	-	2,380	2,373	7	99.7%	900	894
Contractors	10,831	(4,077)	-	6,754	6,754	-	100.0%	4,215	4,215
Agency and support/outsourced services	6,266	(3,845)	-	2,421	2,413	8	99.7%	9,200	9,100
Entertainment	210	200	-	410	404	6	98.5%	400	399
Fleet services (incl. government motor transport)	-	290	-	290	285	5	98.3%	165	165
Inventory: Clothing, material & accessories	-	1,030	-	1,030	1,028	2	99.8%	300	286
Inventory: Fuel, oil and gas	95	(86)	-	9	9	-	100.0%	-	-
Inventory: Material and supplies	-	320	-	320	317	3	99.1%	15	10
Inventory: Other supplies	774	(750)	-	24	-	24	-	-	-
Consumable supplies	-	1,900	-	1,900	1,895	5	99.7%	2,540	2,539
Consumable: Stationary, printing and office supplies	3,093	135	-	3,228	3,222	6	99.8%	4,230	4,220
Operating leases	2,273	2,120	-	4,393	4,387	6	99.9%	3,500	3,500
Property payments	2,765	4,119	-	6,884	6,866	18	99.7%	2,380	2,374
Travel and subsistence	10,763	(5,745)	-	5,018	4,998	20	99.6%	4,400	4,380
Training and development	5,047	(1,670)	-	3,377	3,350	27	99.2%	6,080	6,073
Operating payments	3,627	20	1,500	5,147	5,143	4	99.9%	6,000	5,987
Venues and facilities	15,008	(3,640)	(7,800)	3,568	3,567	1	100.0%	5,740	5,722
Rental and hiring	-	885	-	885	881	4	99.5%	971	958

Subprogramme: I.3: Corporate Services	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	-	-	198	198	198	-	100.0%	684	684
Departmental agencies and accounts	-	-	-	-	-	-	-	-	-
Higher education Institutions	-	-	-	-	-	-	-	-	-
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Public corporations</b>	-	-	-	-	-	-	-	-	-
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	-	-	-	-	-	-	-	-	-
<b>Private enterprise</b>	-	-	-	-	-	-	-	-	-
Other transfers to private enterprises	-	-	-	-	-	-	-	-	-
Non-profit institutions	-	-	-	-	-	-	-	-	-
<b>Households</b>	-	-	198	198	198	-	100.0%	684	684
Social benefits	-	-	198	198	198	-	100.0%	284	284
Other transfers to households	-	-	-	-	-	-	-	400	400
<b>Payment for capital assets</b>	1,190	-	4,819	6,009	5,964	45	99.3%	6,437	6,361
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	1,190	-	4,819	6,009	5,964	45	99.3%	6,437	6,361
Transport equipment	-	-	250	250	250	-	100.0%	177	177
Other machinery and equipment	1,190	-	4,569	5,759	5,714	45	99.2%	6,260	6,184
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	30	30	30	-	100.0%	-	-
<b>Total</b>	172,497	-	11,949	184,446	183,897	549	99.7%	164,750	164,571



# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: I.4 Governance	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>8,826</b>	-	<b>(880)</b>	<b>7,946</b>	<b>7,550</b>	<b>396</b>	<b>95.0%</b>	<b>8,038</b>	<b>7,825</b>
<b>Compensation of employees</b>	<b>5,811</b>	-	<b>1400</b>	<b>7,211</b>	<b>7,001</b>	<b>210</b>	<b>97.1%</b>	<b>6,252</b>	<b>6,215</b>
Salaries and wages	4,474	580	1400	6,454	6,246	208	96.8%	5,591	5,582
Social contributions	1,337	(580)	-	757	755	2	99.7%	661	633
<b>Goods and services</b>	<b>3,015</b>	-	<b>(2,280)</b>	<b>735</b>	<b>549</b>	<b>186</b>	<b>74.7%</b>	<b>1,786</b>	<b>1,610</b>
Administration fees	10	-	-	10	8	2	80.0%	35	33
Advertising	492	-	(400)	92	31	61	33.7%	255	253
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	55	-	-	55	32	23	58.2%	165	152
Communication (G&S)	134	-	-	134	126	8	94.0%	145	141
Computer services	-	-	-	-	-	-	-	-	-
Consultants: Business & advisory services	2,106	(195)	(1,880)	31	28	3	90.3%	180	158
Legal services	-	-	-	-	-	-	-	-	-
Contractors	-	-	-	-	-	-	-	48	48
Agency and support/outsourced services	-	25	-	25	20	5	80.0%	-	-
Entertainment	11	-	-	11	-	11	-	2	1
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	-	5	-	5	1	4	20.0%	85	62
Consumable: Stationary, printing and office supplies	24	-	-	24	-	24	-	5	3
Operating leases	-	-	-	-	-	-	-	289	246
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	128	5	-	133	130	3	97.7%	320	307
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	2	160	-	162	159	3	98.1%	20	13
Venues and facilities	53	-	-	53	14	39	26.4%	237	193
Rental and hiring	-	-	-	-	-	-	-	-	-

Subprogramme: I.4 Governance	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	-	-	-	-	-	-	-	2	2
Departmental agencies and accounts	-	-	-	-	-	-	-	-	-
Higher education institutions	-	-	-	-	-	-	-	-	-
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Public corporations</b>	-	-	-	-	-	-	-	-	-
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporation	-	-	-	-	-	-	-	-	-
<b>Private enterprises</b>	-	-	-	-	-	-	-	-	-
Other transfers to private enterprises	-	-	-	-	-	-	-	-	-
Non-profit institution	-	-	-	-	-	-	-	-	-
<b>Households</b>	-	-	-	-	-	-	-	2	2
Social benefits	-	-	-	-	-	-	-	2	2
Other transfers to households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	175	-	(175)	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	175	-	(175)	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	175	-	(175)	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>9,001</b>	<b>-</b>	<b>(1,055)</b>	<b>7,946</b>	<b>7,550</b>	<b>396</b>	<b>95.0%</b>	<b>8,040</b>	<b>7,827</b>

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 1.5: Office Accommodation	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>4,679</b>	-	<b>(3,000)</b>	<b>1,679</b>	<b>1,257</b>	<b>422</b>	<b>74.9%</b>	<b>3,264</b>	<b>3,160</b>
<b>Compensation of employees</b>	-	-	-	-	-	-	-	-	-
Salaries and wages	-	-	-	-	-	-	-	-	-
Social contributions	-	-	-	-	-	-	-	-	-
<b>Goods and services</b>	<b>4,679</b>	-	<b>(3,000)</b>	<b>1,679</b>	<b>1,257</b>	<b>422</b>	<b>74.9%</b>	<b>3,264</b>	<b>3,160</b>
Administrative fees	4,679	(1,200)	(3,000)	479	100	379	20.9%	3,264	-
Advertising	-	-	-	-	-	-	-	-	-
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	-	-	-	-	-	-	-	-	-
Communication (G&S)	-	-	-	-	-	-	-	-	-
Computer services	-	-	-	-	-	-	-	-	-
Consultants: Business & advisory services	-	-	-	-	-	-	-	-	-
Legal services	-	-	-	-	-	-	-	-	-
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/outsourced Services	-	-	-	-	-	-	-	-	-
Entertainment	-	-	-	-	-	-	-	-	-
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	-	-	-	-	-	-	-	-	-
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	-	-
Operating leases	-	-	-	-	-	-	-	-	-
Property payments	-	1,200	-	1,200	1,157	43	96.4%	-	3,160
Travel and subsistence	-	-	-	-	-	-	-	-	-
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	-	-	-	-	-	-	-	-	-
Venues and facilities	-	-	-	-	-	-	-	-	-
Rental and hiring	-	-	-	-	-	-	-	-	-

Subprogramme: I.5: Office Accommodation	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	-	-	-	-	-	-	-	-	-
Departmental agencies and accounts	-	-	-	-	-	-	-	-	-
higher education Institutions	-	-	-	-	-	-	-	-	-
Foreign governments	-	-	-	-	-	-	-	-	-
and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Public corporation</b>	-	-	-	-	-	-	-	-	-
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	-	-	-	-	-	-	-	-	-
<b>Private enterprises</b>	-	-	-	-	-	-	-	-	-
Other transfers to private enterprises	-	-	-	-	-	-	-	-	-
Non-profit institutions	-	-	-	-	-	-	-	-	-
Households	-	-	-	-	-	-	-	-	-
Other transfers to households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>4,679</b>	<b>-</b>	<b>(3,000)</b>	<b>1,679</b>	<b>1,257</b>	<b>422</b>	<b>74.9%</b>	<b>3,264</b>	<b>3,160</b>

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Detail per Programme 2 – Technology Innovation for the year ended 31 March 2015									
Detail per subprogramme	2014/15						2013/14		
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>2.1 Space Science</b>	169,909	-	(800)	169,109	168,464	645	99.6%	873,155	872,141
<b>2.2 Hydrogen and Energy</b>	146,396	-	(1,286)	145,110	143,848	1,262	99.1%	140,133	139,861
<b>2.3 Bio-economy</b>	128,114	-	23,138	151,252	150,109	1,143	99.2%	122,499	122,448
<b>2.4 Innovation Priorities and Instruments</b>	520,896	-	(1,630)	519,266	447,412	71,854	86.2%	535,254	535,228
<b>2.5 National Intellectual Property Management Office</b>	43,608	-	21,105	64,713	64,207	506	99.2%	-	-
<b>Total</b>	<b>1,008,923</b>	<b>-</b>	<b>40,527</b>	<b>1,049,450</b>	<b>974,040</b>	<b>75,410</b>	<b>92.8%</b>	<b>1,671,041</b>	<b>1,669,678</b>
<b>Current payments</b>	<b>59,954</b>	<b>-</b>	<b>(5,441)</b>	<b>54,513</b>	<b>51,754</b>	<b>2,759</b>	<b>94.9%</b>	<b>41,519</b>	<b>40,461</b>
<b>Compensation of employees</b>	<b>41,407</b>	<b>-</b>	<b>(3,500)</b>	<b>37,907</b>	<b>35,571</b>	<b>2,336</b>	<b>93.8%</b>	<b>26,403</b>	<b>26,324</b>
Salaries and wages	36,864	672	(3,500)	34,036	32,307	1,729	94.9%	24,264	24,185
Social contributions	4,543	(672)	-	3,871	3,264	607	84.3%	2,139	2,139
<b>Goods and services</b>	<b>18,547</b>	<b>-</b>	<b>(1,941)</b>	<b>16,606</b>	<b>16,183</b>	<b>423</b>	<b>97.5%</b>	<b>15,116</b>	<b>14,137</b>
Administrative fees	150	537	-	687	673	14	98.0%	382	347
Advertising	460	(293)	(103)	64	4	60	6.3%	201	192
Minor assets	-	-	-	-	-	-	-	18	18
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	454	(273)	(25)	156	141	15	90.4%	199	166
Communication (G&S)	549	97	(166)	480	427	53	89.0%	699	694
Computer services	-	-	-	-	-	-	-	15	14
Consultants: Business & advisory services	1,864	(501)	(103)	1,260	1,257	3	99.8%	1,430	1,378
Legal services	-	234	-	234	234	-	100.0%	1,714	1,710
Contractors	-	9	-	9	9	-	100.0%	52	51
Agency and support/outsourced Services	3,959	(929)	(1,099)	1,931	1,885	46	97.6%	1,161	1,150

Detail per Programme 2 – Technology Innovation for the year ended 31 March 2015									
Detail per subprogramme	2014/15					2013/14			
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
Entertainment	1,474	7	(1,366)	115	15	100	13.0%	29	23
Fleet services (incl. government motor transport)	1	-	-	1	-	1	-	-	-
Inventory: Clothing, material & supplies	-	-	-	-	-	-	-	-	-
Accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	19	-	-	19	-	19	-	-	-
Consumable supplies	3	(3)	-	-	-	-	-	7	7
Consumable: Stationary, printing and office supplies	59	(50)	-	9	-	9	-	49	45
Operating leases	-	523	-	523	523	-	100.0%	642	633
Property payments	-	199	20	219	199	20	90.9%	150	150
Travel and subsistence	2,018	3,985	326	6,329	6,329	-	100.0%	6,107	5,456
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	267	781	834	1,882	1,869	13	99.3%	748	739
Venues and facilities	7,270	(4,323)	(259)	2,688	2,618	70	97.4%	1,513	1,364
Rental and hiring	-	-	-	-	-	-	-	-	-
<b>Transfers and subsidies</b>	<b>948,969</b>	<b>-</b>	<b>45,887</b>	<b>994,856</b>	<b>922,205</b>	<b>72,651</b>	<b>92.7%</b>	<b>1,574,522</b>	<b>1,574,236</b>
Departmental agencies and accounts	644,098	-	24,688	668,786	623,688	45,098	93.3%	1,401,354	1,172,150
Higher education institutions	127,700	-	21,039	148,739	147,095	1,644	98.9%	-	94,860
<b>Public corporations and private enterprises</b>	<b>92,351</b>	<b>-</b>	<b>-</b>	<b>92,351</b>	<b>100,267</b>	<b>(7,916)</b>	<b>108.6%</b>	<b>-</b>	<b>275,335</b>
<b>Public corporations</b>	<b>92,351</b>	<b>-</b>	<b>-</b>	<b>92,351</b>	<b>94,441</b>	<b>(2,090)</b>	<b>102.3%</b>	<b>-</b>	<b>220,824</b>
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	92,351	-	-	92,351	94,441	(2,090)	102.3%	-	220,824
<b>Private enterprises</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,826</b>	<b>(5,826)</b>	<b>-</b>	<b>-</b>	<b>54,511</b>
Other transfers to private enterprises	-	-	-	-	5,826	(5,826)	-	-	31,750
Non-profit institutions	84,820	-	-	84,820	50,995	33,825	60.1%	173,027	141
<b>Households</b>	<b>-</b>	<b>-</b>	<b>160</b>	<b>160</b>	<b>160</b>	<b>-</b>	<b>100.0%</b>	<b>141</b>	<b>141</b>
Social benefits	-	-	121	121	121	-	100.0%	141	141
Other transfers to households	-	-	39	39	39	-	100.0%	-	-

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Detail per Programme 2 – Technology Innovation for the year ended 31 March 2015									
Detail per subprogramme	2014/15						2013/14		
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Payment for capital assets</b>	-	-	81	81	81	-	100.0%	55,000	54,981
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
Machinery and equipment	-	-	81	81	81	-	100.0%	118	118
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	81	81	81	-	-	118	118
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	54,882	54,863
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1,008,923</b>	<b>-</b>	<b>40,527</b>	<b>1,049,450</b>	<b>974,040</b>	<b>75,410</b>	<b>92.8%</b>	<b>1,671,041</b>	<b>1,669,678</b>



Detail per Programme 2 – Technology Innovation for the year ended 31 March 2015										
Subprogramme: 2.1: Space Science	2014/15					2013/14				
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure	
<b>Current payments</b>	<b>11,611</b>	-	<b>(920)</b>	<b>10,691</b>	<b>10,046</b>	<b>645</b>	<b>94.0%</b>	<b>8,787</b>	<b>7,834</b>	
<b>Compensation of employees</b>	<b>9,444</b>	-	<b>(800)</b>	<b>8,644</b>	<b>8,035</b>	<b>609</b>	<b>93.0%</b>	<b>4,617</b>	<b>4,542</b>	
Salaries and wages	8,568	-	(800)	7,768	7,552	216	97.2%	4,240	4,165	
Social contributions	876	-	-	876	483	393	55.1%	377	377	
<b>Goods and services</b>	<b>2,167</b>	-	<b>(120)</b>	<b>2,047</b>	<b>2,011</b>	<b>36</b>	<b>98.2%</b>	<b>4,170</b>	<b>3,292</b>	
Administrative fees	36	9	-	45	41	4	91.1%	87	62	
Advertising	143	(143)	-	-	-	-	-	61	61	
Minor assets	-	-	-	-	-	-	-	18	18	
Audit costs: External	-	-	-	-	-	-	-	-	-	
Bursaries: Employees	-	-	-	-	-	-	-	-	-	
Catering: Departmental activities	117	(70)	-	47	38	9	80.9%	33	33	
Communication (G&S)	149	(26)	(39)	84	73	11	86.9%	154	154	
Computer services	-	-	-	-	-	-	-	-	-	
Consultants: Business & advisory services	104	170	-	274	271	3	98.9%	7	7	
Legal Services	-	-	-	-	-	-	-	-	-	
Contractors	-	-	-	-	-	-	-	50	50	
Agency and support/outsourced Services	441	105	-	546	543	3	99.5%	336	336	
Entertainment	15	-	(6)	9	3	6	33.3%	3	3	
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-	
Inventory: Clothing, material & accessories	-	-	-	-	-	-	-	-	-	
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-	
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-	
Inventory: Other supplies	-	-	-	-	-	-	-	-	-	
Consumable supplies	-	-	-	-	-	-	-	1	1	
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	10	10	
Operating leases	-	-	-	-	-	-	-	22	21	
Property payments	-	-	-	-	-	-	-	-	-	
Travel and subsistence	828	65	(4)	889	889	-	100.0%	2,636	1,916	
Training and development	-	-	-	-	-	-	-	-	-	
Operating payments	170	-	(66)	104	104	-	100.0%	340	340	
Venues and facilities	164	(110)	(5)	49	49	-	100.0%	412	280	
Rental and hiring	-	-	-	-	-	-	-	-	-	

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Detail per Programme 2 – Technology Innovation for the year ended 31 March 2015									
Subprogramme: 2.1: Space Science	2014/15					2013/14			
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>158,298</b>	-	<b>39</b>	<b>158,337</b>	<b>158,337</b>	-	<b>100.0%</b>	<b>809,368</b>	<b>809,326</b>
Departmental agencies and accounts	158,298	-	-	158,298	158,298	-	100.0%	809,273	586,773
Higher education institutions	-	-	-	-	-	-	-	-	-
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Public corporations</b>	-	-	-	-	-	-	-	-	<b>220,824</b>
Subsidies on products	-	-	-	-	-	-	-	-	<b>220,824</b>
Other transfers to public corporations	-	-	-	-	-	-	-	-	220,824
Private enterprises	-	-	-	-	-	-	-	-	-
Other transfers to private enterprises	-	-	-	-	-	-	-	-	-
Non-profit institutions	-	-	-	-	-	-	-	-	1,676
<b>Households</b>	-	-	<b>39</b>	<b>39</b>	<b>39</b>	-	<b>100.0%</b>	<b>95</b>	<b>53</b>
Social benefit	-	-	-	-	-	-	-	95	53
Other transfers to households	-	-	39	39	39	-	100.0%	-	-
<b>Payment for capital assets</b>	-	-	<b>81</b>	<b>81</b>	<b>81</b>	-	<b>100.0%</b>	<b>55,000</b>	<b>54,981</b>
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	<b>81</b>	<b>81</b>	<b>81</b>	-	<b>100.0%</b>	<b>118</b>	<b>118</b>
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	81	81	81	-	100.0%	118	118
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	54,882	54,863
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>169,909</b>	-	<b>(800)</b>	<b>169,109</b>	<b>168,464</b>	<b>645</b>	<b>99.6%</b>	<b>873,155</b>	<b>872,141</b>

Subprogramme 2.2: Hydrogen Energy	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>11,195</b>	-	<b>(1,286)</b>	<b>9,909</b>	<b>8,852</b>	<b>1,057</b>	<b>89.3%</b>	<b>8,594</b>	<b>8,566</b>
<b>Compensation of employees</b>	<b>6,748</b>	-	-	<b>6,748</b>	<b>5,762</b>	<b>986</b>	<b>85.4%</b>	<b>5,480</b>	<b>5,480</b>
Salaries and wages	6,141	-	-	6,141	5,183	958	84.4%	4,927	4,927
Social contributions	607	-	-	607	579	28	95.4%	553	553
<b>Goods and services</b>	<b>4,447</b>	-	<b>(1,286)</b>	<b>3,161</b>	<b>3,090</b>	<b>71</b>	<b>97.8%</b>	<b>3,114</b>	<b>3,086</b>
Administrative fees	21	40	-	61	61	-	100.0%	45	37
Advertising	78	-	(78)	-	-	-	-	25	20
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	16	-	-	16	14	2	87.5%	50	43
Communication (G&S)	164	-	(105)	59	59	-	100.0%	70	69
Computer services	-	-	-	-	-	-	-	-	-
Consultants: Business & advisory services	510	-	(103)	407	407	-	100.0%	788	743
Legal services	-	-	-	-	-	-	-	220	216
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/outsourced services	2,768	(1,014)	(1,000)	754	711	43	94.3%	350	343
Entertainment	7	-	-	7	1	6	14.3%	5	3
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing, material & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	19	-	-	19	-	19	-	-	-
Consumable supplies	-	-	-	-	-	-	-	-	-
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	2	1
Operating leases	-	-	-	-	-	-	-	20	13
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	510	907	-	1,417	1,417	-	100.0%	1,386	1,464
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	77	-	-	77	76	1	98.7%	23	16
Venues and facilities	277	67	-	344	344	-	100.0%	130	118
Rental and hiring	-	-	-	-	-	-	-	-	-

