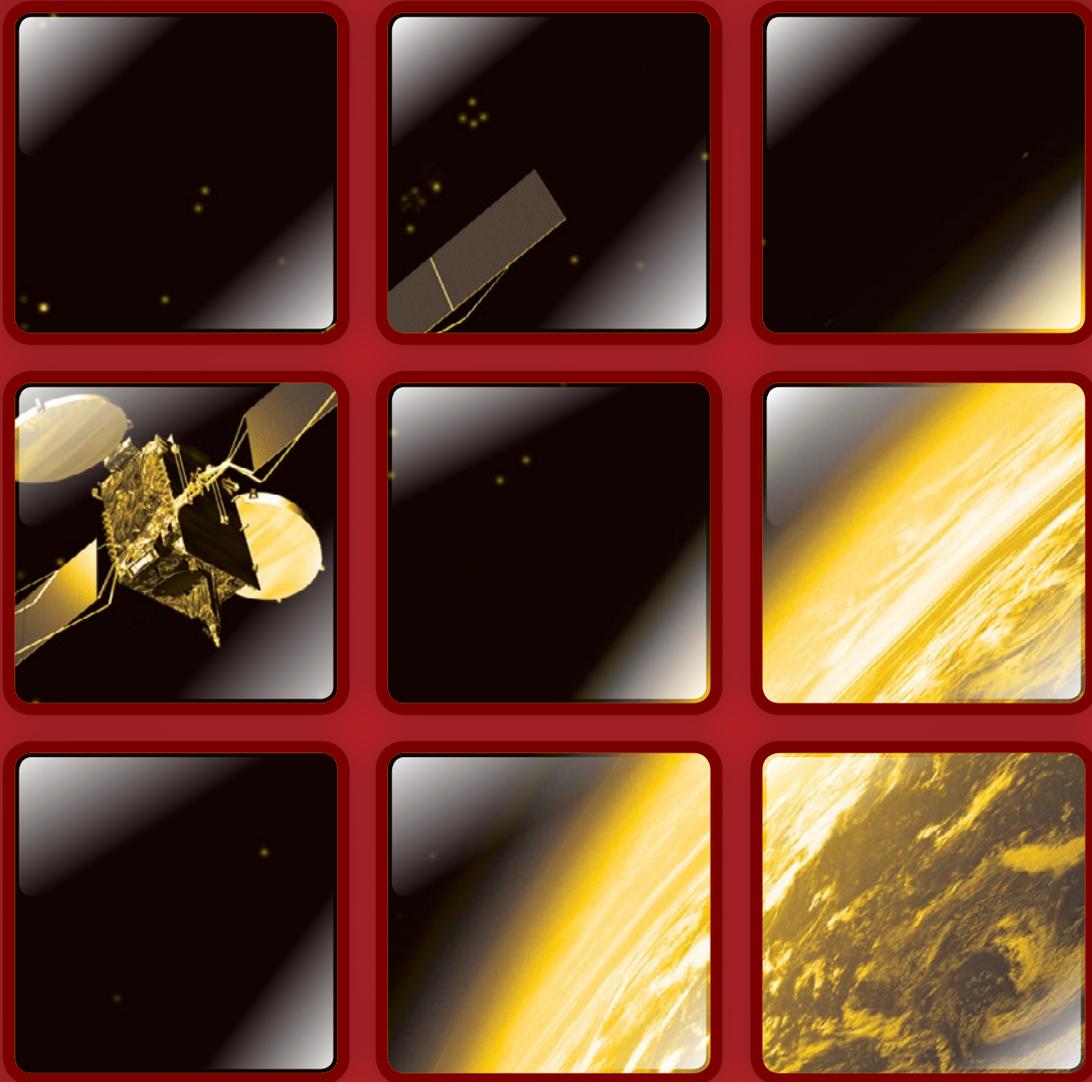


Photos provided by GCIS.



BUDGET 2015

ESTIMATES OF NATIONAL EXPENDITURE

VOTE 30

SCIENCE AND TECHNOLOGY



national treasury

Department:
National Treasury
REPUBLIC OF SOUTH AFRICA

Estimates of National Expenditure

2015

National Treasury

Republic of South Africa

25 February 2015



ISBN: 978-0-621-43285-5

RP: 08/2015

The 2015 Estimates of National Expenditure e-publications are compiled with the latest available information from departmental and other sources. Some of this information is unaudited or subject to revision.

The Estimates of National Expenditure e-publications for individual votes are available on www.treasury.gov.za.

Compared to the abridged version of the 2015 ENE, the 2015 ENE e-publications provide more detailed information, including on goods and services, transfers and subsidies, as well as on programme specific personnel expenditure. The abridged version of the ENE contains one additional table at the end of a chapter that shows expenditure on infrastructure, whereas the vote ENE e-publications' additional tables also contain summaries of expenditure on conditional allocations to provinces and municipalities; departmental public private partnerships; and donor funding. Budget information is also provided for the public entities that are not shown in detail in the abridged publication. In some e-publications more detailed information at the level of site service delivery is included.

Foreword

Some of the tough economic conditions occasioned by the 2008 to 2009 global financial crisis continue to plague most parts of the world: Economic growth remains sluggish, unemployment and inequality levels are elevated, while financial markets tend to reposition themselves substantially at the slightest sign of unsettling news. As an open economy, South Africa is highly susceptible to global economic developments, often disproportionately so. In the face of all of this, the 2015 Medium Term Expenditure Framework (MTEF) response provides for positive real growth in expenditure averaging 2.1 per cent per year. The annual budget reaches R1.6 trillion by 2017/18.

True to the commitment government made in the Medium Term Budget Policy Statement (MTBPS) in October 2014, the budget framework sets out departmental programmes and plans that fit within the broad expenditure envelope published last year. To keep our fiscal accounts firmly on a sustainable path, the MTBPS proposed a fiscal policy package that has trimmed overall spending by R25 billion, which is the combined amount for 2015/16 and 2016/17. Government spending does continue to surpass inflation after these adjustments in both years, but growth is marginally slower. In addition, for 2017/18, R45 billion is placed in an unallocated reserve to cushion our plans against unforeseeable eventualities. Further, to achieve our fiscal objectives, government has had to institute carefully selected tax measures too. These are implemented within the framework of a progressive tax system and have been informed by the work of the Davies Tax Committee. The tax proposals are set out in detail in chapter 4 of the Budget Review.

The process of realigning expenditure in response to the closing of the fiscal space is being actively managed, in the context of government's 2014-2019 medium term strategic framework. Some of our aspirations might take longer to realise. Within government's institutions, more urgent and essential existing programmes are being prioritised above other programmes that are reduced. The implementation of some newly proposed programmes will either be phased in over a longer period or, in some cases, possibly even delayed. Social sector spending and key infrastructure spending, as well as other key areas of spending, continue to grow in real terms.

In addition to the reprioritisation of government programmes, the policy frameworks and implementation methodology of programmes are being re-evaluated, with a focus on service delivery of programmes. In line with the 2013/14 National Treasury instruction on cost containment measures, financing programmes must entail a greater share of goods and services budgets being devoted towards core areas of service delivery. The focus of government programmes is being sharpened, both in terms of spatial distribution, and in terms of their nature and emphasis. Effectiveness and efficiency of expenditure is our guiding mantra.

The spending plans contained in the 2015 Budget do respond to our short term needs for economic growth. However, to achieve our ambition of faster growth, which we unquestionably need for pushing back the frontiers of unemployment, poverty and inequality, we must continue to strive towards shifting the composition of expenditure more towards investment, away from consumption. Institutional spending, as always, is being closely monitored, and the ongoing process of realignment continues. The details of the spending of national government departments and its entities are encompassed in the chapters of this publication.

All the expenditure and service delivery information contained in the chapters of this publication result from a wide ranging intergovernmental consultative process, leading to executive approval of reprioritised and realigned spending allocations. Many people have contributed to making this publication possible, particularly my colleagues in national departments and agencies. Their collaboration and understanding during the budget allocation and document drafting processes has been invaluable. Appreciation is also due to the dedicated team at National Treasury for the publication of this highly valuable resource.



Lungisa Fuzile
Director-General: National Treasury

Introduction

The Estimates of National Expenditure publications

The Estimates of national Expenditure (ENE) publications provide comprehensive information on how budget resources are generated, how institutions have spent their budgets in previous years, and how institutions plan to spend the resources allocated to them over the MTEF period. Key performance indicators are included for each national government vote and entity showing what the institutions aim to achieve by spending their budget allocations in a particular manner. This information provides Parliament and the public with the necessary tools to hold government accountable against the 14 outcomes set out in the 2014-2019 medium term strategic framework.

The 2015 ENE publications largely retain the scope of information presented in previous years' publications. For ease of comprehension, however, in the 2015 publications information is presented in a more succinct and concise manner in data tables and their accompanying explanatory narratives. The reader can thus more readily understand what each institution is planning to spend its budget on and what it aims to achieve. Each chapter in the abridged 2015 ENE publication relates to a specific budget vote. A separate, more detailed, e-publication is also available for each vote.

Compared to the abridged version of the 2015 ENE, the 2015 ENE e-publications provide more detailed information, including on goods and services, transfers and subsidies, as well as on programme specific personnel expenditure. The abridged version of the ENE contains one additional table at the end of a chapter that shows expenditure on infrastructure, whereas the vote ENE e-publications' additional tables also contain summaries of expenditure on conditional allocations to provinces and municipalities; departmental public private partnerships; and donor funding. Budget information is also provided for the public entities that are not shown in detail in the abridged publication. In some e-publications more detailed information at the level of site service delivery is included.

A separate 2015 ENE Overview e-publication is also available, which contains a description at the main budget non-interest spending level, summarising the ENE publication information across votes. The 2015 ENE Overview contains this narrative explanation and summary tables; a description of the budgeting approach; and also has a write-up on how to interpret the information that is contained in each section of the publications.

Science and Technology

**National Treasury
Republic of South Africa**



Contents

Budget summary	1
Vote purpose.....	1
Mandate	1
Selected performance indicators	1
Expenditure analysis.....	2
Expenditure trends	3
Expenditure estimates	5
Personnel information	6
Departmental receipts	6
Programme 1: Administration	7
Programme 2: Technology Innovation	8
Programme 3: International Cooperation and Resources	12
Programme 4: Research, Development and Support.....	14
Programme 5: Socio-Economic Innovation Partnerships	17
Public entities and other agencies	20
Additional table.....	41

Vote 30

Science and Technology

Budget summary

R million	2015/16				2016/17	2017/18
	Total	Current payments	Transfers and subsidies	Payments for capital assets	Total	Total
MTEF allocation						
Administration	299.8	284.7	12.8	2.3	304.1	320.8
Technology Innovation	1 008.8	62.7	946.1	–	1 011.6	1 044.3
International Cooperation and Resources	122.0	60.9	61.0	–	123.9	130.8
Research, Development and Support	4 247.1	44.9	4 202.1	–	4 265.3	4 448.5
Socio-Economic Innovation Partnerships	1 804.5	43.1	1 761.4	–	1 857.3	1 664.3
Total expenditure estimates	7 482.1	496.4	6 983.4	2.3	7 562.2	7 608.6

Executive authority Minister of Science and Technology
 Accounting officer Director General of Science and Technology
 Website address www.dst.gov.za

The Estimates of National Expenditure e-publications for individual votes are available on www.treasury.gov.za. These publications provide more comprehensive coverage of vote specific information, particularly about goods and services, transfers and subsidies, personnel, public entities, donor funding, public private partnerships, conditional allocations to provinces and municipalities and expenditure information at the level of service delivery, where appropriate.

Vote purpose

Realise the full potential of science and technology in social and economic development by developing human resources, research and innovation.

Mandate

The Department of Science and Technology executes its mandate through the implementation of the 1996 White Paper on Science and Technology, the national research and development strategy and the 10-year innovation plan. The plan aims to make science and technology a driving force in enhancing productivity, economic growth and socioeconomic development.

Selected performance indicators

Table 30.1 Performance indicators by programme and related outcome

Indicator	Programme	Outcome	Past			Current	Projections		
			2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Total number of pilot plants supported as a result of department funded energy research, development and innovation initiatives	Technology Innovation	Outcome 4: Decent employment through inclusive economic growth	1	2	2	3	7	8	7
Number of commercial biotechnology products, prototypes and services developed per year	Technology Innovation		26	37	4	6	8	4	6
Value of foreign science, technology and innovative funds secured for knowledge production, technology transfer, enhanced innovation and science, technology, and innovative human capital development from international partners through agreed instruments per year	International Cooperation and Resources	Outcome 5: A skilled and capable workforce to support an inclusive growth path	R285m	R241.2m	R436.38m	R330m	R388.6m	R414.2m	R429.8m
Number of South African researchers and students participating in international human capital development opportunities relevant to the priorities of the department and government's 2014-2019 medium term strategic framework per year	International Cooperation and Resources		–1	–1	–1	1 456	1 571	1 962	2 000

Table 30.1 Performance indicators by programme and related outcome

Indicator	Programme	Outcome	Past			Current	Projections		
			2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Total number of postgraduate research students awarded bursaries as reflected in the National Research Foundation project reports	Research, Development and Support	Outcome 5: A skilled and capable workforce to support an inclusive growth path	7 083	8 379	9 771	11 440	14 880	14 880	14 880
Total number of researchers awarded research grants through National Research Foundation managed programmes as reflected in the foundation's project reports	Research, Development and Support		2 886	1 665	3 569	3 820	4 539	4 539	4 539
Number of knowledge and innovation products (patents, prototypes, technology demonstrators or technology transfer packages) added to the intellectual property portfolio through fully funded or co-funded research initiatives per year	Socio-Economic Innovation Partnerships	Outcome 4: Decent employment through inclusive economic growth	14	26	2	21	27	37	42

1. New indicator, hence no historical data.

Expenditure analysis

The Department of Science and Technology is expected to use 93 per cent of its total budget of R22.7 billion over the medium term to fund research and development entities that drive science and technology and innovation.

Research and development

57.2 per cent, or R13 billion of the department's budget over the medium term is in the *Research, Development, and Support* programme. Transfers to the National Research Foundation of R2.7 billion are for the foundation to support 4 539 researchers, 15 918 masters students and 9 615 doctoral students over the period. These priorities are in line with outcome 5 of government's 2014-2019 medium term strategic framework (a skilled and capable workforce to support an inclusive growth path). Cabinet approved budget reductions of R27.8 million over the medium term, due to accumulated surpluses in the foundation, are projected to decrease growth in transfers to only 2.2 per cent over the period.

The transfers to the foundation also support the construction of the Square Kilometre Array, which will be the world's largest and most sensitive radio telescope. Slow spending as a result of contractual delays and delays in the testing phase led to a Cabinet approved budget reduction of R21.8 million over the medium term to be effected on the budget for the Square Kilometre Array.

Innovation

The national development plan identifies the innovation system as a key element in South Africa's long term development, including the role of innovation in driving technological growth and higher living standards. One of the proposals of the national development plan is centred on a larger, more effective innovation system, closely aligned with firms that operate in the sectors that drive government's growth strategy. Through fully funded or co-funded research initiatives, the department intends to increase the number of knowledge and innovation products (patents, prototypes, technology demonstrators or technology transfer packages) added to the national intellectual property portfolio to 42 by 2017/18, among other initiatives to support innovation. Innovation initiatives are funded through the *Socio-Economic Innovation Partnerships* programme, with a projected budget of R5.3 billion (23.6 per cent of the department's total budget) over the medium term. Expenditure is expected to grow by 2.1 per cent over the period. Spending has been prioritised towards: developing science and technology indicators and supporting the implementation of high impact science and technology interventions; initiating science and technology programmes that support the growth of environmental technologies and services; and facilitating policy and strategy development that will grow the ICT sector.

Launched early in 2014, the bioeconomy strategy positions bio-innovation as essential to achieving government's industrial and social development goals, as expressed in the national development plan and the 2014-2019 medium term strategic framework, as well as contributing to poverty alleviation, health care, and local innovation. The bioeconomy strategy will encourage industry, science councils, government departments

and academia to cooperate closely to ensure that biotechnology and bio-innovations are applicable in the South African market. For example, a new pathway has been discovered for the development of potent, broadly neutralising antibodies, which might be useful in preventing HIV infection. The bioeconomy strategy is funded through the *Technology Innovation* programme, and is allocated R420.7 million over the MTEF period. The *Technology Innovation* programme's budget as a whole is R3.1 billion over the medium term, or 13.5 per cent of the department's total budget.

Expenditure trends

Table 30.2 Vote expenditure trends by programme and economic classification

Programmes														
1. Administration														
2. Technology Innovation														
3. International Cooperation and Resources														
4. Research, Development and Support														
5. Socio-Economic Innovation Partnerships														
Programme	Annual budget	Adjusted appropriation	Audited outcome	Annual budget	Adjusted appropriation	Audited outcome	Annual budget	Adjusted appropriation	Audited outcome	Annual budget	Adjusted appropriation	Revised estimate	Outcome/Annual budget Average (%)	Outcome/Adjusted appropriation Average (%)
R million	2011/12			2012/13			2013/14			2014/15			2011/12 - 2014/15	
Programme 1	192.1	195.7	195.6	202.7	229.4	225.3	268.2	245.7	257.5	291.0	291.9	291.9	101.7%	100.8%
Programme 2	854.6	854.6	945.7	1 156.4	1 142.8	1 033.2	1 627.1	1 122.1	1 150.4	991.6	1 008.9	1 008.9	89.4%	100.2%
Programme 3	137.2	137.2	99.8	141.2	139.3	102.9	148.4	110.2	104.5	119.7	119.3	119.3	78.0%	84.3%
Programme 4	1 950.4	1 950.4	1 977.6	2 035.9	2 064.7	2 302.8	2 476.8	3 170.0	3 198.8	3 503.8	3 496.9	3 496.9	110.1%	102.8%
Programme 5	1 270.3	1 269.1	1 184.8	1 419.8	1 423.4	1 309.2	1 677.6	1 550.3	1 458.2	1 564.1	1 562.8	1 562.8	93.0%	95.0%
Total	4 404.6	4 407.0	4 403.5	4 955.9	4 999.6	4 973.3	6 198.2	6 198.2	6 169.5	6 470.2	6 479.9	6 479.9	100.0%	99.7%
Change to 2014											9.7			
Budget estimate														
Economic classification														
Current payments	369.7	365.3	345.9	393.5	409.3	386.8	454.1	414.1	402.6	486.7	494.5	495.7	95.7%	96.9%
Compensation of employees	225.3	227.6	207.2	242.3	247.6	221.8	260.7	251.4	241.6	283.8	284.9	284.9	94.4%	94.5%
Goods and services	144.5	137.7	138.3	151.2	161.7	164.6	193.3	162.7	161.0	202.9	209.6	210.8	97.5%	100.4%
of which:														
Administrative fees	4.7	4.7	3.3	5.0	10.5	6.6	5.3	3.8	6.4	5.7	5.7	5.7	106.4%	88.9%
Advertising	3.1	3.1	14.0	3.2	4.2	15.0	13.6	3.9	16.5	15.0	15.0	16.4	177.3%	236.5%
Assets less than the capitalisation threshold	0.6	0.6	0.4	0.6	0.7	0.2	0.9	0.9	0.3	0.5	0.5	0.5	54.0%	53.2%
Audit costs: External	1.9	1.9	2.7	1.9	5.4	3.3	5.8	5.8	4.5	6.0	6.0	6.0	106.7%	87.0%
Bursaries: Employees	2.2	2.2	1.4	2.0	2.0	1.2	2.4	2.4	1.2	2.4	2.4	2.4	68.3%	68.3%
Catering: Departmental activities	2.1	2.1	1.2	2.3	2.3	3.2	2.6	2.7	2.8	2.6	2.6	2.7	102.2%	101.3%
Communication	7.9	7.9	6.2	8.7	8.3	4.5	9.2	9.2	5.4	9.8	9.8	10.0	73.3%	74.1%
Computer services	5.1	5.1	5.7	5.4	6.9	7.8	7.5	7.4	7.4	7.8	7.8	7.7	111.2%	105.0%
Consultants and professional services:	17.1	16.9	3.9	17.6	14.8	3.8	16.0	16.1	7.3	18.0	24.7	23.8	56.6%	53.6%
Business and advisory services														
Consultants and professional services:	1.0	1.0	0.3	1.1	1.1	0.2	1.2	1.2	2.7	1.3	1.3	1.4	100.4%	100.4%
Legal costs														
Contractors	7.1	7.1	4.9	7.2	7.1	5.0	11.6	9.1	4.4	11.6	11.6	11.4	68.5%	73.5%
Agency and support/outsourced services	17.7	14.7	24.8	18.4	14.9	22.0	16.6	11.7	13.5	17.7	17.7	15.0	106.9%	127.5%
Entertainment	6.7	4.3	0.8	6.8	4.4	0.9	6.6	3.1	0.7	6.1	6.1	5.0	28.3%	41.6%
Fleet services (including government motor transport)	0.1	0.1	-	-	-	-	-	-	0.5	-	-	0.0	402.2%	402.2%
Inventory: Clothing material and accessories	-	-	-	-	-	-	-	-	0.3	-	-	-	-	-
Inventory: Food and food supplies	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-