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme 2.2: Hydrogen Energy	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>135,201</b>	-	-	<b>135,201</b>	<b>134,996</b>	<b>205</b>	<b>99.8%</b>	<b>131,539</b>	<b>131,295</b>
Departmental agencies and accounts	33,796	-	-	33,796	47,401	(13,605)	140.3%	41,728	49,300
Higher education institutions	95,200	-	-	95,200	82,245	12,955	86.4%	-	75,271
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,000</b>	<b>(3,000)</b>	<b>-</b>	<b>-</b>	<b>2,980</b>
Public corporation	-	-	-	-	-	-	-	-	-
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	-	-	-	-	3,000	(3,000)	-	-	-
<b>Private enterprises</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,980</b>
Other transfers to private enterprises	-	-	-	-	-	-	-	-	2,980
Non-profit institutions	6,205	-	-	6,205	2,350	3,855	37.9%	89,811	3,720
<b>Households</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>24</b>
Social benefit	-	-	-	-	-	-	-	-	24
Other transfers to households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>146,396</b>	<b>-</b>	<b>(1,286)</b>	<b>145,110</b>	<b>143,848</b>	<b>1,262</b>	<b>99.1%</b>	<b>140,133</b>	<b>139,861</b>

Subprogramme: 2.3: Bio-economy	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	14,874	-	(1,553)	13,321	12,812	509	96.2%	10,193	10,142
<b>Compensation of employees</b>	11,246	-	(1,200)	10,046	9,684	362	96.4%	6,731	6,731
Salaries and wages	10,235	-	(1,200)	9,035	8,673	362	96.0%	6,024	6,024
Social contributions	1,011	-	-	1,011	1,011	-	100.0%	707	707
<b>Goods and services</b>	3,628	-	(353)	3,275	3,128	147	95.5%	3,462	3,411
Administrative fees	30	315	-	345	345	-	100.0%	55	55
Advertising	64	-	-	64	4	60	6.3%	35	33
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	80	-	-	80	76	4	95.0%	76	52
Communication (G&S)	130	-	(3)	127	114	13	89.8%	145	144
Computer services	-	-	-	-	-	-	-	-	-
Consultants: Business & advisory services	-	-	-	-	-	-	-	250	244
Legal services	-	234	-	234	234	-	100.0%	1,494	1,494
Contractors	-	-	-	-	-	-	-	-	-
Agency and support /outsourced services	-	48	-	48	48	-	100.0%	200	197
Entertainment	-	3	-	3	3	-	100.0%	5	2
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing, material & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	-	-	-	-	-	-	-	5	5
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	2	1
Operating leases	-	-	-	-	-	-	-	15	14
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	-	2,229	-	2,229	2,229	-	100.0%	870	864
Operating payments	-	21	-	21	21	-	100.0%	90	90
Venues and facilities	3,324	(2,850)	(350)	124	54	70	43.5%	220	216
Rental and hiring	-	-	-	-	-	-	-	-	-
<b>Transfers and subsidies</b>	113,240	-	24,691	137,931	137,297	634	99.5%	112,306	112,306

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 2.3: Bio-economy	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
Departmental agencies and accounts	37,978	-	24,688	62,666	73,782	(11,116)	117.7%	32,253	50,339
Higher education institutions	-	-	-	-	9,600	(9,600)	-	-	9,389
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	13,822	(13,822)	-	-	34,628
<b>Public corporations</b>	-	-	-	-	13,760	(13,760)	-	-	-
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	-	-	-	-	13,760	(13,760)	-	-	-
<b>Private enterprises</b>	-	-	-	-	62	(62)	-	-	34,628
Other transfers to private enterprises	-	-	-	-	62	(62)	-	-	34,628
Non-profit institutions	75,262	-	-	75,262	40,090	35,172	53.3%	80,053	17,940
<b>Households</b>	-	-	3	3	3	-	100.0%	-	10
Social benefit	-	-	3	3	3	-	100.0%	-	10
Other transfers to households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>128,114</b>	<b>-</b>	<b>23,138</b>	<b>151,252</b>	<b>150,109</b>	<b>1,143</b>	<b>99.2%</b>	<b>122,499</b>	<b>122,448</b>

Subprogramme: 2.4 Innovation Priorities and Instruments	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>11,166</b>	-	<b>(1,649)</b>	<b>9,517</b>	<b>9,342</b>	<b>175</b>	<b>98.2%</b>	<b>13,945</b>	<b>13,919</b>
<b>Compensation of employees</b>	<b>5,769</b>	-	<b>120</b>	<b>5,889</b>	<b>5,845</b>	<b>44</b>	<b>99.3%</b>	<b>9,575</b>	<b>9,571</b>
Salaries and wages	4,476	672	120	5,268	5,224	44	99.2%	9,073	9,069
Social contributions	1,293	(672)	-	621	621	-	100.0%	502	502
<b>Goods and services</b>	<b>5,397</b>	-	<b>(1,769)</b>	<b>3,628</b>	<b>3,497</b>	<b>131</b>	<b>96.4%</b>	<b>4,370</b>	<b>4,348</b>
Administrative fees	27	93	-	120	120	-	100.0%	195	193
Advertising	25	-	(25)	-	-	-	-	80	78
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	33	-	(25)	8	8	-	100.0%	40	38
Communication (G&S)	106	-	(19)	87	58	29	66.7%	330	327
Computer services	-	-	-	-	-	-	-	15	14
Consultants: Business & advisory services	-	375	-	375	375	-	100.0%	385	384
Legal services	-	-	-	-	-	-	-	-	-
Contractors	-	-	-	-	-	-	-	2	1
Agency and support/outsourced Services	-	396	-	396	396	-	100.0%	275	274
Entertainment	1,452	-	(1,360)	92	4	88	4.3%	16	15
Fleet services (incl. government motor transport)	1	-	-	1	-	1	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	-	-	-	-	-	-	-	1	1
Consumable: Stationary, printing and office supplies	9	-	-	9	-	9	-	35	33
Operating leases	-	-	-	-	-	-	-	585	585
Property payments	-	-	-	-	-	-	-	150	150
Travel and subsistence	420	500	-	920	920	-	100.0%	1,215	1,212
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	5	-	-	5	1	4	20.0%	295	293
Venues and facilities	3,319	(1,364)	(340)	1,615	1,615	-	100.0%	751	750
Rental and hiring	-	-	-	-	-	-	-	-	-



# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 2.4 Innovation Priorities and Instruments	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>509,730</b>	-	<b>19</b>	<b>509,749</b>	<b>438,070</b>	<b>71,679</b>	<b>85.9%</b>	<b>521,309</b>	<b>521,309</b>
Departmental agencies and Accounts	414,026	-	-	414,026	342,008	72,018	82.6%	518,100	485,738
Higher education Institutions	-	-	-	-	18,690	(18,690)	-	-	10,200
<b>Public corporations and private enterprises</b>	<b>92,351</b>	-	-	<b>92,351</b>	<b>68,798</b>	<b>23,553</b>	<b>74.5%</b>	-	<b>16,903</b>
<b>Public corporations</b>	<b>92,351</b>	-	-	<b>92,351</b>	<b>65,345</b>	<b>27,006</b>	<b>70.8%</b>	-	-
Subsidies									
Other transfers to public corporations	92,351	-	-	92,351	65,345	27,006	70.8%	-	-
<b>Private enterprises</b>	-	-	-	-	<b>3,453</b>	<b>(3,453)</b>	-	-	<b>16,903</b>
Other transfers to private enterprises	-	-	-	-	3,453	(3,453)	-	-	16,903
Non-profit institutions	3,353	-	-	3,353	8,555	(5,202)	255.1%	3,163	8,414
<b>Households</b>	-	-	<b>19</b>	<b>19</b>	<b>19</b>	-	<b>100.0%</b>	<b>46</b>	<b>54</b>
Social benefits	-	-	19	19	19	-	100.0%	46	54
Other transfers to households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>520,896</b>	-	<b>(1,630)</b>	<b>519,266</b>	<b>447,412</b>	<b>71,854</b>	<b>86.2%</b>	<b>535,254</b>	<b>535,228</b>

Subprogramme: 2.5: National Intellectual Property Management Office	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>11,108</b>	-	<b>(33)</b>	<b>11,075</b>	<b>10,702</b>	<b>373</b>	<b>96.6%</b>	-	-
<b>Compensation of employees</b>	<b>8,200</b>	-	<b>(1,620)</b>	<b>6,580</b>	<b>6,245</b>	<b>335</b>	<b>94.9%</b>	-	-
Salaries and wages	7,444	-	(1,620)	5,824	5,675	149	97.4%	-	-
Social contributions	756	-	-	756	570	186	75.4%	-	-
<b>Goods and services</b>	<b>2,908</b>	-	<b>1,587</b>	<b>4,495</b>	<b>4,457</b>	<b>38</b>	<b>99.2%</b>	-	-
Administrative fees	36	80	-	116	106	10	91.4%	-	-
Advertising	150	(150)	-	-	-	-	-	-	-
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	208	(203)	-	5	5	-	100.0%	-	-
Communication (G&S)	-	123	-	123	123	-	100.0%	-	-
Computer services	-	-	-	-	-	-	-	-	-
Consultants: Business & advisory services	1,250	(1,046)	-	204	204	-	100.0%	-	-
Legal services	-	-	-	-	-	-	-	-	-
Contractors	-	9	-	9	9	-	100.0%	-	-
Agency and support/outsourced services	750	(464)	(99)	187	187	-	100.0%	-	-
Entertainment	-	4	-	4	4	-	100.0%	-	-
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	3	(3)	-	-	-	-	-	-	-
Consumable: Stationary, printing and office supplies	50	(50)	-	-	-	-	-	-	-
Operating leases	-	523	-	523	523	-	100.0%	-	-
Property payments	-	199	20	219	199	20	90.9%	-	-
Travel and subsistence	260	284	330	874	874	-	100.0%	-	-
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	15	760	900	1,675	1,667	8	99.5%	-	-
Venues and facilities	186	(66)	436	556	556	-	100.0%	-	-
Rental and hiring	-	-	-	-	-	-	-	-	-

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 2.5: National Intellectual Property Management Office	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>32,500</b>	-	<b>21,138</b>	<b>53,638</b>	<b>53,505</b>	<b>133</b>	<b>99.8%</b>	-	-
Departmental agencies and accounts	-	-	-	-	2,199	(2,199)	-	-	-
Higher education institutions	32,500	-	21,039	53,539	36,560	16,979	68.3%	-	-
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	<b>14,647</b>	<b>(14,647)</b>	-	-	-
<b>Public corporations</b>	-	-	-	-	<b>12,336</b>	<b>(12,336)</b>	-	-	-
Subsidies	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	-	-	-	-	12,336	(12,336)	-	-	-
<b>Private enterprises</b>	-	-	-	-	<b>2,311</b>	<b>(2,311)</b>	-	-	-
Other transfers to private enterprises	-	-	-	-	2,311	(2,311)	-	-	-
Non-profit institutions	-	-	-	-	-	-	-	-	-
<b>Households</b>	-	-	<b>99</b>	<b>99</b>	<b>99</b>	-	<b>100.0%</b>	-	-
Social benefits	-	-	99	99	99	-	100.0%	-	-
Other transfers to households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>43,608</b>	-	<b>21,105</b>	<b>64,713</b>	<b>64,207</b>	<b>506</b>	<b>99.2%</b>	-	-

Detail per Programme 3 – International Cooperation and Resources for the year ended 31 March 2015										
Detail per subprogramme	2014/15						2013/14			
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure	
	R'000	R'000	R'000	R'000	R'000	R'000	%	R'000	R'000	R'000
<b>3.1 Multilateral Cooperation and Africa</b>	27,341	-	(4,800)	22,541	22,167	374	98.3%	60,882	60,518	
<b>3.2 International Resources</b>	54,864	-	1,940	56,804	54,021	2,783	95.1%	50,948	50,402	
<b>3.3 Overseas Bilateral Cooperation</b>	37,114	-	(4,940)	32,174	31,401	773	97.6%	29,600	28,863	
<b>Total</b>	<b>119,319</b>	<b>-</b>	<b>(7,800)</b>	<b>111,519</b>	<b>107,589</b>	<b>3,930</b>	<b>96.5%</b>	<b>141,430</b>	<b>139,783</b>	

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Detail per Programme 3 – International Cooperation and Resources for the year ended 31 March 2015										
Detail per subprogramme	2014/15					2013/14				
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure	
	R'000	R'000	R'000	R'000	R'000	R'000	%	R'000	R'000	
<b>Current payments</b>	<b>68,515</b>	-	<b>(11,237)</b>	<b>57,278</b>	<b>53,349</b>	<b>3,929</b>	<b>93.1%</b>	<b>54,574</b>	<b>53,233</b>	
<b>Compensation of employees</b>	<b>43,418</b>	-	<b>(3,000)</b>	<b>40,418</b>	<b>36,762</b>	<b>3,656</b>	<b>91.0%</b>	<b>33,673</b>	<b>33,205</b>	
Salaries and wages	39,829	(192)	(3,000)	36,637	33,136	3,501	90.4%	30,346	29,841	
Social contributions	3,589	192	-	3,781	3,626	155	95.9%	3,327	3,364	
<b>Goods and services</b>	<b>25,097</b>	-	<b>(8,237)</b>	<b>16,860</b>	<b>16,587</b>	<b>273</b>	<b>98.4%</b>	<b>20,901</b>	<b>20,028</b>	
Administrative fees	618	327	(100)	845	839	6	99.3%	890	774	
Advertising	119	4	(53)	70	60	10	85.7%	350	338	
Minor assets	5	-	(1)	4	-	4	-	12	-	
Audit costs: External	-	-	-	-	-	-	-	40	30	
Bursaries: Employees	-	-	-	-	-	-	-	-	-	
Catering: Departmental Activities	505	101	(156)	450	444	6	98.7%	628	620	
Communication (G&S)	1,611	(266)	(849)	496	494	2	99.6%	668	621	
Computer services	126	-	(126)	-	-	-	-	5	12	
Consultants: Business & advisory services	3,610	-	(3,384)	226	163	63	72.1%	258	257	
Legal services	502	(448)	(1)	53	53	-	100.0%	118	103	
Contractors	80	-	(80)	-	-	-	-	101	82	
Agency and support/outsourced Services	1,312	(660)	(323)	329	327	2	99.4%	796	663	
Entertainment	761	-	(533)	228	218	10	95.6%	194	182	
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-	
Inventory: Clothing, material & accessories	-	-	-	-	-	-	-	-	-	
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-	
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-	
Inventory: Other supplies	161	-	(160)	1	-	1	-	12	-	
Consumable supplies	15	-	(11)	4	2	2	50.0%	32	31	
Consumable: Stationary, printing and office supplies	47	-	(15)	32	-	32	-	18	10	
Operating leases	32	-	(22)	10	-	10	-	303	296	
Property payments	463	-	(450)	13	-	13	-	-	-	
Travel and subsistence	10,252	(900)	(1,183)	8,169	8,152	17	99.8%	11,298	11,164	
Training and development	-	-	-	-	-	-	-	-	-	
Operating payments	920	780	(90)	1,610	1,579	31	98.1%	975	955	
Venues and facilities	3,633	1,021	(700)	3,954	3,891	63	98.4%	4,160	3,847	
Rental and hiring	325	41	-	366	365	1	99.7%	43	43	

Detail per Programme 3 – International Cooperation and Resources for the year ended 31 March 2015										
Detail per subprogramme	2014/15					2013/14				
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure	
	R'000	R'000	R'000	R'000	R'000	R'000	%	R'000	R'000	
<b>Transfers and subsidies</b>	<b>50,804</b>	-	<b>3,324</b>	<b>54,128</b>	<b>54,127</b>	<b>1</b>	<b>100.0%</b>	<b>86,856</b>	<b>86,550</b>	
Departmental agencies and accounts	12,935	-	-	12,935	14,591	(1,656)	112.8%	35,237	52,862	
Higher education Institutions	-	-	-	-	19,986	(19,986)	-	-	17,032	
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-	
<b>Public corporations and private enterprises</b>	<b>33,549</b>	-	-	<b>33,549</b>	<b>16,198</b>	<b>17,351</b>	<b>48.3%</b>	-	<b>16,318</b>	
<b>Public corporations</b>	<b>33,549</b>	-	-	<b>33,549</b>	<b>10,446</b>	<b>23,103</b>	<b>31.1%</b>	-	<b>9,383</b>	
Subsidies on	-	-	-	-	-	-	-	-	-	
Other transfers to public corporation	33,549	-	-	33,549	10,446	23,103	31.1%	-	9,383	
<b>Private enterprises</b>	-	-	-	-	5,752	(5,752)	-	-	6,935	
Other transfers to private enterprises	4,320	-	-	4,320	5,752	(5,752)	-	-	6,935	
Non-profit institutions	-	-	-	-	28	4,292	0.6%	51,553	272	
<b>Households</b>	<b>-</b>	<b>-</b>	<b>3,324</b>	<b>3,324</b>	<b>3,324</b>	<b>-</b>	<b>100.0%</b>	<b>66</b>	<b>66</b>	
Social benefits	-	-	84	84	84	-	100.0%	-	-	
Other transfers to households	-	-	3,240	3,240	3,240	-	100.0%	66	66	
<b>Payment for capital assets</b>	<b>-</b>	<b>-</b>	<b>113</b>	<b>113</b>	<b>113</b>	<b>-</b>	<b>100.0%</b>	<b>-</b>	<b>-</b>	
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-	
<b>Machinery and equipment</b>	<b>-</b>	<b>-</b>	<b>113</b>	<b>113</b>	<b>113</b>	<b>-</b>	<b>100.0%</b>	<b>-</b>	<b>-</b>	
Transport equipment	-	-	-	-	-	-	-	-	-	
Other machinery and equipment	-	-	113	113	113	-	100.0%	-	-	
Biological assets	-	-	-	-	-	-	-	-	-	
Software and other intangible -assets	-	-	-	-	-	-	-	-	-	
Land and subsoil assets	-	-	-	-	-	-	-	-	-	
<b>Payment for financial assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>Total</b>	<b>119,319</b>	<b>-</b>	<b>(7,800)</b>	<b>111,519</b>	<b>107,589</b>	<b>3,930</b>	<b>96.5%</b>	<b>141,430</b>	<b>139,783</b>	

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 3.1: Multilateral Co-operation and Africa	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>23,021</b>	-	<b>(4,822)</b>	<b>18,199</b>	<b>17,825</b>	<b>374</b>	<b>97.9%</b>	<b>17,934</b>	<b>17,570</b>
<b>Compensation of employees</b>	<b>13,310</b>	-	-	<b>13,310</b>	<b>13,132</b>	<b>178</b>	<b>98.7%</b>	<b>11,097</b>	<b>11,075</b>
Salaries and wages	12,112	(192)	-	11,920	11,742	178	98.5%	9,826	9,804
Social contributions	1,198	192	-	1,390	1,390	-	100.0%	1,271	1,271
<b>Goods and services</b>	<b>9,711</b>	-	<b>(4,822)</b>	<b>4,889</b>	<b>4,693</b>	<b>196</b>	<b>96.0%</b>	<b>6,837</b>	<b>6,495</b>
Administrative fees	519	-	(100)	419	413	6	98.6%	450	338
Advertising	-	-	-	-	-	-	-	119	115
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental Activities	169	-	(60)	109	103	6	94.5%	113	111
Communication (G&S)	206	-	(70)	136	134	2	98.5%	201	196
Computer services	-	-	-	-	-	-	-	-	-
Consultants: Business & advisory services	3,365	-	(3,350)	15	-	15	-	15	14
Legal services	-	-	-	-	-	-	-	-	-
Contractors	80	-	(80)	-	-	-	-	82	82
Agency and support/outsourced services	25	-	(25)	-	-	-	-	243	113
Entertainment	10	-	-	10	4	6	40.0%	75	65
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	2	-	-	2	1	1	50.0%	16	13
Consumable: Stationary, printing and office supplies	47	-	(15)	32	-	32	-	11	6
Operating leases	32	-	(22)	10	-	10	-	260	256
Property payments	10	-	-	10	-	10	-	-	-
Travel and subsistence	3,572	-	(1,100)	2,472	2,457	15	99.4%	3,296	3,240
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	68	-	-	68	37	31	54.4%	134	126
Venues and facilities	1,281	-	-	1,281	1,220	61	95.2%	1,822	1,820
Rental and hiring	325	-	-	325	324	1	99.7%	-	-



Subprogramme: 3.1: Multilateral Co-operation and Africa	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>4,320</b>	-	<b>22</b>	<b>4,342</b>	<b>4,342</b>	-	<b>100.0%</b>	<b>42,948</b>	<b>42,948</b>
Departmental agencies and accounts	-	-	-	-	-	-	-	35,237	39,037
Higher education institutions	-	-	-	-	4,320	(4,320)	-	-	3,900
<b>Public corporations and private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Public corporations</b>	-	-	-	-	-	-	-	-	-
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	-	-	-	-	-	-	-	-	-
<b>Private enterprises</b>	-	-	-	-	-	-	-	-	-
Other transfers to private enterprises	-	-	-	-	-	-	-	-	-
Non-profit institutions	4,320	-	-	4,320	-	4,320	-	7,700	-
<b>Households</b>	-	-	<b>22</b>	<b>22</b>	<b>22</b>	-	<b>100.0%</b>	<b>11</b>	<b>11</b>
Social benefit	-	-	22	22	22	-	100.0%	-	-
Other transfers to households	-	-	-	-	-	-	-	11	11
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
<b>Transport equipment</b>	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>27,341</b>	<b>-</b>	<b>(4,800)</b>	<b>22,541</b>	<b>22,167</b>	<b>374</b>	<b>98.3%</b>	<b>60,882</b>	<b>60,518</b>