Table 30.2 Vote expenditure trends by programme and economic classification

Economic classification	2011/12			2012/13			2013/14			2014/15			Outcome/Annual budget Average (%)	Outcome/Adjusted appropriation Average (%)
	Annual budget	Adjusted appropriation	Audited outcome	Annual budget	Adjusted appropriation	Audited outcome	Annual budget	Adjusted appropriation	Audited outcome	Annual budget	Adjusted appropriation	Revised estimate		
R million														
<i>Inventory: Fuel, oil and gas</i>	0.1	0.1	–	0.1	0.1	–	0.1	0.1	–	0.1	0.1	0.1	27.6%	27.6%
<i>Inventory: Materials and supplies</i>	–	–	1.2	–	–	0.4	–	–	0.0	–	–	–	–	–
<i>Inventory: Other supplies</i>	–	–	0.1	–	2.9	2.8	1.6	1.6	0.0	1.1	1.1	1.1	152.2%	72.3%
<i>Consumable supplies</i>	0.8	0.8	0.2	1.0	0.0	–	–	–	2.7	–	–	–	163.3%	356.9%
<i>Consumables: Stationery, printing and office supplies</i>	5.0	5.0	6.1	5.3	5.1	8.0	7.4	7.4	4.4	3.7	3.7	3.7	104.5%	105.3%
<i>Operating leases</i>	3.5	3.5	1.9	3.7	4.7	4.4	4.4	4.4	5.2	3.5	3.5	3.5	98.0%	92.2%
<i>Property payments</i>	4.7	4.7	2.9	5.0	5.0	2.6	5.9	5.9	2.7	6.2	6.2	7.4	71.4%	71.4%
<i>Transport provided: Departmental activity</i>	–	–	–	–	0.0	0.1	–	–	–	–	–	–	–	1 820.0%
<i>Travel and subsistence</i>	38.6	36.2	34.2	40.9	40.4	39.5	45.0	36.1	40.4	48.3	48.3	50.3	95.1%	102.1%
<i>Training and development</i>	4.6	4.6	4.2	4.7	4.3	6.1	5.2	5.2	6.1	5.0	5.0	5.0	109.3%	111.5%
<i>Operating payments</i>	4.8	4.8	4.5	5.0	7.0	7.1	6.5	6.4	9.9	7.0	7.0	7.0	122.3%	113.4%
<i>Venues and facilities</i>	5.1	6.3	13.2	5.4	9.7	18.0	17.8	18.1	14.6	23.5	23.5	24.8	136.3%	122.6%
<i>Rental and hiring</i>	–	–	0.1	–	–	1.9	–	–	1.0	–	–	–	–	–
<i>Interest and rent on land</i>	–	–	0.5	–	–	0.4	–	–	–	–	–	–	–	–
Transfers and subsidies	4 031.6	4 038.4	4 050.4	4 559.0	4 587.7	4 580.0	5 741.9	5 754.4	5 703.9	5 981.2	5 983.1	5 983.1	100.0%	99.8%
Departmental agencies and accounts	2 619.9	2 633.5	2 618.1	2 823.8	2 844.7	3 058.9	4 174.9	4 303.5	3 762.9	4 409.3	4 393.7	4 492.4	99.3%	98.3%
Higher education institutions	–	–	139.3	33.6	–	124.2	–	115.8	156.2	21.4	38.9	127.7	995.2%	353.9%
Foreign governments and international organisations	–	–	–	–	–	–	–	–	0.5	–	–	–	–	–
Public corporations and private enterprises	924.8	924.8	1 248.8	972.6	1 015.7	1 329.0	1 034.2	1 101.2	1 698.0	1 140.8	1 145.5	1 228.2	135.2%	131.4%
Non-profit institutions	486.9	480.1	43.6	728.9	727.3	67.3	532.8	233.8	84.7	409.7	405.0	134.8	15.3%	17.9%
Households	–	–	0.6	–	–	0.6	–	–	1.7	–	–	–	–	–
Payments for capital assets	3.3	3.3	6.9	3.4	2.6	6.5	2.2	29.7	63.0	2.3	2.3	1.1	694.9%	205.1%
Machinery and equipment	3.3	3.3	6.9	3.4	2.6	6.5	2.2	29.7	8.2	2.3	2.3	1.1	203.4%	60.1%
Software and other intangible assets	–	–	–	–	–	–	–	–	54.9	–	–	–	–	–
Payments for financial assets	–	–	0.2	–	–	0.0	–	–	–	–	–	–	–	–
Total	4 404.6	4 407.0	4 403.5	4 955.9	4 999.6	4 973.3	6 198.2	6 198.2	6 169.5	6 470.2	6 479.9	6 479.9	100.0%	99.7%

Expenditure estimates

Table 30.3 Vote expenditure estimates by programme and economic classification

Programmes								
1. Administration								
2. Technology Innovation								
3. International Cooperation and Resources								
4. Research, Development and Support								
5. Socio-Economic Innovation Partnerships								
Programme	Revised estimate	Average growth rate (%)	Expenditure/total: Average (%)	Medium-term expenditure estimate			Average growth rate (%)	Expenditure/total: Average (%)
				2014/15	2011/12 - 2014/15	2015/16		
R million								
Programme 1	291.9	14.3%	4.4%	299.8	304.1	320.8	3.2%	4.2%
Programme 2	1 008.9	5.7%	18.8%	1 008.8	1 011.6	1 044.3	1.2%	14.0%
Programme 3	119.3	-4.5%	1.9%	122.0	123.9	130.8	3.1%	1.7%
Programme 4	3 496.9	21.5%	49.8%	4 247.1	4 265.3	4 448.5	8.4%	56.5%
Programme 5	1 562.8	7.2%	25.0%	1 804.5	1 857.3	1 664.3	2.1%	23.6%
Total	6 479.9	13.7%	100.0%	7 482.1	7 562.2	7 608.6	5.5%	100.0%
Change to 2014 Budget estimate				(72.2)	(72.6)	(82.8)		
Economic classification								
Current payments	495.7	10.7%	7.4%	496.4	507.9	536.4	2.7%	7.0%
Compensation of employees	284.9	7.8%	4.3%	291.3	302.4	321.3	4.1%	4.1%
Goods and services	210.8	15.3%	3.1%	205.1	205.5	215.1	0.7%	2.9%
of which:								
Administrative fees	5.7	6.5%	0.1%	6.1	6.0	6.4	3.9%	0.1%
Advertising	16.4	74.3%	0.3%	17.2	17.7	18.7	4.6%	0.2%
Assets less than the capitalisation threshold	0.5	-2.5%	0.0%	0.6	0.6	0.6	3.5%	0.0%
Audit costs: External	6.0	47.5%	0.1%	6.4	6.4	6.7	3.6%	0.1%
Bursaries: Employees	2.4	1.8%	0.0%	2.5	2.5	2.6	3.3%	0.0%
Catering: Departmental activities	2.7	8.0%	0.0%	2.8	2.8	3.1	4.8%	0.0%
Communication	10.0	8.3%	0.1%	9.7	9.6	10.3	1.0%	0.1%
Computer services	7.7	14.8%	0.1%	8.1	8.2	8.6	3.6%	0.1%
Consultants and professional services: Business and advisory services	23.8	12.1%	0.2%	14.5	13.5	14.0	-16.3%	0.2%
Consultants and professional services: Legal costs	1.4	10.2%	0.0%	0.9	0.9	1.0	-10.2%	0.0%
Contractors	11.4	17.0%	0.1%	11.0	11.0	11.6	0.7%	0.2%
Agency and support/outourced services	15.0	0.7%	0.3%	16.9	16.4	17.0	4.4%	0.2%
Entertainment	5.0	5.5%	0.0%	5.9	5.3	5.5	2.8%	0.1%
Inventory: Fuel, oil and gas	0.1	6.8%	0.0%	0.1	0.1	0.1	3.4%	0.0%
Inventory: Other supplies	1.1		0.0%	1.2	1.2	1.3	5.3%	0.0%
Consumables: Stationery, printing and office supplies	3.7	-9.6%	0.1%	5.0	5.0	5.3	12.2%	0.1%
Operating leases	3.5	-0.4%	0.1%	3.7	3.7	3.9	4.0%	0.1%
Property payments	7.4	16.4%	0.1%	7.2	7.0	7.3	-0.4%	0.1%
Travel and subsistence	50.3	11.6%	0.7%	47.9	49.1	50.8	0.3%	0.7%
Training and development	5.0	3.5%	0.1%	5.3	5.3	5.6	3.3%	0.1%
Operating payments	7.0	13.5%	0.1%	7.3	7.3	7.7	3.4%	0.1%
Venues and facilities	24.8	58.1%	0.3%	25.0	25.7	27.1	3.0%	0.4%
Transfers and subsidies	5 983.1	14.0%	92.2%	6 983.4	7 052.0	7 069.8	5.7%	93.0%
Departmental agencies and accounts	4 492.4	19.5%	63.3%	5 466.0	5 487.7	5 443.1	6.6%	71.7%
Higher education institutions	127.7	-	2.5%	114.6	115.2	105.1	-6.3%	1.6%
Public corporations and private enterprises	1 228.2	9.9%	25.0%	1 253.3	1 299.4	1 364.3	3.6%	17.7%
Non-profit institutions	134.8	-34.5%	1.5%	149.6	149.8	157.3	5.3%	2.0%
Payments for capital assets	1.1	-30.0%	0.4%	2.3	2.3	2.4	29.3%	0.0%
Machinery and equipment	1.1	-30.0%	0.1%	2.3	2.3	2.4	29.3%	0.0%
Software and other intangible assets	-	-	0.2%	-	-	-	-	-
Total	6 479.9	13.7%	100.0%	7 482.1	7 562.2	7 608.6	5.5%	100.0%

Personnel information

Table 30.4 Vote personnel numbers and cost by salary level and programme¹

Programmes		Number and cost ² of personnel posts filled / planned for on funded establishment															Number		
Number of posts estimated for 31 March 2015																	Average growth rate (%)	Salary level/total: Average (%)	
Number of funded posts	Number of posts additional to the establishment	Actual			Revised estimate			Medium-term expenditure estimate						2014/15 - 2017/18					
		2013/14			2014/15			2015/16		2016/17		2017/18							
		Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost			
Science and Technology																			
Salary level	481	–	434	241.6	0.6	484	284.9	0.6	470	291.3	0.6	470	302.4	0.6	470	321.3	0.7	-1.0%	100.0%
1 – 6	66	–	71	11.3	0.2	65	12.7	0.2	65	13.2	0.2	65	13.3	0.2	65	14.0	0.2	–	13.7%
7 – 10	139	–	126	57.2	0.5	141	70.0	0.5	142	60.1	0.4	142	62.5	0.4	142	66.3	0.5	0.2%	29.9%
11 – 12	154	–	137	70.4	0.5	154	81.6	0.5	149	95.5	0.6	149	100.0	0.7	149	106.4	0.7	-1.1%	31.7%
13 – 16	122	–	100	102.7	1.0	124	120.6	1.0	114	122.5	1.1	114	126.6	1.1	114	134.6	1.2	-2.8%	24.6%
Programme	481	–	434	241.6	0.6	484	284.9	0.6	470	291.3	0.6	470	302.4	0.6	470	321.3	0.7	-1.0%	100.0%
Programme 1	255	–	236	123.0	0.5	255	137.0	0.5	264	142.0	0.5	264	146.6	0.6	264	155.5	0.6	1.2%	55.3%
Programme 2	56	–	42	30.9	0.7	60	41.4	0.7	50	41.4	0.8	50	42.6	0.9	50	45.3	0.9	-5.9%	11.1%
Programme 3	63	–	57	33.2	0.6	61	43.4	0.7	57	43.7	0.8	57	45.1	0.8	57	48.2	0.8	-2.2%	12.2%
Programme 4	50	–	45	24.5	0.5	50	29.1	0.6	45	30.1	0.7	45	31.1	0.7	45	33.0	0.7	-3.5%	9.8%
Programme 5	57	–	54	30.0	0.6	58	33.9	0.6	54	34.1	0.6	54	37.0	0.7	54	39.3	0.7	-2.4%	11.6%

1. Data has been provided by the department and may not necessarily reconcile with official government personnel data.

2. Rand million.

Departmental receipts

Table 30.5 Departmental receipts by economic classification

R thousand	Audited outcome			Adjusted estimate	Revised estimate	Average growth rate (%)	Receipt item/total: Average (%)	Medium-term receipts estimate			Average growth rate (%)	Receipt item/total: Average (%)
	2011/12	2012/13	2013/14					2014/15	2015/16	2016/17		
Departmental receipts	1 365	1 219	1 658	116	1 332	-0.8%	100.0%	121	121	121	-55.0%	100.0%
Sales of goods and services produced by department	56	64	47	28	32	-17.0%	3.6%	29	29	29	-3.2%	7.0%
Other sales	56	64	47	28	32	-17.0%	3.6%	29	29	29	-3.2%	7.0%
of which:												
Services rendered:	56	64	47	27	32	-17.0%	3.6%	28	28	28	-4.4%	6.8%
Commission on insurance	–	–	–	1	–	–	–	1	1	1	–	0.2%
Replacement of security cards												
Interest, dividends and rent on land	7	81	8	8	2	-34.1%	1.8%	8	8	8	58.7%	1.5%
Interest	7	81	8	8	2	-34.1%	1.8%	8	8	8	58.7%	1.5%
Sales of capital assets	257	577	–	–	–	-100.0%	15.0%	–	–	–	–	–
Transactions in financial assets and liabilities	1 045	497	1 603	80	1 298	7.5%	79.7%	84	84	84	-59.9%	91.4%
Total	1 365	1 219	1 658	116	1 332	-0.8%	100.0%	121	121	121	-55.0%	100.0%

Programme 1: Administration

Programme purpose

Provide strategic leadership, management and support services to the department.

Expenditure trends and estimates

Table 30.6 Administration expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)	Expenditure/ Total: Average (%)	Medium-term expenditure estimate			Average growth rate (%)	Expenditure/ Total: Average (%)
	2011/12	2012/13	2013/14				2014/15	2015/16	2016/17		
R thousand											
Ministry	3 453	2 790	3 403	4 065	5.6%	1.4%	4 252	4 274	4 544	3.8%	1.4%
Management	63 703	65 852	78 510	101 698	16.9%	31.9%	103 016	104 849	110 782	2.9%	34.5%
Corporate Services	119 666	146 897	164 571	172 497	13.0%	62.2%	178 722	181 095	190 810	3.4%	59.4%
Governance	5 858	6 594	7 828	9 001	15.4%	3.0%	9 070	9 245	9 786	2.8%	3.0%
Office Accommodation	2 876	3 137	3 160	4 679	17.6%	1.4%	4 716	4 673	4 894	1.5%	1.6%
Total	195 556	225 270	257 472	291 940	14.3%	100.0%	299 776	304 136	320 816	3.2%	100.0%
Change to 2014				980			(9 407)	(7 052)	(8 853)		
Budget estimate											
Economic classification											
Current payments	189 740	219 803	235 147	278 734	13.7%	95.2%	284 671	288 967	304 895	3.0%	95.1%
Compensation of employees	102 915	111 328	122 972	137 041	10.0%	48.9%	141 978	146 563	155 538	4.3%	47.8%
Goods and services	86 544	108 232	112 175	141 693	17.9%	46.2%	142 693	142 404	149 357	1.8%	47.4%
of which:											
Administrative fees	3 045	4 557	4 881	5 123	18.9%	1.8%	5 180	5 139	5 383	1.7%	1.7%
Advertising	12 944	13 754	15 573	15 455	6.1%	5.9%	16 319	16 857	17 635	4.5%	5.4%
Assets less than the capitalisation threshold	219	103	275	549	35.8%	0.1%	576	579	608	3.5%	0.2%
Audit costs: External	2 715	3 316	4 518	6 021	30.4%	1.7%	6 351	6 383	6 702	3.6%	2.1%
Bursaries: Employees	1 366	1 248	1 201	2 351	19.8%	0.6%	2 459	2 471	2 595	3.3%	0.8%
Catering: Departmental activities	595	2 430	1 697	1 394	32.8%	0.6%	1 459	1 466	1 539	3.4%	0.5%
Communication	3 198	2 374	3 089	5 860	22.4%	1.5%	6 130	6 161	6 469	3.4%	2.0%
Computer services	3 908	7 603	7 384	7 403	23.7%	2.7%	7 744	7 783	8 172	3.3%	2.6%
Consultants and professional services:	2 226	1 940	3 952	10 461	67.5%	1.9%	7 527	6 619	6 946	-12.8%	2.6%
Business and advisory services											
Consultants and professional services:	147	100	894	740	71.4%	0.2%	774	778	817	3.4%	0.3%
Legal costs											
Contractors	4 802	2 813	4 267	11 350	33.2%	2.4%	10 975	11 030	11 581	0.7%	3.7%
Agency and support/outsourced services	13 375	13 197	10 367	7 804	-16.4%	4.6%	8 163	8 204	8 614	3.3%	2.7%
Entertainment	148	429	471	597	59.2%	0.2%	525	532	559	-2.2%	0.2%
Fleet services (including government motor transport)	-	-	541	-	-	0.1%	-	-	-	-	-
Inventory: Clothing material and accessories	-	-	286	-	-	-	-	-	-	-	-
Inventory: Food and food supplies	126	-	-	-	-100.0%	-	-	-	-	-	-
Inventory: Fuel, oil and gas	-	-	-	123	-	-	128	129	136	3.4%	-
Inventory: Learner and teacher support material	-	5	-	-	-	-	-	-	-	-	-
Inventory: Materials and supplies	-	341	31	-	-	-	-	-	-	-	-
Inventory: Other supplies	90	2 819	-	835	110.1%	0.4%	874	878	922	3.4%	0.3%
Consumable supplies	-	-	2 647	-	-	0.3%	-	-	-	-	-
Consumables Stationery, printing and office supplies	4 436	6 278	4 276	3 682	-6.0%	1.9%	4 990	5 015	5 266	12.7%	1.6%
Operating leases	755	2 129	4 092	3 496	66.7%	1.1%	3 731	3 749	3 936	4.0%	1.2%
Property payments	2 488	2 503	2 508	6 916	40.6%	1.5%	6 165	6 196	6 506	-2.0%	2.1%
Travel and subsistence	16 467	17 863	17 169	25 032	15.0%	7.9%	24 531	24 206	25 331	0.4%	8.1%
Training and development	4 199	5 940	6 073	5 047	6.3%	2.2%	5 279	5 303	5 568	3.3%	1.7%
Operating payments	3 227	4 676	7 363	5 207	17.3%	2.1%	5 463	5 490	5 764	3.4%	1.8%
Venues and facilities	6 056	9 911	7 659	16 247	39.0%	4.1%	17 350	17 436	18 308	4.1%	5.7%
Rental and hiring	12	1 903	961	-	-100.0%	0.3%	-	-	-	-	-
Interest and rent on land	281	243	-	-	-100.0%	0.1%	-	-	-	-	-
Transfers and subsidies	1 036	930	14 287	12 087	126.8%	2.9%	12 796	12 860	13 503	3.8%	4.2%
Departmental agencies and accounts	-	-	11 231	-	-	1.2%	-	-	-	-	-
Higher education institutions	264	-	1 324	-	-100.0%	0.2%	-	-	-	-	-
Foreign governments and international organisations	-	-	452	-	-	-	-	-	-	-	-
Public corporations and private enterprises	-	500	300	-	-	0.1%	-	-	-	-	-
Non-profit institutions	698	329	228	12 087	158.7%	1.4%	12 796	12 860	13 503	3.8%	4.2%
Households	74	101	752	-	-100.0%	0.1%	-	-	-	-	-
Payments for capital assets	4 780	4 526	8 038	1 119	-38.4%	1.9%	2 309	2 309	2 418	29.3%	0.7%
Machinery and equipment	4 780	4 526	8 038	1 119	-38.4%	1.9%	2 309	2 309	2 418	29.3%	0.7%
Payments for financial assets	-	11	-	-	-	-	-	-	-	-	-
Total	195 556	225 270	257 472	291 940	14.3%	100.0%	299 776	304 136	320 816	3.2%	100.0%
Proportion of total programme expenditure to vote expenditure	4.4%	4.5%	4.2%	4.5%	-	-	4.0%	4.0%	4.2%	-	-

Table 30.6 Administration expenditure trends and estimates by subprogramme and economic classification

Details of transfers and subsidies		Audited outcome			Adjusted appropriation	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
		2011/12	2012/13	2013/14		2014/15	2011/12 - 2014/15	2015/16	2016/17	2017/18	2014/15 - 2017/18	2014/15 - 2017/18
R thousand												
Households												
Social benefits												
Current		74	101	352	-	-100.0%	0.1%	-	-	-	-	-
Households		74	101	352	-	-100.0%	0.1%	-	-	-	-	-
Households												
Other transfers to households												
Current		-	-	400	-	-	-	-	-	-	-	-
Households		-	-	400	-	-	-	-	-	-	-	-
Departmental agencies and accounts												
Departmental agencies (non-business entities)												
Current		-	-	11 231	-	-	1.2%	-	-	-	-	-
Institutional and programme support		-	-	11 231	-	-	1.2%	-	-	-	-	-
Higher education institutions												
Current		264	-	1 324	-	-100.0%	0.2%	-	-	-	-	-
Institutional and programme support		264	-	1 324	-	-100.0%	0.2%	-	-	-	-	-
Non-profit institutions												
Current		698	329	228	12 087	158.7%	1.4%	12 796	12 860	13 503	3.8%	4.2%
Institutional and programme support		698	329	228	12 087	158.7%	1.4%	12 796	12 860	13 503	3.8%	4.2%
Public corporations and private enterprises												
Public corporations												
Other transfers to public corporations												
Current		-	500	300	-	-	0.1%	-	-	-	-	-
Institutional and programme support		-	500	300	-	-	0.1%	-	-	-	-	-
Foreign governments and international organisations												
Current		-	-	452	-	-	-	-	-	-	-	-
Institutional and programme support		-	-	452	-	-	-	-	-	-	-	-

Personnel information

Table 30.7 Administration personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2015		Number and cost ² of personnel posts filled / planned for on funded establishment															Number		
		Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Salary level/total: Average (%)				
Number of funded posts	Number of posts additional to the establishment	2013/14			2014/15			2015/16		2016/17		2017/18		2014/15 - 2017/18					
		Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost				
Administration	255	-	236	123.0	0.5	255	137.0	0.5	264	142.0	0.5	264	146.6	0.6	264	155.5	0.6	1.2%	100.0%
Salary level																			
1 - 6	46	-	52	8.1	0.2	46	9.0	0.2	48	9.7	0.2	48	9.7	0.2	48	10.1	0.2	1.4%	18.1%
7 - 10	90	-	78	36.1	0.5	90	47.5	0.5	94	36.4	0.4	94	38.5	0.4	94	40.8	0.4	1.5%	35.5%
11 - 12	63	-	60	33.5	0.6	63	30.8	0.5	65	42.0	0.6	65	42.2	0.6	65	44.9	0.7	1.0%	24.6%
13 - 16	56	-	46	45.4	1.0	56	49.8	0.9	57	53.9	0.9	57	56.2	1.0	57	59.7	1.0	0.6%	21.7%

1. Data has been provided by the department and may not necessarily reconcile with official government personnel data.

2. Rand million.

Programme 2: Technology Innovation

Programme purpose

Enable research and development in space science and technology, energy security and the bioeconomy, and in the emerging and converging areas of nanotechnology, robotics, photonics and indigenous knowledge systems, to promote the realisation of commercial products, processes and services. Promote the protection and utilisation of intellectual property, technology transfer and technology commercialisation through the implementation of enabling policies and interventions along the entire innovation value chain.

Objectives

- Lead, inform and influence policy development in areas of strategic science and technology innovation by implementing 5 innovation enabling programmes, and developing and approving 10 technology development and innovation policy directives by 31 March 2018.

- Oversee, monitor and regulate key policy instruments, including institutional arrangements and support interventions, by developing 24 evaluation and assessment reports in the areas of strategic and emerging science and technology by 31 March 2018.
- Coordinate and support research and high end skills development by supporting 1 351 postgraduate students (masters and doctorates) through department funded research and development initiatives, generating 350 publications in the strategic, emerging and converging areas, and filing 27 patents in these areas by 31 March 2018.
- Support the translation of scientific research into commercial products and services that will contribute to economic growth and a better quality of life by 31 March 2018, by:
 - implementing 16 new technologies from publicly funded research and development institutions to address South Africa's socioeconomic challenges
 - supporting 8 demonstration plants as a result of department funded energy research, development and innovation initiatives
 - completing 1 satellite mission, and developing, designing and launching 1 indigenous satellite constellation
 - ensuring full operation and functioning of the Houwteq assembly, integration and testing facility, mission control centre and secondary ground station facilities
 - licensing 1 emerging and converging technology; developing 3 commercial health innovation products, processes and services, and 3 agricultural biotechnology products, prototypes or services; and commercialising 6 products, processes and services based on indigenous knowledge systems.

Subprogrammes

- *Space Science* supports the creation of an environment that is conducive to the implementation of the national space strategy and the South African earth observation strategy, which address the development of innovative applications and human capital to respond to national priorities.
- *Hydrogen and Energy* provides policy leadership in research, development and innovation initiatives in the energy sector. It plays a key role in developing a sustainable and globally competitive South African energy knowledge base and industry.
- *Bioeconomy* leads the implementation of the national bioeconomy strategy, which was approved by Cabinet in 2013.
- *Innovation Priorities and Instruments* supports and strengthens the innovation policy package aimed at creating and sustaining an enabling environment for innovation, technology development, and the commercialisation of publicly funded research and development initiatives.
- *National Intellectual Property Management Office* is the implementing agency established to provide for the more effective utilisation of intellectual property emanating from publicly financed research and development.

Expenditure trends and estimates

Table 30.8 Technology Innovation expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2011/12	2012/13	2013/14		2014/15	2011/12 - 2014/15	Average (%)	2015/16	2016/17	2017/18	2014/15 - 2017/18
R thousand											
Space Science	115 743	170 269	230 621	169 909	13.7%	16.6%	167 184	166 757	173 663	0.7%	16.6%
Hydrogen and Energy	145 641	131 881	139 861	146 396	0.2%	13.6%	152 339	152 551	160 193	3.0%	15.0%
Bioeconomy	107 352	125 728	139 439	128 114	6.1%	12.1%	137 740	138 039	144 969	4.2%	13.5%
Innovation Priorities and Instruments	550 293	574 128	608 776	520 896	-1.8%	54.5%	526 206	528 085	554 456	2.1%	52.3%
National Intellectual Property Management Office	26 661	31 180	31 699	43 608	17.8%	3.2%	25 348	26 204	11 033	-36.8%	2.6%
Total	945 690	1 033 186	1 150 396	1 008 923	2.2%	100.0%	1 008 817	1 011 636	1 044 314	1.2%	100.0%
Change to 2014 Budget estimate				17 300			(9 694)	(11 469)	(13 718)		

Table 30.8 Technology Innovation expenditure trends and estimates by subprogramme and economic classification

Economic classification	Audited outcome			Adjusted appropriation 2014/15	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%) 2014/15 - 2017/18	Expenditure/Total: Average (%) 2014/15 - 2017/18
	2011/12	2012/13	2013/14		2011/12	2014/15	2015/16	2016/17	2017/18		
R thousand											
Current payments	44 642	49 129	45 274	59 954	10.3%	4.8%	62 736	63 947	67 345	4.0%	6.2%
Compensation of employees	29 452	30 086	30 940	41 407	12.0%	3.2%	41 428	42 596	45 261	3.0%	4.2%
Goods and services	15 144	19 013	14 334	18 547	7.0%	1.6%	21 308	21 351	22 084	6.0%	2.0%
of which:											
Administrative fees	59	391	376	125	28.4%	-	131	131	179	12.7%	-
Advertising	160	24	168	345	29.2%	-	226	226	446	8.9%	-
Assets less than the capitalisation threshold	27	34	18	-	-100.0%	-	-	-	-	-	-
Bursaries: Employees	-	-	-	23	-	-	24	24	25	2.8%	-
Catering: Departmental activities	116	192	176	160	11.3%	-	166	173	308	24.4%	-
Communication	927	820	788	655	-10.9%	0.1%	680	692	862	9.6%	0.1%
Computer services	580	156	14	-	-100.0%	-	-	-	-	-	-
Consultants and professional services: Business and advisory services	1 199	1 012	1 543	2 644	30.2%	0.2%	1 634	1 643	1 638	-14.8%	0.2%
Consultants and professional services: Legal costs	-	-	1 710	-	-	-	-	-	-	-	-
Contractors	18	2 169	1	-	-100.0%	0.1%	-	-	-	-	-
Agency and support/outourced services	3 826	4 492	889	4 523	5.7%	0.3%	7 055	6 558	6 684	13.9%	0.6%
Entertainment	19	39	24	3 433	465.3%	0.1%	4 347	3 717	3 818	3.6%	0.4%
Inventory: Materials and supplies	23	-	-	-	-100.0%	-	-	-	-	-	-
Inventory: Medical supplies	1	-	-	-	-100.0%	-	-	-	-	-	-
Inventory: Other supplies	9	6	-	36	58.7%	-	69	70	108	44.2%	-
Consumable supplies	129	-	5	-	-100.0%	-	-	-	-	-	-
Consumables: Stationery, printing and office supplies	846	751	45	-	-100.0%	-	-	-	-	-	-
Operating leases	131	1 357	647	-	-100.0%	0.1%	-	-	-	-	-
Property payments	123	91	150	34	-34.9%	-	530	345	300	106.6%	-
Transport provided: Departmental activity	-	91	-	-	-	-	-	-	-	-	-
Travel and subsistence	4 665	4 728	5 541	4 795	0.9%	0.5%	4 562	5 693	5 396	4.0%	0.5%
Training and development	-	106	2	-	-	-	-	-	-	-	-
Operating payments	297	1 152	721	294	-0.3%	0.1%	309	310	325	3.4%	-
Venues and facilities	1 922	1 398	1 516	1 480	-8.3%	0.2%	1 575	1 769	1 995	10.5%	0.2%
Rental and hiring	67	4	-	-	-100.0%	-	-	-	-	-	-
Interest and rent on land	46	30	-	-	-100.0%	-	-	-	-	-	-
Transfers and subsidies	900 373	983 489	1 050 141	948 969	1.8%	93.8%	946 081	947 689	976 969	1.0%	93.8%
Departmental agencies and accounts	658 745	741 922	770 585	644 098	-0.7%	68.0%	646 250	647 329	677 419	1.7%	64.2%
Higher education institutions	102 091	83 216	102 397	127 700	7.7%	10.0%	114 580	115 153	105 082	-6.3%	11.4%
Public corporations and private enterprises	129 015	139 149	140 769	92 351	-10.5%	12.1%	96 011	96 045	100 848	3.0%	9.5%
Non-profit institutions	10 522	19 110	36 250	84 820	100.5%	3.6%	89 240	89 162	93 620	3.3%	8.8%
Households	-	92	140	-	-	-	-	-	-	-	-
Payments for capital assets	675	568	54 981	-	-100.0%	1.4%	-	-	-	-	-
Machinery and equipment	675	568	118	-	-100.0%	-	-	-	-	-	-
Software and other intangible assets	-	-	54 863	-	-	1.3%	-	-	-	-	-
Total	945 690	1 033 186	1 150 396	1 008 923	2.2%	100.0%	1 008 817	1 011 636	1 044 314	1.2%	100.0%
Proportion of total programme expenditure to vote expenditure	21.5%	20.8%	18.6%	15.6%	-	-	13.5%	13.4%	13.7%	-	-
Details of transfers and subsidies											
Households											
Social benefits											
Current	-	92	140	-	-	-	-	-	-	-	-
Households	-	92	140	-	-	-	-	-	-	-	-
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	647 087	725 861	765 928	644 098	-0.2%	67.3%	646 250	647 329	677 419	1.7%	64.2%
Academy of Science of South Africa: Biofuels	5 000	-	-	-	-100.0%	0.1%	-	-	-	-	-
Biotechnology strategy	19 450	24 020	11 613	-	-100.0%	1.3%	-	-	-	-	-
Energy Grand Challenge	11 803	32 010	32 500	33 796	42.0%	2.7%	35 240	34 904	36 649	2.7%	3.5%
Health innovation	28 529	28 915	36 909	-	-100.0%	2.3%	-	-	-	-	-
HIV and AIDS prevention and treatment technologies	4 298	3 963	1 817	22 596	73.9%	0.8%	23 635	23 753	24 941	3.3%	2.3%
Hydrogen strategy	16 897	15 000	16 800	-	-100.0%	1.2%	-	-	-	-	-
Innovation projects	-	-	-	28 640	-	0.7%	29 957	30 107	31 612	3.3%	3.0%
International Centre for Genetic Engineering and Biotechnology	-	-	-	11 592	-	0.3%	12 125	12 186	12 795	3.3%	1.2%
Space science	-	19 620	30 500	40 000	-	2.2%	31 386	29 653	28 860	-10.3%	3.2%
National Research Foundation: Indigenous knowledge systems	2 075	-	10 000	-	-100.0%	0.3%	-	-	-	-	-
Technology Innovation Agency	433 816	456 325	481 081	385 386	-3.9%	42.4%	385 188	387 364	406 732	1.8%	38.4%
South African National Space Agency	106 719	126 008	123 708	118 298	3.5%	11.5%	124 355	124 977	131 226	3.5%	12.2%
Emerging research areas	18 500	20 000	21 000	-	-100.0%	1.4%	-	-	-	-	-
Indigenous knowledge systems	-	-	-	3 790	-	0.1%	4 364	4 385	4 604	6.7%	0.4%

Table 30.8 Technology Innovation expenditure trends and estimates by subprogramme and economic classification

Details of transfers and subsidies											
R thousand	Audited outcome			Adjusted appropriation 2014/15	Average growth rate (%) 2011/12 - 2014/15	Expenditure/ Total: Average (%) 2014/15	Medium-term expenditure estimate			Average growth rate (%) 2014/15 - 2017/18	Expenditure/ Total: Average (%) 2014/15 - 2017/18
	2011/12	2012/13	2013/14				2015/16	2016/17	2017/18		
Capital	11 658	16 061	4 657	–	-100.0%	0.8%	–	–	–	–	–
Technology transfer offices support	11 658	16 061	4 657	–	-100.0%	0.8%	–	–	–	–	–
Higher education institutions											
Current	50 191	28 718	45 065	66 928	10.1%	4.6%	51 012	51 267	38 002	-17.2%	5.1%
Biotechnology strategy	10 590	3 200	7 524	–	-100.0%	0.5%	–	–	–	–	–
Technology transfer offices support	2 984	–	10 201	32 500	121.7%	1.1%	15 000	15 075	–	-100.0%	1.5%
Energy Grand Challenge	21 821	2 415	3 100	–	-100.0%	0.7%	–	–	–	–	–
Health innovation	–	2 785	1 865	–	–	0.1%	–	–	–	–	–
Hydrogen strategy	8 800	15 318	14 839	34 428	57.6%	1.8%	36 012	36 192	38 002	3.3%	3.6%
National Research Foundation: Indigenous knowledge systems	–	–	1 932	–	–	–	–	–	–	–	–
Square Kilometre Array	495	–	–	–	-100.0%	–	–	–	–	–	–
Emerging research areas	5 501	5 000	5 604	–	-100.0%	0.4%	–	–	–	–	–
Capital	51 900	54 498	57 332	60 772	5.4%	5.4%	63 568	63 886	67 080	3.3%	6.3%
Hydrogen strategy	51 900	54 498	57 332	60 772	5.4%	5.4%	63 568	63 886	67 080	3.3%	6.3%
Non-profit institutions											
Current	5 300	14 999	36 217	84 820	152.0%	3.4%	89 240	89 162	93 620	3.3%	8.8%
Academy of Science of South Africa: Biofuels	–	–	–	6 205	–	0.1%	6 490	6 522	6 848	3.3%	0.6%
Biotechnology strategy	–	3 504	6 805	33 556	–	1.1%	35 618	35 505	37 280	3.6%	3.5%
Energy Grand Challenge	2 500	1 000	3 720	–	-100.0%	0.2%	–	–	–	–	–
Health innovation	2 800	100	200	41 706	146.0%	1.1%	43 625	43 610	45 791	3.2%	4.3%
Innovation projects	–	–	8 380	–	–	0.2%	–	–	–	–	–
International Centre for Generic Engineering and Biotechnology	–	10 395	10 936	–	–	0.5%	–	–	–	–	–
Space science	–	–	1 676	–	–	–	–	–	–	–	–
Technology top 100	–	–	–	3 353	–	0.1%	3 507	3 525	3 701	3.3%	0.3%
Emerging research areas	–	–	4 500	–	–	0.1%	–	–	–	–	–
Capital	5 222	4 111	33	–	-100.0%	0.2%	–	–	–	–	–
Technology transfer offices support	5 222	4 111	33	–	-100.0%	0.2%	–	–	–	–	–
Public corporations and private enterprises											
Public corporations											
Other transfers to public corporations											
Current	81 048	91 642	84 516	52 576	-13.4%	7.5%	45 582	45 364	37 344	-10.8%	4.4%
Biotechnology strategy	5 350	9 800	10 378	–	-100.0%	0.6%	–	–	–	–	–
Technology transfer offices support	–	–	6 485	–	–	0.2%	–	–	–	–	–
Energy Grand Challenge	12 503	3 540	2 179	–	-100.0%	0.4%	–	–	–	–	–
Health innovation	6 964	6 088	4 750	–	-100.0%	0.4%	–	–	–	–	–
HIV and AIDS prevention and treatment technologies	15 000	16 300	19 500	–	-100.0%	1.2%	–	–	–	–	–
Hydrogen strategy	4 659	354	800	–	-100.0%	0.1%	–	–	–	–	–
Innovation projects	4 727	6 001	–	–	-100.0%	0.3%	–	–	–	–	–
Space science	–	16 380	12 824	–	–	0.7%	–	–	–	–	–
National Research Foundation: Indigenous knowledge systems	–	–	2 000	–	–	–	–	–	–	–	–
Biofuels	300	–	–	–	-100.0%	–	–	–	–	–	–
Emerging research areas	31 545	33 179	25 600	52 576	18.6%	3.5%	45 582	45 364	37 344	-10.8%	4.4%
Capital	42 400	44 500	45 835	39 775	-2.1%	4.2%	50 429	50 681	63 504	16.9%	5.0%
National nanotechnology	42 400	44 500	45 835	39 775	-2.1%	4.2%	50 429	50 681	63 504	16.9%	5.0%
Public corporations and private enterprises											
Private enterprises											
Other transfers to private enterprises											
Current	5 567	3 007	10 418	–	-100.0%	0.5%	–	–	–	–	–
Technology transfer offices support	–	–	255	–	–	–	–	–	–	–	–
Innovation projects	273	–	7 000	–	-100.0%	0.2%	–	–	–	–	–
Technology top 100	5 294	3 007	3 163	–	-100.0%	0.3%	–	–	–	–	–

Personnel information

Table 30.9 Technology Innovation personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2015		Number and cost ² of personnel posts filled / planned for on funded establishment															Number		
		Actual			Revised estimate			Medium-term expenditure estimate									Average growth rate (%)	Salary level/total: Average (%)	
Number of funded posts	Number of posts additional to the establishment	2013/14			2014/15			2015/16			2016/17			2017/18			2014/15 - 2017/18		
		Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost			
Technology Innovation																			
Salary level	56		42	30.9	0.7	60	41.4	0.7	50	41.4	0.8	50	42.6	0.9	50	45.3	0.9	-5.9%	100.0%
1 – 6	5		6	0.3	0.1	5	0.4	0.1	5	0.4	0.1	5	0.4	0.1	5	0.4	0.1	-	9.5%
7 – 10	7		7	5.3	0.8	10	5.7	0.6	7	6.2	0.9	7	6.2	0.9	7	6.6	0.9	-11.2%	14.8%
11 – 12	24		16	6.4	0.4	25	10.5	0.4	22	10.6	0.5	22	11.8	0.5	22	12.5	0.6	-4.2%	43.3%
13 – 16	20		13	18.9	1.5	20	24.7	1.2	16	24.3	1.5	16	24.2	1.5	16	25.7	1.6	-7.2%	32.4%

1. Data has been provided by the department and may not necessarily reconcile with official government personnel data.

2. Rand million.

Programme 3: International Cooperation and Resources

Programme purpose

Strategically develop, promote and manage international partnerships that strengthen the national system of innovation. Enable an exchange of knowledge, capacity and resources between South Africa and its international partners, with a focus on supporting science, technology and innovation capacity building in Africa. Support South African foreign policy through science diplomacy.

Objectives

- Complement South Africa's national investments in science technology and innovation, including access to resources for department initiatives that require external investment, by securing international funds of R1.4 billion by 31 March 2018.
- Enhance South Africa's national science, technology and innovation capabilities, thus contributing to the attainment of the department's targets for human capital development, by accessing international knowledge and resources through securing the participation of 550 South African researchers in international postgraduate training programmes, by 31 March 2018.
- Build capacity in and support initiatives for the Southern African Development Community (SADC) and African Union (AU), thus advancing Africa's growth and development agenda, by strengthening cooperation in science, technology and innovation through the technical and financial support of 30 approved SADC and AU science, technology and innovation initiatives and programmes by 31 March 2018.
- Support South Africa's foreign policy objectives of creating a better South Africa, a better Africa and a better world by maximising South Africa's strategic interests in international science, technology and innovation cooperation through interventions that ensure that South Africa occupies 10 leadership positions in international science, technology and innovation governance structures by 31 March 2018.

Subprogrammes

- *Multilateral Cooperation and Africa* advances and facilitates South Africa's participation in: bilateral science, technology and innovation cooperation initiatives with other African partners; African multilateral programmes, specifically with the AU and SADC; and broader multilateral science technology and innovation partnerships, with a strategic focus on South-South cooperation.
- *International Resources* works to increase international funding accessed for South African science, technology and innovation initiatives and African regional and continental programmes through concerted efforts to promote investment and the fostering of strategic partnerships.
- *Overseas Bilateral Cooperation* promotes and facilitates South Africa's bilateral science, technology and innovation cooperation with partners in the Americas, Asia, Australasia and Europe, especially for human capital development and collaborative research in science, technology and innovation, and to secure their support for joint cooperation with other African partners.

Expenditure trends and estimates

Table 30.10 International Cooperation and Resources expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2011/12	2012/13	2013/14		2014/15	2011/12 - 2014/15	2015/16	2016/17	2017/18	2014/15 - 2017/18	2014/15 - 2017/18
R thousand											
Multilateral Cooperation and Africa	26 692	24 790	25 281	27 341	0.8%	24.4%	27 703	28 536	30 119	3.3%	22.9%
International Resources	42 610	44 716	50 402	54 864	8.8%	45.1%	56 612	57 210	60 247	3.2%	46.2%
Overseas Bilateral Cooperation	30 534	33 369	28 863	37 114	6.7%	30.4%	37 682	38 128	40 413	2.9%	30.9%
Total	99 836	102 875	104 546	119 319	6.1%	100.0%	121 997	123 874	130 779	3.1%	100.0%
Change to 2014 Budget estimate				(380)			(3 154)	(2 362)	(1 977)		
Economic classification											
Current payments	48 222	56 550	53 233	68 515	12.4%	53.1%	60 948	62 520	66 357	-1.1%	52.1%
Compensation of employees	31 836	33 934	33 205	43 418	10.9%	33.4%	43 729	45 146	48 172	3.5%	36.4%
Goods and services	16 324	22 580	20 028	25 097	15.4%	19.7%	17 219	17 374	18 185	-10.2%	15.7%
of which:											
Administrative fees	76	1 101	775	137	21.7%	0.5%	144	144	153	3.8%	0.1%
Advertising	116	627	338	119	0.9%	0.3%	395	396	421	52.4%	0.3%
Assets less than the capitalisation threshold	29	29	-	-	-100.0%	-	-	-	-	-	-
Audit costs: External	-	-	30	-	-	-	-	-	-	-	-
Catering: Departmental activities	369	285	621	432	5.4%	0.4%	351	353	371	-4.9%	0.3%
Communication	956	565	620	1 766	22.7%	0.9%	1 291	1 299	1 376	-8.0%	1.2%
Computer services	354	54	-	156	-23.9%	0.1%	163	164	173	3.5%	0.1%
Consultants and professional services: Business and advisory services	158	848	269	4 045	194.7%	1.2%	256	257	269	-59.5%	1.0%
Consultants and professional services: Legal costs	174	134	103	502	42.4%	0.2%	-	-	-	-100.0%	0.1%
Contractors	74	-	82	-	-100.0%	-	-	-	-	-	-
Agency and support/outsourced services	684	812	662	1 287	23.5%	0.8%	621	624	655	-20.2%	0.6%
Entertainment	111	383	182	852	97.3%	0.4%	740	744	781	-2.9%	0.6%
Inventory: Materials and supplies	1 168	24	-	-	-100.0%	0.3%	-	-	-	-	-
Inventory: Other supplies	8	-	2	195	189.9%	-	204	205	216	3.5%	0.2%
Consumable supplies	-	-	31	-	-	-	-	-	-	-	-
Consumables: Stationery, printing and office supplies	259	537	8	-	-100.0%	0.2%	-	-	-	-	-
Operating leases	-	323	296	-	-	0.1%	-	-	-	-	-
Property payments	250	-	-	453	21.9%	0.2%	474	476	500	3.3%	0.4%
Travel and subsistence	8 235	10 303	11 164	10 364	8.0%	9.4%	7 818	7 924	8 245	-7.3%	6.9%
Operating payments	821	1 042	955	1 003	6.9%	0.9%	1 050	1 055	1 108	3.4%	0.9%
Venues and facilities	2 471	5 502	3 847	3 786	15.3%	3.7%	3 712	3 733	3 917	1.1%	3.1%
Rental and hiring	11	11	43	-	-100.0%	-	-	-	-	-	-
Interest and rent on land	62	36	-	-	-100.0%	-	-	-	-	-	-
Transfers and subsidies	51 112	45 707	51 313	50 804	-0.2%	46.6%	61 049	61 354	64 422	8.2%	47.9%
Departmental agencies and accounts	19 838	16 574	17 625	12 935	-13.3%	15.7%	13 530	13 598	14 278	3.3%	11.0%
Higher education institutions	5 612	13 788	17 033	-	-100.0%	8.5%	-	-	-	-	-
Public corporations and private enterprises	22 545	12 453	16 317	-	-100.0%	12.0%	-	-	-	-	-
Non-profit institutions	2 886	2 892	272	37 869	135.9%	10.3%	47 519	47 756	50 144	9.8%	37.0%
Households	231	-	66	-	-100.0%	0.1%	-	-	-	-	-
Payments for capital assets	502	618	-	-	-100.0%	0.3%	-	-	-	-	-
Machinery and equipment	502	618	-	-	-100.0%	0.3%	-	-	-	-	-
Total	99 836	102 875	104 546	119 319	6.1%	100.0%	121 997	123 874	130 779	3.1%	100.0%
Proportion of total programme expenditure to vote expenditure	2.3%	2.1%	1.7%	1.8%	-	-	1.6%	1.6%	1.7%	-	-
Details of transfers and subsidies											
Households											
Social benefits											
Current	231	-	66	-	-100.0%	0.1%	-	-	-	-	-
Households	231	-	66	-	-100.0%	0.1%	-	-	-	-	-
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	19 838	16 574	17 625	12 935	-13.3%	15.7%	13 530	13 598	14 278	3.3%	11.0%
National Research Foundation: Global science: Bilateral cooperation	11 500	9 600	12 203	12 935	4.0%	10.8%	13 530	13 598	14 278	3.3%	11.0%
Global science: International resources	3 138	3 174	1 622	-	-100.0%	1.9%	-	-	-	-	-
Global science: African multilateral agreements	5 200	3 800	3 800	-	-100.0%	3.0%	-	-	-	-	-
Higher education institutions											
Current	5 612	13 788	17 033	-	-100.0%	8.5%	-	-	-	-	-
Global science: International resources	3 112	10 188	13 133	-	-100.0%	6.2%	-	-	-	-	-
Global science: African multilateral agreements	2 500	3 600	3 900	-	-100.0%	2.3%	-	-	-	-	-