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 3.2 International Resources	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>21,315</b>	-	<b>(1,368)</b>	<b>19,947</b>	<b>17,165</b>	<b>2,782</b>	<b>86.1%</b>	<b>19,298</b>	<b>19,025</b>
<b>Compensation of employees</b>	<b>14,164</b>	-	-	<b>14,164</b>	<b>11,449</b>	<b>2,715</b>	<b>80.8%</b>	<b>11,662</b>	<b>11,653</b>
Salaries and wages	12,889	-	-	12,889	10,188	2,701	79.0%	10,559	10,481
Social contributions	1,275	-	-	1,275	1,261	14	98.9%	1,103	1,172
<b>Goods and services</b>	<b>7,151</b>	-	<b>(1,368)</b>	<b>5,783</b>	<b>5,716</b>	<b>67</b>	<b>98.8%</b>	<b>7,636</b>	<b>7,372</b>
Administrative fees	85	62	-	147	147	-	100.0%	295	291
Advertising	63	-	(53)	10	-	10	-	90	82
Minor assets	5	-	(1)	4	-	4	-	12	-
Audit costs: External	-	-	-	-	-	-	-	40	30
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	262	-	(96)	166	166	-	100.0%	374	368
Communication (G&S)	652	(266)	(181)	205	205	-	100.0%	265	262
Computer services	126	-	(126)	-	-	-	-	5	5
Consultants: Business advisory services	63	-	(15)	48	-	48	-	48	48
Legal services	502	(460)	(1)	41	41	-	100.0%	100	85
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/outsourced Services	715	(660)	(8)	47	47	-	100.0%	55	52
Entertainment	314	-	(113)	201	200	1	99.5%	50	48
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing, material & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, Oil and Gas	-	-	-	-	-	-	-	-	-
Inventory: Material and Supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	12	-
Consumable supplies	13	-	(11)	2	1	1	50.0%	16	16
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	5	2
Operating leases	-	-	-	-	-	-	-	25	22
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	3,262	-	(63)	3,199	3,198	1	100.0%	4,700	4,630
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	77	1,304	-	1,381	1,381	-	100.0%	110	109
Venues and facilities	1,012	-	(700)	312	310	2	99.4%	1,400	1,307
Rental and hiring	-	20	-	20	20	-	100.0%	15	15

Subprogramme: 3.2 International	Resources	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>		<b>33,549</b>	-	<b>3,293</b>	<b>36,842</b>	<b>36,841</b>	<b>1</b>	<b>100.0%</b>	<b>31,650</b>	<b>31,377</b>
Departmental agencies and accounts	-	-	-	-	-	1,656	(1,656)	-	-	1,622
Higher education institutions	-	-	-	-	-	15,666	(15,666)	-	-	13,132
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>		<b>33,549</b>	-	-	<b>33,549</b>	<b>16,198</b>	<b>17,351</b>	<b>48.3%</b>	-	<b>16,318</b>
<b>Public corporations</b>		<b>33,549</b>	-	-	<b>33,549</b>	<b>10,446</b>	<b>23,103</b>	<b>31.1%</b>	-	<b>9,383</b>
Subsidies										
Other transfers to public corporations	33,549	33,549	-	-	33,549	10,446	23,103	31.1%	-	9,383
<b>Private enterprises</b>		-	-	-	-	<b>5,752</b>	<b>(5,752)</b>	-	-	<b>6,935</b>
Other transfers to private enterprises	-	-	-	-	-	5,752	(5,752)	-	-	6,935
Non-profit institutions	-	-	-	-	-	28	(28)	-	31,650	272
<b>Households</b>		-	-	<b>3,293</b>	<b>3,293</b>	<b>3,293</b>	-	<b>100.0%</b>	-	<b>33</b>
Social benefits	-	-	-	53	53	53	-	100.0%	-	-
Other transfers to households	-	-	-	3,240	3,240	3,240	-	100.0%	-	33
Payment for capital assets	-	-	-	15	15	15	-	100.0%	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>		-	-	<b>15</b>	<b>15</b>	<b>15</b>	-	<b>100.0%</b>	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	15	15	15	-	100.0%	-	-
Biological assets	-	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>		-	-	-	-	-	-	-	-	-
<b>Total</b>		<b>54,864</b>	-	<b>1,940</b>	<b>56,804</b>	<b>54,021</b>	<b>2,783</b>	<b>95.1%</b>	<b>50,948</b>	<b>50,402</b>

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 3.3 Overseas Bilateral Cooperation	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>24,179</b>	-	<b>(5,047)</b>	<b>19,132</b>	<b>18,359</b>	<b>773</b>	<b>96.0%</b>	<b>17,342</b>	<b>16,638</b>
<b>Compensation of employees</b>	<b>15,944</b>	-	<b>(3,000)</b>	<b>12,944</b>	<b>12,181</b>	<b>763</b>	<b>94.1%</b>	<b>10,914</b>	<b>10,477</b>
Salaries and wages	14,828	-	(3,000)	11,828	11,206	622	94.7%	9,961	9,556
Social contributions	1,116	-	-	1,116	975	141	87.4%	953	921
<b>Goods and services</b>	<b>8,235</b>	-	<b>(2,047)</b>	<b>6,188</b>	<b>6,178</b>	<b>10</b>	<b>99.8%</b>	<b>6,428</b>	<b>6,161</b>
Administrative fees	14	265	-	279	279	-	100.0%	145	145
Advertising	56	4	-	60	60	-	100.0%	141	141
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	74	101	-	175	175	-	100.0%	141	141
Communication (G&S)	753	-	(598)	155	155	-	100.0%	202	163
Computer services	-	-	-	-	-	-	-	-	7
Consultants: Business & advisory services	182	-	(19)	163	163	-	100.0%	195	195
Legal services	-	12	-	12	12	-	100.0%	18	18
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/outsourced services	572	-	(290)	282	280	2	99.3%	498	498
Entertainment	437	-	(420)	17	14	3	82.4%	69	69
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & Accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	161	-	(160)	1	-	1	-	-	-
Consumable supplies	-	-	-	-	-	-	-	-	2
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	2	2
Operating leases	-	-	-	-	-	-	-	18	18
Property payments	453	-	(450)	3	-	3	-	-	-
Travel and subsistence	3,418	(900)	(20)	2,498	2,497	1	100.0%	3,302	3,294
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	775	(524)	(90)	161	161	-	100.0%	731	720
Venues and facilities	1,340	1,021	-	2,361	2,361	-	100.0%	938	720
Rental and hiring	-	21	-	21	21	-	100.0%	28	28

Subprogramme: 3.3 Overseas Bilateral Cooperation	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>12,935</b>	-	<b>9</b>	<b>12,944</b>	<b>12,944</b>	-	<b>100.0%</b>	<b>12,258</b>	<b>12,225</b>
Departmental agencies and Accounts	12,935	-	-	12,935	12,935	-	100.0%	-	12,203
Higher education institutions	-	-	-	-	-	-	-	-	-
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Public corporations</b>	-	-	-	-	-	-	-	-	-
Subsidies	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	-	-	-	-	-	-	-	-	-
<b>Private enterprises</b>	-	-	-	-	-	-	-	-	-
Other transfers to private Enterprises	-	-	-	-	-	-	-	-	-
Non-profit institutions	-	-	-	-	-	-	-	12,203	-
<b>households</b>	-	-	<b>9</b>	<b>9</b>	<b>9</b>	-	100.0%	<b>55</b>	<b>22</b>
Social benefits	-	-	<b>9</b>	<b>9</b>	<b>9</b>	-	100.0%	-	-
Other transfers to households	-	-	-	-	-	-	-	<b>55</b>	<b>22</b>
<b>Payment for capital assets</b>	-	-	<b>98</b>	<b>98</b>	<b>98</b>	-	<b>100.0%</b>	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	<b>98</b>	<b>98</b>	<b>98</b>	-	<b>100.0%</b>	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	<b>98</b>	<b>98</b>	<b>98</b>	-	100.0%	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>37,114</b>	-	<b>(4,940)</b>	<b>32,174</b>	<b>31,401</b>	<b>773</b>	<b>97.6%</b>	<b>29,600</b>	<b>28,863</b>

# Vote 34 Appropriation Statement (continued)

for the year ended 31 March 2015 (continued)

Detail per Programme 4 – Research Development and Support for the year ended 31 March 2015											
Detail per subprogramme	2014/15						2013/14				
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure		
	R'000	R'000	R'000	R'000	R'000	R'000	%	R'000	R'000		
<b>4.1 Human Capital and Science Promotion</b>	1,874,610	-	(1,258)	1,873,352	1,872,787	565	100.0%	1,697,555	1,687,558		
<b>4.2 Science Missions</b>	160,439	-	(300)	160,139	159,549	590	99.6%	30,215	29,993		
<b>4.3 Basic Science and Infrastructure</b>	783,738	-	400	784,138	783,727	411	99.9%	745,402	745,169		
<b>4.4 Astronomy</b>	678,160	-	(2,900)	675,260	673,774	1,486	99.8%	-	-		
<b>Total</b>	<b>3,496,947</b>	<b>-</b>	<b>(4,058)</b>	<b>3,492,889</b>	<b>3,489,837</b>	<b>3,052</b>	<b>99.9%</b>	<b>2,473,172</b>	<b>2,462,720</b>		

Detail per Programme 4 – Research Development and Support for the year ended 31 March 2015										
Detail per subprogramme	2014/15						2013/14			
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure	
	R'000	R'000	R'000	R'000	R'000	R'000	%	R'000	R'000	R'000
<b>Current payments</b>	<b>44,228</b>	<b>-</b>	<b>(4,178)</b>	<b>40,050</b>	<b>37,696</b>	<b>2,354</b>	<b>94.1%</b>	<b>33,447</b>	<b>32,720</b>	
<b>Compensation of employees</b>	<b>29,125</b>	<b>-</b>	<b>800</b>	<b>29,925</b>	<b>29,438</b>	<b>487</b>	<b>98.4%</b>	<b>25,266</b>	<b>25,039</b>	
Salaries and wages	25,951	132	593	26,676	26,457	219	99.2%	22,400	22,474	
Social contributions	3,174	(132)	207	3,249	2,981	268	91.8%	2,866	2,565	
Goods and services	15,103	-	(4,978)	10,125	8,258	1,867	81.6%	8,181	7,681	
Administrative fees	173	61	-	234	202	32	86.3%	208	177	
Advertising	187	7	-	194	44	150	22.7%	135	125	
Minor assets	-	2	-	2	1	1	50.0%	-	-	
Audit costs: External	-	-	-	-	-	-	-	-	-	
Bursaries: Employees	-	-	-	-	-	-	-	-	-	
Catering: Departmental activities	425	(23)	(100)	302	96	206	31.8%	115	82	
Communication (G&S)	824	-	(100)	724	339	385	46.8%	490	453	
Computer services	135	428	(50)	513	428	85	83.4%	-	-	
Consultants: Business & advisory services	1,596	(447)	(500)	649	385	264	59.3%	848	855	
Legal services	132	-	-	132	-	132	-	-	-	
Contractors	-	-	-	-	-	-	-	-	-	
Agency and support/outsourced Services	1,167	173	(300)	1,040	919	121	88.4%	910	863	
Entertainment	74	-	-	74	6	68	8.1%	51	19	
Fleet services (incl. government motor transport)	10	-	(9)	1	-	1	-	-	-	
Inventory: Clothing & Accessories	-	-	-	-	-	-	-	-	-	
Inventory: Fuel, oil and gas	-	2	-	2	1	1	50.0%	-	-	
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-	
Inventory: Other supplies	16	-	-	16	-	16	-	-	-	
Consumable supplies	-	-	-	-	-	-	-	12	6	
Consumable: Stationary, printing and office supplies	45	-	-	45	-	45	-	29	18	
Operating leases	-	-	-	-	-	-	-	95	70	
Property payments	-	-	-	-	-	-	-	-	-	
Travel and subsistence	7,401	(143)	(2,297)	4,961	4,864	97	98.0%	3,890	3,708	
Training and development	-	65	-	65	61	4	93.8%	-	-	
Operating payments	413	99	(222)	290	241	49	83.1%	795	742	
Venues and facilities	2,505	(224)	(1,400)	881	671	210	76.2%	603	563	
Rental and hiring	-	-	-	-	-	-	-	-	-	

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Detail per Programme 4 – Research Development and Support for the year ended 31 March 2015										
Detail per subprogramme	Adjusted appropriation	Shifting of funds	2014/15				Variance	Expenditure as % of final appropriation	2013/14	
			R'000	R'000	Virement	Final appropriation			Final appropriation	Actual expenditure
	R'000	R'000	R'000	R'000		R'000	R'000	%	R'000	R'000
<b>Transfers and subsidies</b>	<b>3,452,719</b>	-	(11)			<b>3,452,708</b>	<b>3,452,010</b>	<b>100.0%</b>	<b>2,439,725</b>	<b>2,430,000</b>
Departmental agencies and accounts	3,248,674	-	(58)			3,248,616	2,977,765	91.7%	2,042,411	2,010,493
Higher education institutions	-	-	-			-	53,477	-	-	38,562
Foreign governments and international organisations	-	-	-			-	-	-	-	-
<b>Public corporations and private enterprises</b>	<b>204,045</b>	-	-			<b>204,045</b>	<b>390,539</b>	<b>191.4%</b>	<b>101,943</b>	<b>340,771</b>
<b>Public corporations</b>	<b>204,045</b>	-	-			<b>204,045</b>	<b>390,539</b>	<b>191.4%</b>	<b>101,943</b>	<b>340,271</b>
Subsidies	-	-	-			-	-	-	-	340,271
Other transfers to public corporations	204,045	-	-			204,045	390,539	191.4%	101,943	-
<b>Private enterprises</b>	-	-	-			-	-	-	-	500
Other transfers to private Enterprises	-	-	-			-	-	-	-	500
Non-profit institutions	-	-	-			-	29,857	-	295,371	39,744
Households	-	-	47			47	372	791.5%	-	430
Social benefits	-	-	47			47	47	100.0%	-	430
Other transfers to households	-	-	-			-	325	-	-	-
<b>Payment for capital assets</b>	<b>-</b>	<b>-</b>	<b>72</b>			<b>72</b>	<b>72</b>	<b>100.0%</b>	<b>-</b>	<b>-</b>
Buildings and other fixed structures	-	-	-			-	-	-	-	-
<b>Machinery and equipment</b>	<b>-</b>	<b>-</b>	<b>72</b>			<b>72</b>	<b>72</b>	<b>100.0%</b>	<b>-</b>	<b>-</b>
Transport equipment	-	-	-			-	-	-	-	-
Other machinery and equipment	-	-	72			72	72	100.0%	-	-
Biological assets	-	-	-			-	-	-	-	-
Software and other intangible assets	-	-	-			-	-	-	-	-
Land and subsoil assets	-	-	-			-	-	-	-	-
<b>Payment for financial assets</b>	<b>-</b>	<b>-</b>	<b>59</b>			<b>59</b>	<b>59</b>	<b>100.0%</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>3,496,947</b>	<b>-</b>	<b>(4,058)</b>			<b>3,492,889</b>	<b>3,489,837</b>	<b>99.9%</b>	<b>2,473,172</b>	<b>2,462,720</b>



Subprogramme: 4.1: Human Capital and Science Promotion	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>13,277</b>	-	<b>(1,369)</b>	<b>11,908</b>	<b>11,343</b>	<b>565</b>	<b>95.3%</b>	<b>15,773</b>	<b>15,477</b>
<b>Compensation of employees</b>	<b>9,713</b>	-	-	<b>9,713</b>	<b>9,355</b>	<b>358</b>	<b>96.3%</b>	<b>11,377</b>	<b>11,330</b>
Salaries and wages	8,367	150	-	8,517	8,416	101	98.8%	10,017	10,257
Social contributions	1,346	(150)	-	1,196	939	257	78.5%	1,360	1,073
<b>Goods and services</b>	<b>3,564</b>	-	<b>(1,369)</b>	<b>2,195</b>	<b>1,988</b>	<b>207</b>	<b>90.6%</b>	<b>4,396</b>	<b>4,147</b>
Administrative fees	42	16	-	58	58	-	100.0%	60	52
Advertising	37	7	-	44	44	-	100.0%	135	125
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	199	(23)	(100)	76	12	64	15.8%	40	31
Communication (G&S)	273	-	(100)	173	112	61	64.7%	240	226
Computer services	67	-	(50)	17	-	17	-	-	-
Consultants: Business & advisory services	-	-	-	-	-	-	-	400	350
Legal services	-	-	-	-	-	-	-	-	-
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/outsourced Services	164	190	-	354	350	4	98.9%	900	855
Entertainment	12	-	-	12	1	11	8.3%	36	13
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	16	-	-	16	-	16	-	-	-
Consumable supplies	-	-	-	-	-	-	-	10	5
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	15	6
Operating leases	-	-	-	-	-	-	-	50	31
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	1,859	-	(697)	1,162	1,162	-	100.0%	1,700	1,696
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	166	-	(122)	44	44	-	100.0%	780	730
Venues and facilities	729	(190)	(300)	239	205	34	85.8%	30	27
Rental and hiring	-	-	-	-	-	-	-	-	-

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 4.1: Human Capital and Science Promotion	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>1,861,333</b>	-	<b>(11)</b>	<b>1,861,322</b>	<b>1,861,322</b>	-	<b>100.0%</b>	<b>1,681,782</b>	<b>1,672,081</b>
Departmental agencies and accounts`	1,861,333	-	(58)	1,861,275	1,821,826	39,449	97.9%	1,599,571	1,637,731
Higher education Institutions	-	-	-	-	14,592	(14,592)	-	-	10,176
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Public corporations</b>	-	-	-	-	-	-	-	-	-
Subsidies	-	-	-	-	-	-	-	-	-
Other transfers to public corporations	-	-	-	-	-	-	-	-	-
<b>Private enterprises</b>	-	-	-	-	-	-	-	-	-
Other transfers to private Enterprises	-	-	-	-	-	-	-	-	-
Non-profit institution	-	-	-	-	24,857	(24,857)	-	82,211	23,744
Households	-	-	47	47	47	-	100.0%	-	430
Social benefits	-	-	47	47	47	-	100.0%	-	430
Other transfers to Households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	-	-	<b>63</b>	<b>63</b>	<b>63</b>	-	<b>100.0%</b>	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	<b>63</b>	<b>63</b>	<b>63</b>	-	<b>100.0%</b>	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	63	63	63	-	100.0%	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	<b>59</b>	<b>59</b>	<b>59</b>	-	<b>100.0%</b>	-	-
<b>Total</b>	<b>1,874,610</b>	-	<b>(1,258)</b>	<b>1,873,352</b>	<b>1,872,787</b>	<b>565</b>	<b>100.0%</b>	<b>1,697,555</b>	<b>1,687,558</b>

Subprogramme: 4.2: Science Mission	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>12,861</b>	-	<b>(300)</b>	<b>12,561</b>	<b>12,138</b>	<b>423</b>	<b>96.6%</b>	<b>10,033</b>	<b>9,812</b>
<b>Compensation of employees</b>	<b>8,973</b>	-	<b>1,300</b>	<b>10,273</b>	<b>10,259</b>	<b>14</b>	<b>99.9%</b>	<b>8,038</b>	<b>7,758</b>
Salaries and wages	8,113	-	1,093	9,206	9,192	14	99.8%	7,234	6,940
Social contributions	860	-	207	1,067	1,067	-	100.0%	804	818
<b>Goods and services</b>	<b>3,888</b>	-	<b>(1,600)</b>	<b>2,288</b>	<b>1,879</b>	<b>409</b>	<b>82.1%</b>	<b>1,995</b>	<b>2,054</b>
Administrative fees	49	15	-	64	61	3	95.3%	93	89
Advertising	-	-	-	-	-	-	-	-	-
Minor assets	-	2	-	2	1	1	50.0%	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	100	-	-	100	24	76	24.0%	35	32
Communication (G&S)	219	-	-	219	136	83	62.1%	130	126
Computer services	36	-	-	36	-	36	-	-	-
Consultants: Business & advisory services	620	-	(500)	120	114	6	95.0%	123	211
Legal services	-	-	-	-	-	-	-	-	-
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/outsourced Services	190	(17)	(100)	73	-	73	-	10	8
Entertainment	15	-	-	15	4	11	26.7%	5	4
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	-	-	-	-	-	-	-	2	1
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	12	11
Operating leases	--	-	-	-	-	-	-	25	24
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	2,003	-	(700)	1,303	1,271	32	97.5%	1,090	1,084
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	156	-	(100)	56	7	49	12.5%	10	8
Venues and facilities	500	-	(200)	300	261	39	87.0%	460	456
Rental and hiring	-	-	-	-	-	-	-	-	-

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 4.2: Science Mission	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>147,578</b>	-	-	<b>147,578</b>	<b>147,411</b>	<b>167</b>	<b>99.9%</b>	<b>20,182</b>	<b>20,181</b>
Departmental agencies and accounts	147,578	-	-	147,578	138,044	9,534	93.5%	-	10,000
higher education Institutions	-	-	-	-	5,467	(5,467)	-	-	7,181
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>700</b>	<b>(700)</b>	<b>-</b>	<b>-</b>	<b>2,500</b>
<b>Public corporations</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>700</b>	<b>(700)</b>	<b>-</b>	<b>-</b>	<b>2,000</b>
Subsidies	-	-	-	-	-	-	-	-	2,000
Other transfers to public corporations	-	-	-	-	700	(700)	-	-	-
<b>Private enterprises</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>500</b>
Other transfers to private enterprises	-	-	-	-	-	-	-	-	500
Non-profit institution	-	-	-	-	3,000	(3,000)	-	20,182	500
<b>Households</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>200</b>	<b>(200)</b>	<b>-</b>	<b>-</b>	<b>-</b>
Other transfers to households	-	-	-	-	200	(200)	-	-	-
<b>Payment for capital assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>160,439</b>	<b>-</b>	<b>(300)</b>	<b>160,139</b>	<b>159,549</b>	<b>590</b>	<b>99.6%</b>	<b>30,215</b>	<b>29,993</b>