Table 30.10 International Cooperation and Resources expenditure trends and estimates by subprogramme and economic classification

Details of transfers and subsidies	Audited outcome			Adjusted appropriation 2014/15	Average growth rate (%) 2011/12 - 2014/15	Expenditure/ Total: Average (%) 2014/15	Medium-term expenditure estimate			Average growth rate (%) 2014/15 - 2017/18	Expenditure/ Total: Average (%) 2014/15 - 2017/18
	2011/12	2012/13	2013/14				2015/16	2016/17	2017/18		
R thousand											
Non-profit institutions											
Current	2 886	2 892	272	37 869	135.9%	10.3%	47 519	47 756	50 144	9.8%	37.0%
Global science: International resources	2 886	2 892	272	33 549	126.5%	9.3%	39 025	39 220	41 181	7.1%	30.8%
Global science: African multilateral agreements	-	-	-	4 320	-	1.0%	8 494	8 536	8 963	27.5%	6.1%
Public corporations and private enterprises											
Public corporations											
Other transfers to public corporations											
Current	22 037	12 453	9 382	-	-100.0%	10.3%	-	-	-	-	-
National Research Foundation: Global science: Bilateral cooperation	1 500	2 000	-	-	-100.0%	0.8%	-	-	-	-	-
Global science: International resources	16 937	10 453	9 382	-	-100.0%	8.6%	-	-	-	-	-
Global science: African multilateral agreements	3 600	-	-	-	-100.0%	0.8%	-	-	-	-	-
Private enterprises											
Other transfers to private enterprises											
Current	508	-	6 935	-	-100.0%	1.7%	-	-	-	-	-
Global science: International resources	508	-	6 935	-	-100.0%	1.7%	-	-	-	-	-

Personnel information

Table 30.11 International Cooperation and Resources personnel numbers and cost by salary level¹

International Cooperation and Resources	Number of posts estimated for 31 March 2015	Number of posts additional to the establishment	Number and cost ² of personnel posts filled / planned for on funded establishment															Number	
			Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Salary level/total: Average (%)			
			2013/14		Unit Cost	2014/15		Unit Cost	2015/16		Unit Cost	2016/17		Unit Cost			2017/18		Unit Cost
Salary level	63	-	57	33.2	0.6	61	43.4	0.7	57	43.7	0.8	57	45.1	0.8	57	48.2	0.8	-2.2%	100.0%
1-6	4	-	4	0.6	0.2	4	0.7	0.2	4	0.7	0.2	4	0.7	0.2	4	0.7	0.2	-	6.9%
7-10	25	-	24	11.0	0.5	24	11.6	0.5	24	12.1	0.5	24	12.2	0.5	24	13.0	0.5	-	41.4%
11-12	18	-	17	7.6	0.4	17	13.1	0.8	17	12.1	0.7	17	13.3	0.8	17	14.3	0.8	-	29.3%
13-16	16	-	12	14.0	1.2	16	18.0	1.1	12	18.8	1.6	12	18.9	1.6	12	20.1	1.7	-9.1%	22.4%

1. Data has been provided by the department and may not necessarily reconcile with official government personnel data.
2. Rand million.

Programme 4: Research, Development and Support

Programme purpose

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

Objectives

- Contribute to the development of demographically representative, high level human capital that is capable of pursuing locally relevant, globally competitive research and innovation activities by:
 - maintaining the total number of postgraduate students and postdoctoral fellows awarded bursaries at 44 640 over the MTEF period
 - maintaining the total number of graduates and students placed in department funded work preparation programmes in science, engineering and technology institutions at 2 700 over the MTEF period.
- Ensure the availability of and access to internationally comparable research and innovation infrastructure by:
 - increasing the number of researchers awarded research infrastructure grants to 70 in 2017/18

- increasing the average amount of bandwidth per South African National Research Network site from 3 500bps in 2015/16 to 5 000Mbps in 2017/18, which will assist in providing more efficient transmission of data to all research and academic institutions.
- Support and promote research that develops basic and applied sciences through the production of new knowledge and relevant training opportunities by:
 - maintaining the total number of researchers awarded research grants through National Research Foundation managed programmes at 13 617 over the MTEF period
 - maintaining the number of Institute for Scientific Information accredited research articles published by National Research Foundation funded researchers at 21 000 over the medium term.
- Strategically develop priority science areas in which South Africa enjoys a competitive advantage by:
 - increasing the total number of MeerKAT antennae installed from 28 in 2015/16 to 64 in 2016/17
 - ensuring that a number of regulations on astronomy advantage areas are gazetted in 2015/16
 - ensuring that a functional climate change research network is in place and 1 report on the state of climate change in South Africa is approved by Cabinet by 2017/18.

Subprogrammes

- *Human Capital and Science Promotion* formulates and implements policies and strategies that address the availability of human capital for science, technology and innovation, and provides support for research activities.
- *Science Missions* promotes the development of research, the production of scientific knowledge, and the development of human capital within science areas in which South Africa enjoys a geographic advantage.
- *Basic Science and Infrastructure* facilitates the strategic implementation of research and innovation equipment and infrastructure to promote knowledge production in areas that are of national priority and to sustain innovation led by research and development.
- *Astronomy* supports the development of astronomical sciences around a research strategy on multi-wavelength astronomy, and provides strategic guidance and support to relevant astronomy institutions in the implementation of the department's astronomy programmes.

Expenditure trends and estimates

Table 30.12 Research, Development and Support expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome				Adjusted appropriation	Average growth rate (%)	Expenditure/ Total: Average (%)	Medium-term expenditure estimate			Average growth rate (%)	Expenditure/ Total: Average (%)
	2011/12	2012/13	2013/14	2014/15				2015/16	2016/17	2017/18		
R thousand												
Human Capital and Science Promotions	1 357 863	1 413 926	1 683 088	1 874 610	11.3%	57.7%	2 345 412	2 356 296	2 441 228	9.2%	54.8%	
Science Missions	81 717	83 896	151 318	160 439	25.2%	4.3%	165 913	164 195	175 891	3.1%	4.0%	
Basic Science and Infrastructure	510 764	561 350	710 235	783 738	15.3%	23.4%	1 010 014	1 015 214	1 065 638	10.8%	23.5%	
Astronomy	27 212	243 598	654 192	678 160	192.1%	14.6%	725 727	729 564	765 717	4.1%	17.6%	
Total	1 977 556	2 302 770	3 198 833	3 496 947	20.9%	100.0%	4 247 066	4 265 269	4 448 474	8.4%	100.0%	
Change to 2014				(6 815)			(53 060)	(58 398)	(61 306)			
Budget estimate												
Economic classification												
Current payments	32 564	28 878	32 422	44 228	10.7%	1.3%	44 948	46 401	49 047	3.5%	1.1%	
Compensation of employees	21 619	21 179	24 516	29 125	10.4%	0.9%	30 054	31 113	33 032	4.3%	0.7%	
Goods and services	10 899	7 677	7 906	15 103	11.5%	0.4%	14 894	15 288	16 015	2.0%	0.4%	
of which:												
Administrative fees	57	261	166	173	44.8%	–	493	503	527	45.0%	–	
Advertising	343	457	149	187	-18.3%	–	39	39	41	-39.7%	–	
Assets less than the capitalisation threshold	103	9	–	–	-100.0%	–	–	–	–	–	–	
Audit costs: External	–	2	–	–	–	–	–	–	–	–	–	
Catering: Departmental activities	59	231	74	425	93.1%	–	546	541	570	10.3%	–	
Communication	412	307	429	824	26.0%	–	574	563	646	-7.8%	–	
Computer services	366	–	–	135	-28.3%	–	144	146	154	4.5%	–	
Consultants and professional services: Business and advisory services	184	5	688	1 596	105.5%	–	1 253	1 348	1 365	-5.1%	–	
Consultants and professional services: Legal costs	–	–	–	132	–	–	166	171	180	10.8%	–	
Contractors	7	17	50	–	-100.0%	–	–	–	–	–	–	
Agency and support/outsourced services	2 382	860	1 124	1 167	-21.2%	0.1%	830	836	879	-9.0%	–	
Entertainment	522	8	18	74	-47.9%	–	220	190	200	39.2%	–	

Table 30.12 Research, Development and Support expenditure trends and estimates by subprogramme and economic classification

Economic classification	Audited outcome			Adjusted appropriation 2014/15	Average growth rate (%) 2011/12 - 2014/15	Expenditure/Total: Average (%)	Medium-term expenditure estimate			Average growth rate (%) 2014/15 - 2017/18	Expenditure/Total: Average (%)
	2011/12	2012/13	2013/14				2015/16	2016/17	2017/18		
R thousand											
<i>Fleet services (including government motor transport)</i>	–	–	–	10	–	–	–	–	–	-100.0%	–
<i>Inventory: Other supplies</i>	–	–	–	16	–	–	17	17	19	5.9%	–
<i>Consumable supplies</i>	–	–	6	–	–	–	–	–	–	–	–
<i>Consumables: Stationery, printing and office supplies</i>	235	312	17	45	-42.4%	–	–	–	–	-100.0%	–
<i>Operating leases</i>	980	176	69	–	-100.0%	–	–	–	–	–	–
<i>Property payments</i>	10	–	–	–	-100.0%	–	–	–	–	–	–
<i>Travel and subsistence</i>	2 717	3 907	3 925	7 401	39.7%	0.2%	8 550	8 588	8 971	6.6%	0.2%
<i>Operating payments</i>	176	70	759	413	32.9%	–	429	431	453	3.1%	–
<i>Venues and facilities</i>	2 346	1 054	432	2 505	2.2%	0.1%	1 635	1 915	2 010	-7.1%	–
<i>Rental and hiring</i>	–	1	–	–	–	–	–	–	–	–	–
<i>Interest and rent on land</i>	46	22	–	–	-100.0%	–	–	–	–	–	–
Transfers and subsidies	1 944 642	2 273 592	3 166 411	3 452 719	21.1%	98.7%	4 202 118	4 218 868	4 399 427	8.4%	98.9%
Departmental agencies and accounts	1 608 407	1 918 945	2 617 282	3 248 674	26.4%	85.6%	3 988 639	4 004 322	4 174 154	8.7%	93.7%
Higher education institutions	19 167	22 585	31 025	–	-100.0%	0.7%	–	–	–	–	–
Public corporations and private enterprises	294 456	293 113	482 305	204 045	-11.5%	11.6%	213 479	214 546	225 273	3.4%	5.2%
Non-profit institutions	22 362	38 531	35 244	–	-100.0%	0.9%	–	–	–	–	–
Households	250	418	555	–	-100.0%	–	–	–	–	–	–
Payments for capital assets	350	289	–	–	-100.0%	–	–	–	–	–	–
Machinery and equipment	350	289	–	–	-100.0%	–	–	–	–	–	–
Payments for financial assets	–	11	–	–	–	–	–	–	–	–	–
Total	1 977 556	2 302 770	3 198 833	3 496 947	20.9%	100.0%	4 247 066	4 265 269	4 448 474	8.4%	100.0%
Proportion of total programme expenditure to vote expenditure	44.9%	46.3%	51.8%	54.0%	–	–	56.8%	56.4%	58.5%	–	–
Details of transfers and subsidies											
Households											
Other transfers to households											
Current	250	418	555	–	-100.0%	–	–	–	–	–	–
Households	–	22	–	–	–	–	–	–	–	–	–
Human and social development dynamics	125	125	125	–	-100.0%	–	–	–	–	–	–
Human resources development	125	245	–	–	-100.0%	–	–	–	–	–	–
Indigenous Knowledge System	–	26	–	–	–	–	–	–	–	–	–
Science awareness	–	–	430	–	–	–	–	–	–	–	–
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	1 394 801	1 445 255	1 798 624	2 045 411	13.6%	60.9%	2 523 233	2 531 686	2 628 656	8.7%	59.1%
Square Kilometre Array	10 787	11 842	12 458	13 205	7.0%	0.4%	13 812	13 881	14 575	3.3%	0.3%
Academy of Science of South Africa	13 952	16 284	–	21 577	15.6%	0.5%	22 991	23 106	24 261	4.0%	0.6%
Astronomy	12 175	11 673	12 673	13 319	3.0%	0.5%	13 999	14 069	14 773	3.5%	0.3%
Human and social development dynamics	17 059	10 096	11 098	9 976	-16.4%	0.4%	10 435	10 487	11 012	3.3%	0.3%
Human resources development	146 209	190 983	410 034	470 736	47.7%	11.1%	883 117	884 262	895 944	23.9%	19.0%
National Research Foundation	1 099 035	1 063 869	1 112 879	851 286	-8.2%	37.6%	885 899	882 805	925 964	2.8%	21.5%
Science awareness	37 752	53 883	40 332	65 955	20.4%	1.8%	69 195	69 541	73 018	3.4%	1.7%
South African Research Chairs Initiative	19 400	60 385	74 045	451 779	185.6%	5.5%	470 446	482 243	506 875	3.9%	11.6%
Strategic science platforms	38 432	26 240	125 105	147 578	56.6%	3.1%	153 339	151 292	162 234	3.2%	3.7%
Capital	213 606	473 690	818 658	1 203 263	77.9%	24.7%	1 465 406	1 472 636	1 545 498	8.7%	34.6%
Square Kilometre Array	–	218 738	420 107	641 635	–	11.7%	687 415	690 756	724 931	4.2%	16.7%
Research and development infrastructure	213 606	254 952	398 551	561 628	38.0%	13.0%	777 991	781 880	820 567	13.5%	17.9%
Higher education institutions											
Current	11 555	10 088	15 425	–	-100.0%	0.3%	–	–	–	–	–
Human resources development	590	1 198	551	–	-100.0%	–	–	–	–	–	–
Science awareness	8 500	8 099	8 805	–	-100.0%	0.2%	–	–	–	–	–
Strategic science platforms	2 465	791	6 069	–	-100.0%	0.1%	–	–	–	–	–
Capital	7 612	12 497	15 600	–	-100.0%	0.3%	–	–	–	–	–
Research and development infrastructure	7 612	12 497	15 600	–	-100.0%	0.3%	–	–	–	–	–
Non-profit institutions											
Current	22 362	38 531	24 244	–	-100.0%	0.8%	–	–	–	–	–
Academy of Science of South Africa	–	–	20 744	–	–	0.2%	–	–	–	–	–
Human resources development	7 926	8 320	–	–	-100.0%	0.1%	–	–	–	–	–
Science awareness	–	–	2 200	–	–	–	–	–	–	–	–
Strategic science platforms	14 436	30 211	1 300	–	-100.0%	0.4%	–	–	–	–	–
Capital	–	–	11 000	–	–	0.1%	–	–	–	–	–
Research and development infrastructure	–	–	11 000	–	–	0.1%	–	–	–	–	–
Public corporations and private enterprises											
Public corporations											
Other transfers to public corporations											
Current	19 921	15 017	4 688	–	-100.0%	0.4%	–	–	–	–	–
Human resources development	4 001	–	–	–	-100.0%	–	–	–	–	–	–
Strategic science platforms	15 920	15 017	4 688	–	-100.0%	0.3%	–	–	–	–	–

Table 30.12 Research, Development and Support expenditure trends and estimates by subprogramme and economic classification

Details of transfers and subsidies	Audited outcome			Adjusted appropriation	Average growth rate (%)	Expenditure/ Total: Average (%)	Medium-term expenditure estimate			Average growth rate (%)	Expenditure/ Total: Average (%)
	2011/12	2012/13	2013/14				2014/15	2015/16	2016/17		
R thousand											
Capital	252 684	278 096	474 837	204 045	-6.9%	11.0%	213 479	214 546	225 273	3.4%	5.2%
Square Kilometre Array	–	–	208 000	–	–	1.9%	–	–	–	–	–
Council for Scientific and Industrial Research: Cyber infrastructure	186 680	216 014	192 382	204 045	3.0%	7.3%	213 479	214 546	225 273	3.4%	5.2%
Research and development infrastructure	66 004	62 082	74 455	–	-100.0%	1.8%	–	–	–	–	–
Public corporations and private enterprises											
Private enterprises											
Other transfers to private enterprises											
Current	8 000	–	2 780	–	-100.0%	0.1%	–	–	–	–	–
Science awareness	8 000	–	–	–	-100.0%	0.1%	–	–	–	–	–
Strategic science platforms	–	–	2 780	–	–	–	–	–	–	–	–
Capital	13 851	–	–	–	-100.0%	0.1%	–	–	–	–	–
Research and development infrastructure	13 851	–	–	–	-100.0%	0.1%	–	–	–	–	–

Personnel information

Table 30.13 Research, Development and Support personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2015		Number and cost ² of personnel posts filled / planned for on funded establishment												Number					
Number of funded posts	Number of posts additional to the establishment	Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Salary level/total: Average (%)				
		2013/14		2014/15		2015/16		2016/17		2017/18		2014/15 - 2017/18							
Research, Development and Support		Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost			
Salary level	50	–	45	24.5	0.5	50	29.1	0.6	45	30.1	0.7	45	31.1	0.7	45	33.0	0.7	-3.5%	100.0%
1 – 6	5	–	4	0.7	0.2	5	1.0	0.2	3	0.7	0.2	3	0.8	0.3	3	0.8	0.3	-15.7%	7.6%
7 – 10	7	–	7	1.5	0.2	7	1.6	0.2	7	1.6	0.2	7	1.7	0.2	7	1.8	0.3	–	15.1%
11 – 12	23	–	20	12.1	0.6	23	15.2	0.7	21	16.6	0.8	21	17.6	0.8	21	18.7	0.9	-3.0%	46.5%
13 – 16	15	–	14	10.2	0.7	15	11.4	0.8	14	11.0	0.8	14	11.1	0.8	14	11.8	0.8	-2.3%	30.8%

1. Data has been provided by the department and may not necessarily reconcile with official government personnel data.

2. Rand million.

Programme 5: Socio-Economic Innovation Partnerships

Programme purpose

Enhance the growth and development priorities of government through targeted science and technology based innovation interventions, and the development of strategic partnerships with other government departments, industry, research institutions and communities.

Objectives

- Identify, grow and sustain science, technology and innovation capabilities for sustainable development and the greening of society and the economy by fully funding or co-funding 350 masters and doctoral students, and 24 knowledge and innovation products (patents, prototypes, technology demonstrators or technology transfer packages) in designated niche areas that support the green economy and sustainable development, by 31 March 2018.
- Identify, grow and sustain science, technology and innovation 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, beneficiation and ICT sector innovation funds by:
 - funding or co-funding 863 masters and doctoral students in designated niche areas by 31 March 2018
 - adding 100 knowledge and innovation products to the intellectual property portfolio by 31 March 2018.
- Enhance understanding and analysis that supports improvements in the functioning and performance of the national system of innovation by publishing 18 reports and policy briefings on the innovation system and innovation policy that have been approved by the department's executive committee, by 31 March 2018.

- Strengthen provincial and rural innovation and production systems through analysis and catalytic interventions by supporting 7 innovation interventions implemented in provinces or priority district municipalities, by 31 March 2018.

Subprogrammes

- *Sector Innovation and Green Economy* provides support in policy, strategy and direction setting for research and development led growth in strategic sectors of the economy; and supports the transition to a green economy.
- *Innovation for Inclusive Development* supports the development of science and technology based innovations for tackling poverty, including the creation of sustainable jobs, sustainable human settlements, and the enhanced delivery of basic services.
- *Science and Technology Investment* leads and supports the development of indicators and instruments for monitoring investments in science and technology and the performance of the national system of innovation, as well as ways of strengthening policy in relation to the national system of innovation.
- *Technology Localisation, Beneficiation and Advanced Manufacturing* advances strategic medium and long term priorities for sustainable economic growth and sector development, and public service delivery.