Subprogramme: 4.3: Basic Science and Infrastructure	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>8,089</b>	-	<b>400</b>	<b>8,489</b>	<b>8,091</b>	<b>398</b>	<b>95.3%</b>	<b>7,641</b>	<b>7,431</b>
<b>Compensation of employees</b>	<b>6,029</b>	-	<b>400</b>	<b>6,429</b>	<b>6,412</b>	<b>17</b>	<b>99.7%</b>	<b>5,851</b>	<b>5,951</b>
Salaries and wages	5,340	32	400	5,772	5,755	17	99.7%	5,149	5,277
Social contributions	689	(32)	-	657	657	-	100.0%	702	674
<b>Goods and services</b>	<b>2,060</b>	-	-	<b>2,060</b>	<b>1,679</b>	<b>381</b>	<b>81.5%</b>	<b>1,790</b>	<b>1,480</b>
Administrative fees	8	30	-	38	36	2	94.7%	55	36
Advertising	-	-	-	-	-	-	-	-	-
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	54	-	-	54	39	15	72.2%	40	19
Communication (G&S)	132	-	-	132	48	84	36.4%	120	101
Computer services	32	-	-	32	-	32	-	-	-
Consultants: Business & advisory services	579	(447)	-	132	11	121	8.3%	325	294
Legal services	-	-	-	-	-	-	-	-	-
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/outsourced Services	171	-	-	171	131	40	76.6%	-	-
Entertainment	15	-	-	15	1	14	6.7%	10	2
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	2	-	2	1	1	50.0%	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	-	-	-	-	-	-	-	-	-
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	2	1
Operating leases	-	-	-	-	-	-	-	20	15
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	797	285	-	1,082	1,078	4	99.6%	1,100	928
Training and development	-	65	-	65	61	4	93.8%	-	-
Operating payments	91	65	-	156	156	-	100.0%	5	4
Venues and facilities	181	-	-	181	117	64	64.6%	113	80
Rental and hiring	-	-	-	-	-	-	-	-	-

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 4.3: Basic Science and Infrastructure	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>775,649</b>	-	-	<b>775,649</b>	<b>775,636</b>	<b>13</b>	<b>100.0%</b>	<b>737,761</b>	<b>737,738</b>
Departmental agencies and accounts	571,604	-	-	571,604	353,589	218,015	61.9%	442,840	362,762
Higher education Institutions	-	-	-	-	32,806	(32,806)	-	-	21,205
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	<b>204,045</b>	-	-	<b>204,045</b>	<b>389,116</b>	<b>(185,071)</b>	<b>190.7%</b>	<b>101,943</b>	<b>338,271</b>
<b>Public corporation</b>	<b>204,045</b>	-	-	<b>204,045</b>	<b>389,116</b>	<b>(185,071)</b>	<b>190.7%</b>	<b>101,943</b>	<b>338,271</b>
Subsidies	-	-	-	-	-	-	-	-	338,271
Other transfers to public corporations	204,045	-	-	204,045	389,116	(185,071)	190.7%	101,943	-
<b>Private enterprises</b>	<b>204,045</b>	-	-	<b>204,045</b>	-	<b>204,045</b>	-	-	-
Other transfers to private Enterprises	-	-	-	-	-	-	-	-	-
Non-profit institutions	-	-	-	-	-	-	-	-	-
Households	-	-	-	-	125	(125)	-	-	15,500
Other transfers to Households	-	-	-	-	125	(125)	-	-	-
<b>Payment for capital assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>783,738</b>	<b>-</b>	<b>400</b>	<b>784,138</b>	<b>783,727</b>	<b>411</b>	<b>99.9%</b>	<b>745,402</b>	<b>745,169</b>

Subprogramme: 4.4 Astronomy	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>10,001</b>	-	<b>(2,909)</b>	<b>7,092</b>	<b>6,124</b>	<b>968</b>	<b>86.4%</b>	-	-
<b>Compensation of employees</b>	<b>4,410</b>	-	<b>(900)</b>	<b>3,510</b>	<b>3,412</b>	<b>98</b>	<b>97.2%</b>	-	-
Salaries and wages	4,131	(50)	(900)	3,181	3,094	87	97.3%	-	-
Social contributions	279	50	-	329	318	11	96.7%	-	-
<b>Goods and services</b>	<b>5,591</b>	-	<b>(2,009)</b>	<b>3,582</b>	<b>2,712</b>	<b>870</b>	<b>75.7%</b>	-	-
Administrative fees	74	-	-	74	47	27	63.5%	-	-
Advertising	150	-	-	150	-	150	-	-	-
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	72	-	-	72	21	51	29.2%	-	-
Communication (G&S)	200	-	-	200	43	157	21.5%	-	-
Computer services	-	428	-	428	428	-	100.0%	-	-
Consultants: Business & advisory services	397	-	-	397	260	137	65.5%	-	-
Legal services	132	-	-	132	-	132	-	-	-
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/outsourcedServices	642	-	(200)	442	438	4	99.1%	-	-
Entertainment	32	-	-	32	-	32	-	-	-
Fleet services (incl.government motor transport)	10	-	(9)	1	-	1	-	-	-
Inventory: Clothing &accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	-	-	-	-	-	-	-	-	-
Consumable: Stationary, printing and office supplies	45	-	-	45	-	45	-	-	-
Operating leases	-	-	-	-	-	-	-	-	-
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	2,742	(428)	(900)	1,414	1,353	61	95.7%	-	-
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	-	34	-	34	34	-	100.0%	-	-
Venues and facilities	1,095	(34)	(900)	161	88	73	54.7%	-	-
Rental and hiring	-	-	-	-	-	-	-	-	-
<b>Transfers and subsidies</b>	<b>668,159</b>	-	-	<b>668,159</b>	<b>667,641</b>	<b>518</b>	<b>99.9%</b>	-	-

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 4.4 Astronomy	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
Departmental agencies and accounts	668,159	-	-	668,159	664,306	3,853	99.4%	-	-
Higher education institutions	-	-	-	-	612	(612)	-	-	-
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	723	(723)	-	-	-
<b>Public corporations</b>	-	-	-	-	723	(723)	-	-	-
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporation	-	-	-	-	723	(723)	-	-	-
<b>Private enterprises</b>	-	-	-	-	-	-	-	-	-
Other transfers to private enterprises	-	-	-	-	-	-	-	-	-
Non-profit institutions	-	-	-	-	2,000	(2,000)	-	-	-
<b>Households</b>	-	-	-	-	-	-	-	-	-
Other transfers to households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	-	-	9	9	9	-	100.0%	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	9	9	9	-	100.0%	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	9	9	9	-	100.0%	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>678,160</b>	<b>-</b>	<b>(2,900)</b>	<b>675,260</b>	<b>673,774</b>	<b>1,486</b>	<b>99.8%</b>	<b>-</b>	<b>-</b>



Detail per programme 5 – Socio –Economic Innovation Partnerships  
for the year ended 31 March 2015

Detail per subprogramme	2014/15						2013/14		
	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
	R'000	R'000	R'000	R'000	R'000	R'000	%	R'000	R'000
5.1 Sector Innovation and Green Economy	878,626	-	(1,820)	876,806	875,737	1,069	99.9%	1,249,374	1,236,949
5.2 Innovation for Inclusive Development	341,869	-	(1,200)	340,669	340,095	574	99.8%	378,481	377,457
5.3 Science and Technology Investment									
5.4 Technology Localisation, Beneficiation and Advanced Manufacturing	28,291	-	1,870	30,161	29,864	297	99.0%	25,731	25,431
	313,975	-	(19,369)	294,606	293,470	1,136	99.6%	-	-
Total	1,562,761	-	(20,519)	1,542,242	1,539,166	3,076	99.8%	w1,653,586	1,639,837

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Detail per subprogramme	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>44,271</b>	-	<b>(2,261)</b>	<b>42,010</b>	<b>40,858</b>	<b>1,152</b>	<b>97.3%</b>	<b>43,754</b>	<b>41,034</b>
<b>Compensation of employees</b>	<b>33,881</b>	-	<b>1,200</b>	<b>35,081</b>	<b>34,158</b>	<b>923</b>	<b>97.4%</b>	<b>34,145</b>	<b>34,081</b>
Salaries and wages	30,513	-	995	31,508	30,648	860	97.3%	30,671	30,544
Social contributions	3,368	-	205	3,573	3,510	63	98.2%	3,474	3,537
<b>Goods and services</b>	<b>10,390</b>	-	<b>(3,461)</b>	<b>6,929</b>	<b>6,700</b>	<b>229</b>	<b>96.7%</b>	<b>9,609</b>	<b>6,953</b>
Administrative fees	112	277	(27)	362	362	-	100.0%	375	243
Advertising	280	(122)	(118)	40	40	-	100.0%	343	239
Minor assets	-	2	-	2	2	-	100.0%	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
<b>Bursaries: Employees</b>	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	253	(59)	(107)	87	87	-	100.0%	291	188
Communication (G&S)	933	(248)	(392)	293	293	-	100.0%	873	509
Computer services	16	-	(16)	-	-	-	-	-	-
Consultants: Business & advisory services	5,081	(1,626)	(2,893)	562	486	76	86.5%	1,626	829
Legal services	-	62	-	62	62	-	100.0%	-	-
Contractors	-	-	-	-	-	-	-	92	46
Agency and support/outsourced Services	177	1,056	524	1,757	1,715	42	97.6%	528	496
Entertainment	68	(28)	(22)	18	18	-	100.0%	62	12
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing, material and accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and Supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	6	-	(6)	-	-	-	-	-	-
Consumable supplies	-	1	-	1	1	-	100.0%	70	20
Consumable: Stationary, printing and office supplies	-	1	-	1	1	-	100.0%	114	88
Operating leases	-	-	-	-	-	-	-	207	85
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	2,671	449	(202)	2,918	2,828	90	96.9%	3,514	2,921
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	36	149	-	185	185	-	100.0%	222	76
Venues and facilities	757	86	(202)	641	620	21	96.7%	1,292	1,201
Rental and hiring	-	-	-	-	-	-	-	-	-

Detail per Subprogramme	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>1,518,490</b>	-	<b>(18,258)</b>	<b>1,500,232</b>	<b>1,498,308</b>	<b>1,924</b>	<b>99.9%</b>	<b>1,609,832</b>	<b>1,598,803</b>
Departmental agencies and accounts	586,705	-	(7,048)	579,657	391,492	188,165	67.5%	682,088	516,190
Higher education Institutions	-	-	-	-	7,065	(7,065)	-	-	4,385
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporation and private enterprises</b>	<b>931,785</b>	-	<b>(11,251)</b>	<b>920,534</b>	<b>1,064,637</b>	<b>(144,103)</b>	<b>115.7%</b>	<b>927,741</b>	<b>1,065,251</b>
<b>Public co-operations</b>	<b>931,785</b>	-	<b>(11,251)</b>	<b>920,534</b>	<b>1,054,265</b>	<b>(133,731)</b>	<b>114.5%</b>	<b>927,741</b>	<b>1,065,251</b>
Subsidies	825,740	-	-	825,740	825,740	-	100.0%	781,996	1,035,047
Other transfers to public corporations	106,045	-	(11,251)	94,794	228,525	(133,731)	241.1%	145,745	30,204
<b>Private enterprises</b>	-	-	-	-	<b>10,372</b>	<b>(10,372)</b>	-	-	-
Other transfers to private enterprises	-	-	-	-	10,372	(10,372)	-	-	-
Non-profit institutions	-	-	-	-	35,053	(35,053)	-	-	12,707
<b>Households</b>	-	-	<b>41</b>	<b>41</b>	<b>61</b>	<b>(20)</b>	<b>148.8%</b>	<b>3</b>	<b>270</b>
Social benefits	-	-	41	41	61	(20)	148.8%	3	145
Other transfers to households	-	-	-	-	-	-	-	-	125
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
<b>Buildings and other fixed structures</b>	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1,562,761</b>	-	<b>(20,519)</b>	<b>1,542,242</b>	<b>1,539,166</b>	<b>3,076</b>	<b>99.8%</b>	<b>1,653,586</b>	<b>1,639,837</b>

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 5.1: Sector Innovation and Green Economy	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>12,313</b>	-	<b>(1,820)</b>	<b>10,493</b>	<b>10,231</b>	<b>262</b>	<b>97.5%</b>	<b>23,616</b>	<b>22,144</b>
<b>Compensation of employees</b>	<b>7,452</b>	-	<b>1,800</b>	<b>9,252</b>	<b>9,065</b>	<b>187</b>	<b>98.0%</b>	<b>18,173</b>	<b>18,417</b>
Salaries and wages	6,600	-	1,647	8,247	8,060	187	97.7%	16,356	16,521
Social contributions	852	-	153	1,005	1,005	-	100.0%	1,817	1,896
<b>Goods and services</b>	<b>4,861</b>	-	<b>(3,620)</b>	<b>1,241</b>	<b>1,166</b>	<b>75</b>	<b>94.0%</b>	<b>5,443</b>	<b>3,727</b>
Administrative fees	56	-	(27)	29	29	-	100.0%	200	94
Advertising	118	-	(118)	-	-	-	-	110	52
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	75	-	(62)	13	13	-	100.0%	130	63
Communication (G&S)	318	-	(252)	66	66	-	100.0%	580	284
Computer services	16	-	(16)	-	-	-	-	-	-
Consultants: Business & advisory services	2,906	(70)	(2,761)	75	-	75	-	1,500	732
Legal services	-	-	-	-	-	-	-	-	-
Contractors	-	-	-	-	-	-	-	92	46
Agency and support/outsourced services	37	-	(37)	-	-	-	-	280	248
Entertainment	8	-	(4)	4	4	-	100.0%	46	9
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	6	-	(6)	-	-	-	-	-	-
Consumable supplies	-	1	-	1	1	-	100.0%	70	20
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	25	1
Operating leases	-	-	-	-	-	-	-	110	48
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	1,110	-	(147)	963	963	-	100.0%	1,700	1,696
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	15	69	-	84	84	-	100.0%	150	32
Venues and facilities	196	-	(190)	6	6	-	100.0%	450	402
Rental and hiring	-	-	-	-	-	-	-	-	-

Subprogramme: 5.1: Sector Innovation and Green Economy	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>866,313</b>	-	-	<b>866,313</b>	<b>865,506</b>	<b>807</b>	<b>99.9%</b>	<b>1,225,758</b>	<b>1,214,805</b>
Departmental agencies and accounts	16,315	-	-	16,315	4,585	11,730	28.1%	333,518	185,081
Higher education institutions	-	-	-	-	-	-	-	-	4,385
<b>Foreign governments and international organisations</b>	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	849,998	-	-	849,998	860,211	(10,213)	101.2%	892,240	1,015,134
<b>Public corporations</b>	849,998	-	-	849,998	860,061	(10,063)	101.2%	892,240	1,015,134
Subsidies	825,740	-	-	825,740	825,740	-	100.0%	781,996	997,212
<b>Other transfers to public corporations</b>	24,258	-	-	24,258	34,321	(10,063)	141.5%	110,244	17,922
<b>Private enterprises</b>	-	-	-	-	150	(150)	-	-	-
Other transfers to private Enterprises	-	-	-	-	150	(150)	-	-	-
Non-profit institutions	-	-	-	-	690	(690)	-	-	10,205
<b>Households</b>	-	-	-	-	20	(20)	-	-	-
Social benefits	-	-	-	-	20	(20)	-	-	-
Other transfers to households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>878,626</b>	-	<b>(1,820)</b>	<b>876,806</b>	<b>875,737</b>	<b>1,069</b>	<b>99.9%</b>	<b>1,249,374</b>	<b>1,236,949</b>

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 5.2: Innovation for Inclusive Development	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>7,713</b>	-	<b>(1,212)</b>	<b>6,501</b>	<b>6,293</b>	<b>208</b>	<b>96.8%</b>	<b>8,417</b>	<b>7,469</b>
<b>Compensation of employees</b>	<b>6,856</b>	-	<b>(1,200)</b>	<b>5,656</b>	<b>5,469</b>	<b>187</b>	<b>96.7%</b>	<b>6,323</b>	<b>6,323</b>
Salaries and wages	6,306	-	(1,200)	5,106	4,925	181	96.5%	5,663	5,663
Social contributions	550	-	-	550	544	6	98.9%	660	660
Goods and services	857	-	(12)	845	824	21	97.5%	2,094	1,146
Administrative fees	39	(18)	-	21	21	-	100.0%	65	39
Advertising	61	(61)	-	-	-	-	-	120	74
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	58	(48)	-	10	10	-	100.0%	67	31
Communication (G&S)	144	(91)	-	53	53	-	100.0%	180	113
Computer services	-	-	-	-	-	-	-	-	-
<b>Consultants: Business &amp; advisory services</b>	<b>8</b>	<b>(8)</b>	-	-	-	-	-	<b>71</b>	<b>42</b>
Legal services	-	-	-	-	-	-	-	-	-
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/outsourced services	140	(140)	-	-	-	-	-	-	-
Entertainment	-	4	-	4	4	-	100.0%	15	2
Fleet services (incl.government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, Oil and Gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	-	-	-	-	-	-	-	-	-
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	3	1
Operating leases	-	-	-	-	-	-	-	75	15
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	193	483	-	676	676	-	100.0%	1,373	784
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	21	34	-	55	55	-	100.0%	50	19
Venues and facilities	193	(155)	(12)	26	5	21	19.2%	75	26
Rental and hiring	-	-	-	-	-	-	-	-	-

Subprogramme: 5.2: Innovation for Inclusive Development	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>334,156</b>	-	<b>12</b>	<b>334,168</b>	<b>333,802</b>	<b>366</b>	<b>99.9%</b>	<b>370,064</b>	<b>369,988</b>
Departmental agencies and accounts	334,156	-	-	334,156	292,688	41,468	87.6%	334,563	317,102
Higher education institutions	-	-	-	-	631	(631)	-	-	-
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	<b>20,827</b>	<b>(20,827)</b>	-	<b>35,501</b>	<b>50,117</b>
<b>Public corporation</b>	-	-	-	-	<b>20,827</b>	<b>(20,827)</b>	-	<b>35,501</b>	<b>50,117</b>
Subsidies on products	-	-	-	-	-	-	-	-	37,835
Other transfers to public corporations	-	-	-	-	20,827	(20,827)	-	35,501	12,282
<b>Private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Other transfers to private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Non-profit institution</b>	-	-	-	-	<b>19,644</b>	<b>(19,644)</b>	-	-	<b>2,502</b>
<b>households</b>	-	-	<b>12</b>	<b>12</b>	<b>12</b>	-	<b>100.0%</b>	-	<b>267</b>
<b>Social benefit</b>	-	-	<b>12</b>	<b>12</b>	<b>12</b>	-	<b>100.0%</b>	-	<b>142</b>
<b>Other transfers to households</b>	-	-	-	-	-	-	-	-	<b>125</b>
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>341,869</b>	-	<b>(1,200)</b>	<b>340,669</b>	<b>340,095</b>	<b>574</b>	<b>99.8%</b>	<b>378,481</b>	<b>377,457</b>

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 5.3: Science and Technology Investment	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>11,384</b>	-	<b>2,261</b>	<b>13,645</b>	<b>13,348</b>	<b>297</b>	<b>97.8%</b>	<b>11,721</b>	<b>11,421</b>
<b>Compensation of employees</b>	<b>9,607</b>	-	<b>1,700</b>	<b>11,307</b>	<b>11,052</b>	<b>255</b>	<b>97.7%</b>	<b>9,649</b>	<b>9,341</b>
Salaries and wages	8,550	-	1,648	10,198	9,943	255	97.5%	8,652	8,360
Social contributions	1,057	-	52	1,109	1,109	-	100.0%	997	981
Goods and services	1,777	-	561	2,338	2,296	42	98.2%	2,072	2,080
Administrative fees	17	6	-	23	23	-	100.0%	110	110
Advertising	101	(61)	-	40	40	-	100.0%	113	113
Minor assets	-	-	-	-	-	-	-	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	67	(11)	-	56	56	-	100.0%	94	94
Communication (G&S)	260	(157)	-	103	103	-	100.0%	113	112
Computer services	-	-	-	-	-	-	-	-	-
Consultants: Business & advisory services	636	(636)	-	-	-	-	-	55	55
Legal services	-	62	-	62	62	-	100.0%	-	-
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/outsourced Services	-	948	561	1,509	1,467	42	97.2%	248	248
Entertainment	34	(32)	-	2	2	-	100.0%	1	1
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	-	-	-	-	-	-	-	-	-
Consumable: Stationary, printing and office supplies	-	1	-	1	1	-	100.0%	86	86
Operating leases	-	-	-	-	-	-	-	22	22
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	478	(34)	-	444	444	-	100.0%	441	441
Training and development	-	-	-	-	-	-	-	-	-



Subprogramme: 5.3: Science and Technology Investment	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
Operating payments	-	34	-	34	34	-	100.0%	22	25
Venues and facilities	184	(120)	-	64	64	-	100.0%	767	773
<b>Rental and hiring</b>	-	-	-	-	-	-	-	-	-
<b>Transfers and subsidies</b>	<b>16,907</b>	-	<b>(391)</b>	<b>16,516</b>	<b>16,516</b>	-	<b>100.0%</b>	<b>14,010</b>	<b>14,010</b>
Departmental agencies and accounts	16,907	-	(400)	16,507	16,507	-	100.0%	14,007	14,007
Higher education institutions	-	-	-	-	-	-	-	-	-
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	-	-	-	-	-	-	-	-	-
<b>Public corporations</b>	-	-	-	-	-	-	-	-	-
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporation	-	-	-	-	-	-	-	-	-
<b>Private enterprises</b>	-	-	-	-	-	-	-	-	-
Other transfers to private enterprises	-	-	-	-	-	-	-	-	-
Non-profit institutions	-	-	-	-	-	-	-	-	-
<b>Households</b>	-	-	9	9	9	-	100.0%	3	3
Social benefits	-	-	9	9	9	-	100.0%	3	3
Other transfers to households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 5.3: Science and Technology Investment	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>28,291</b>	<b>-</b>	<b>1,870</b>	<b>30,161</b>	<b>29,864</b>	<b>297</b>	<b>99.0%</b>	<b>25,731</b>	<b>25,431</b>