Expenditure trends and estimates

Table 30.14 Socio-Economic Innovation Partnerships expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2011/12	2012/13	2013/14		2014/15	2011/12 - 2014/15	2015/16	2016/17	2017/18	2014/15 - 2017/18	2014/15 - 2017/18
R thousand											
Sector Innovation and Green Economy	739 090	833 595	812 750	878 626	5.9%	59.2%	881 319	925 015	965 252	3.2%	53.0%
Innovation for Inclusive Development	287 461	315 974	325 125	341 869	5.9%	23.0%	370 043	371 785	390 487	4.5%	21.4%
Science and Technology Investment	30 935	31 976	25 377	28 291	-2.9%	2.1%	29 001	29 364	30 951	3.0%	1.7%
Technology Localisation, Beneficiation and Advanced Manufacturing	127 348	127 669	294 990	313 975	35.1%	15.7%	524 101	531 106	277 569	-4.0%	23.9%
Total	1 184 834	1 309 214	1 458 242	1 562 761	9.7%	100.0%	1 804 464.0	1 857 270.0	1 664 259.0	2.1%	100.0%
Change to 2014 Budget estimate				(1 385)			3 115	6 634	3 068		
Economic classification											
Current payments	30 749	32 398	36 519	44 271	12.9%	2.6%	43 075	46 057	48 791	3.3%	2.6%
Compensation of employees	21 342	25 240	29 988	33 881	16.7%	2.0%	34 113	37 015	39 331	5.1%	2.1%
Goods and services	9 372	7 113	6 531	10 390	3.5%	0.6%	8 962	9 042	9 460	-3.1%	0.5%
of which:											
Administrative fees	30	272	229	112	55.1%	-	116	116	122	2.9%	-
Advertising	471	98	239	280	-15.9%	-	188	189	206	-9.7%	-
Assets less than the capitalisation threshold	19	7	-	-	-100.0%	-	-	-	-	-	-
Catering: Departmental activities	75	104	185	253	50.0%	-	261	267	281	3.6%	-
Communication	690	448	438	933	10.6%	-	1 072	931	979	1.6%	0.1%
Computer services	501	-	-	16	-68.3%	-	69	69	72	65.1%	-
Consultants and professional services: Business and advisory services	165	-	829	5 081	213.4%	0.1%	3 795	3 611	3 770	-9.5%	0.2%
Contractors	2	-	46	-	-100.0%	-	-	-	-	-	-
Agency and support/outourced services	4 515	2 617	497	177	-66.0%	0.1%	187	187	196	3.5%	-
Entertainment	16	11	12	68	62.0%	-	67	95	100	13.7%	-
Inventory: Other supplies	-	1	-	6	-	-	5	5	5	-5.9%	-
Consumable supplies	23	-	21	-	-100.0%	-	-	-	-	-	-
Consumable: Stationery, printing and office supplies	370	164	88	-	-100.0%	-	-	-	-	-	-
Operating leases	11	379	72	-	-100.0%	-	-	-	-	-	-
Travel and subsistence	2 079	2 745	2 619	2 671	8.7%	0.2%	2 411	2 725	2 839	2.1%	0.2%
Training and development	-	4	-	-	-	-	-	-	-	-	-
Operating payments	20	138	75	36	21.6%	-	39	39	41	4.4%	-
Venues and facilities	385	125	1 181	757	25.3%	-	752	808	849	3.9%	-
Interest and rent on land	35	45	-	-	-100.0%	-	-	-	-	-	-
Transfers and subsidies	1 153 263	1 276 327	1 421 723	1 518 490	9.6%	97.4%	1 761 389	1 811 213	1 615 468	2.1%	97.4%
Departmental agencies and accounts	331 106	381 482	346 204	586 705	21.0%	29.8%	817 532	822 435	577 251	-0.5%	40.7%
Higher education institutions	12 188	4 633	4 384	-	-100.0%	0.4%	-	-	-	-	-
Public corporations and private enterprises	802 791	883 764	1 058 283	931 785	5.1%	66.7%	943 857	988 778	1 038 217	3.7%	56.7%
Non-profit institutions	7 103	6 429	12 707	-	-100.0%	0.5%	-	-	-	-	-
Households	75	19	145	-	-100.0%	-	-	-	-	-	-
Payments for capital assets	639	489	-	-	-100.0%	-	-	-	-	-	-
Machinery and equipment	639	489	-	-	-100.0%	-	-	-	-	-	-
Payments for financial assets	183	-	-	-	-100.0%	-	-	-	-	-	-
Total	1 184 834.0	1 309 214	1 458 242	1 562 761	9.7%	100.0%	1 804 464	1 857 270	1 664 259	2.1%	100.0%
Proportion of total programme expenditure to vote expenditure	26.9%	26.3%	23.6%	24.1%	-	-	24.1%	24.6%	21.9%	-	-

Table 30.14 Socio-Economic Innovation Partnerships expenditure trends and estimates by subprogramme and economic classification

Details of transfers and subsidies	Audited outcome			Adjusted appropriation 2014/15	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%) 2014/15 - 2017/18	Expenditure/ Total: Average (%)
	2011/12	2012/13	2013/14		2011/12 - 2014/15	2014/15	2015/16	2016/17	2017/18		
R thousand											
Households											
Social benefits											
Current	75	19	145	-	-100.0%	-	-	-	-	-	-
Households	75	19	145	-	-100.0%	-	-	-	-	-	-
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	331 106	381 482	346 204	586 705	21.0%	29.8%	817 532	822 435	577 251	-0.5%	40.7%
Advanced manufacturing technology strategy	25 526	-	-	-	-100.0%	0.5%	-	-	-	-	-
Innovation for Inclusive Development	13 270	39 780	8 330	58 146	63.6%	2.2%	73 558	71 926	75 522	9.1%	4.1%
Human Sciences Research Council	238 609	247 820	258 867	276 010	5.0%	18.5%	288 706	290 149	304 656	3.3%	16.8%
Local manufacturing capacity	8 166	7 000	40 000	113 264	140.3%	3.1%	213 117	214 183	124 312	3.2%	9.7%
Local systems of innovation	-	-	25 000	106 063	-	2.4%	208 003	209 043	37 233	-29.5%	8.1%
Quality of life nuclear technologies	660	-	-	-	-100.0%	-	-	-	-	-	-
Research information management system	10 606	14 010	4 519	6 850	-13.6%	0.7%	7 165	7 201	7 561	3.3%	0.4%
Science and technology indicators	8 494	9 019	9 488	10 057	5.8%	0.7%	10 520	10 573	11 102	3.4%	0.6%
Environmental Innovation	25 775	63 853	-	16 315	-14.1%	1.9%	16 463	19 360	16 865	1.1%	1.0%
Higher education institutions											
Current	12 188	4 633	4 384	-	-100.0%	0.4%	-	-	-	-	-
Advanced manufacturing technology strategy	1 505	550	169	-	-100.0%	-	-	-	-	-	-
Innovation for Inclusive Development	8 468	-	-	-	-100.0%	0.2%	-	-	-	-	-
ICT	-	-	1 001	-	-	-	-	-	-	-	-
Local manufacturing capacity	-	-	549	-	-	-	-	-	-	-	-
Local systems of innovation	1 700	2 568	1 150	-	-100.0%	0.1%	-	-	-	-	-
Resource based industries	515	1 515	1 515	-	-100.0%	0.1%	-	-	-	-	-
Non-profit institutions											
Current	7 103	6 429	12 707	-	-100.0%	0.5%	-	-	-	-	-
Advanced manufacturing technology strategy	80	-	-	-	-100.0%	-	-	-	-	-	-
Innovation for Inclusive Development	-	-	2 502	-	-	-	-	-	-	-	-
Local systems of innovation	6 000	5 000	10 000	-	-100.0%	0.4%	-	-	-	-	-
Resource based industries	1 023	1 429	205	-	-100.0%	-	-	-	-	-	-
Public corporations and private enterprises											
Public corporations											
Other transfers to public corporations											
Current	104 464	141 012	248 864	106 045	0.5%	10.9%	116 153	116 735	122 572	4.9%	6.7%
Advanced manufacturing technology strategy	12 262	42 444	22 642	38 281	46.2%	2.1%	40 502	45 755	53 293	11.7%	2.6%
Innovation for Inclusive Development	22 493	23 366	37 835	-	-100.0%	1.5%	-	-	-	-	-
ICT	18 352	17 270	20 167	24 258	9.7%	1.5%	26 144	22 745	21 257	-4.3%	1.4%
Local manufacturing capacity	14 377	13 862	71 398	-	-100.0%	1.8%	-	-	-	-	-
Local systems of innovation	-	-	57 688	-	-	1.0%	-	-	-	-	-
Resource based industries	36 980	44 070	39 134	43 506	5.6%	3.0%	49 507	48 235	48 022	3.3%	2.7%
Public corporations and private enterprises											
Private enterprises											
Other transfers to private enterprises											
Current	11 158	-	27 423	-	-100.0%	0.7%	-	-	-	-	-
Advanced manufacturing technology strategy	9 414	-	15 142	-	-100.0%	0.4%	-	-	-	-	-
Innovation for Inclusive Development	-	-	12 281	-	-	0.2%	-	-	-	-	-
Local systems of innovation	1 203	-	-	-	-100.0%	-	-	-	-	-	-
Resource based industries	541	-	-	-	-100.0%	-	-	-	-	-	-
Public corporations and private enterprises											
Public corporations											
Public corporations - subsidies on products and production											
Current	687 169	742 752	781 996	825 740	6.3%	55.1%	827 704	872 043	915 645	3.5%	50.0%
Council for Scientific and Industrial Research	687 169	742 752	781 996	825 740	6.3%	55.1%	827 704	872 043	915 645	3.5%	50.0%

Personnel information

Table 30.15 Socio-Economic Innovation Partnerships personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2015		Number and cost ² of personnel posts filled / planned for on funded establishment															Number			
Number of funded posts	Number of posts additional to the establishment	Actual			Revised estimate			Medium-term expenditure estimate									Average growth rate (%)	Salary level/total: Average (%)		
		2013/14			2014/15			2015/16			2016/17			2017/18						
		Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost			2014/15 - 2017/18	
Socio-Economic Innovation Partnerships		57	–	54	30.0	0.6	58	33.9	0.6	54	34.1	0.6	54	37.0	0.7	54	39.3	0.7	-2.4%	100.0%
Salary level																				
1 – 6	6	–	5	1.5	0.3	5	1.6	0.3	5	1.7	0.3	5	1.8	0.4	5	1.9	0.4	–	9.1%	
7 – 10	10	–	10	3.4	0.3	10	3.6	0.4	10	3.7	0.4	10	4.0	0.4	10	4.2	0.4	–	18.2%	
11 – 12	26	–	24	10.8	0.5	26	11.9	0.5	24	14.2	0.6	24	15.0	0.6	24	16.0	0.7	-2.6%	44.5%	
13 – 16	15	–	15	14.2	0.9	17	16.7	1.0	15	14.5	1.0	15	16.3	1.1	15	17.3	1.2	-4.1%	28.2%	

1. Data has been provided by the department and may not necessarily reconcile with official government personnel data.

2. Rand million.

Public entities and other agencies

Academy of Science of South Africa

Mandate

The Academy of Science of South Africa was established in terms of the Academy of Science of South Africa Act (2001), as amended. The academy's mandate is to promote the outstanding achievements in all fields of scientific enquiry, grant recognition for excellence, and provide evidence based scientific advice to government and other stakeholders.

Selected performance indicators

Table 30.16 Academy of Science of South Africa performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome	Past			Current	Projections		
			2011/12	2012/13	2013/14		2014/15	2015/16	2016/17
Number of exhibitions at science events per year	Communication	Outcome 1: Quality basic education	14	8	8	8	8	8	8
Number of Science for Society gold medals awarded per year	Liaison	Outcome 5: A skilled and capable workforce to support an inclusive growth path	2	2	2	2	2	2	2
Number of regional public lectures hosted per year	Liaison		7	7	7	7	7	7	7
Number of scientific evidence based reports produced per year	Policy advisory programme		3	8	8	8	8	8	8
Number of South African Journal of Science publications per year	Publications		6	6	6	6	6	6	6
Number of Quest science magazines produced per year	Publications	Outcome 1: Quality basic education	4	4	4	4	4	4	4
Number of new journal titles added to open access platforms per year	Scholarly publishing programme	Outcome 5: A skilled and capable workforce to support an inclusive growth path	7	6	10	10	10	10	10
Number of national scholarly publishing programme forums hosted per year	Scholarly publishing programme		1	1	1	1	1	1	1
Number of national annual scholarly editors' forums hosted per year	Scholarly publishing programme		1	1	1	1	1	1	1

Expenditure analysis

The key focus of the Academy of Science of South Africa over the MTEF period will be on promoting effective, evidence based scientific studies; promoting scholarly activity and innovation; recognising scientific excellence; contributing to science education and the public awareness of science; and strengthening human capital in the sciences in South Africa. This will be done through various studies that look at, among other things, the state of energy research in South Africa, agriculture, and the technical readiness of South Africa to support the shale gas industry. These studies are all directly related to the national development plan's objectives of promoting scientific research, human capital development and innovation; and reducing poverty and inequality, creating jobs, bringing about the equitable distribution of wealth, and improving education.

The academy's work is also aligned with government's 2014-2019 medium term strategic framework, which calls for South African research institutions and the national science and innovation system to be more

coordinated and collaborative. Through various studies, the academy brings to the attention of relevant role players areas of importance in areas such as human capital development, climate change, poverty alleviation and health, and contributes to facilitating corrective and remedial action. Evidence based scientific advice and scholarly publishing activities are the academy's core area of focus.

45.3 per cent (R36.6 million) of the budget over the MTEF period is allocated to the policy advisory and scholarly publishing programmes for the realisation of scientific evidence based studies, scholarly publishing, and cooperation with other science academies regionally and internationally for the advancement of science in the service of society. These funds will be allocated to studies on topics such as green technologies, energy, agriculture, and biosafety and biosecurity.

As the academy's activities are labour intensive, expenditure on compensation of employees over the medium term constitutes 46.5 per cent of spending, with expenditure on goods and services making up 52.8 per cent of the total budget. The academy has 32 funded posts, and this is expected to increase to 33 over the medium term. The academy is able to optimise the resources of its permanent staff, and, as a result, expenditure on consultants is almost non-existent.

The academy's main source of revenue (94.5 per cent of its total revenue) comes from transfers from the Department of Science and Technology. Some income is generated from short term contract funding generated both locally and internationally, membership fees, subscription fees, and interest on investments. Although there are no guarantees, it is expected that income generated through contract funding locally and internationally will increase. Such funding is intended to supplement new and existing projects. Income fluctuates as a result of ad hoc short term contracts and donor funding that the academy receives from year to year.

Programmes/objectives/activities

Table 30.17 Academy of Science of South Africa expenditure trends and estimates by programme/objective/activity

R thousand	Audited outcome			Revised estimate	Average growth rate (%)	Expenditure/ Total: Average (%)	Medium-term expenditure estimate			Average growth rate (%)	Expenditure/ Total: Average (%)
	2011/12	2012/13	2013/14				2015/16	2016/17	2017/18		
Administration	4 171	4 532	5 896	5 598	10.3%	21.0%	5 786	5 792	6 045	2.6%	20.0%
Communication	1 327	1 210	1 429	1 828	11.3%	5.9%	1 632	1 678	1 810	-0.3%	6.0%
Liaison	3 054	3 268	3 503	4 814	16.4%	14.9%	3 585	3 799	4 005	-5.9%	13.7%
Policy advisory programme	3 932	2 904	2 607	10 395	38.3%	18.3%	5 225	5 013	5 233	-20.4%	21.2%
Publications	4 208	3 925	3 661	3 578	-5.3%	16.6%	3 295	3 299	3 422	-1.5%	11.6%
Scholarly publishing programme	3 390	3 807	6 000	11 778	51.5%	23.3%	6 579	7 143	7 512	-13.9%	27.4%
Total	20 082	19 646	23 096	37 991	23.7%	100.0%	26 102	26 724	28 027	-9.6%	100.0%

Statements of historical financial performance and position

Table 30.18 Academy of Science of South Africa statements of historical financial performance and position

Statement of financial performance									
R thousand	Audited outcome		Audited outcome		Audited outcome		Budget estimate	Revised estimate	Outcome/ Budget Average (%)
	Budget	2011/12	Budget	2012/13	Budget	2013/14			
Revenue									
Non-tax revenue	1 018	2 084	874	1 863	728	1 449	750	1 625	208.3%
Sale of goods and services other than capital assets	268	1 549	324	758	328	610	332	332	259.5%
of which:									
Administrative fees	-	105	74	72	78	65	82	82	138.5%
Sales by market establishment	268	1 444	250	686	250	545	250	250	287.3%
Other non-tax revenue	750	535	550	1 105	400	839	418	1 293	178.1%
Transfers received	19 873	18 058	16 319	17 703	20 982	26 209	21 797	36 365	124.5%
Total revenue	20 891	20 142	17 193	19 566	21 710	27 658	22 547	37 990	128.0%
Expenses									
Current expenses	20 891	20 082	17 193	19 646	21 710	23 096	22 547	37 991	122.4%
Compensation of employees	9 881	9 103	9 563	9 070	9 559	9 425	10 090	12 319	102.1%
Goods and services	10 759	10 596	7 420	10 304	12 151	13 412	12 457	25 452	139.7%
Depreciation	251	383	210	272	-	259	-	220	246.0%
Total expenses	20 891	20 082	17 193	19 646	21 710	23 096	22 547	37 991	122.4%
Surplus/(Deficit)	-	60	-	(80)	-	4 562	-	(1)	-

Table 30.18 Academy of Science of South Africa statements of historical financial performance and position

Statement of financial position										Outcome/ Budget Average (%)
	Budget	Audited outcome	Budget	Audited outcome	Budget	Audited outcome	Budget estimate	Revised estimate	2011/12 - 2014/15	
R thousand	2011/12		2012/13		2013/14		2014/15			
Carrying value of assets	1 050	857	845	602	525	650	304	952		112.4%
<i>of which:</i>										
Acquisition of assets	70	55	70	16	70	307	80	150		182.1%
Investments	-	-	-	-	-	6 332	-	-		-
Loans	-	145	-	-	-	-	-	-		-
Accrued investment interest	-	1 074	-	2 700	32	-	32	-		5 897.6%
Receivables and prepayments	-	62	-	458	-	916	-	513		-
Cash and cash equivalents	8 268	9 065	9 792	9 294	9 792	9 281	9 792	19 123		124.2%
Total assets	9 318	11 203	10 637	13 054	10 349	17 179	10 128	20 588		153.4%
Accumulated surplus/(deficit)	9 018	5 088	-	(80)	-	4 562	-	-		106.1%
Capital and reserves	-	5 390	10 157	10 477	9 624	10 397	9 403	19 838		158.0%
Deferred income	-	-	-	1 264	-	870	-	-		-
Trade and other payables	-	362	-	1 020	-	978	-	52		-
Provisions	300	363	480	373	725	372	725	698		81.0%
Total equity and liabilities	9 318	11 203	10 637	13 054	10 349	17 179	10 128	20 588		153.4%

Statements of estimates of financial performance and position**Table 30.19 Academy of Science of South Africa statements of estimates of financial performance and position**

Statement of financial performance										Expenditure/ Total: Average (%)
	Revised estimate	Average growth rate (%)	Expenditure/ Total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/ Total: Average (%)		
R thousand	2014/15	2011/12 - 2014/15		2015/16	2016/17	2017/18	2014/15 - 2017/18			
Revenue										
Non-tax revenue	1 625	-8.0%	7.3%	1 616	1 618	1 608	-0.3%	5.5%		
Sale of goods and services other than capital assets	332	-40.2%	3.7%	586	588	590	21.1%	1.8%		
<i>of which:</i>										
Administrative fees	82	-7.9%	0.3%	86	88	90	3.2%	0.3%		
Sales by market establishment	250	-44.3%	3.3%	500	500	500	26.0%	1.5%		
Other non-tax revenue	1 293	34.2%	3.7%	1 030	1 030	1 018	-7.7%	3.7%		
Transfers received	36 365	26.3%	92.7%	24 991	25 106	26 501	-10.0%	94.5%		
Total revenue	37 990	23.6%	100.0%	26 607	26 724	28 109	-9.6%	100.0%		
Expenses										
Current expenses	37 991	23.7%	100.0%	26 102	26 724	28 027	-9.6%	100.0%		
Compensation of employees	12 319	10.6%	41.2%	12 925	13 781	14 683	6.0%	46.5%		
Goods and services	25 452	33.9%	57.6%	12 957	12 723	13 134	-19.8%	52.8%		
Depreciation	220	-16.9%	1.2%	220	220	210	-1.5%	0.7%		
Total expenses	37 991	23.7%	100.0%	26 102	26 724	28 027	-9.6%	100.0%		
Surplus/(Deficit)	(1)	-125.5%	-	505	-	82	-534.4%	-		
Statement of financial position										
Carrying value of assets	952	3.6%	5.2%	1 100	1 100	1 100	4.9%	5.1%		
<i>of which:</i>										
Acquisition of assets	150	39.7%	0.8%	150	150	150	-	0.7%		
Receivables and prepayments	513	102.6%	3.0%	500	500	500	-0.9%	2.4%		
Cash and cash equivalents	19 123	28.3%	74.8%	19 200	19 200	19 200	0.1%	92.5%		
Total assets	20 588	22.5%	100.0%	20 800	20 800	20 800	0.3%	100.0%		
Capital and reserves	19 838	54.4%	71.3%	20 000	20 000	20 000	0.3%	96.2%		
Trade and other payables	52	-47.6%	4.2%	100	100	100	24.4%	0.4%		
Provisions	698	24.4%	2.9%	700	700	700	0.1%	3.4%		
Total equity and liabilities	20 588	22.5%	100.0%	20 800	20 800	20 800	24.7%	100.0%		

Personnel information**Table 30.20 Academy of Science of South Africa personnel numbers and cost by salary level¹**

Number of posts estimated for 31 March 2015		Number and cost ¹ of personnel posts filled / planned for on funded establishment												Number		
Number of funded posts	Number of posts on approved establishment	Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Salary level/total: Average (%)	
		2013/14		2014/15		2015/16		2016/17		2017/18		2014/15 - 2017/18				
		Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost
Academy of Science of South Africa																
Salary level	32															
1-6	1	1	0.1	0.1	1	0.0	0.0	1	0.0	0.0	1	0.0	0.0	1	0.1	0.1
7-10	25	14	0.1	0.0	25	0.9	0.0	26	1.0	0.0	24	0.4	0.0	18	0.4	0.0
11-12	3	3	1.8	0.6	3	3.2	1.1	3	2.0	0.7	4	1.3	0.3	9	1.4	0.2
13-16	3	3	2.2	0.7	3	3.4	1.1	3	3.6	1.2	4	3.8	1.0	5	4.0	0.8
17-22	-	-	4.8	-	-	7.4	-	-	7.8	-	-	7.3	-	-	4.6	-

1. Rand million.

Council for Scientific and Industrial Research

Mandate

The Council for Scientific and Industrial Research was established in terms of the Scientific Research Council Act (1988), as amended. The council's mandate is to foster industrial and scientific development in the national interest through multidisciplinary research and technological innovation.