Subprogramme: 5.4: Technology Localisation, Beneficiation and Advanced Manufacturing	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Current payments</b>	<b>12,861</b>	-	<b>(1,490)</b>	<b>11,371</b>	<b>10,986</b>	<b>385</b>	<b>96.6%</b>	-	-
<b>Compensation of employees</b>	<b>9,966</b>	-	<b>(1,100)</b>	<b>8,866</b>	<b>8,572</b>	<b>294</b>	<b>96.7%</b>	-	-
Salaries and wages	9,057	-	(1,100)	7,957	7,720	237	97.0%	-	-
Social contributions	909	-	-	909	852	57	93.7%	-	-
<b>Goods and services</b>	<b>2,895</b>	-	<b>(390)</b>	<b>2,505</b>	<b>2,414</b>	<b>91</b>	<b>96.4%</b>	-	-
Administrative fees	-	289	-	289	289	-	100.0%	-	-
Advertising	-	-	-	-	-	-	-	-	-
Minor assets	-	2	-	2	2	-	100.0%	-	-
Audit costs: External	-	-	-	-	-	-	-	-	-
Bursaries: Employees	-	-	-	-	-	-	-	-	-
Catering: Departmental activities	53	-	(45)	8	8	-	100.0%	-	-
Communication (G&S)	211	-	(140)	71	71	-	100.0%	-	-
Computer services	-	-	-	-	-	-	-	-	-
Consultants: Business & advisory services	1,531	(912)	(132)	487	486	1	99.8%	-	-
Legal services	-	-	-	-	-	-	-	-	-
Contractors	-	-	-	-	-	-	-	-	-
Agency and support/ outsourced services	-	248	-	248	248	-	100.0%	-	-
Entertainment	26	-	(18)	8	8	-	100.0%	-	-
Fleet services (incl. government motor transport)	-	-	-	-	-	-	-	-	-
Inventory: Clothing & accessories	-	-	-	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	-	-	-	-	-	-
Inventory: Material and supplies	-	-	-	-	-	-	-	-	-
Inventory: Other supplies	-	-	-	-	-	-	-	-	-
Consumable supplies	-	-	-	-	-	-	-	-	-
Consumable: Stationary, printing and office supplies	-	-	-	-	-	-	-	-	-
Operating leases	-	-	-	-	-	-	-	-	-
Property payments	-	-	-	-	-	-	-	-	-
Travel and subsistence	890	-	(55)	835	745	90	89.2%	-	-
Training and development	-	-	-	-	-	-	-	-	-
Operating payments	-	12	-	12	12	-	100.0%	-	-
Venues and facilities	184	361	-	545	545	-	100.0%	-	-
Rental and hiring	-	-	-	-	-	-	-	-	-

# Vote 34 Appropriation Statement

for the year ended 31 March 2015 (continued)

Subprogramme: 5.4: Technology Localisation, Benefitiation and Advanced Manufacturing	Adjusted appropriation	Shifting of funds	Virement	Final appropriation	Actual expenditure	Variance	Expenditure as % of final appropriation	Final appropriation	Actual expenditure
<b>Transfers and subsidies</b>	<b>301,114</b>	-	<b>(17,879)</b>	<b>283,235</b>	<b>282,484</b>	<b>751</b>	<b>99.7%</b>	-	-
Departmental agencies and accounts	219,327	-	(6,648)	212,679	77,712	134,967	36.5%	-	-
Higher education institutions	-	-	-	-	6,434	(6,434)	-	-	-
Foreign governments and international organisations	-	-	-	-	-	-	-	-	-
<b>Public corporations and private enterprises</b>	<b>81,787</b>	-	<b>(11,251)</b>	<b>70,536</b>	<b>183,599</b>	<b>(113,063)</b>	<b>260.3%</b>	-	-
<b>Public corporation</b>	<b>81,787</b>	-	<b>(11,251)</b>	<b>70,536</b>	<b>173,377</b>	<b>(102,841)</b>	<b>245.8%</b>	-	-
Subsidies on products	-	-	-	-	-	-	-	-	-
Other transfers to public corporation	81,787	-	(11,251)	70,536	173,377	(102,841)	245.8%	-	-
<b>Private enterprises</b>	-	-	-	-	<b>10,222</b>	<b>(10,222)</b>	-	-	-
Other transfers to private enterprises	-	-	-	-	10,222	(10,222)	-	-	-
Non-profit institutions	-	-	-	-	14,719	(14,719)	-	-	-
<b>Households</b>	-	-	<b>20</b>	<b>20</b>	<b>20</b>	-	<b>100.0%</b>	-	-
Social benefits	-	-	20	20	20	-	100.0%	-	-
Other transfers to Households	-	-	-	-	-	-	-	-	-
<b>Payment for capital assets</b>	-	-	-	-	-	-	-	-	-
Buildings and other fixed structures	-	-	-	-	-	-	-	-	-
<b>Machinery and equipment</b>	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-
Other machinery and equipment	-	-	-	-	-	-	-	-	-
Biological assets	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	-	-	-	-	-	-	-	-
Land and subsoil assets	-	-	-	-	-	-	-	-	-
<b>Payment for financial assets</b>	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>313,975</b>	-	<b>(19,369)</b>	<b>294,606</b>	<b>293,470</b>	<b>1,136</b>	<b>99.6%</b>	-	-

# Notes to the Appropriation Statement

for the year ended 31 March 2015

## 1. Detail of transfers and subsidies as per Appropriation Act (after virement):

Detail of these transactions can be viewed in the note Transfers and subsidies, disclosure notes and Annexure I (B, C, E, D, F and G) to the Annual Financial Statements.

## 2. Detail of specifically and exclusively appropriated amounts voted (after virement):

Detail of these transactions can be viewed in note I (Annual Appropriation) to the Annual Financial Statements.

## 3. Detail on payments for financial assets.

There were no transactions on payments for financial assets.

## 4. Explanations of material variances from amounts voted (after virement):

4.1 Per Programme:	Final appropriation	Actual expenditure	Variance R'000	Variance as a % of final appropriation
	R'000	R'000	R'000	%
<b>Administration</b>				
Transfers and subsidies	12,372	10,222	2,150	17.4%
The deviation is due to the fact that payments of transfers in the programme are dependent on requests for assistance for science and technology activities. The requests received could not absorb the whole budget.				
<b>Technology Innovation</b>				
Compensation of employees	37,907	35,571	2,336	6.2%
Goods and services	16,606	16,184	422	2.5%
The deviation is due to the vacant positions which resulted in reduction of administration costs. Technology Innovation Agency (TIA) requested the Department to discount R47 million from their parliamentary grant payment because they were anticipating surpluses at the end of the year.				
<b>International Cooperation and Resources</b>				
Compensation of employees	40,418	36,762	3,656	9%

# Notes to the Appropriation Statement

for the year ended 31 March 2015 (continued)

The deviation is due to the vacant positions. The office of the Science and Technology Representative started to operate in December 2014.

4.2 Per economic classification	Final appropriation	Actual expenditure	Variance	Variance as a % of final appropriation
	R'000	R'000	R'000	%
<b>Current payments</b>				
Compensation of employees	284,872	276,001	8,871	3.1%
Goods and services	174,157	169,850	4,307	2.5%
Interest and rent on land	-	-	-	-
Unauthorised expenditure approved	-	-	-	-
Transfers and subsidies				
Departmental agencies and accounts	4,509,994	4,011,036	498,958	11%
Higher education institutions	148,739	228,033	(79,294)	-53%
Foreign governments and international organisations	-	-	-	-
Public corporations and private enterprises	1,250,479	1,573,067	(322,588)	-26%
Non-profit institutions	101,227	120,289	(19,062)	-19%
Households	4,055	4,448	(393)	-10%
<b>Payments for capital assets</b>				
Machinery and equipment	6,275	6,230	45	1%
Intangible assets	-	-	-	-
<b>Payments for financial assets</b>	92	92	-	-

The vacant positions resulted in the reduction of administrative costs and delays in finalising contracts and slow on implementing agencies.

# Statement of Financial Performance

for the year ended 31 March 2015

PERFORMANCE	Note	2014/15 R'000	2013/14 R'000
<b>REVENUE</b>			
Annual appropriation	1	6,479,890	6,198,155
Departmental revenue	2	1,602	1,658
Aid assistance	3	156,814	109,335
<b>TOTAL REVENUE</b>		<b>6,638,306</b>	<b>6,309,148</b>
<b>EXPENDITURE</b>			
<b>Current expenditure</b>			
Compensation of employees	4	276,001	241,621
Goods and services	5	169,848	160,974
Interest and rent on land	6	-	-
Aid assistance	3	3,615	8,263
<b>Total current expenditure</b>		<b>449,464</b>	<b>410,858</b>
<b>Transfers and subsidies</b>			
Transfers and subsidies	8	5,936,872	5,703,875
Aid assistance	3	141,524	98,966
<b>Total transfers and subsidies</b>		<b>6,078,396</b>	<b>5,802,841</b>
<b>Expenditure for capital assets</b>			
Tangible capital assets	9	6,231	8,211
Intangible assets	9	-	54,863
<b>Total expenditure for capital assets</b>		<b>6,231</b>	<b>63,074</b>
Unauthorised expenditure approved without funding	10	-	-
<b>Payment for financial assets</b>	7	92	-
<b>TOTAL EXPENDITURE</b>		<b>6,534,183</b>	<b>6,276,773</b>
<b>SURPLUS FOR THE YEAR</b>		<b>104,123</b>	<b>32,375</b>
<b>Reconciliation of net surplus for the year</b>			
Voted funds		90,846	28,666
Departmental revenue	15	1,602	1,658
Aid assistance	3	11,675	2,051
<b>SURPLUS FOR THE YEAR</b>		<b>104,123</b>	<b>32,375</b>

# Statement of Financial Posotion

for the year ended 31 March 2015

POSITION	Note	2014/15 R'000	2013/14 R'000
<b>ASSETS</b>			
<b>Current assets</b>		<b>102,189</b>	<b>31,520</b>
Cash and cash equivalents	10	100,939	30,027
Prepayments and advances	11	571	283
Receivables	12	679	1,210
<b>Non-current assets</b>		<b>583</b>	<b>-</b>
Receivables	12	583	-
<b>TOTAL ASSETS</b>		<b>102,772</b>	<b>31,520</b>
<b>LIABILITIES</b>			
<b>Current liabilities</b>		<b>102,654</b>	<b>31,455</b>
Voted funds to be surrendered to the Revenue Fund	14	90,846	28,666
Departmental revenue to be surrendered to the Revenue Fund	15	94	720
Payables	16	39	18
Aid assistance repayable	3	11,675	2,051
<b>TOTAL LIABILITIES</b>		<b>102,654</b>	<b>31,455</b>
<b>NET ASSETS</b>		<b>118</b>	<b>65</b>
<b>Represented by:</b>			
Recoverable revenue		118	65
<b>TOTAL</b>		<b>118</b>	<b>65</b>



# Statement of Changes in net Assets

for the year ended 31 March 2015

NET ASSETS	Note	2014/15	2013/14
		R'000	R'000
<b>Recoverable revenue</b>			
Opening balance		65	141
Transfers:		53	(76)
Debts revised		3	2
Debts recovered (included in departmental receipts)		(31)	(78)
Debts raised		81	-
Closing balance		118	65
<b>TOTAL</b>		<b>118</b>	<b>65</b>

# Cashflow Statement

for the year ended 31 March 2015

CASH FLOW	Note	2014/15	2013/14
		R'000	R'000
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Receipts		<b>6,638,306</b>	<b>6,309,148</b>
Annual appropriated funds received	1.1	6,479,890	6,198,155
Departmental revenue received	2	1,599	1,650
Interest received	2.2	3	8
Aid assistance received	3	156,814	109,335
Net (increase) in working capital		(319)	(792)
Surrendered to Revenue Fund		(30,894)	(27,244)
Surrendered to RDP Fund/Donor		(2,051)	(4,885)
Current payments		(449,464)	(410,858)
Interest paid		-	-
Payments for financial assets		(92)	-
Transfers and subsidies paid		(6,078,396)	(5,802,841)
<b>Net cash flow available from operating activities</b>	<b>17</b>	<b>77,090</b>	<b>62,528</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Payments for capital assets	9	(6,231)	(63,074)
Proceeds from sale of capital assets	2.3	-	-
<b>Net cash flows from investing activities</b>		<b>(6,231)</b>	<b>(63,074)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Increase/(decrease) in net assets		53	(76)
<b>Net cash flows from financing activities</b>		<b>53</b>	<b>(76)</b>
Net increase/(decrease) in cash and cash equivalents		70,912	(622)
Cash and cash equivalents at the beginning of the period		30,027	30,649
<b>Cash and cash equivalents at end of period</b>	<b>18</b>	<b>100,939</b>	<b>30,027</b>

# Accounting Policies

for the year ended 31 March 2015

The Financial Statements have been prepared in accordance with the following policies, which have been applied consistently in all material aspects, unless otherwise indicated.

The historical cost convention has been used, except where otherwise indicated. Management has used assessments and estimates in preparing the annual financial statements.

Where appropriate and meaningful, additional information has been disclosed to enhance the usefulness of the Financial Statements and to comply with the statutory requirements of the Public Finance Management Act, Act 1 of 1999 (as amended by Act 29 of 1999), and the Treasury Regulations issued in terms of the Act and the Division of Revenue Act.

## 1. Basis of preparation

The Financial Statements have been prepared in accordance with the Modified Cash Standard.

## 2. Going concern

The financial statements have been prepared on a going concern basis.

## 3. Presentation currency

All amounts have been presented in South African Rand (R), which is also the functional currency of the Department.

## 4. Rounding

Unless otherwise stated all financial figures have been rounded to the nearest one thousand Rand (R'000).

## 5. Foreign currency translation

Cash flows arising from foreign currency transactions are translated into South African Rands using the exchange rates prevailing at the date of payment.

## 6. Current year comparison with budget

A comparison between the approved, final budget and actual amounts for each programme and economic classification is included in the appropriation statement.

## 7. Revenue

### 7.1 Appropriated funds

Appropriated funds comprises of departmental allocations as well as direct charges against revenue fund (i.e. statutory

appropriation). Appropriated funds are recognised in the statement of financial performance on the date the appropriation becomes effective. Adjustments to the appropriated funds made in terms of the adjustments budget process are recognised in the statement of financial performance on the date the adjustments become effective.

The net amount of any appropriated funds due to or from the National Revenue Fund at the reporting date is recognised as payable or receivable in the Statement of Financial Position.

## 7.2 Departmental revenue

The departmental revenue is recognised in the Statement of Financial Performance when received and is subsequently paid into the National Revenue Fund, unless otherwise stated.

Any amount owing to the National Revenue Fund at the reporting date is recognised as payable in the Statement of Financial Position.

## 7.3 Accrued departmental revenue

Accruals in respect of departmental revenue (excluding tax revenue) are recorded in the notes to the financial statements when

- it is probable that the economic benefits or service potential associated with the transaction will flow to the Department; and
- The amount of revenue can be measured reliably.
- The accrued revenue (and related interest and penalties) is measured at amounts receivable from collecting agents.

## 8. Expenditure

### 8.1 Compensation of employees

#### 8.1.1 Salaries and wages

Salaries and wages are recognised in the Statement of Financial Performance on the date of payment.

#### 8.1.2 Social contributions

Social contributions made by the Department in respect of current employees are recognised in the Statement of Financial Performance on the date of payment. Social contributions made by the Department in respect of ex-

# Accounting Policies

for the year ended 31 March 2015 (continued)

employees are classified as transfers to households in the Statement of Financial Performance on the date of payment.

## 8.2. Other expenditure

Other expenditure such as goods and services, transfers and subsidies, and payments for capital assets are recognised in the Statement of Financial Performance on the date of payment. The expense is classified as a capital expense if the total consideration paid is more than the capitalisation threshold.

## 8.3 Accrued expenditure payable

Accrued expenditure payable is recorded in the notes to the financial statements when the goods are received or, in the case of services, when they are rendered to the Department. Accrued expenditure payable is measured at cost.

## 8.4 Leases

### 8.4.1 Operating leases

Operating lease payments made during the reporting period are recognised as current expenditure in the Statement of Financial Performance on the date of payment. The operating lease commitments are recorded in the notes to the financial statements.

### 8.4.2 Finance leases

Finance lease payments made during the reporting period are recognised as capital expenditure in the Statement of Financial Performance on the date of payment. The finance lease commitments are recorded in the notes to the financial statements and are not apportioned between the capital and interest portions.

Finance lease acquired at the end of the lease term are recorded and measured at the lower of:

- Cost, being the fair value of the asset, or
- The sum of the minimum lease payments made, including any payments made to acquire ownership at the end of the lease term, excluding interest.

## 9. Aid Assistance

### 9.1 Aid assistance received

Aid assistance received in cash is recognised in the Statement of Financial Performance when received. In-kind aid assistance is recorded in the notes to the financial statements on the date of receipt and is measured at fair value.

Aid assistance not spent for the intended purpose and any unutilised funds from aid assistance that are required to be refunded to the donor are recognised as a payable in the Statement of Financial position.

### 9.2 Aid assistance paid

Aid assistance paid is recognised in the Statement of Financial Performance on the date of payment. Aid assistance payments made prior to the receipt of funds are recognised as a receivable in the Statement of Financial Position.

## 10 Cash and cash equivalents

Cash and cash equivalents are stated at cost in the Statement of Financial Position.

Bank overdrafts are shown separately on the face of the Statement of Financial Position.

For the purposes of the Cash Flow Statement, cash and cash equivalents comprise cash on hand, deposits held, other short-term highly liquid investments and bank overdrafts.

## 11. Prepayments and advances

Prepayments and advances are recognised in the Statement of Financial Position when the Department receives or disburses the cash.

Prepayments and advances are initially and subsequently measured at cost. Prepayments and advances are expensed when expenditure is incurred and are recognised in the Statement of Financial Performance when the expenditure is effected on the system.

## **12. Loans and receivables**

Loans and receivables are recognised in the Statement of Financial Position at cost plus accrued interest, where interest is charged, less amounts already settled are recognised in the Statement of Financial Position when the cash is paid to the beneficiary. Loans that are outstanding at year-end are carried in the Statement of Financial Position at cost plus accrued interest.

## **13. Investments**

Investments are recognised in the Statement of Financial position at cost.

## **14. Impairment of financial assets**

Where there is an indication of impairment of a financial asset, an estimation of the reduction is the recorded carrying value, to reflect the best estimate of the amount of the future economic benefits expected to be recovered from that asset is recorded in the notes to the financial statements.

## **15. Payables**

Loans and payables are recognised in the Statement of Financial Position at cost.

## **16. Capital Assets**

### **16.1 Immovable capital assets**

Immovable capital assets are initially recorded in the notes to the financial statements at cost. Immovable capital assets acquired through a non - exchange transaction is measured at fair value as at the date of acquisition.

Where the cost of immovable capital asset cannot be determined accurately, the immovable assets are measured at RI unless the fair value of the asset has been reliably estimated, in which case a fair value is used.

Immovable capital assets are subsequently carried at cost and are not subject to depreciation or impairment.

Subsequent expenditure that is of a capital nature is added to the cost of the asset at the end of the capital project unless the immovable asset is recorded by another

department, in which case the completed project costs are transferred to the department.

### **16.2 Movable capital assets**

Movable capital assets are initially recorded in the notes to the financial statements at cost. Movable capital assets acquired through a non-exchange transaction is measured at fair value as at the date of acquisition.

Where the cost of movable capital assets cannot be determined accurately, the movable capital assets are measured at fair value and, where fair value cannot be determined, the movable assets are measured at RI.

All assets acquired prior to 1 April 2002 (or late as approved by the Office of the Accountant-General) are measured at RI.

Movable capital assets are subsequently carried at cost and are not subject to depreciation or impairment.

Subsequent expenditure that is of capital nature is added to the cost of the asset at the end of the capital project unless the movable asset is recorded by another department, in which case the completed project costs are transferred to the department.

### **16.3 Intangible assets**

Intangible assets are initially recorded in the notes to the financial statements at cost. Intangible assets acquired through a non-exchange transaction are measured at fair value as at the date of acquisition.

Internally generated intangible assets are recorded in the notes to the financial statements when the Department commences the development phase of the project.

Where the cost of intangible assets cannot be determined accurately, the intangible capital assets are measured at fair value and, where fair value cannot be determined, the intangible assets are measured at RI.

All assets acquired prior to 1 April 2002 (or a later date as approved by the OAG) are recorded at RI. Intangible assets are subsequently carried at cost and are not subject to depreciation or impairment.

# Accounting Policies

for the year ended 31 March 2015 (continued)

Subsequent expenditure that is of a capital nature is added to the cost of the asset at the end of the capital project unless the intangible asset is recorded by another department/entity, in which case the completed project costs are transferred to that department.

## 17. Provisions and contingents

### 17.1 Provisions

Provisions are recorded in the notes to the financial statements when there is a present legal or constructive obligation to forfeit economic benefits as a result of events in the past and 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 of the obligation can be made. The provision is measured as the best estimate of the funds required to settle the present obligation at the reporting date.

### 17.2 Contingent liabilities

Contingent liabilities are recorded in the notes to the financial statements when there is a possible obligation that arises from past events, whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not within the control of the Department, or when there is a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation or the amount of the obligation, cannot be measured reliably

### 17.3 Contingent assets

Contingent assets are recorded in the notes to the financial statements when a possible asset arises from past events, and whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events not within the control of the department.

### 17.4 Commitments

Commitments are recorded at cost in the notes to the financial statements when there is a contractual arrangement or an approval by management in a manner that raises a valid expectation that the Department will discharge its responsibilities, thereby incurring future expenditure that will result in the outflow of cash.

## 18. Unauthorised expenditure

Unauthorised expenditure is recognised in the Statement of Financial Position until such time as the expenditure is either:

- approved by Parliament or the Provincial Legislature with funding and the related funds are received; or
- approved by Parliament or the Provincial Legislature without funding and is written off against the appropriation in the statement of financial performance; or
- transferred to receivables for recovery.

Unauthorised expenditure is measured at the amount of the confirmed unauthorised expenditure.

## 19. Fruitless and wasteful expenditure

Fruitless and wasteful expenditure is recorded in the notes to the financial statements when confirmed. The amount recorded is equal to the total value of the fruitless and or wasteful expenditure incurred.

Fruitless and wasteful expenditure is removed from the notes to the financial statements when it is resolved or transferred to receivables for recovery.

Fruitless and wasteful expenditure receivables are measured at the amount that is expected to be recoverable and are de-recognised when settled or subsequently written-off as irrecoverable.

## 20. Irregular expenditure

Irregular expenditure is recorded in the notes to the financial statements when confirmed. The amount recorded is equal to the value of the irregular expenditure incurred unless it is impracticable to determine, in which case reasons therefore are provided in the note.

Irregular expenditure is removed from the note when it is either condoned by the relevant authority, transferred to receivables for recovery, or not condoned and not recoverable.

Irregular expenditure receivables are measured at the amount that is expected to be recoverable and are de-recognised when settled or subsequently written-off as irrecoverable.

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## **21. Changes in accounting estimates**

A change in accounting estimate is an adjustment of the carrying amount of an asset or a liability, or the amount of the periodic consumption of an asset, that results from the assessment of the present status of, and expected future benefits and obligations associated with, assets and liabilities. Changes in accounting estimates result from new information or new developments and, accordingly, are not corrections of errors.

## **22. Prior period errors**

Prior period errors are omissions from, and misstatements in the Department's financial statements for one or more prior periods arising from a failure to use, or misuse of, reliable information that -

- was available when financial statements for those periods were authorised for issue; and
- could reasonably be expected to have been obtained and taken into account in the preparation and presentation of those financial statements.

## **23. Non-adjusting events after the reporting date**

Non-adjusting events after the reporting date are those events that are indicative of conditions that arose after the reporting date.

## **24. Agent-Principal arrangements**

A department is acting as a principal when it has the power to exercise beneficial control over an activity. A department has beneficial control when it has both the power to direct the activity, and the ability to benefit from that power. Agent-principal arrangements exclude transfer payments.

# Notes to the Annual Financial Statements

for the year ended 31 March 2015

## I. Annual appropriation

### I.1 Annual appropriation

Included are funds appropriated in terms of the Appropriation Act (and the Adjustments Appropriation Act) for National Departments (Voted funds):

	Final appropriation	2014/15 Actual funds received	Funds not requested/ not received	Appropriation received 2013/14
	R'000	R'000	R'000	R'000
Administration	283,790	284,070	(280)	258,926
Technology Innovation	1,049,450	1,049,150	300	1,671,041
International Cooperation and Resources	111,519	111,519	-	141,430
Research Development and Support	3,492,889	3,492,889	-	2,473,172
Socio-Economic Innovation Partnerships	1,542,242	1,542,262	(20)	1,653,586
<b>Total</b>	<b>6,479,890</b>	<b>6,479,890</b>	<b>-</b>	<b>6,198,155</b>

## 2. Departmental revenue

	Note	2014/15	2013/14
		R'000	R'000
Sales of goods and services other than capital assets	2.1	50	47
Interest, dividends and rent on land	2.2	3	8
Sale of capital assets	2.3	-	-
Transactions in financial assets and liabilities	2.4	1,549	1,603
<b>Departmental revenue collected</b>		<b>1,602</b>	<b>1,658</b>

### 2.1 Sales of goods and services other than capital assets

	Note	2014/15	2013/14
	2	R'000	R'000
Other sales		50	47
<b>Total</b>		<b>50</b>	<b>47</b>

### 2.2 Interest, dividends and rent on land

	Note	2014/15	2013/14
	2	R'000	R'000
Interest		3	8
<b>Total</b>		<b>3</b>	<b>8</b>

### 2.3 Sale of capital assets

	Note	2014/15	2013/14
	2	R'000	R'000
Machinery and equipment		-	-
<b>Total</b>		<b>-</b>	<b>-</b>



## 2.4 Transactions in financial assets and liabilities

	Note	2014/15	2013/14
	<u>2</u>	R'000	R'000
Stale cheque written back		-	6
Other receipts, including recoverable revenue		1,549	1,597
<b>Total</b>		<b>1,549</b>	<b>1,603</b>

## 3. Aid assistance

### 3.1 Aid assistance received in cash from RDP

	Note	2014/15	2013/14
	<u>3</u>	R'000	R'000
<b>Foreign</b>			
Opening balance		2,051	4,885
Prior period error		-	-
As restated		2,051	4,885
Transferred from Statement of Financial Performance		11,675	2,051
Transferred to/from retained funds		-	-
Paid during the year		(2,051)	(4,885)
<b>Closing balance</b>		<b>11,675</b>	<b>2,051</b>

The note for Aid assistance, note 3, has been changed in terms of Modified Cash Standards and Accounting Manual for Departments as instructed by National Treasury.

### 3.2 Analysis of balance by source

	Note	2014/15	2013/14
	<u>3</u>	R'000	R'000
<b>Aid assistance from RDP</b>		11,675	2,051
RDP Fund		11,675	2,051
<b>Closing balance</b>		<b>11,675</b>	<b>2,051</b>

### 3.3 Analysis of balance

	Note	2014/15	2013/14
	<u>3</u>	R'000	R'000
		11,675	2,051
Aid assistance repayable		11,675	2,051
<b>Closing balance</b>		<b>11,675</b>	<b>2,051</b>

# Notes to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## 4. Compensation of employees

### 4.1 Salaries and wages

	Note	2014/15	2013/14
	<u>4</u>	R'000	R'000
Basic salary		184,744	163,256
Performance award		4,171	4,230
Service-based		(10)	53
Compensative/circumstantial		2,598	2,318
Periodic payments		87	33
Other non-pensionable allowances		56,223	46,731
<b>Total</b>		<b>247,813</b>	<b>216,621</b>

### 4.2 Social contributions

	Note	2014/15	2013/14
	<u>4</u>	R'000	R'000
<b>Employer contributions</b>			
Pension		22,857	19,777
Medical		5,301	5,185
Bargaining council		30	38
<b>Total</b>		<b>28,188</b>	<b>25,000</b>
<b>Total compensation of employees</b>		<b>276,001</b>	<b>241,621</b>
Average number of employees		453	431

## 5. Goods and services

	Note	2014/15	2013/14
		R'000	R'000
Administrative fees		3,825	3,223
Advertising		23,225	16,466
Minor assets	<u>5.1</u>	631	292
Bursaries (employees)		1,256	1,201
Catering		3,218	2,752
Communication		5,062	5,364
Computer services	<u>5.2</u>	12,729	7,409
Consultants: Business and advisory services		5,603	7,272
Legal services		2,801	2,708
Contractors		6,770	4,446
Agency and support/outsourced services		8,054	13,540
Entertainment		737	706
Audit cost – external	<u>5.3</u>	4,761	4,548
Fleet services		977	542
Inventory	<u>5.4</u>	1,357	318

	Note	2014/15	2013/14
		R'000	R'000
Consumables	5.5	5,188	7,151
Operating leases		5,488	5,178
Property payments	5.6	8,367	5,816
Rental and Hiring		1,245	1,002
Travel and subsistence	5.7	41,565	40,458
Venues and facilities		12,143	14,634
Training and staff development		3,411	6,075
Other operating expenditure	5.8	11,435	9,873
<b>Total</b>		<b>169,848</b>	<b>160,974</b>

#### 5.1 Minor assets

	Note	2014/15	2013/14
	5	R'000	R'000
<b>Tangible assets</b>		<b>631</b>	<b>292</b>
Machinery and equipment		631	289
<b>Intangible assets</b>		<b>-</b>	<b>3</b>
<b>Total</b>		<b>631</b>	<b>292</b>

#### 5.2 Computer services

	Note	2014/15	2013/14
	5	R'000	R'000
SITA computer services		4,927	3,639
External computer service providers		7,802	3,770
<b>Total</b>		<b>12,729</b>	<b>7,409</b>

#### 5.3 Audit cost – External

	Note	2014/15	2013/14
	5	R'000	R'000
Regularity audits		4,761	4,548
<b>Total</b>		<b>4,761</b>	<b>4,548</b>

#### 5.4 Inventory

	Note	2014/15	2013/14
	5	R'000	R'000
Clothing, material and accessories		1,028	286
Materials and supplies		319	32
Fuel, oil and gas		10	
<b>Total</b>		<b>1,357</b>	<b>318</b>

# Notes to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## 5.5 Consumables

	Note	2014/15	2013/14
	5	R'000	R'000
Consumables supplies		1,959	3,540
Uniform and clothing		22	96
Household supplies		211	470
Building material and supplies		25	568
IT consumables		79	123
Other consumables		1,622	2,283
Stationery, printing and office supplies		3,229	3,611
<b>Total</b>		<b>5,188</b>	<b>7,151</b>

## 5.6 Property payments

	Note	2014/15	2013/14
	5	R'000	R'000
Municipal services		5,543	2,733
Property maintenance and repairs		-	-
Other		2,824	3,083
<b>Total</b>		<b>8,367</b>	<b>5,816</b>

## 5.7 Travel and subsistence

	Note	2014/15	2013/14
	5	R'000	R'000
Local		23,008	21,067
Foreign		18,557	19,391
<b>Total</b>		<b>41,565</b>	<b>40,458</b>

## 5.8 Other operating expenditure

	Note	2014/15	2013/14
	5	R'000	R'000
Professional bodies, membership and subscription fees		4,539	3,296
Resettlement costs		1,171	1,000
Other		5,725	5,577
<b>Total</b>		<b>11,435</b>	<b>9,873</b>

## 6. Interest and rent on land

	2012/14	2013/14
	R'000	R'000
Interest paid	-	-
	-	-

## 7. Payments for financial assets

	Note	2014/15	2013/14
		R'000	R'000
Other material losses written off	7.1	83	-
Debts written off	7.2	9	-
<b>Total</b>		<b>92</b>	<b>-</b>

### 7.1 Other material losses written off

	Note	2014/15	2013/14
	7	R'000	R'000
<b>Nature of losses</b>			
Losses in respect of damaged vehicle written off		83	-
		-	-
<b>Total</b>		<b>83</b>	<b>-</b>

### 7.2 Debts written off

	Note	2014/15	2013/14
	7	R'000	R'000
<b>Nature of losses</b>			
Irrecoverable debts written off		9	-
		-	-
<b>Total</b>		<b>9</b>	<b>-</b>

## 8. Transfers and subsidies

		2014/15	2013/14
	Note	R'000	R'000
Departmental agencies and accounts	Annex IB	4,011,036	3,762,927
Higher education institutions	Annex IC	228,033	156,163
Foreign governments and international organisations	Annex IE	-	452
Public corporations and private enterprises	Annex ID	1,573,066	1,697,974
Non-profit institutions	Annex IF	120,289	84,701
Households	Annex IG	4,448	1658
<b>Total</b>		<b>5,936,872</b>	<b>5,703,875</b>

## 9. Expenditure for capital assets

	Note	2014/15	2013/14
		R'000	R'000
<b>Tangible assets</b>		<b>6,231</b>	<b>8,211</b>
Machinery and equipment	9.1	6,231	8,211
<b>Intangible assets</b>		<b>-</b>	<b>54,863</b>
Software	9.1	-	54,863
Patents, licences, copyright, brand names, trademarks		-	-
<b>Total</b>		<b>6,231</b>	<b>63,074</b>

# Notes to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## 9.1 Analysis of funds utilised to acquire capital assets – 2014/15

	Voted funds	Aid assistance	Total
	R'000	R'000	R'000
<b>Tangible assets</b>	<b>6,231</b>	<b>-</b>	<b>6,231</b>
Machinery and equipment	6,231	-	6,231
<b>Intangible assets</b>			
Software	-	-	-
Patents, licences, copyright, brand names, trademarks	-	-	-
<b>Total</b>	<b>6,231</b>	<b>-</b>	<b>6,231</b>

## 9.2 Analysis of funds utilised to acquire capital assets – 2013/14

	Voted funds	Aid assistance	Total
	R'000	R'000	R'000
Machinery and equipment	8,156	55	8,211
<b>Total assets acquired</b>	<b>8,156</b>	<b>55</b>	<b>8,211</b>
<b>Intangible assets</b>	<b>54,863</b>	<b>-</b>	<b>54,863</b>
Software	54,863	-	54,863
Patents, licences, copyright, brand names, trademarks	-	-	-
<b>Total</b>	<b>63,019</b>	<b>55</b>	<b>63,074</b>

## 9.3 Finance lease expenditure included in expenditure for capital assets

	Note	2014/15	2013/14
		R'000	R'000
<b>Tangible assets</b>			
Machinery and equipment		-	740
<b>Total</b>		<b>-</b>	<b>740</b>

## 10. Cash and cash equivalents

	Note	2014/15	2013/14
		R'000	R'000
Consolidated Paymaster-General Account		100,906	29,994
Cash on hand		33	33
Disbursements			
<b>Total</b>		<b>100,939</b>	<b>30,027</b>

## 11. Prepayments and advances

	Note	2014/15	2013/14
		R'000	R'000
Travel and subsistence		55	107
Advances paid		516	176
<b>Total</b>		<b>571</b>	<b>283</b>

### 11.1 Advances paid

	Note	2014/15	2013/14
		R'000	R'000
National departments	Annex 8A	516	176
<b>Total</b>		<b>516</b>	<b>176</b>

## 12. Receivables

		2014/15				2013/14
		R'000	R'000	R'000	R'000	R'000
	Note	Less than one year	One to three years	Older than three years	Total	Total
Claims recoverable	12.1	415	108	-	523	317
Recoverable expenditure	12.2	102	10	415	527	821
Staff debt	12.3	162	50	-	212	72
<b>Total</b>		<b>679</b>	<b>168</b>	<b>415</b>	<b>1,262</b>	<b>1,210</b>

### 12.1 Claims recoverable

	Note	2014/15	2013/14
	12	R'000	R'000
National departments		82	62
Households and non-profit institutions		441	255
<b>Total</b>		<b>523</b>	<b>317</b>

### 12.2 Recoverable expenditure (disallowance accounts)

	Note	2014/15	2013/14
	12	R'000	R'000
Income tax debt		7	14
Persal salaries and stoppages		-	6
Damages to vehicles		518	469
Value-Added Tax (VAT) in respect of the Donor Fund Project		2	332
<b>Total</b>		<b>527</b>	<b>821</b>

# Notes to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## 12.3 Staff debt

	Note	2014/15	2013/14
	12	R'000	R'000
Bursary debt		70	20
Salary overpayment		94	7
Previous employees - Resettlement debt		48	45
Other		-	-
<b>Total</b>		<b>212</b>	<b>72</b>

## 13. Investments

The Department acquired shares for 35% shareholding of the Biological and Vaccines Institute of South Africa valued at R52 772 million from the Department of Health at no cost. The value of the shares could not be disclosed in the Statement of Financial Position because they were transferred at no cost.

## 14. Voted funds to be surrendered to the Revenue Fund

	Note	2014/15	2013/14
		R'000	R'000
Opening balance		28,666	26,295
Prior period error		-	-
As restated		28,666	26,295
Transfer from statement of financial performance		90,846	28,666
Paid during the year		(28,666)	(26,295)
<b>Closing balance</b>		<b>90,846</b>	<b>28,666</b>

## 15. Departmental revenue to be surrendered to the Revenue Fund

	Note	2014/15	2013/14
		R'000	R'000
Opening balance		720	11
Prior period error		-	-
As restated		720	11
Transfer from Statement of Financial Performance		1,602	1,658
Paid during the year		(2,228)	(949)
<b>Closing balance</b>		<b>94</b>	<b>720</b>

## 16. Payables – current

	Note	2014/15	2013/14
		R'000	R'000
Clearing accounts	15.1	39	18
<b>Total</b>		<b>39</b>	<b>18</b>



## 16.1 Clearing accounts

	Note	2014/15	2013/14
	15	R'000	R'000
Income tax		34	18
Pension Fund		5	-
<b>Total</b>		<b>39</b>	<b>18</b>

## 17. Net cash flow available from operating activities

	Note	2014/15	2013/14
		R'000	R'000
Net surplus as per Statement of Financial Performance		104,123	32,375
Add back non-cash/cash movements not deemed operating activities		(27,033)	30,153
(Increase)/Decrease in receivables – current		(52)	(509)
(Increase)/Decrease in prepayments and advances		(288)	(141)
Increase/(Decrease) in payables – current		21	(142)
Proceeds from sale of capital assets		-	-
Expenditure on capital assets		6,231	63,074
Surrenders to Revenue Fund	13 & 14	(30,894)	(27,244)
Surrenders to Donor Fund		(2,051)	(4,885)
Voted funds not requested/not received		-	-
<b>Net cash flow generated by operating activities</b>		<b>77,090</b>	<b>62,528</b>

## 18. Reconciliation of cash and cash equivalents for cash flow purposes

	Note	2014/15	2013/14
		R'000	R'000
Consolidated Paymaster-General Account		100,906	29,994
Cash on hand		33	33
<b>Total</b>		<b>100,939</b>	<b>30,027</b>

## 19. Contingent liabilities

	Note	2014/15	2013/14
		R'000	R'000
<b>Liable to</b>			
Claims against the Department	<a href="#">Annex 3B</a>	401	3,000
<b>Total</b>		<b>401</b>	<b>3,000</b>

# Notes to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## 20. Commitments

	Note	2014/15	2013/14
		R'000	R'000
<b>Current expenditure</b>			
Approved and contracted		23,517	20,068
Approved but not yet contacted		699	218
		<b>24,216</b>	<b>20,286</b>
<b>Capital expenditure</b>			
Approved and contracted		2,420	562
Approved but not yet contracted		-	101
		<b>2,420</b>	<b>663</b>
<b>Total commitments</b>		<b>26,636</b>	<b>20,949</b>

The commitments for the 2013/14 were decreased by R 284 thousand that was included in the accruals for the same year.

## 21. Accruals and payables not recognised

		2014/15	2013/14
		R'000	R'000
<b>Listed by economic classification</b>			
	30 days	30+ days	Total
Goods and services	7,949	483	8,432
Capital assets	18	284	302
<b>Total</b>	<b>7,967</b>	<b>767</b>	<b>8,734</b>

	Note	2014/15	2013/14
		R'000	R'000
<b>Listed by Programme</b>			
Programme 1: Administration		7,334	8,275
Programme 2: Technology Innovation		450	930
Programme 3: International Cooperation and Resources		26	1,660
Programme 4: Research Development and Support		833	338
Programme 5: Socio-Economic Innovation Partnerships		91	512
<b>Total</b>		<b>8,734</b>	<b>11,715</b>

The accruals for the 2013/14 were increased by R284 thousand that was decreased in the commitments for the same year.

	Note	2014/15	2013/14
		R'000	R'000
Confirmed balances with other departments	Annex 5	-	1,571
<b>Total</b>		<b>-</b>	<b>1,571</b>

## 22. Employee benefits

	Note	2014/15	2013/14
		R'000	R'000
Leave entitlement*		8,633	7,373
Service bonus (thirteenth cheque)		6,539	5,687
Performance awards		4,273	3,643
Capped leave commitments		2,832	2,479
<b>Total</b>		<b>22,277</b>	<b>19,182</b>

\*A negative amount of R401,985.54 was offset against leave entitlement. The amount was as a result of a pro-rata calculation of leave taken by employees as at the 31 March 2015. In terms of the pro-rata calculation, employees are entitled to 5.49 days leave from 1 January to 31 March. If an employee takes more leave this result in a negative leave taken for the three-month period. This situation will be automatically rectified during the leave period.