Selected performance indicators

Table 30.21 Council for Scientific and Industrial Research performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome	Past			Current	Projections		
			2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Number of journal articles published per year	Council sector education and training operating units and centres	Outcome 5: A skilled and capable workforce to support an inclusive growth path	- ¹	- ¹	- ¹	275	300	308	320
Number of conference papers delivered per year	Council sector education and training operating units and centres		- ¹	- ¹	- ¹	280	310	315	325
Number of new technology demonstrators per year	Council sector education and training operating units and centres	Outcome 4: Decent employment through inclusive economic growth	37	33	48	25	>25	>25	>25
Amount of contract research and development income per year	Council sector education and training operating units and centres		R1.3 billion	R1.4 billion	R1.5 billion	R1.6 billion	R1.8 billion	R1.9 billion	R2.0 billion
Number of science, engineering and technology staff per year	Council sector education and training operating units and centres	Outcome 5: A skilled and capable workforce to support an inclusive growth path	1 537	1 578	1 691	1 753	1 771	1 789	1 807
Percentage of black science, engineering and technology staff per year	Council sector education and training operating units and centres		54%	49%	52%	52%	53%	53%	54%
Number of science, engineering and technology staff with doctorates per year	Council sector education and training operating units and centres		293	301	310	320	326	329	343
Number of new patents granted per year	Council sector education and training operating units and centres	Outcome 4: Decent employment through inclusive economic growth	34	35	15	>15	>15	>15	>15

¹. New indicator, hence no historical data.

Expenditure analysis

The Council for Scientific and Industrial Research's scientific initiatives support the aspects of the national development plan that set out the response required to national imperatives relating to science, engineering and technology. In addition, the council contributes to outcome 5 (a skilled and capable workforce to support an inclusive growth path) and outcome 6 (an efficient, competitive and responsive economic infrastructure network) of government's 2014-2019 medium term strategic framework.

The council's research areas and flagship programmes include health, defence and security, the built and natural environments, industry (advanced manufacturing and mining), and energy. These align with a set of core technologies (such as materials, sensors, photonics, robotics, ICT and modelling) to ensure an integrated response to developmental needs, both within the council and as part of the national system of innovation.

The council's focus over the medium term will therefore be on performing relevant research and development; strengthening the science, engineering and technology skills base; building and transforming the council's human capital; and transferring skills and technology. Further focus will be on funding research and development activities that will result in new technologies and patents, thereby contributing towards decent employment through economic growth.

The council derives its revenue from grants from the Department of Science and Technology, contract research and development income from public and private sectors both locally and internationally, and income from intellectual property and technology transfer initiatives. Contract income is expected to increase by an average of 8.8 per cent over the medium term through additional research and development work contracted to the

council. Transfers received from the department will amount to R827.7 million in 2015/16. Total revenue generated from contract research and development activities is projected to increase to R2.2 billion by 2017/18.

These funds will be used to support a range of catalytic industry programmes. This includes the work of the National Cleaner Production Centre on the innovative use of lasers in welding processes; the Titanium Centre of Competence; and the biomanufacturing industry development programme. Attention will also be given to developing innovative methods of using the bandwidth allocated to television to provide broadband services.

Through these efforts, the council will contribute to an environment in which economic development takes place through initiatives such as improving the efficiency of road, rail and port infrastructure; and understanding the challenges related to climate change and how best to mitigate its effects at the regional, national and international levels. These initiatives also contribute to the national development plan's objectives of supporting economic growth through improving efficiencies in economic processes and the nurturing of industries that will provide future jobs.

To develop and attract world class research and engineering expertise, the council requires world class research facilities, and as a result, R747 million has been invested in scientific equipment and infrastructure over the past five years. In terms of large infrastructure projects, the council will continue to establish the South African National Research Network on behalf of the department, with a budget allocation of R113 300 in 2015/16 and R113 867 in 2016/17. The council expects to invest approximately R761 million in research and development facilities over the medium term to support biomanufacturing, biorefineries, advanced manufacturing, nano-polymer upscale facilities, and the modernisation of laboratories. The council has more than 50 buildings on its campuses, many of which are nearly 70 years old. Subject to the availability of funds, the council will be directing resources to upgrading its buildings.

To strengthen the science, engineering and technology base over the medium term, expenditure on compensation of employees will continue to take up a considerable portion of the council's total expenditure. Between 2014/15 and 2017/18, spending on this item accounted for 53.4 per cent of the council's total expenditure. With a staff complement of 2 559 posts, and 2 697 funded posts, the council expects to fill all vacant posts as candidates with specialised science, engineering and technology skills are recruited. The additional personnel will be crucial in ensuring ongoing research and development in selected focus areas in order to contribute to the vision of the national development plan.

Programmes/objectives/activities

Table 30.22 Council for Scientific and Industrial Research expenditure trends and estimates by programme/objective/activity

R thousand	Audited outcome			Revised estimate	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2011/12	2012/13	2013/14		2014/15	2011/12 - 2014/15	2015/16	2016/17	2017/18	2014/15 - 2017/18	2014/15 - 2017/18
Administration	245 536	261 372	262 657	378 622	15.5%	13.2%	398 493	428 751	457 495	6.5%	14.9%
Biosciences	136 295	-	-	-	-100.0%	1.8%	-	-	-	-	-
Built environment	137 994	-	-	-	-100.0%	1.9%	-	-	-	-	-
Centres and implementation units	425 972	-	-	-	-100.0%	5.7%	-	-	-	-	-
Defence, peace, safety and security	376 348	-	-	-	-100.0%	5.1%	-	-	-	-	-
Materials science and manufacturing	170 139	-	-	-	-100.0%	2.3%	-	-	-	-	-
Meraka Institute	209 324	-	-	-	-100.0%	2.8%	-	-	-	-	-
Natural resources and the environment	154 594	-	-	-	-100.0%	2.1%	-	-	-	-	-
CSIR SET Operating Units and Centres	-	1 765 184	1 892 408	2 202 957	-	65.1%	2 270 671	2 445 696	2 609 680	5.8%	85.1%
Total	1 856 202	2 026 556	2 155 065	2 581 579	11.6%	100.0%	2 669 164	2 874 447	3 067 175	5.9%	100.0%

Statements of historical financial performance and position

Table 30.23 Council for Scientific and Industrial Research statements of historical financial performance and position

Statement of financial performance									
R thousand	Budget	Audited outcome	Budget	Audited outcome	Budget	Audited outcome	Budget estimate	Revised estimate	Outcome/ Budget Average (%)
	2011/12		2012/13		2013/14		2014/15		2011/12 - 2014/15
Revenue									
Non-tax revenue	1 176 349	1 364 949	1 334 488	1 485 342	1 503 004	1 590 355	1 662 780	1 738 467	108.9%
Sale of goods and services other than capital assets	1 133 118	1 280 289	1 278 044	1 408 837	1 453 444	1 509 305	1 625 768	1 692 324	107.3%
<i>of which:</i>									
<i>Sales by market establishment</i>	1 133 118	1 280 289	1 278 044	1 408 837	1 453 444	1 509 305	1 625 768	1 692 324	107.3%
Other non-tax revenue	43 231	84 660	56 444	76 505	49 560	81 050	37 012	46 143	154.8%
Transfers received	539 375	556 837	680 834	594 478	781 996	618 849	825 740	897 568	94.3%
Total revenue	1 715 724	1 921 786	2 015 322	2 079 820	2 285 000	2 209 204	2 488 520	2 636 035	104.0%
Expenses									
Current expenses	1 681 794	1 856 202	1 980 256	2 026 556	2 238 288	2 155 065	2 437 876	2 581 579	103.4%
Compensation of employees	984 032	1 015 735	1 073 754	1 110 208	1 220 671	1 231 173	1 284 173	1 332 554	102.8%
Goods and services	632 617	794 189	865 219	866 732	965 413	872 017	1 099 411	1 198 951	104.8%
Depreciation	65 145	41 859	41 283	44 940	52 204	47 240	54 292	50 074	86.5%
Interest, dividends and rent on land	-	4 419	-	4 676	-	4 635	-	-	-
Total expenses	1 681 794	1 856 202	1 980 256	2 026 556	2 238 288	2 155 065	2 437 876	2 581 579	103.4%
Surplus/(Deficit)	33 930	65 584	35 066	53 264	46 712	54 139	50 644	54 456	-
Statement of financial position									
Carrying value of assets	342 947	428 960	435 897	482 007	501 485	515 910	532 598	532 655	108.1%
<i>of which:</i>									
<i>Acquisition of assets</i>	61 388	101 132	75 321	99 474	69 127	81 981	85 405	66 820	120.0%
Investments	1 487	5 372	1 487	6 940	5 372	9 175	5 372	6 940	207.2%
Inventory	98 632	67 501	111 523	112 231	79 390	85 031	94 569	94 569	93.5%
Receivables and prepayments	165 182	179 250	189 597	303 192	195 841	323 745	207 592	216 372	134.9%
Cash and cash equivalents	701 147	969 095	821 477	1 001 874	760 372	1 066 082	756 539	750 163	124.6%
Total assets	1 309 395	1 650 178	1 559 981	1 906 244	1 542 460	1 999 943	1 596 670	1 600 699	119.1%
Accumulated surplus/(deficit)	572 231	580 158	610 878	633 422	669 500	687 561	729 716	742 017	102.4%
Deferred income	-	49 639	-	56 999	-	71 828	-	-	-
Trade and other payables	735 664	1 012 121	934 250	1 205 476	863 713	1 230 782	856 967	848 695	126.7%
Provisions	1 500	8 260	14 853	10 347	9 247	9 772	9 987	9 987	107.8%
Total equity and liabilities	1 309 395	1 650 178	1 559 981	1 906 244	1 542 460	1 999 943	1 596 670	1 600 699	119.1%

Statements of estimates of financial performance and position

Table 30.24 Council for Scientific and Industrial Research statements of estimates of financial performance and position

Statement of financial performance									
R thousand	Revised estimate	Average growth rate (%)	Expenditure/Total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/Total: Average (%)	
	2014/15	2011/12 - 2014/15		2015/16	2016/17	2017/18	2014/15 - 2017/18		
Revenue									
Non-tax revenue	1 738 467	8.4%	70.1%	1 909 496	2 076 474	2 227 398	8.6%	69.3%	
Sale of goods and services other than capital assets	1 692 324	9.7%	66.7%	1 863 125	2 028 787	2 178 399	8.8%	67.6%	
<i>of which:</i>									
<i>Sales by market establishment</i>	1 692 324	9.7%	66.7%	1 863 125	2 028 787	2 178 399	8.8%	67.6%	
Other non-tax revenue	46 143	-18.3%	3.4%	46 371	47 687	48 999	2.0%	1.7%	
Transfers received	897 568	17.3%	29.9%	827 705	872 043	915 645	0.7%	30.7%	
Total revenue	2 636 035	11.1%	100.0%	2 737 201	2 948 517	3 143 042	6.0%	100.0%	
Expenses									
Current expenses	2 581 579	11.6%	100.0%	2 669 164	2 874 447	3 067 175	5.9%	100.0%	
Compensation of employees	1 332 554	9.5%	54.6%	1 442 036	1 552 200	1 657 750	7.6%	53.4%	
Goods and services	1 198 951	14.7%	43.1%	1 174 049	1 265 983	1 349 786	4.0%	44.6%	
Depreciation	50 074	6.2%	2.2%	53 079	56 264	59 639	6.0%	2.0%	
Total expenses	2 581 579	11.6%	100.0%	2 669 164	2 874 447	3 067 175	5.9%	100.0%	
Surplus/(Deficit)	54 456	-6.0%	-	68 037	74 070	75 868	11.7%	-	
Statement of financial position									
Carrying value of assets	532 655	7.5%	27.6%	564 936	564 936	598 832	4.0%	33.0%	
<i>of which:</i>									
<i>Acquisition of assets</i>	66 820	-12.9%	4.9%	85 360	56 264	93 535	11.9%	4.4%	
Investments	6 940	8.9%	0.4%	6 940	6 940	6 940	-	0.4%	
Inventory	94 569	11.9%	5.0%	103 589	103 589	110 426	5.3%	6.0%	
Receivables and prepayments	216 372	6.5%	14.1%	240 010	264 349	281 796	9.2%	14.6%	
Cash and cash equivalents	750 163	-8.2%	52.9%	751 873	801 881	854 805	4.4%	46.0%	
Total assets	1 600 699	-1.0%	100.0%	1 667 348	1 741 695	1 852 799	5.0%	100.0%	
Accumulated surplus/(deficit)	742 017	8.5%	37.3%	810 054	884 124	959 992	9.0%	49.4%	
Trade and other payables	848 695	-5.7%	59.8%	846 731	845 726	880 180	1.2%	50.0%	
Provisions	9 987	6.5%	0.5%	10 563	11 845	12 627	8.1%	0.7%	
Total equity and liabilities	1 600 699	-1.0%	100.0%	1 667 348	1 741 695	1 852 799	18.3%	100.0%	

Personnel information

Table 30.25 Council for Scientific and Industrial Research personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2015		Number and cost ¹ of personnel posts filled / planned for on funded establishment															Number			
Number of funded posts	Number of posts on approved establishment	Actual			Revised estimate			Medium-term expenditure estimate									Average growth rate (%)	Salary level/total: Average (%)		
		2013/14			2014/15			2015/16			2016/17			2017/18						
		Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost			2014/15 - 2017/18	
Council for Scientific and Industrial Research		2 697	2 697	2 559	1 231.2	0.5	2 697	1 332.6	0.5	2 683	1 442.0	0.5	2 711	1 552.2	0.6	2 697	1 657.7	0.6	7.6%	100.0%
1 – 6	339	339	339	40.6	0.1	339	43.9	0.1	339	47.5	0.1	339	51.1	0.2	339	55.1	0.2	7.8%	12.6%	
7 – 10	1 451	1 451	1 361	455.6	0.3	1 451	493.1	0.3	1 441	533.7	0.4	1 467	574.4	0.4	1 457	608.3	0.4	7.2%	53.9%	
11 – 12	434	434	505	333.4	0.7	434	277.7	0.6	430	300.5	0.7	430	323.5	0.8	430	348.2	0.8	7.8%	16.0%	
13 – 16	462	462	343	376.8	1.1	462	491.0	1.1	462	531.4	1.2	464	572.0	1.2	460	612.6	1.3	7.7%	17.1%	
17 – 22	11	11	11	24.8	2.3	11	26.8	2.4	11	29.0	2.6	11	31.2	2.8	11	33.6	3.1	7.8%	0.4%	

1. Rand million.

Human Sciences Research Council

Mandate

The Human Sciences Research Council was established in 1968 to undertake, promote and coordinate research in the human and social sciences, and operates in terms of the Human Sciences Research Council Act (2008), as amended. In terms of the act, the council is mandated to:

- initiate, undertake and foster strategic, basic and applied research in human sciences
- address developmental challenges in South Africa, elsewhere in Africa and in the rest of the world by gathering, analysing and publishing data relevant to such challenges, especially by means of projects linked to public sector oriented collaborative programmes
- inform the effective formulation and monitoring of policy, and evaluate how it is implemented
- stimulate public debate through the effective dissemination of fact based research results
- help build research capacity and infrastructure for the human sciences
- foster research collaboration, networks and institutional linkages
- respond to the needs of vulnerable and marginalised groups in society through the research and analysis of developmental issues, to contribute to the improvement of the quality of their lives
- develop and make available data sets underpinning research, policy development and public discussion of developmental issues
- develop new and improved methodologies for use in the development of these kinds of data sets.

Selected performance indicators

Table 30.26 Human Sciences Research Council performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome	Past		Current	Projections			
			2011/12	2012/13		2013/14	2014/15	2015/16	2016/17
Percentage of female researchers at senior level (senior researcher specialist/senior research manager and above) per year	Research, development and innovation	Outcome 5: A skilled and capable workforce to support an inclusive growth path	- ¹	48%	48%	48%	49%	49%	50%
Number of peer reviewed publications in an internationally accredited scientific journal, per senior researcher (senior researcher specialist/senior research manager and above) per year	Research, development and innovation	Outcome 11: Create a better South Africa, a better Africa and a better world	1.68	1.77	1.7	1.9	1.9	2	2

Table 30.26 Human Sciences Research Council performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome	Past			Current	Projections		
			2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Number of recognised books with at least 1 council researcher listed as author or co-author per year	Research, development and innovation	Outcome 2: A long and healthy life for all South Africans	2	8	9	13	13	16	16
Number of recognised book chapters with at least one council researcher listed as author or co-author per year	Research, development and innovation		10	39	33	52	54	63	65
Number of Human Sciences Research Council Review publications produced per year	Research, development and innovation		4	4	4	6	6	8	8
Number of policy briefs produced by council researchers and published by the entity per year	Research, development and innovation		6	8	14	19	43	45	45
Number of research projects completed per year	Research, development and innovation		25	11	15	16	25	25	19
Number of research reports produced per year	Research, development and innovation		22	19	24	26	30	30	32
Number of structured collaborative research projects completed per year	Research, development and innovation		- ¹	7	14	14	14	15	15
Number of research fellows at the council from elsewhere in Africa per year	Research, development and innovation		7	10	11	15	15	17	17
Percentage of all Black researchers at senior level (senior researcher specialist/senior research manager and above) per year	Research, development and innovation		44%	35%	53%	54%	56%	56%	56%
Number of peer reviewed publications in an internationally accredited scientific journal, per PhD intern per year	Research, development and innovation		Outcome 5: A skilled and capable workforce to support an inclusive growth path	- ¹	- ¹	0.9	0.9	1	1
Number of students who have attended research seminars or campus lecture series per year	Research, development and innovation	- ¹		- ¹	- ¹	500	700	750	800

1. New indicator, hence no historical data.

Expenditure analysis

The Human Sciences Research Council's focus over the medium term will be on research, informing policy, and providing data to help monitor and evaluate the implementation of policies dealing with developmental issues, thereby contributing to the improvement of the quality of life of vulnerable communities. This cross-cutting role of the council and the areas of work it addresses are closely aligned with the national development plan and specified desired outcomes over the next five years as highlighted in government's 2014-2019 medium term strategic framework. In line with this, the council is committed to addressing inequality and supporting sustainable growth through relevant research in priority areas such as health, education, skills development, employment creation, urban and rural development, and nation building.

The council has a budget allocation of R481.9 million in 2015/16, which is expected to grow by 4.5 per cent over the MTEF period in line with inflation. These funds will be used over the medium term mainly to fund research that serves the public, contributes to good governance and public service delivery, and helps to address poverty and inequality. Research and administrative expenses are expected to support: more large scale, longitudinal and cross-sectional studies in contributing to government's monitoring and evaluation mandate; more innovative and collaborative work to disseminate research; infrastructure, including staff, for data curation and dissemination; and activities aimed to enhance institutional collaboration and capacity enhancement nationally and globally.

The council is funded by government transfers, which will make up approximately 60 per cent of its total income over the medium term. The remaining 40 per cent of revenue is generated from research contracts in fields in which the council has widely recognised expertise. All income is generated to allow the council to address work aligned with its mandate as outlined in the Human Sciences Research Council Act (2008). Research revenue is bolstered by local and international funding. The research outcomes play a vital role in producing evidence that supports policy development by government decision makers at local, provincial and national level. The council will increase the number of research projects completed from 16 in 2014/15 to 19 in 2017/18, and the number of research reports produced from 26 in 2014/15 to 32 in 2017/18.

The council believes that high quality research facilities are conducive to good research outputs. This accounts for the projected spending of approximately R67.3 million on infrastructure, which includes the maintenance of the council's infrastructure and its building.

The number of personnel in the council increased from 502 in 2013/14 to 568 in 2014/15. This is largely attributed to the incorporation of the Africa Institute of South Africa, which had 60 posts. With effect from 1 April 2014, the institute was incorporated into the council, which accounts for the increase in all expenditure line items over the medium term, with the institute's budget ringfenced within the council for the next three years. The reason for incorporation was to increase efficiencies and the impact of the council's research focusing on Africa.

Personnel costs will account for 54.5 per cent of the council's budget over the medium term, with the rest going to research costs such as field work expenses, travel and accommodation. The acquisition of additional personnel will be crucial over the medium term in order to supply researchers and research capacity development to government, and to take part in funded cooperation agreements.

Programmes/objectives/activities

Table 30.27 Human Sciences Research Council expenditure trends and estimates by programme/objective/activity

R thousand	Audited outcome			Revised estimate 2014/15	Average growth rate (%) 2011/12 - 2014/15	Expenditure/Total: Average (%) 2011/12 - 2014/15	Medium-term expenditure estimate			Average growth rate (%) 2014/15 - 2017/18	Expenditure/Total: Average (%) 2014/15 - 2017/18
	2011/12	2012/13	2013/14				2015/16	2016/17	2017/18		
Administration	176 489	148 725	153 996	173 280	-0.6%	41.3%	181 949	190 319	199 835	4.9%	37.6%
Research, development and innovation	203 839	251 499	193 721	248 710	6.9%	56.4%	254 949	267 184	280 543	4.1%	53.1%
Africa Institute of South Africa	-	-	-	42 672	-	2.3%	44 976	47 602	49 982	5.4%	9.3%
Total	380 328	400 224	347 717	464 662	6.9%	100.0%	481 874	505 105	530 360	4.5%	100.0%

Statements of historical financial performance and position

Table 30.28 Human Sciences Research Council statements of historical financial performance and position

Statement of financial performance									
R thousand	Budget		Audited outcome		Budget		Audited outcome		Outcome/Budget Average (%)
	2011/12	2012/13	2012/13	2013/14	2013/14	2014/15	2014/15	2014/15	2011/12 - 2014/15
Revenue									
Non-tax revenue	166 852	172 172	172 331	208 417	178 258	153 142	188 652	188 652	102.3%
Sale of goods and services other than capital assets	164 632	146 885	151 843	183 051	156 289	128 006	160 359	160 359	97.7%
<i>of which:</i>									
Administrative fees	-	87	-	-	-	-	181	181	148.1%
Sales by market establishment	160 132	144 188	148 843	180 504	152 971	125 391	156 545	156 545	98.1%
Other sales	4 500	2 610	3 000	2 547	3 318	2 615	3 633	3 633	78.9%
Other non-tax revenue	2 220	25 287	20 488	25 366	21 969	25 136	28 293	28 293	142.6%
Transfers received	180 850	213 290	214 177	187 875	223 630	197 473	276 010	276 010	97.8%
Total revenue	347 702	385 462	386 508	396 292	401 888	350 615	464 662	464 662	99.8%
Statement of financial position									
Expenses									
Current expenses	334 088	380 328	360 206	400 224	374 425	347 717	435 370	435 370	104.0%
Compensation of employees	159 861	189 275	182 669	197 164	192 716	208 135	225 394	245 747	110.5%
Goods and services	170 255	178 262	171 775	191 409	175 630	129 799	197 561	177 841	94.7%
Depreciation	3 972	13 280	4 183	8 338	4 413	8 750	10 665	10 690	176.7%
Interest, dividends and rent on land	-	(489)	1 580	3 312	1 666	1 033	1 750	1 091	99.0%
Transfers and subsidies	13 614	-	26 302	-	27 463	-	29 293	29 292	30.3%
Total expenses	347 702	380 328	386 508	400 224	401 888	347 717	464 663	464 662	99.5%
Surplus/(Deficit)	-	5 134	-	(3 932)	-	2 898	(1)	-	-
Carrying value of assets	184 192	188 031	179 456	185 130	177 024	178 387	194 997	188 377	100.6%
<i>of which:</i>									
Acquisition of assets	2 900	9 277	3 054	6 040	3 222	2 662	5 565	2 811	141.0%
Investments	2 435	1 198	-	100	-	-	111	-	51.0%
Inventory	4 856	4 005	5 535	4 910	5 828	5 300	6 325	5 597	87.9%
Receivables and prepayments	33 517	32 007	40 985	41 670	44 561	40 447	47 699	42 712	94.0%
Cash and cash equivalents	37 229	67 506	18 855	35 510	30 601	50 681	42 768	53 519	160.1%
Taxation	-	4 064	-	-	-	788	-	832	-
Total assets	262 229	296 811	244 831	267 320	258 014	275 603	291 901	291 037	107.0%
Accumulated surplus/(deficit)	32 499	19 693	15 428	13 093	19 693	15 991	24 082	16 886	71.6%
Capital and reserves	144 404	154 925	144 404	154 925	154 925	154 925	154 925	163 601	105.0%
Finance lease	-	1 404	2 518	975	-	514	573	543	111.1%
Deferred income	-	74 383	40 654	48 976	42 809	54 925	54 244	58 001	171.6%
Trade and other payables	66 229	29 591	27 528	25 934	29 352	24 252	29 784	25 610	68.9%
Taxation	-	-	-	838	-	-	932	-	90.0%
Provisions	13 579	16 815	14 299	22 579	11 236	24 996	27 361	26 396	136.6%
Derivatives financial instruments	5 518	-	-	-	-	-	-	-	-
Total equity and liabilities	262 229	296 811	244 831	267 320	258 015	275 603	291 901	291 037	107.0%

Statements of estimates of financial performance and position

Table 30.29 Human Sciences Research Council statements of estimates of financial performance and position

Statement of financial performance		Revised estimate	Average growth rate (%)	Expenditure/Total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/Total: Average (%)
					2015/16	2016/17	2017/18		
R thousand		2014/15	2011/12 - 2014/15		2015/16	2016/17	2017/18	2014/15 - 2017/18	
Revenue									
Non-tax revenue		188 652	3.1%	45.4%	193 168	200 511	210 537	3.7%	40.0%
Sale of goods and services other than capital assets		160 359	3.0%	38.8%	163 239	168 837	177 279	3.4%	33.8%
of which:									
Administrative fees		181	27.7%	0.0%	192	204	214	5.8%	0.0%
Sales by market establishment		156 545	2.8%	38.1%	159 247	164 631	172 863	3.4%	33.0%
Other sales		3 633	11.7%	0.7%	3 800	4 002	4 202	5.0%	0.8%
Other non-tax revenue		28 293	3.8%	6.6%	29 929	31 674	33 258	5.5%	6.2%
Transfers received		276 010	9.0%	54.6%	288 706	304 595	319 825	5.0%	60.0%
Total revenue		464 662	6.4%	100.0%	481 874	505 106	530 362	4.5%	100.0%
Expenses									
Current expenses		435 370	4.6%	98.4%	451 234	473 055	496 708	4.5%	93.7%
Compensation of employees		245 747	9.1%	52.9%	262 725	278 567	295 022	6.3%	54.5%
Goods and services		177 841	-0.1%	42.6%	175 809	181 022	187 382	1.8%	36.5%
Depreciation		10 690	-7.0%	2.6%	11 548	12 250	13 028	6.8%	2.4%
Interest, dividends and rent on land		1 091	-230.7%	0.3%	1 152	1 215	1 276	5.4%	0.2%
Transfers and subsidies		29 292	-	1.6%	30 640	32 050	33 653	4.7%	6.3%
Total expenses		464 662	6.9%	100.0%	481 874	505 105	530 360	4.5%	100.0%
Surplus/(Deficit)		-	-100.0%	-	-	1	1	-	-
Statement of financial position									
Carrying value of assets		188 377	0.1%	65.5%	198 926	209 867	220 360	5.4%	64.7%
of which:									
Acquisition of assets		2 811	-32.8%	1.8%	2 968	3 132	3 288	5.4%	1.0%
Inventory		5 597	11.8%	1.8%	5 910	6 235	6 547	5.4%	1.9%
Receivables and prepayments		42 712	10.1%	13.9%	45 104	47 585	49 964	5.4%	14.7%
Cash and cash equivalents		53 519	-7.4%	18.2%	56 516	59 625	62 606	5.4%	18.4%
Taxation		832	-41.1%	0.5%	879	927	973	5.4%	0.3%
Total assets		291 037	-0.7%	100.0%	307 335	324 238	340 450	5.4%	100.0%
Accumulated surplus/(deficit)		16 886	-5.0%	5.8%	17 832	18 813	19 754	5.4%	5.8%
Capital and reserves		163 601	1.8%	55.6%	172 762	182 264	191 378	5.4%	56.2%
Finance lease		543	-27.2%	0.3%	573	605	635	5.4%	0.2%
Deferred income		58 001	-8.0%	20.8%	61 249	64 618	67 848	5.4%	19.9%
Trade and other payables		25 610	-4.7%	9.3%	27 044	28 532	29 958	5.4%	8.8%
Provisions		26 396	16.2%	8.1%	27 874	29 407	30 877	5.4%	9.1%
Total equity and liabilities		291 037	-0.7%	100.0%	307 335	324 238	340 450	32.2%	100.0%

Personnel information

Table 30.30 Human Sciences Research Council personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2015		Number and cost ¹ of personnel posts filled / planned for on funded establishment															Number	
		Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Salary level/total: Average (%)			
Number of funded posts	Number of posts on approved establishment	2013/14		2014/15		2015/16		2016/17		2017/18		2014/15 - 2017/18						
		Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost					
Human Sciences Research Council	-	502	208.1	0.4	568	245.7	0.4	568	262.7	0.5	568	278.6	0.5	568	295.0	0.5	6.3%	100.0%
Salary level	-																	
1 - 6	-	128	12.7	0.1	134	13.4	0.1	134	14.3	0.1	134	15.2	0.1	134	16.1	0.1	6.5%	23.6%
7 - 10	-	140	33.3	0.2	187	49.9	0.3	187	53.3	0.3	187	56.5	0.3	187	59.8	0.3	6.2%	32.9%
11 - 12	-	120	56.1	0.5	132	69.5	0.5	132	74.3	0.6	132	78.7	0.6	132	83.4	0.6	6.3%	23.2%
13 - 16	-	108	94.4	0.9	108	96.2	0.9	108	103.0	1.0	108	109.1	1.0	108	115.7	1.1	6.3%	19.0%
17 - 22	-	6	11.5	1.9	7	16.8	2.4	7	17.9	2.6	7	19.0	2.7	7	20.1	2.9	6.3%	1.2%

1. Rand million.

National Research Foundation

Mandate

The National Research Foundation was established in terms of the National Research Foundation Act (1998), as amended. In terms of the act, the foundation is mandated to promote and support research in all fields of humanities, the social and natural sciences, engineering and technology, and indigenous knowledge. The foundation provides research funding and platforms through national facilities and science engagement activities. It also performs an agency function on behalf of the Department of Science and Technology, and is a service provider to several other government departments in matters related to research.

Selected performance indicators

Table 30.31 National Research Foundation performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome	Past			Current	Projections		
			2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Number of international science information publications published by national facilities researchers (including joint papers) per year	National research facilities	Outcome 5: A skilled and capable workforce to support an inclusive growth path	233	271	304	295	310	330	350
Total infrastructure investment (including the Square Kilometre Array)	Science engagement and corporate relations and national research facilities: Astronomy	Outcome 6: An efficient, competitive and responsive economic infrastructure network	R287.7m	R325m	R341.6m	R780m	R879.4m	R638m	R225.1m ¹
Number of interventions focusing on educator development and learner performance in mathematics, technology and science per year	Science engagement and corporate relations	Outcome 1: Quality basic education	- ²	7	8	7	7	8	9
Number of international science index publications published by National Research Foundation funded researchers	Research and innovation support and advancement	Entity mandate	4 777	5 185	5 641	5 700	7 000	7 300	7 600
Percentage of grant funding awarded to researchers and postgraduate students in various thematic areas, aligned with national priorities	Research and innovation support and advancement		82%	84%	79%	91%	93%	95%	95%
Total number of funded black researchers	Research and innovation support and advancement		754	790	1 008	1 300	1 665	1 800	1 890
Total number of funded female researchers per year	Research and innovation support and advancement		957	1 044	1 285	1 700	1 935	1 935	1 980
Total number of black postgraduate students supported	Research and innovation support and advancement	Outcome 5: A skilled and capable workforce to support an inclusive growth path	4 569	5 541	6 110	7 400	8 775	9 045	9 315
Total number of female postgraduate students supported	Research and innovation support and advancement		3 774	4 557	5 186	6 100	7 560	7 695	7 830
Number of masters students supported per year	Research and innovation support and advancement		3 801	3 592	3 830	4 828	5 268	5 300	5 350
Number of doctoral students supported per year	Research and innovation support and advancement	Outcome 5: A skilled and capable workforce to support an inclusive growth path	2 098	2 149	2 391	2 790	3 185	3 200	3 230
Total number of rating applications reviewed to measure the competence of South African researchers on a global scale	Research and innovation support and advancement	Outcome 6: An efficient, competitive and responsive economic infrastructure network	695	786	761	800	815	830	850

1. The decline in projected investment is due to the ramp down and the completion of the MeerKAT radio telescope, a precursor to the Square Kilometre Array telescope.

2. New indicator, hence no historical data.

Expenditure analysis

The national development plan calls for investment in a strong economic infrastructure network to support the country's medium and long term economic and social objectives. The plan identifies science, technology and innovation as key elements in South Africa's long term development. This includes access to quality education and training, and more investment in research and development to sharpen the country's innovative edge and contribution to global scientific and technological advancement. To this end, much of the National Research Foundation's work is aligned with outcome 5 (a skilled and capable workforce to support an inclusive growth path) and outcome 6 (an efficient, competitive and responsive economic infrastructure network) of government's 2014-2019 medium term strategic framework.

The foundation's focus over the medium term will be on ensuring that South Africa meets its target of increasing spending on research and development to at least 1 per cent of GDP, in line with the targets of the national development plan and the medium term strategic framework. Total expenditure over the medium term is estimated at R10.7 billion, growing at 5.5 per cent between 2014/15 and 2017/18.

Expenditure on infrastructure is focused primarily on the Square Kilometre Array project, which is allocated approximately R2.1 billion over the medium term. This project goes a long way in positioning Africa, particularly Southern Africa, as a key player in cutting edge science and technology innovation. It also aligns with the focus of the foundation to contribute to global scientific and technological advancement. This priority is further supported through the facilitation and funding of international collaboration agreements at institutional

and governmental levels, where the foundation and the Department of Science and Technology are able to provide the research community with access to international research platforms, as well as support international researchers using the local national research facilities and research equipment. Capital expenditure on the project represents approximately 84 per cent of the foundation's total capital expenditure over the medium term. Other expenditure on infrastructure projects includes R46 million on a 3 megaelectron volt accelerator, R17 million on a 1m optical telescope, and R49 million on a 12m radio telescope.

South Africa is positioning itself as a global contributor to research and development by supporting cutting edge research infrastructure and strategic initiatives, as well as generating its own knowledge in critical areas. The foundation will ensure quality and competitive research through fostering international collaboration and supporting emerging knowledge fields. It is able to influence the research agenda to ensure that the broader thematic areas align with national priorities.

These funding mechanisms, which are mainly supported by the research and innovation support and advancement programme, include the funding of student bursaries at masters and doctorate level, the centres of excellence, the human capacity development excellence pipeline, the South African Research Chairs Initiative, and the modernisation of research infrastructure to enable high quality research and leading edge facilities to attract international researchers. In this regard, expenditure will centre on increasing the investment in skills development and transformation within the national system of innovation. This will be evidenced by the increase of the number of International Science Index publications published by researchers funded by the foundation from 5 700 in 2014/15 to 7 600 by 2017/18.

90 per cent of the foundation's funding is received from government in three forms: MTEF allocations, ringfenced MTEF funds, and designated funds for specific projects and programmes from the department and other government departments and organisations. Only 3 per cent of income is self-generated through the sale of goods and services, entrance fees and interest earned. Designated funds represent almost 75 per cent of total income, while designated income in the form of contracts is expected to remain stable in 2015/16 and onwards as the figures are based on confirmed agreements only. The major increase in the ringfenced allocations in 2015/16 is due to new funding of R350 million received for human capacity development in the form of student bursaries and research grants, as well as an additional R120 million for the South African Research Chairs Initiative, which represents an increase from R352 million in 2014/15 to R473 million in 2015/16. As a result, 5 350 masters students and 3 230 doctoral students will be supported by 2017/18.

The human capacity development excellence pipeline has a budget allocation of R1.1 billion over the medium term to help to create a skilled and competent workforce through increasing the number of researchers supported at all levels of proficiency. In addition, R470 million has been allocated to the centres of excellence programme over the MTEF period.

Programmes/objectives/activities

Table 30.32 National Research Foundation expenditure trends and estimates by programme/objective/activity

	Audited outcome			Revised estimate 2014/15	Average growth rate (%) 2011/12 - 2014/15	Expenditure/Total: Average (%) 2014/15	Medium-term expenditure estimate			Average growth rate (%) 2014/15 - 2017/18	Expenditure/Total: Average (%) 2014/15 - 2017/18
	2011/12	2012/13	2013/14				2015/16	2016/17	2017/18		
R thousand											
Administration	78 513	57 012	64 321	80 731	0.9%	3.0%	86 040	82 569	84 499	1.5%	2.4%
Science engagement and corporate relations	64 229	106 685	128 962	139 958	29.6%	4.5%	145 392	134 162	140 740	0.2%	4.1%
Research and innovation support and advancement	1 173 441	1 211 307	1 774 282	2 042 386	20.3%	63.7%	2 272 925	2 354 033	2 468 444	6.5%	66.2%
National research facilities: Nuclear, biodiversity, conservation and environment	331 785	316 705	342 773	375 286	4.2%	14.5%	392 467	396 404	417 950	3.7%	11.5%
National research facilities: Astronomy	319 782	271 804	306 662	468 035	13.5%	14.2%	608 872	578 204	533 010	4.4%	15.8%
Total	1 967 750	1 963 513	2 617 000	3 106 396	16.4%	100.0%	3 505 696	3 545 372	3 644 643	5.5%	100.0%

Statements of historical financial performance and position

Table 30.33 National Research Foundation statements of historical financial performance and position

Statement of financial performance									
R thousand	Budget	Audited outcome	Budget	Audited outcome	Budget	Audited outcome	Budget estimate	Revised estimate	Outcome/Budget Average (%)
	2011/12		2012/13		2013/14		2014/15		2011/12 - 2014/15
Revenue									
Non-tax revenue	839 288	1 085 906	1 433 325	1 236 839	1 961 729	1 592 844	1 604 110	1 047 611	85.0%
Sale of goods and services other than capital assets	783 886	929 682	1 367 019	78 176	1 526 733	86 169	1 523 607	106 484	23.1%
<i>of which:</i>									
<i>Sales by market establishment</i>	52 307	37 796	53 426	48 542	32 198	52 131	53 330	63 330	105.5%
<i>Other sales</i>	731 579	891 886	1 313 593	29 634	1 494 535	34 038	1 470 277	43 154	19.9%
Other non-tax revenue	55 402	156 224	66 306	1 158 663	434 996	1 506 675	80 503	941 127	590.5%
Transfers received	1 108 669	895 661	1 093 043	918 290	1 112 879	1 412 879	1 565 365	2 520 403	117.8%
Total revenue	1 947 957	1 981 567	2 526 368	2 155 129	3 074 608	3 005 723	3 169 475	3 568 014	99.9%
Expenses									
Current expenses	831 389	801 025	963 086	838 073	950 285	900 798	1 131 565	1 137 419	94.9%
Compensation of employees	430 191	404 977	483 510	439 653	516 789	478 619	612 608	611 186	94.7%
Goods and services	361 868	355 778	434 946	354 552	387 176	363 407	460 693	467 969	93.7%
Depreciation	39 170	39 999	44 515	43 521	46 228	58 633	58 232	58 232	106.5%
Interest, dividends and rent on land	159	271	115	347	92	139	32	32	198.0%
Transfers and subsidies	988 733	1 166 725	1 291 129	1 125 440	1 703 788	1 716 202	1 952 887	1 968 977	100.7%
Total expenses	1 820 122	1 967 750	2 254 215	1 963 513	2 654 073	2 617 000	3 084 452	3 106 396	98.4%
Surplus/(Deficit)	127 835	13 817	272 153	191 616	420 535	388 723	85 023	461 618	-
Statement of financial position									
Carrying value of assets	722 826	557 216	852 954	749 537	1 342 124	1 115 411	1 641 876	1 573 841	87.6%
<i>of which:</i>									
<i>Acquisition of assets</i>	167 164	112 852	315 803	239 600	213 770	426 595	480 048	516 662	110.1%
Investments	36 000	35 054	38 150	32 650	29 054	29 915	32 650	29 915	93.9%
Inventory	6 000	3 384	6 500	5 253	7 000	4 800	6 000	6 000	76.2%
Accrued investment interest	3 000	-	2 800	-	-	-	-	-	-
Receivables and prepayments	295 000	720 328	712 728	807 330	710 528	1 001 161	704 528	824 528	138.4%
Cash and cash equivalents	547 736	360 062	522 808	605 774	280 000	422 168	473 404	473 404	102.1%
Defined benefit plan assets	-	183	-	-	-	-	-	-	-
Total assets	1 610 561	1 676 227	2 135 940	2 200 544	2 368 706	2 573 455	2 858 458	2 907 688	104.3%
Accumulated surplus/(deficit)	-	152	(37 847)	(11 283)	(38 056)	4 363	2 467	-	9.2%
Capital and reserves	757 726	44 947	38 150	52 357	38 947	59 567	52 357	67 118	25.2%
Capital reserve fund	-	556 112	851 854	748 445	1 341 024	1 114 312	1 640 776	1 572 741	104.1%
Finance lease	-	1 728	2 000	1 785	878	1 015	1 308	980	131.6%
Deferred income	666 078	1 001 702	1 210 128	1 328 473	947 786	1 279 668	1 084 770	1 186 889	122.7%
Trade and other payables	73 286	71 586	71 655	74 921	78 127	111 294	76 780	76 780	111.6%
Provisions	113 471	-	-	5 846	-	3 236	-	3 180	10.8%
Total equity and liabilities	1 610 561	1 676 227	2 135 940	2 200 544	2 368 706	2 573 455	2 858 458	2 907 688	104.3%

Statements of estimates of financial performance and position

Table 30.34 National Research Foundation statements of estimates of financial performance and position

Statement of financial performance									
R thousand	Revised estimate	Average growth rate (%)	Expenditure/Total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/Total: Average (%)	
	2014/15	2011/12 - 2014/15		2015/16	2016/17	2017/18	2014/15 - 2017/18		
Revenue									
Non-tax revenue	1 047 611	-1.2%	48.6%	1 137 957	1 073 632	1 078 492	1.0%	28.2%	
Sale of goods and services other than capital assets	106 484	-51.4%	14.1%	114 354	116 872	121 319	4.4%	3.0%	
<i>of which:</i>									
<i>Sales by market establishment</i>	63 330	18.8%	1.9%	61 528	62 368	63 083	-0.1%	1.6%	
<i>Other sales</i>	43 154	-63.6%	12.2%	52 826	54 504	58 236	10.5%	1.4%	
Other non-tax revenue	941 127	82.0%	34.5%	1 023 603	956 760	957 173	0.6%	25.3%	
Transfers received	2 520 403	41.2%	51.4%	2 874 783	2 772 039	2 865 012	4.4%	71.8%	
Total revenue	3 568 014	21.7%	100.0%	4 012 740	3 845 671	3 943 504	3.4%	100.0%	
Expenses									
Current expenses	1 137 419	12.4%	38.6%	1 309 645	1 285 606	1 291 176	4.3%	36.4%	
Compensation of employees	611 186	14.7%	20.2%	663 437	706 906	752 260	7.2%	19.8%	
Goods and services	467 969	9.6%	16.3%	567 135	493 629	449 452	-1.3%	14.4%	
Depreciation	58 232	13.3%	2.1%	79 039	85 038	89 431	15.4%	2.2%	
Interest, dividends and rent on land	32	-50.9%	0.0%	34	33	33	1.0%	0.0%	
Transfers and subsidies	1 968 977	19.1%	61.4%	2 196 051	2 259 766	2 353 467	6.1%	63.6%	
Total expenses	3 106 396	16.4%	100.0%	3 505 696	3 545 372	3 644 643	5.5%	100.0%	
Surplus/(Deficit)	461 618	222.1%	-	507 044	300 299	298 861	-13.5%	-	

Table 30.34 National Research Foundation statements of estimates of financial performance and position

Statement of financial position	Revised estimate	Average growth rate (%)	Expenditure/ Total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/ Total: Average (%)			
				2014/15	2011/12 - 2014/15	2015/16			2016/17	2017/18	2014/15 - 2017/18
				R thousand							
Carrying value of assets of which:	1 573 841	41.4%	41.2%	2 078 603	2 370 284	2 661 232	19.1%	64.0%			
Acquisition of assets	516 662	66.0%	13.0%	583 802	376 720	380 380	-9.7%	14.1%			
Investments	29 915	-5.1%	1.4%	29 915	29 915	29 915	-	0.9%			
Inventory	6 000	21.0%	0.2%	6 500	6 500	6 300	1.6%	0.2%			
Receivables and prepayments	824 528	4.6%	36.7%	780 832	736 418	700 000	-5.3%	23.0%			
Cash and cash equivalents	473 404	9.6%	20.4%	398 404	352 401	350 000	-9.6%	11.9%			
Total assets	2 907 688	20.2%	100.0%	3 294 254	3 495 518	3 747 447	8.8%	100.0%			
Capital and reserves	67 118	14.3%	2.4%	29 915	29 915	29 915	-23.6%	1.2%			
Capital reserve fund	1 572 741	41.4%	41.1%	2 077 503	2 369 184	2 660 132	19.1%	64.0%			
Finance lease	980	-17.2%	0.1%	850	700	350	-29.1%	0.0%			
Deferred income	1 186 889	5.8%	52.7%	1 106 630	1 017 314	978 830	-6.2%	32.4%			
Trade and other payables	76 780	2.4%	3.7%	75 998	74 862	74 500	-1.0%	2.3%			
Provisions	3 180	-	0.1%	3 358	3 543	3 720	5.4%	0.1%			
Total equity and liabilities	2 907 688	20.2%	100.0%	3 294 254	3 495 518	3 747 447	-35.4%	100.0%			

Personnel information

Table 30.35 National Research Foundation personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2015		Number and cost ¹ of personnel posts filled / planned for on funded establishment												Number					
Number of funded posts	Number of posts on approved establishment	Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Salary level/total: Average (%)				
		2013/14		2014/15		2015/16		2016/17		2017/18		2014/15 - 2017/18							
		Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number		Cost			Unit Cost			
National Research Foundation	1 582	1 582	1 461	478.6	0.3	1 582	611.2	0.4	1 582	663.4	0.4	1 582	706.9	0.4	1 582	752.3	0.5	7.2%	100.0%
1 – 6	341	341	266	30.7	0.1	341	43.3	0.1	341	46.8	0.1	341	49.6	0.1	341	53.0	0.2	7.0%	21.6%
7 – 10	889	889	594	135.0	0.2	889	301.7	0.3	889	327.8	0.4	889	349.5	0.4	889	371.8	0.4	7.2%	56.2%
11 – 12	231	231	411	170.8	0.4	231	166.2	0.7	231	180.9	0.8	231	193.4	0.8	231	205.0	0.9	7.2%	14.6%
13 – 16	115	115	183	119.1	0.7	115	86.1	0.7	115	92.9	0.8	115	98.5	0.9	115	105.4	0.9	7.0%	7.3%
17 – 22	6	6	7	23.0	3.3	6	13.9	2.3	6	15.0	2.5	6	15.9	2.7	6	17.0	2.8	7.0%	0.4%

1. Rand million.

South African National Space Agency

Mandate

The South African National Space Agency was established in terms of the South African National Space Agency Act (2008), as amended. The agency became operational in 2010 and is broadly required to promote the peaceful use of space, foster international cooperation in space related activities, and facilitate the creation of an environment that is conducive to space technology and industrial development.