## 23. Lease commitments

### 23.1 Operating leases expenditure

2014/15	Land	Buildings and other fixed structures	Machinery and equipment	Total
	R'000	R'000	R'000	R'000
Not later than 1 year	-	823	1,347	2,170
Later than 1 year and not later than 5 years	-	-	561	561
<b>Total lease commitments</b>	<b>-</b>	<b>823</b>	<b>1,908</b>	<b>2,731</b>

2013/14	Land	Buildings and other fixed structures	Machinery and equipment	Total
	R'000	R'000	R'000	R'000
Not later than 1 year	-	1,170	4,025	5,195
Later than 1 year and not later than 5 years	-	823	2,753	3,576
<b>Total lease commitments</b>	<b>-</b>	<b>1,993</b>	<b>6,778</b>	<b>8,771</b>

## 24. Accrued departmental revenue

	Note	2014/15	2013/14
		R'000	R'000
Transactions in financial assets and liabilities		-	240
<b>Total</b>		<b>-</b>	<b>240</b>

### 24.1 Analysis for accrued departmental revenue

	Note	2014/15	2013/14
		R'000	R'000
Opening balance		240	638
Less: Amounts received		240	638
Add: Amounts recognised		-	240
<b>Total</b>		<b>-</b>	<b>240</b>

# Notes to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## 25. Irregular expenditure

### 25.1 Reconciliation of irregular expenditure

	Note	2014/15	2013/14
		R'000	R'000
Opening balance		32,783	569
Add: Irregular expenditure – relating to prior year		=	15,304
Add: Irregular expenditure – relating to current year		1,922	16,910
Less: Prior year amount condoned		(851)	-
Less: Current year amounts condoned		-	-
Less: Amounts recoverable (not condoned)		-	-
<b>Irregular expenditure awaiting condonation</b>		<b>33,854</b>	<b>32,783</b>

#### Analysis of awaiting condonation per age classification

Current year	1,922	16,910
Prior years	31,932	15,873
<b>Total</b>	<b>33,854</b>	<b>32,783</b>

### 25.2 Details of irregular expenditure – current year

Incident	Disciplinary steps taken/ criminal proceedings	2014/15 R'000
Non-compliance with SCM processes	Investigating	167
Non-compliance with SCM processes	Investigating	206
Non-compliance with SCM processes	Investigating	291
Non-compliance with SCM processes	Investigating	125
Non-compliance with SCM processes	Investigating	151
Non-compliance with Preferential Procurement Policy Framework Act	Investigating	233
Non-compliance with treasury prescripts	Investigating	38
Goods procured without obtaining three quotations	Investigating	205
Non-compliance with Preferential Procurement Policy Framework Act	Investigating	434
Non-compliance with SCM processes	Investigating	72
<b>Total</b>		<b>1,922</b>

### 25.3 Details of irregular expenditure – Condoned

Incident	Condoning Authority	2014/15 R'000
Goods procured without obtaining three quotations	Accounting Officer	153
Goods procured without obtaining three quotations	Accounting Officer	335
Goods procured without obtaining three quotations	Accounting Officer	98
Goods procured without obtaining three quotations	Accounting Officer	265
<b>Total</b>		<b>851</b>

## 26. Fruitless and wasteful expenditure

### Reconciliation of fruitless and wasteful expenditure

	Note	2014/15	2013/14
		R'000	R'000
Opening balance		-	-
Fruitless and wasteful expenditure – relating to prior year		-	-
Fruitless and wasteful expenditure – relating to current year		-	-
Less: Amounts resolved		-	-
<b>Fruitless and wasteful expenditure awaiting condonement</b>		<b>-</b>	<b>-</b>

### Analysis of awaiting condonation per economic classification

		2014/15	2013/14
		R'000	R'000
Current		-	-
<b>Total</b>		<b>-</b>	<b>-</b>

## 27. Related party transactions

### 27.1 Related party transactions

Payments made		2014/15	2013/14
		R'000	R'000
Goods and services		-	-
<b>Total</b>		<b>-</b>	<b>-</b>

### 27.2 Public entities under ownership control of the Department

There were no transactions that the Department incurred with its related parties. The following is the status as at 31 March 2015. The following entities are under the ownership control of the Department in terms of Chapter I of the Public Finance Management Act, 1999, and report to the Minister of Science and Technology, and as such are related parties to the Department:

#### Schedule 3A – National public entities

- Human Sciences Research Council
- National Research Foundation
- South African National Space Agency
- Technology Innovation Agency

#### Schedule 3B – National government business enterprises

- Council for Scientific and Industrial Research

The Department transactions with these entities are limited to transfer and subsidy payments. Annexures IC and IE to the Annual Financial Statement reflect payments to these public entities. Where transactions other than these occur, they occur within a normal supplier/client relationship in terms of the procurement procedures of the Department and the Public Finance Management Act, 1999.

# Notes to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## 27.3 Related party relationships with other departments

The Department has a related party relationship with the Department of Public Works. The Department of Public Works is providing office accommodation free of charge to the Department. The Memorandum of Understanding that stipulates the amount the Department of Public Works is spending on behalf of the Department of Science and Technology had not yet been concluded at the end of 31 March 2015.

## 28. Key management personnel

	No. of individuals	2014/15 R'000	2013/14 R'000
Political office bearers (provide detail below)	4	4,277	3,362
Officials:			-
Level I5 to I6	10	11,599	9,683
Level I4 (incl. CFO if at a lower level)	27	26,495	24,097
<b>Total</b>		<b>42,371</b>	<b>37,142</b>

The key management personnel do not qualify for any remuneration other than the approved remuneration structures for the different classes of key management personnel (political office bearers and officials).

## 29. Movable tangible capital assets

### MOVEMENT IN MOVABLE TANGIBLE CAPITAL ASSETS PER ASSET REGISTER FOR THE YEAR ENDED 31 MARCH 2015

	Opening balance	Curr. year adjustments to prior year balances	Additions	Disposals	Closing balance
	R'000	R'000	R'000	R'000	R'000
<b>MACHINERY AND EQUIPMENT</b>	<b>62,157</b>	<b>-</b>	<b>7,983</b>	<b>4,102</b>	<b>66,038</b>
Transport assets	4,940	-	1,549	1,501	4,988
Computer equipment	31,474	-	4,664	2,434	33,704
Furniture and office equipment	13,590	-	763	38	14,315
Other machinery and equipment	12,153	-	1,007	129	13,031
<b>TOTAL MOVABLE TANGIBLE CAPITAL ASSETS</b>	<b>62,157</b>	<b>-</b>	<b>7,983</b>	<b>4,102</b>	<b>66,038</b>

## 29.1 Additions

### ADDITIONS TO MOVABLE TANGIBLE CAPITAL ASSETS PER ASSET REGISTER FOR THE YEAR ENDED 31 MARCH 2015

	Cash	Non-cash	(Capital work in progress current costs and finance lease payments)	Received current, not paid (Paid current year, received prior year)	Total
	R'000	R'000	R'000	R'000	R'000
<b>MACHINERY AND EQUIPMENT</b>	<b>6,231</b>	<b>1,411</b>	<b>-</b>	<b>341</b>	<b>7,983</b>
Transport assets	250	1,299	-	-	1,549
Computer equipment	4,590	56	-	18	4,664
Furniture and office equipment	763	-	-	-	763
Other machinery and equipment	628	56	-	323	1,007
<b>TOTAL ADDITIONS TO MOVABLE TANGIBLE CAPITAL ASSETS</b>	<b>6,231</b>	<b>1,411</b>	<b>-</b>	<b>341</b>	<b>7,983</b>

## 29.2 Disposals

### DISPOSALS OF MOVABLE TANGIBLE CAPITAL ASSETS PER ASSET REGISTER FOR THE YEAR ENDED 31 MARCH 2015

	Sold for cash	Transfer out or destroyed or scrapped	Total disposals	Cash received actual
	R'000	R'000	R'000	R'000
<b>MACHINERY AND EQUIPMENT</b>	<b>-</b>	<b>(4,102)</b>	<b>(4,102)</b>	<b>-</b>
Transport assets	-	(1,501)	(1,501)	-
Computer equipment	-	(2,434)	(2,434)	-
Furniture and office equipment	-	(38)	(38)	-
Other machinery and equipment	-	(129)	(129)	-
<b>TOTAL DISPOSAL OF MOVABLE TANGIBLE CAPITAL ASSETS</b>	<b>-</b>	<b>(4,102)</b>	<b>(4,102)</b>	<b>-</b>

# Notes to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## 29.3 Movement for 2013/14

### MOVEMENT IN MOVABLE TANGIBLE CAPITAL ASSETS PER ASSET REGISTER FOR THE YEAR ENDED 31 MARCH 2013

	Opening balance	Curr. year adjustments to prior year balances	Additions	Disposals	Closing balance
	R'000	R'000	R'000	R'000	R'000
<b>MACHINERY AND EQUIPMENT</b>	<b>55,588</b>	<b>-</b>	<b>7,598</b>	<b>1,029</b>	<b>62,157</b>
Transport assets	3,127	-	1,813	-	4,940
Computer equipment	27,224	-	5,144	894	31,474
Furniture and office equipment	13,199	-	423	32	13,590
Other machinery and equipment	12,038	-	218	103	12,153
<b>TOTAL MOVABLE TANGIBLE CAPITAL ASSETS</b>	<b>55,588</b>	<b>-</b>	<b>7,598</b>	<b>1,029</b>	<b>62,157</b>

## 29.4 Minor assets

### Minor assets

#### MINOR ASSETS OF THE DEPARTMENT FOR THE YEAR ENDED 31 MARCH 2014

	Intangible assets	Heritage assets	Machinery and equipment	Biological assets	Total
	R'000	R'000	R'000	R'000	R'000
Opening balance	-	-	1,836	-	1,836
Prior period error	-	-	1,361	-	1,361
Additions	3	-	289	-	292
Disposals	(3)	-	(16)	-	(19)
<b>Total</b>	<b>-</b>	<b>-</b>	<b>3,470</b>	<b>-</b>	<b>3,470</b>

	Intangible assets	Heritage assets	Machinery and equipment	Biological assets	Total
Number of RI minor assets	-	-	27	-	27
Number of minor assets at cost	-	-	183	-	183
	<b>-</b>	<b>-</b>	<b>210</b>	<b>-</b>	<b>210</b>



#### 29.4.1 Prior period errors

Nature of prior error		2013/14 R'000
The landline telephone instruments were not recorded as minor assets		1,361
<b>Total</b>		<b>1,361</b>

#### 30. Intangible capital assets

##### MOVEMENT IN INTANGIBLE CAPITAL ASSETS PER ASSET REGISTER FOR THE YEAR ENDED 31 MARCH 2014

	Opening balance	Additions	Disposals	Closing balance
	R'000	R'000	R'000	R'000
Software	5,880	-	-	5,880
<b>TOTAL INTANGIBLE CAPITAL ASSETS</b>	<b>5,880</b>	<b>-</b>	<b>-</b>	<b>5,880</b>

#### 30.1 Additions

##### ADDITIONS TO INTANGIBLE CAPITAL ASSETS PER ASSET REGISTER FOR THE YEAR ENDED 31 MARCH 2015

	Cash	Non-cash	(Development work in progress current costs)	Received current, not paid (Paid current year, received prior year)	Total
	R'000	R'000	R'000	R'000	R'000
Software	-	-	-	-	-
<b>TOTAL ADDITIONS TO MOVABLE TANGIBLE CAPITAL ASSETS</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

#### 30.2 Disposals

##### DISPOSALS OF INTANGIBLE CAPITAL ASSETS PER ASSET REGISTER FOR THE YEAR ENDED 31 MARCH 2015

	Sold for cash	Transfer out or destroyed or scrapped	Total disposals	Cash received actual
	R'000	R'000	R'000	R'000
Software	-	-	-	-
<b>TOTAL DISPOSAL OF INTANGIBLE CAPITAL ASSETS</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

# Notes to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## 30.3 Intangible capital assets

### MOVEMENT IN INTANGIBLE CAPITAL ASSETS PER ASSET REGISTER FOR THE YEAR ENDED 31 MARCH 2014

	Opening balance	Prior year error balances	Additions	Disposals	Closing balance
	R'000	R'000	R'000	R'000	R'000
Software	-	5,880	54,863	(54,863)	5,880
<b>TOTAL INTANGIBLE CAPITAL ASSETS</b>	<b>-</b>	<b>5,880</b>	<b>54,863</b>	<b>(54,863)</b>	<b>5,880</b>

The intangible assets from the prior year amounting to R 5, 880 million were restated.

## 31. Prior period errors

Assets	2013/14 R'000
The comparative figures in note 29.4 and 30.3 were restated as follows:	
Machinery and equipment	1,361
Intangible assets	5,880
<b>Total</b>	<b>7,241</b>
Liabilities	
The accruals for 2013/14 were restated with an amount of R284 that was included in the commitments for the same period.	284
The commitments for 2013/14 were restated with an amount of R284 that was included in the accruals for the same period.	(284)
<b>Total</b>	<b>-</b>

# Annexures to the Annual Financial Statements

for the year ended 31 March 2015

## ANNEXURE IB

### STATEMENT OF TRANSFERS TO DEPARTMENTAL AGENCIES AND ACCOUNTS

DEPARTMENT/AGENCY/ACCOUNT	TRANSFER ALLOCATION				TRANSFER		2013/14
	Adjusted Appropriation Act	Rollovers	Adjustments	Total available	Actual transfer	% of available funds transferred	
	R'000	R'000	R'000	R'000	R'000	%	R'000
Africa Institute of South Africa	-	-	-	-	-	-	35,237
Agricultural Research Council	66,600	-	-	66,600	66,660	100%	64,000
Council for Geoscience	2,300	-	-	2,300	2,300	100%	3,500
Human Sciences Research Council	303,526	-	-	303,526	303,526	100%	257,801
National Research Foundation	3,387,831	-	(7,106)	3,380,725	2,989,065	88%	3,098,832
South African Medical Research Council	60,546	-	-	60,546	60,546	100%	48,567
South African National Biodiversity Institute	42	-	-	42	42	100%	42
South African National Energy Development Institute	5,100	-	-	5,100	5,100	100%	6,000
South African National Space Agency	188,298	-	-	188,298	188,298	100%	123,708
Technology Innovation Agency	437,588	-	-	437,588	390,588	89%	523,081
Water Research Commission	4,911	-	-	4,911	4,911	100%	-
<b>Total</b>	<b>4,456,742</b>	<b>-</b>	<b>(7,106)</b>	<b>4,449,636</b>	<b>4,011,036</b>		<b>4,174,654</b>

# Annexures to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## ANNEXURE IC STATEMENT OF TRANSFERS TO UNIVERSITIES AND UNIVERSITIES OF TECHNOLOGY

UNIVERSITY/UNIVERSITY OF TECHNOLOGY	TRANSFER ALLOCATION				TRANSFER			2013/14
	Adjusted appropriation Act	Rollovers	Adjustments	Total available	Actual transfer	Amount not transferred	% of available funds transferred	Appropriation Act
	R'000	R'000	R'000	R'000	R'000	R'000	%	R'000
Cape Peninsula University of Technology	694	-	-	694	694	-	0%	-
Central University of Technology	1,916	-	-	1,916	1,916	-	0%	-
Durban University of Technology	206	-	-	206	206	-	0%	-
Mangosuthu University of Technology	5	-	-	5	5	-	0%	-
Nelson Mandela Metropolitan University	4,392	-	-	4,392	4,392	-	0%	-
North-West University	6,239	21,039	-	27,278	50,732	(23,454)	-46%	-
Rhodes University	576	-	-	576	576	-	0%	-
Tshwane University of Technology	3,330	-	-	3,330	3,330	-	0%	-
University of Cape Town	41,619	-	-	41,619	41,619	-	0%	-
University of Fort Hare	1,887	-	-	1,887	1,887	-	0%	-
University of the Free State	1,760	-	-	1,760	1,760	-	0%	-
University of Johannesburg	1,641	-	-	1,641	1,641	-	0%	-
University of Kwazulu-Natal	3,145	-	-	3,145	3,145	-	0%	-
University of Limpopo	5,839	-	-	5,839	5,839	-	0%	-
University of Pretoria	12,905	-	-	12,905	12,905	-	0%	-
University of South Africa	3,310	-	-	3,310	3,310	-	0%	-
University of Stellenbosch	11,879	-	-	11,879	11,879	-	0%	-
University of the Western Cape	-	-	-	-	55,840	(55,840)	-100%	-
University of Venda	3,239	-	-	3,239	3,239	-	0%	-
University of the Witwatersrand	19,683	-	-	19,683	19,683	-	0%	-
University of Zululand	711	-	-	711	711	-	0%	-
Vaal University of Technology	2,700	-	-	2,700	2,700	-	0%	-
Walter Sisulu University of Technology	24	-	-	24	24	-	0%	-
<b>Total</b>	<b>127,700</b>	<b>21,039</b>	<b>-</b>	<b>148,739</b>	<b>228,033</b>	<b>(79,294)</b>		

# ANNEXURE ID

## STATEMENT OF TRANSFERS/SUBSIDIES TO PUBLIC CORPORATIONS AND PRIVATE ENTERPRISES

NAME OF PUBLIC CORPORATION/PRIVATE ENTERPRISE	TRANSFER ALLOCATION				EXPENDITURE				2013/14
	Adjusted Appropriation Act	Rollovers	Adjustments	Total available	Actual transfer	% of available funds transferred	Capital	Current	
	R'000	R'000	R'000	R'000	R'000	%	R'000	R'000	
<b>Public corporations</b>									
<b>Transfers</b>									
Council for Minerals Technology (MINTEK)	37,831	-	-	37,831	37,831	100.0%	22,645	15,186	37,055
Council for Scientific and Industrial Research	347,605	-	(11,251)	336,354	670,416	199.3%	381,243	289,173	198,836
Development Bank of South Africa	800	-	-	800	800	100.0%	-	800	-
South African Bureau of Standards	1,200	-	-	1,200	1,200	100.0%	-	1,200	-
South African Nuclear Energy Corporation	15,005	-	-	15,005	15,005	100.0%	-	15,005	11,597
<b>Subtotal</b>	<b>402,441</b>	<b>-</b>	<b>(11,251)</b>	<b>391,190</b>	<b>725,252</b>	<b>185.4%</b>	<b>403,888</b>	<b>321,364</b>	<b>247,488</b>
<b>Subsidies</b>									
Council for Scientific and Industrial Research	825,740	-	-	825,740	825,740	100%	-	825,740	781,996
<b>Subtotal</b>	<b>825,740</b>	<b>-</b>	<b>-</b>	<b>825,740</b>	<b>825,740</b>	<b>100%</b>	<b>-</b>	<b>825,740</b>	<b>781,996</b>
<b>Total</b>	<b>1,228,181</b>	<b>-</b>	<b>(11,251)</b>	<b>1,216,930</b>	<b>1,550,992</b>	<b>127.5%</b>	<b>403,888</b>	<b>1,147,104</b>	<b>1,029,484</b>

# Annexures to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

NAME OF PUBLIC CORPORATION/PRIVATE ENTERPRISE	TRANSFER ALLOCATION				EXPENDITURE				2013/14
	Adjusted Appropriation Act	Rollovers	Adjustments	Total available	Actual transfer	% of available funds transferred	Capital	Current	
	R'000	R'000	R'000	R'000	R'000	%	R'000	R'000	
<b>Private enterprises: Transfers</b>									
Wits Health Consortium	-	-	-	-	735	-	-	735	-
Citrus	-	-	-	-	2,325	-	-	2,325	-
Wits Commercial Enterprise (Pty) Ltd	-	-	-	-	2,156	-	-	2,156	-
Eskom Holding	-	-	-	-	990	-	-	990	-
EPI Use Africa	-	-	-	-	2,789	-	-	2,789	-
Infusion Knowledge Hub (Pty) Ltd	-	-	-	-	879	-	-	879	-
Joyn-Coop GBR	-	-	-	-	152	-	-	152	-
Pelchem	-	-	-	-	5,800	-	-	5,800	-
Bsquare Communication (Pty) Ltd	-	-	-	-	125	-	-	125	-
Aquaculture Innovation CC	-	-	-	-	11	-	-	11	-
Da Vinci TT 100 Awards Programme	-	-	-	-	3,353	-	-	3,353	-
Tony and Lisette Lewis Foundation	-	-	-	-	150	-	-	150	-
Biodx Biological Chemical Technology	-	-	-	-	100	-	-	100	-
Citrogold (Pty) Ltd	-	-	-	-	63	-	-	63	-
Western Cape Investment and Trade	-	-	-	-	2,447	-	-	2,447	-
<b>Subtotal</b>	-	-	-	-	22,075	-	-	22,075	-
<b>Total</b>	<b>1,228,181</b>	<b>-</b>	<b>(11,251)</b>	<b>1,216,930</b>	<b>1,573,067</b>	<b>129,3%</b>	<b>403,888</b>	<b>1,169,179</b>	<b>1,029,484</b>

# ANNEXURE IE

## STATEMENT OF TRANSFERS TO FOREIGN GOVERNMENT AND INTERNATIONAL ORGANISATIONS

FOREIGN GOVERNMENT/ INTERNATIONAL ORGANISATION	TRANSFER ALLOCATION			EXPENDITURE		2013/14
	Adjusted appropriation Act	Rollovers	Adjustments	Total available	Actual transfer	Appropriation Act
	R'000	R'000	R'000	R'000	R'000	R'000
United Nations Education, Scientific and Cultural Organisation	-	-	-	-	-	452
	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	<b>452</b>

# Annexures to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## ANNEXURE IF

### STATEMENT OF TRANSFERS TO NON-PROFIT INSTITUTIONS

NON-PROFIT INSTITUTIONS	TRANSFER ALLOCATION				EXPENDITURE		2013/14 Appropriation Act R'000
	Adjusted Appropriation Act R'000	Rollovers R'000	Adjustments R'000	Total available R'000	Actual transfer R'000	% of available funds transferred %	
<b>Transfers</b>							
Aeronautical Society of South Africa	100	-	-	100	100	100%	-
Agriculture Biotechnology Industry	10	-	-	10	10	100%	-
Bakgatla Sports, Arts & Culture	500	-	-	500	500	100%	500
Centre for Proteomic and Genomic Research	28	-	-	28	28	100%	-
Environmental Affairs	2,000	-	-	2,000	2,000	100%	-
Fresh Produce Exporters' Forum	4,000	-	-	4,000	4,000	100%	-
Grahamstown Foundation	2,000	-	-	2,000	2,000	100%	-
Grain South Africa	2,000	-	-	2,000	2,000	100%	-
Indigenous Knowledge of SA Trust	250	-	-	250	250	100%	-
Int Centre for Genetic Engineering and Biotechnology	-	-	-	-	-	-	-
Marine Industry Association of South Africa	3,500	-	-	3,500	3,500	100%	-
Mpilonhle	2,000	-	-	2,000	2,000	100%	-
National Health Laboratory Service	5,800	-	-	5,800	5,800	100%	4,500
National Science & Technology Forum	17,837	-	-	17,837	17,837	100%	2,631
Paper Manufacturers Association of SA	1,100	-	1,100	1,100	1,100	100%	-
Resonance Bazar	500	-	-	500	500	100%	-
SEDA Essential Oils Business Incubation	3,712	-	-	3,712	3,712	100%	-
SA Association of Science and Technology Centre	200	-	-	200	200	100%	200
South Africa Chemical Institute	100	-	-	100	100	100%	100
South African Institute of Physics	1,250	-	-	1,250	1,250	100%	800
South African Maritime Safety Authority	300	-	-	300	300	100%	-
South African Mathematics Foundation	1,000	-	-	1,000	1,000	100%	-
South African National Editor's Forum	100	-	-	100	100	100%	-
SA Research & Innovation Man Ass	2,835	-	-	2,835	2,835	100%	8,573
South African San Institute	500	-	-	500	500	100%	-
South African Weather Service	1,600	-	-	1,600	1,600	100%	-
Sugar Milling Research Institute	1,547	-	-	1,547	1,547	100%	-
The SA Institute of Mining and Metallurgy	1,222	-	-	1,222	1,222	100%	-
Trade and Industrial Policy Strategy	500	-	-	500	500	100%	-



NON-PROFIT INSTITUTIONS	TRANSFER ALLOCATION			EXPENDITURE		2013/14	
	Adjusted Appropriation Act	Rollovers	Adjustments	Total available	Actual transfer	% of available funds transferred	Appropriation Act
	R'000	R'000	R'000	R'000	R'000	%	R'000
Western Cape Econ Dev Partnerships	1,250	-	-	1,250	1,250	100%	-
Winetech	2,000	-	-	2,000	2,000	100%	-
Young Water Professionals (WISA)	190	-	-	190	190	100%	230
Knowledge Economic Network	-	-	-	-	-	-	87
South African Society for Human Genetics	-	-	-	-	-	-	100
South African Society of Biotechnology and Molecular Biology	-	-	-	-	-	-	50
World Meteorological Organisation	-	-	-	-	-	-	1,676
Unallocated funds	74,845	-	-	74,845	-	0%	475,225
Academy of Science of South Africa	22,278	-	-	22,278	22,277	100%	-
International Centre for Genetic Engineering and Biotechnology	13,392	-	24,688	38,080	38,080	100%	13,886
<b>Total</b>	<b>170,446</b>	<b>-</b>	<b>24,688</b>	<b>195,134</b>	<b>120,289</b>		<b>508,558</b>
<b>Subsidies</b>							
Academy of Science of South Africa	-	-	-	-	-	100%	20,744
<b>Total</b>	<b>170,446</b>	<b>-</b>	<b>24,688</b>	<b>195,135</b>	<b>120,289</b>		<b>20,744</b> <b>529,302</b>

# Annexures to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## ANNEXURE IG

### STATEMENT OF TRANSFERS TO HOUSEHOLDS

HOUSEHOLDS	TRANSFER ALLOCATION				EXPENDITURE		2013/14
	Adjusted appropriation Act	Rollovers	Adjustments	Total available	Actual transfer	% of available funds transferred	
	R'000	R'000	R'000	R'000	R'000	%	
<b>Transfers</b>							
Claim against the state: A&L Catering	-	-	-	-	-	-	400
Claim against the state: SL Morgan	-	-	26	26	26	100%	-
Claim against the state: M Maleka	-	-	540	540	540	100%	-
Claim against the state: I Mabuela	-	-	257	257	257	100%	-
Claim against the state: Brentlana Solutions	-	-	2,700	2,700	2,700	100%	-
Leave gratuity: Arendse, NH	-	-	28	28	28	100%	-
Leave gratuity: Baloyi, MW	-	-	6	6	6	100%	-
Leave gratuity: Canca, AJ	-	-	5	5	5	100%	3
Leave gratuity: Canca, AJ	-	-	-	-	-	-	-
Leave gratuity: Chandiymba, MJ	-	-	23	23	23	100%	-
Leave gratuity: Dilotsotlhe, KE	-	-	-	-	-	-	11
Leave gratuity: Dube, TKO	-	-	-	-	-	-	22
Leave gratuity: Engelbrecht, A	-	-	-	-	-	-	15
Leave gratuity: Gantsho, PC	-	-	3	3	3	100%	-
Leave gratuity: Hector, A	-	-	-	-	-	-	2
Leave gratuity: Hobololo, VL	-	-	5	5	5	100%	-
Leave gratuity: Khosa, BG	-	-	-	-	-	-	2
Leave gratuity: Lagadien, FE	-	-	24	24	24	100%	-
Leave gratuity: Langa, PE	-	-	-	-	-	-	6
Leave gratuity: Mabele, LP	-	-	19	19	19	100%	-
Leave gratuity: Mabodisa, KG	-	-	-	-	-	-	3
Leave gratuity: Machivha, LP	-	-	26	26	26	100%	-
Leave gratuity: Maja, DM	-	-	4	4	4	100%	-
Leave gratuity: Makobane, PR	-	-	8	8	8	100%	-
Leave gratuity: Makondo, N	-	-	-	-	-	-	26
Leave gratuity: Makua, AM	-	-	6	6	6	100%	-
Leave gratuity: Malapane, M	-	-	-	-	-	-	80
Leave gratuity: Maphakisa, ME	-	-	8	8	8	100%	-

HOUSEHOLDS	TRANSFER ALLOCATION				EXPENDITURE		2013/14
	Adjusted appropriation Act	Rollovers	Adjustments	Total available	Actual transfer	% of available funds transferred	Appropriation Act
	R'000	R'000	R'000	R'000	R'000	%	R'000
Leave gratuity: Maluleke TS	-	-	15	15	15	100%	-
Leave gratuity: Masuku, PL	-	-	7	7	7	100%	-
Leave gratuity: Mathabe, IT	-	-	-	-	-	-	2
Leave gratuity: Mathe, TD	-	-	28	28	28	100%	-
Leave gratuity: Mazibuko, CS	-	-	18	18	18	100%	-
Leave gratuity: Mogomotsi, SR	-	-	-	-	-	-	2
Leave gratuity: Mokobane, PR	-	-	8	8	8	100%	-
Leave gratuity: Mokoduwe, PS	-	-	-	-	-	-	11
Leave gratuity: Makola, LM	-	-	-	-	-	-	1
Leave gratuity: Mokwatedi, MPV	-	-	2	2	2	100%	-
Leave gratuity: Moleli, KL	-	-	13	13	13	100%	-
Leave gratuity: Mopai, MD	-	-	-	-	-	-	19
Leave gratuity: Moropa, SD	-	-	6	6	6	100%	-
Leave gratuity: Mosehle, LL	-	-	10	10	10	100%	1
Leave gratuity: Mosehle, LL	-	-	-	-	-	-	1
Leave gratuity: Motaung, MP	-	-	9	9	9	100%	-
Leave gratuity: Mote, NJ	-	-	12	12	12	100%	-
Leave gratuity: Mothiba, HN	-	-	-	-	-	-	3
Leave gratuity: Motopa, MM	-	-	-	-	-	-	3
Leave gratuity: Motsepe, VN	-	-	-	-	-	-	3
Leave gratuity: Mudzanani, V	-	-	-	-	-	-	1
Leave gratuity: Mukhororo, PT	-	-	-	-	-	-	10
Leave gratuity: Murovhi, NAC	-	-	-	-	-	-	24
Leave gratuity: Muthwa, BS	-	-	-	-	-	-	101
Leave gratuity: Ndllovu, BS	-	-	5	5	5	100%	-
Leave gratuity: Ngcobo, MF	-	-	27	27	27	100%	-
Leave gratuity: Nghulele, W	-	-	-	-	-	-	1
Leave gratuity: Ngoma, GYM	-	-	23	23	23	100%	-
Leave gratuity: Nkgadime, NL	-	-	-	-	-	-	10
Leave gratuity: Nkosi, PCZZ	-	-	22	22	22	100%	-
Leave gratuity: Ntuli, VM	-	-	-	-	-	-	15
Leave gratuity: Phali, MA	-	-	6	6	6	100%	-
Leave gratuity: Ramabulana, E	-	-	-	-	-	-	2
Leave gratuity: Ramaloko, LA	-	-	2	2	2	100%	-

# Annexures to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

HOUSEHOLDS	TRANSFER ALLOCATION				EXPENDITURE		2013/14
	Adjusted appropriation Act	Rollovers	Adjustments	Total available	Actual transfer	% of available funds transferred	
	R'000	R'000	R'000	R'000	R'000	%	
Leave gratuity: Ramela, MA	-	-	-	-	-	-	10
Leave gratuity: Ramushu, L	-	-	-	-	-	-	2
Leave gratuity: Rasemphe, AG	-	-	35	35	35	100%	-
Leave gratuity: Rubadiri, TM	-	-	-	-	-	-	19
Leave gratuity: Saar, MJ	-	-	-	-	-	-	142
Leave gratuity: Saloojee, I	-	-	-	-	-	-	53
Leave gratuity: Seekoe, TW	-	-	-	-	-	-	28
Leave gratuity: Setlaba, MB	-	-	9	9	9	100%	-
Leave gratuity: Shibambo, LP	-	-	-	-	-	-	2
Leave gratuity: Shilubane, C	-	-	-	-	-	-	4
Leave gratuity: Simelane, SA	-	-	1	1	1	100%	-
Leave gratuity: Sithole, KL	-	-	20	20	20	100%	-
Leave gratuity: Thusi, KK	-	-	-	-	-	-	2
Leave gratuity: Tjemolane, T	-	-	11	11	11	100%	-
Leave gratuity: Tsatsi, DM	-	-	9	9	9	100%	-
Leave gratuity: Tshabalala,	-	-	3	3	3	100%	-
Leave gratuity: Tshiseisei, M	-	-	-	-	-	-	2
Leave gratuity: Weyers, J	-	-	41	41	41	100%	-
Leave gratuity: Yabo, P	-	-	-	-	-	-	2
Leave gratuity: Youngleson, JS	-	-	-	-	-	-	48
Leave gratuity: Zantsi, LK	-	-	4	4	4	100%	-
Leave gratuity: Zondi, MSV	-	-	20	20	20	100%	-
Leave gratuity: Zwane, MN; Phaswana, R and Mokhari, MT	-	-	27	27	27	-	-
Refund of lost items	-	-	3	3	3	-	-
Women in Science Awards	-	-	325	325	325	-	-
Group on Earth Observations	-	-	39	39	39	-	-
<b>TOTAL</b>	<b>-</b>	<b>-</b>	<b>4,448</b>	<b>4,448</b>	<b>4,448</b>	<b>-</b>	<b>1,103</b>

# ANNEXURE II

## STATEMENT OF LOCAL AND FOREIGN AID ASSISTANCE RECEIVED

NAME OF DONOR	PURPOSE	OPENING		SURRENDERED FUNDS	REVENUE		EXPENDITURE		CLOSING		
		BALANCE			R'000	R'000	R'000	BALANCE			
		R'000									
Received in cash											
European Union	BioCircle2: To develop a skilled and capable workforce	23	23	-	-	-	-	-	-	-	
European Union	Innovation for Poverty Alleviation Programme	500	500	69,409	65,050	4,359					
European Union	To develop vibrant and sustainable rural communities that contribute to adequate food security.	617	617	40,000	34,794	5,206					
European Union	Strengthening the European-South African Science and Advancement Programme (ESASTAP2)	237	237	525	418	107					
European Union	ER Africa: To develop a skilled and capable workforce	208	208	354	354	-					
United States Agency for International Development	Malawi Potato pathogen project	62	62	-	-	-					
Ireland	Potato tissue culture project-Lesotho	404	404	340	267	73					
European Union	To improve the overall ICT policies and create systems for each African country to ensure a consolidated effective regional.	-	-	210	22	188					
European Union	European researchers to access SA innovation programmes and collaborate with SA researchers	-	-	626	-	626					
European Union	Cooperation with EU associated member states and 3rd countries on STI	-	-	200	47	153					
European Union	Promote mutual understanding of Africa EU cooperation in critical S&T areas of mutual interest	-	-	150	7	143					
European Union	Information and communication technology innovation	-	-	42,788	42,185	603					
Portugal	Bridging actions for GMES and Africa-BRAGMA. To build capacity in the SADC member states in understanding information on climate change impact and risk	-	-	617	400	217					
United States of Agency for International Development	The SADC early warning mechanism	-	-	456	456	-					
United States of Agency for International Development	To determine the extent to which waste and air pollution may impact on the health of two communities in the lower Olifants water catchment area	-	-	479	479	-					
United States Agency for International Development	IKS standards development and capacity building	-	-	660	660	-					
Subtotal		2,051	2,051	156,814	145,139	11,675					

# Annexures to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

NAME OF DONOR	PURPOSE	OPENING		SURRENDERED FUNDS	REVENUE		EXPENDITURE		CLOSING		
		BALANCE			R'000	R'000	R'000	R'000	BALANCE	R'000	
		R'000									
Received in kind											
Canada	To support the development new technology in improving existing point of care diagnostic	-	-	-	2,297	2,297	2,297	2,297	-	-	
United States of America	FACTS 001: Study: The confirmation of the results of CAPRISA 004, though a phase III clinical trial	-	-	-	50,800	50,800	50,800	50,800	-	-	
Japan	To improve accuracy of predicting and control of seismicity and earthquakes	-	-	-	3,200	3,200	3,200	3,200	-	-	
Bill & Melinda Gates Foundation	To build post graduate capacity in legume sciences in Africa, with the aim of increasing household food security	-	-	-	2,000	2,000	2,000	2,000	-	-	
Bill & Melinda Gates Foundation	MRC's Strategic Health Innovation Research Initiatives in AIDS, TB and Malaria	-	-	-	41,667	41,667	41,667	41,667	-	-	
Bill & Melinda Gates Foundation	To develop novel clinical drugs to address TB and Malaria	-	-	-	11,000	11,000	11,000	11,000	-	-	
Bill & Melinda Gates Foundation	To confirm the results of CAPRISA 004 through phase III clinical trials of the tenofovir gel	-	-	-	15,056	15,056	15,056	15,056	-	-	
Wellcome Trust	Bt20+ seeks to build an evidence base for active approaches to the transfer research into the policy domain of human development	-	-	-	5,449	5,449	5,449	5,449	-	-	
UK Medical Research Council	Bt20+ seeks to build an evidence base for active approaches to the transfer research into the policy domain of human development	-	-	-	4,318	4,318	4,318	4,318	-	-	
Wellcome Trust	Identification of novel genetic risk and protective factors for RHD and new targets of drugs and vaccine development	-	-	-	3,084	3,084	3,084	3,084	-	-	
Subtotal		2,051	2,051	-	138,871	138,871	138,871	138,871		11,675	
TOTAL		2,051	2,051	-	295,685	295,685	284,010	284,010		11,675	

# ANNEXURE IJ

## STATEMENT OF GIFTS, DONATIONS AND SPONSORSHIPS MADE AND REMISSIONS, REFUNDS AND PAYMENTS MADE AS AN ACT OF GRACE

	NATURE OF GIFT, DONATION OR SPONSORSHIP		2014/2015	2013/14
			R'000	R'000
<b>Paid in cash</b>				
Women in Science Awards			325	555
Refund for lost items			3	-
Group on Earth Observations			39	-
<b>SUBTOTAL</b>			<b>367</b>	<b>555</b>
<b>TOTAL</b>			<b>367</b>	<b>555</b>

# Annexures to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## ANNEXURE 2B

### STATEMENT OF INVESTMENTS IN AND AMOUNTS OWING BY/TO ENTITIES AS AT 31 MARCH 2015

NAME OF ENTITY	Nature of business	Cost of investment	Net asset value of investment	Amount owing to entities	Amount owing by entities
	R'000	R'000	R'000	R'000	R'000
Controlled entities					
	-	-	-	-	-
Non-controlled entities					
<b>BIOVAC</b>	Pharmaceutical Industry (35% share holding)	-	52,772	-	-
<b>Total</b>	-	-	<b>52,772</b>	-	-

The Department of Science and Technology acquired BIOVAC shares from the Department of Health. The shares were transfer to the DST without any financial implications to the department. The amount of R52 772 million is the value of shares calculated at 35% of the retained earnings of BIOVAC as at 31 December 2014.



# ANNEXURE 3B

## STATEMENT OF CONTINGENT LIABILITIES AS AT 31 MARCH 2015

Nature of liability	Opening balance 1 April 2013	Liabilities incurred during the year	Liabilities paid/ cancelled/reduced during the year	Liabilities recoverable)	Closing balance 31 March 2015
	R'000	R'000	R'000	R'000	R'000
<p>The Department has a dispute over breach of contract with Brentlana. Brentlana accuses the Department of not adhering to the terms of the contract and wants the department to pay R3 million. The matter is being arbitrated.</p> <p>The civil claim against the Department in respect of injuries allegedly sustained when the claimant fell in the in an open hole in the Pretoria Zoo Gardens.</p>	3,000	-	3,000	-	-
	-	401	-	-	401
<b>Total</b>	<b>3,000</b>	<b>401</b>	<b>3,000</b>	<b>-</b>	<b>401</b>

The Department reached a settlement agreement with Brentlana Solutions (Pty) Ltd. The Department paid R2 700 million as a final settlement to the dispute as per the settlement agreement. The remaining contingent liability of R300 thousand was cancelled.

# Annexures to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## ANNEXURE 4

### CLAIMS RECOVERABLE

Government entity	Confirmed balance outstanding		31/03/2014		Unconfirmed balance outstanding		31/03/2014		Total	
	31/03/2015		R'000		31/03/2015		R'000		31/03/2015	
	R'000		R'000		R'000		R'000		R'000	
<b>Department</b>										
Gauteng Province: Provincial Treasury	-		8		-		-			8
Province of KwaZulu-Natal	36		36		-		-		36	36
South African Police Service	-		24		-		-		-	24
Department of Health	3		-		-		-		3	-
Department of Human Settlements	4		-		-		-		4	-
Department of Environmental Affairs	38		-		-		-		38	-
<b>Subtotal</b>	<b>81</b>		<b>68</b>		<b>-</b>		<b>-</b>		<b>81</b>	<b>68</b>
<b>Other government entities</b>										
<b>Subtotal</b>	<b>-</b>		<b>-</b>		<b>-</b>		<b>-</b>		<b>-</b>	<b>-</b>
<b>Total</b>	<b>81</b>		<b>68</b>		<b>-</b>		<b>-</b>		<b>81</b>	<b>68</b>

# ANNEXURE 5

## INTERGOVERNMENT PAYABLES

GOVERNMENT ENTITY	Confirmed balance outstand- ing		Unconfirmed balance out- standing		TOTAL		Cash in transit at year end 2014/15	
	31/03/2015	31/03/2014	31/03/2015	31/03/2014	31/03/2015	31/03/2014	Payment date up to six (working) days before year end	Amount
	R'000	R'000	R'000	R'000	R'000	R'000		R'000
<b>DEPARTMENTS</b>								
<b>Current</b>								
Province of KwaZulu-Natal: Department of Education	-	35	-	-	-	35	-	-
Department of International Relations and Cooperation	-	1,536	-	-	-	1,536	-	-
<b>Total</b>	-	<b>1,571</b>	-	-	-	<b>1,571</b>		-

# Annexures to the Annual Financial Statements

for the year ended 31 March 2015 (continued)

## ANNEXURE 6

### INVENTORY

Inventory	Note	Quantity	2014/15 R'000	Quantity	2013/14 R'000
Opening balance		15,189	388	10,633	433
Add/(Less): Adjustments to prior year balance		-	-	-	20
Add: Additions/Purchases - Cash		-	-	27,313	5,953
Add: Additions - Non-cash		-	-	-	-
(Less): Disposals		-	-	-	-
(Less): Issues		-	-	(22,757)	(6,008)
Add/(Less): Adjustments		(15,189)	(388)	-	(10)
<b>Closing balance</b>		-	-	<b>15,189</b>	<b>388</b>

The inventory was transferred to consumables in terms of the requirements of the modified cash standards and the accounting manual for departments.

## This image shows a full page of blank handwriting practice paper. It features approximately 28 evenly spaced, horizontal orange lines across the entire page. The lines are uniform in color and thickness, providing a guide for letter height and placement. There are no margins, text, or other markings on the paper.


# ANNEXURE 8A

## INTER-ENTITY ADVANCES PAID (note 17)

GOVERNMENT ENTITY	Confirmed balance		Unconfirmed balance		TOTAL	
	31/03/2015	31/03/2014	31/03/2015	31/03/2014	31/03/2015	31/03/2014
	R'000	R'000	R'000	R'000	R'000	R'000
<b>DEPARTMENTS</b>						
<b>Current</b>						
Department of International Relations and Cooperation	516	176	-	-	516	176
<b>Total</b>	<b>516</b>	<b>176</b>	<b>-</b>	<b>-</b>	<b>516</b>	<b>176</b>

## APPROVAL

The Annual Financial Statements set out in pages 149 and 240 for the financial year ended 31 March 2015 have been approved.

  
.....

**PM MJWARA**  
**DIRECTOR GENERAL**

## This image shows a full page of blank handwriting practice paper. It features a series of evenly spaced, horizontal orange lines that run across the entire width of the page. The background is a solid light gray color. There are no margins, text, or other markings present on the page.

## This image shows a full page of blank handwriting practice paper. It features a series of evenly spaced, horizontal orange lines that run across the entire width of the page. The background is a solid, light gray color, providing a clear contrast for the orange lines. There are no margins, text, or other markings on the page.



## This image shows a full page of blank handwriting practice paper. It features a series of evenly spaced, horizontal orange lines that run across the entire width of the page. The background is a solid light gray color. There are no margins, text, or other markings on the page.

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**Al**

Aluminium

**Ni**

Nickel

**In**

Indium

**uA**

Gold

20<sup>15</sup>  
**Li**

Lithium

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