Selected performance indicators

Table 30.36 South African National Space Agency performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome	Past			Current	Projections		
			2011/12	2012/13	2013/14		2015/16	2016/17	2017/18
Number of national high-impact products and applications per year	Earth observation	Outcome 10: Protect and enhance our environmental assets and natural resources	- ¹	- ¹	- ¹	- ¹	4	4	4
Number of youth directly engaged in promoting space science and technology in academic institutions and science centres per year	Earth observation	Outcome 1: Quality basic education	- ¹	- ¹	- ¹	- ¹	2 000	2 500	3 000
Total income generated from space operations activities	Space operation	Outcome 4: Decent employment through inclusive economic growth	- ¹	- ¹	- ¹	- ¹	R58m	R61m	R65m
National research productivity score for space research and development	Space science	Outcome 10: Protect and enhance our environmental assets and natural resources	- ¹	- ¹	- ¹	- ¹	750	1 000	1 500
Number of supported students and interns receiving formalised training per year	Space engineering	Outcome 5: A skilled and capable workforce to support an inclusive growth path	- ¹	- ¹	- ¹	- ¹	40	50	100

Table 30.36 South African National Space Agency performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome	Past			Current	Projections		
			2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Percentage of proportional progress status on the Earth Observation Satellite 1 (the first contribution to the African resource management constellation satellites) development project	Space engineering	Outcome 12: An efficient, effective and development-oriented public service	-1	-1	-1	-1	25%	50%	100%
Total contract expenditure on small and medium enterprises for core space projects	Space engineering	Outcome 4: Decent employment through inclusive economic growth	-1	-1	-1	-1	R10m	R12m	R13m
Total contract expenditure on the broad space related industry for core space projects	Space engineering		-1	-1	-1	-1	R50m	R55m	R61m

1. New indicator, hence no historical data.

2. Four high impact national products and applications include the national geospatial decision support data products, national land use and land cover base map, space weather services, and magnetic technology.

Expenditure analysis

The South African National Space Agency will contribute towards a number of related objectives outlined in the national development plan. These include the creation of high technology jobs; the improvement of geospatial patterns to foster the development of marginalised communities; the planning and monitoring of national infrastructure through space systems; health surveillance and intelligence through satellites; space based service delivery and performance monitoring; and the provision of geospatial decision making tools. These objectives are supported by government's 2014-2019 medium term strategic framework outcomes of decent employment through inclusive economic growth (outcome 4); an efficient, competitive and responsive economic infrastructure network (outcome 6); and quality basic education (outcome 1).

In line with this, the agency's focus over the medium term centres on: addressing South Africa's challenges through space based products and services; leading national high impact collaborative research and development; developing national human capacity and ensuring transformation; enhancing the competitiveness of the South African space industry through its administration; and developing new capabilities in space based technologies.

The agency will continue to source scientists, engineers and researchers in the space sciences sector over the medium term. This accounts for compensation of employees continuing to be a key cost driver, increasing by 18.3 per cent between 2011/12 and 2014/15, and by a further 9.1 per cent over the medium term. Expenditure on compensation of employees is expected to account for 37 per cent of agency's total expenses over the medium term. The projected increase in personnel costs over the MTEF period will enable the space engineering programme to employ 10 people on a full time basis to manage the agency's satellite build programme and the business development and marketing for revenue enhancement programme.

Expenditure of R315 million is expected to go to the satellite build programme over the MTEF period. The programme will contribute to economic transformation and help to develop new capabilities in space based technologies. It will also create high technology jobs within the national space industry to ensure the continuity of skills in space related activities, and increase the number of supported students and interns for formalised training from 40 in 2015/16 to 100 by 2017/18.

The cost of access to other countries' satellites for data acquisition has significantly increased over the past two years, from R16 million to R36 million per year for a negotiated multi-user licence as new upgrades and technology become available.

Other key costs to develop applications in geospatial analysis and land usage on a national scale, as well as mapping urban population development to aid planning and resource allocation, are mainly for access to earth observation satellites, and the related maintenance required for ground support infrastructure and research equipment. These activities contribute to providing crucial geospatial information for the planning and monitoring of the country's resources.

The projected total expenditure for the agency over the MTEF period is R889 million, which will be used to achieve the five-year medium term strategic framework target of directly supporting 40 jobs externally, as well as supporting 50 students and 100 interns by 2017/18.

Programmes/objectives/activities

Table 30.37 South African National Space Agency expenditure trends and estimates by programme/objective/activity

R thousand	Audited outcome			Revised estimate	Average growth rate (%)	Expenditure/ Total: Average (%)	Medium-term expenditure estimate			Average growth rate (%)	Expenditure/ Total: Average (%)
	2011/12	2012/13	2013/14				2014/15	2015/16	2016/17		
					2011/12 - 2014/15					2014/15 - 2017/18	
Administration	46 242	33 573	34 855	41 197	-3.8%	19.7%	38 802	38 190	40 093	-0.9%	13.9%
Earth observation	-	50 275	59 432	66 221	-	19.5%	69 601	66 693	70 268	2.0%	23.9%
Space operation	80 899	57 132	52 669	42 676	-19.2%	30.5%	47 442	50 874	53 832	8.0%	17.0%
Space science	28 195	35 775	33 548	36 371	8.9%	16.5%	33 779	31 732	33 101	-3.1%	11.9%
Space engineering	-	-	70 000	70 000	-	13.8%	97 466	102 653	114 681	17.9%	33.3%
Total	155 336	176 755	250 504	256 465	18.2%	100.0%	287 090	290 142	311 974	6.7%	100.0%

Statements of historical financial performance and position

Table 30.38 South African National Space Agency statements of historical financial performance and position

Statement of financial performance									Outcome/ Budget Average (%)
Budget	Audited outcome	Budget	Audited outcome	Budget	Audited outcome	Budget estimate	Revised estimate	2011/12 - 2014/15	
R thousand	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2014/15	2011/12 - 2014/15
Revenue									
Non-tax revenue	-	61 359	40 499	78 216	66 706	77 136	59 576	63 861	168.2%
Sale of goods and services other than capital assets	-	56 705	40 499	72 322	62 368	71 272	59 396	59 396	160.0%
<i>of which:</i>									
Administrative fees	-	-	-	-	-	61	-	-	-
Sales by market establishment	-	56 705	40 499	72 322	62 368	71 211	59 396	59 396	160.0%
Other non-tax revenue	-	4 654	-	5 894	4 338	5 864	180	4 465	462.1%
Transfers received	-	128 659	347 771	128 986	148 908	135 555	272 604	192 604	76.1%
Total revenue	-	190 018	388 270	207 202	215 614	212 690	332 180	256 465	92.6%
Expenses									
Current expenses	-	149 574	368 270	170 168	215 613	244 393	345 380	253 965	88.0%
Compensation of employees	-	55 353	87 991	62 398	83 597	85 124	87 366	91 680	113.7%
Goods and services	-	80 145	260 529	92 294	132 016	159 269	258 014	162 285	75.9%
Depreciation	-	14 073	19 750	15 476	-	-	-	-	149.6%
Interest, dividends and rent on land	-	3	-	-	-	-	-	-	-
Transfers and subsidies	-	5 761	-	6 587	-	6 111	-	2 500	-
Total expenses	-	155 336	368 270	176 755	215 613	250 504	345 380	256 465	90.3%
Surplus/(Deficit)	-	34 683	20 000	30 447	-	(37 813)	(13 200)	-	-
Statement of financial position									
Carrying value of assets	-	83 226	188 193	99 956	214 169	128 185	366 658	135 364	58.1%
<i>of which:</i>									
Acquisition of assets	-	11 237	43 744	32 328	111 239	52 053	110 624	68 343	61.7%
Investments	-	-	49 102	-	-	-	-	-	-
Inventory	-	314	-	431	326	407	345	430	235.8%
Accrued investment interest	-	-	21 919	-	-	-	-	-	-
Receivables and prepayments	-	19 834	20 024	18 081	5 800	22 008	5 927	23 241	261.9%
Cash and cash equivalents	-	73 292	7 213	96 107	-	120 642	-	127 398	5 787.2%
Total assets	-	176 666	286 451	214 575	220 295	271 242	372 930	286 432	107.9%
Accumulated surplus/(deficit)	-	127 198	-	157 645	185 466	168 941	303 703	178 402	129.2%
Capital and reserves	-	-	30 707	-	-	-	-	-	-
Capital reserve fund	-	16 540	-	24 033	-	77 100	-	81 418	-
Borrowings	-	292	-	-	-	-	-	-	-
Finance lease	-	-	223 147	426	105	501	-	529	0.7%
Deferred income	-	-	21 026	-	-	-	-	-	-
Trade and other payables	-	27 262	3 278	27 260	29 492	19 423	63 657	20 511	98.0%
Provisions	-	5 375	8 293	4 813	5 232	5 123	5 570	5 410	108.5%
Derivatives financial instruments	-	-	-	398	-	154	-	162	-
Total equity and liabilities	-	176 666	286 451	214 575	220 295	271 242	372 930	286 432	107.9%

Statements of estimates of financial performance and position

Table 30.39 South African National Space Agency statements of estimates of financial performance and position

Statement of financial performance		Average growth rate (%)	Expenditure/Total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/Total: Average (%)
Revised estimate	2014/15			2015/16	2016/17	2017/18		
R thousand	2014/15	2011/12 - 2014/15		2015/16	2016/17	2017/18	2014/15 - 2017/18	
Revenue								
Non-tax revenue	63 861	1.3%	32.8%	63 270	61 491	64 938	0.6%	22.2%
Sale of goods and services other than capital assets	59 396	1.6%	30.4%	62 821	60 765	64 193	2.6%	21.6%
<i>of which:</i>								
Sales by market establishment	59 396	1.6%	30.3%	62 821	60 765	64 193	2.6%	21.6%
Other non-tax revenue	4 465	-1.4%	2.4%	449	726	745	-44.9%	0.6%
Transfers received	192 604	14.4%	67.2%	223 820	228 651	247 037	8.7%	77.8%
Total revenue	256 465	10.5%	100.0%	287 090	290 142	311 975	6.7%	100.0%
Expenses								
Current expenses	253 965	19.3%	97.3%	283 763	287 287	308 275	6.7%	100.0%
Compensation of employees	91 680	18.3%	35.2%	103 305	110 210	118 923	9.1%	37.0%
Goods and services	162 285	26.5%	57.7%	180 458	177 077	189 351	5.3%	62.0%
Transfers and subsidies	2 500	-24.3%	2.7%	3 327	2 855	3 700	14.0%	1.1%
Total expenses	256 465	18.2%	100.0%	287 090	290 142	311 975	6.7%	100.0%
Surplus/(Deficit)	-	-100.0%	-	-	-	-	-	-
Statement of financial position								
Carrying value of assets	135 364	17.6%	47.1%	142 809	150 663	158 196	5.3%	47.3%
<i>of which:</i>								
Acquisition of assets	68 343	82.5%	16.1%	93 888	98 881	158 371	32.3%	33.3%
Inventory	430	11.0%	0.2%	453	478	502	5.3%	0.2%
Receivables and prepayments	23 241	5.4%	9.0%	24 519	25 867	27 161	5.3%	8.1%
Cash and cash equivalents	127 398	20.2%	43.8%	134 405	141 797	148 887	5.3%	44.5%
Total assets	286 432	17.5%	100.0%	302 186	318 806	334 746	5.3%	100.0%
Accumulated surplus/(deficit)	178 402	11.9%	67.5%	188 214	198 566	208 494	5.3%	62.3%
Capital reserve fund	81 418	70.1%	19.4%	85 896	90 620	95 151	5.3%	28.4%
Finance lease	529	-	0.1%	558	589	618	5.3%	0.2%
Trade and other payables	20 511	-9.0%	10.6%	21 639	22 829	23 971	5.3%	7.2%
Provisions	5 410	0.2%	2.3%	5 708	6 022	6 323	5.3%	1.9%
Derivatives financial instruments	162	-	0.1%	171	180	190	5.3%	0.1%
Total equity and liabilities	286 432	17.5%	100.0%	302 186	318 806	334 746	5.3%	100.0%

Personnel information

Table 30.40 South African National Space Agency personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2015		Number and cost ¹ of personnel posts filled / planned for on funded establishment															Number		
Number of funded posts	Number of posts on approved establishment	Actual 2013/14			Revised estimate 2014/15			Medium-term expenditure estimate									Average growth rate (%)	Salary level/total: Average (%)	
		Number	Cost	Unit Cost	Number	Cost	Unit Cost	2015/16			2016/17			2017/18					
South African National Space Agency	185	185	216	85.1	0.4	185	91.7	0.5	192	103.3	0.5	194	111.7	0.6	194	118.9	0.6	9.1%	100.0%
Salary level	17	17	43	4.3	0.1	17	2.2	0.1	17	2.3	0.1	17	2.5	0.1	17	2.6	0.2	6.8%	8.9%
7 - 10	103	103	122	37.3	0.3	103	36.8	0.4	103	39.3	0.4	103	42.1	0.4	103	44.8	0.4	6.8%	53.9%
11 - 12	41	41	35	25.7	0.7	41	27.5	0.7	48	34.6	0.7	50	38.2	0.8	50	40.7	0.8	14.0%	24.7%
13 - 16	23	23	16	17.8	1.1	23	23.4	1.0	23	25.0	1.1	23	26.8	1.2	23	28.5	1.2	6.8%	12.0%
17 - 22	1	1	-	-	-	1	1.9	1.9	1	2.0	2.0	1	2.2	2.2	1	2.3	2.3	6.8%	0.5%

1. Rand million.

Technology Innovation Agency

Mandate

The Technology Innovation Agency was established in terms of the Technology Innovation Agency Act (2008), as amended. The agency serves as a key institutional intervention to bridge the innovation chasm between research and development outcomes from higher education institutions, science councils, public entities and private companies to intensify the effect of technological innovation in the economy.

Selected performance indicators

Table 30.41 Technology Innovation Agency performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome	Past			Current	Projections		
			2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Number of technologies, products, processes and services reaching demonstration stage per year	Provide customer centric early stage commercialisation for technology development	Outcome 5: A skilled and capable workforce to support an inclusive growth path	-1	-1	-1	5	6	9	12
Number of technologies, products, processes and services taken up in the market per year	Provide customer centric early stage commercialisation for technology development		5	5	8	3	4	6	9
Amount of third party funding received in the Technology Innovation Agency's portfolio per year	Provide customer centric early stage commercialisation for technology development		-1	R65.5m	R74.4m	R30m	R75m	R75m	R75m
Amount of external income raised per year ¹	Provide customer centric early stage commercialisation for technology development		-1	-1	-1	-1	R50m	R50m	R50m
Number of knowledge innovation products supported (prototypes developed, patents registered) per year	Provide an enabling environment for technology innovation	Outcome 6: An efficient, competitive and responsive economic infrastructure network	-1	-1	-1	30	30	30	50
Number of small and medium enterprises receiving technology support from the technology stations and institute for advanced tooling, per year	Provide an enabling environment for technology innovation		-1	-1	-1	2 000	2 100	2 200	2 300
Number of technology innovations undertaken by the agency per year	Provide an enabling environment for technology innovation		-1	-1	-1	-1	3	5	10
Number of knowledge innovation products supported (prototypes developed, patents registered) receiving follow on funding in each year	Provide an enabling environment for technology innovation		-1	-1	-1	7	7	20	20

1. New indicators beginning from respective years, hence no historical data.

Expenditure analysis

The national development plan identifies technology innovation as one of the critical focus areas required to speed up growth and transform the economy to create decent work and sustainable livelihoods. In support of this component of the plan, the Technology Innovation Agency will contribute to government's 2014-2019 medium term strategic framework outcome 5 (a skilled and capable workforce to support an inclusive growth path) and outcome 6 (an efficient, competitive and responsive economic infrastructure network).

The agency aims to support, stimulate and intensify technological innovation in order to improve economic growth and quality of life for all South Africans by developing and exploiting technological innovations. To this end, the agency wishes to position itself as a thought leader in technological innovation in South Africa; provide South Africa with appropriate and effective support for innovation with high social and economic impact; and support and enhance technological innovation in Africa and globally through partnership initiatives. These overarching goals form the basis of the agency's key focus areas, which include providing technology development funding and support in high impact areas; creating an enabling environment for technology innovation in collaboration with other role players; and developing an effective and efficient internal environment to successfully execute this strategy.

The agency will also contribute to the realisation of national priorities through the structured and focused support of emerging technologies within the limitations of its resources. These technologies include areas such as IT, biological sciences, material sciences, and energy. Participation in the development of these technologies will lead to increased efficiency and market access for new innovations. The agency will contribute to this objective by increasing the number of knowledge innovation products supported (prototypes developed and patents registered) from 30 in 2014/15 to 50 by 2017/18. The agency will focus on supporting technology innovation, emerging technologies and knowledge innovation products over the medium term.

The focus over the medium term will be on the commercialisation of technology based services, processes and products. This will contribute to faster growth and creating sustainable jobs. The agency receives R1.2 billion from government transfers over the medium term, which accounts for approximately 84.8 per cent of its revenue. It plans to source the remainder of its revenue (15.2 per cent) over the medium term mainly through

co-funding partnerships, as well as interest on bank funds, royalties and dividends received on investments. These funds will be used to ensure that at least 9 technologies, products, and/or processes and services are taken up in the market by 2017/18 from a baseline of 3 in 2014/15. Utilising its allocation, the agency seeks to use technology innovation to address issues of national importance, particularly poverty alleviation, job creation and the reduction of the burden of disease.

The agency will continue to strengthen its portfolio by working towards the achievement of the outcomes of the bioeconomy strategy, which seeks to contribute to the development and growth of industries such as human and animal health, and agro-processing. To achieve this objective, R570 million is allocated to biotechnology over the MTEF period.

In recognition of the importance of investing in the youth, the youth technology innovation programme, with a budget allocation of R8.6 million over the medium term, assists young innovators in need of funding, mentorship and business support. A focus on initiatives intended to support these investments will assist in developing technology driven industries.

As the agency's funding has been reduced in the short term, several projects will have to scale back on existing commitments, creating a strong need for effective fund management. In order to mitigate the effects of the funding shortfall, the agency aims to reduce administration costs, including costs related to human resources, to acceptable levels through various initiatives to cut costs and streamline business activities. The agency has initiated an organisational redesign process to enable it to improve its operations and enhance efficiency and effectiveness.

The agency had 228 posts at the end of November 2014, with personnel numbers expected to decrease to 142 over the medium term, due to the organisational redesign process. The agency will retain a critical mass of professional staff that will assist the organisation to meet the challenges posed by the business realities it faces. Therefore, the redesign is not expected to impact on the ability of the agency to meet its commitments.

Programmes/objectives/activities

Table 30.42 Technology Innovation Agency expenditure trends and estimates by programme/objective/activity

R thousand	Audited outcome			Revised estimate	Average growth rate (%)	Expenditure/ Total: Average (%)	Medium-term expenditure estimate			Average growth rate (%)	Expenditure/ Total: Average (%)
	2011/12	2012/13	2013/14				2014/15	2015/16	2016/17		
Administration	120 563	146 483	240 160	181 359	14.6%	31.1%	141 658	152 998	163 473	-3.4%	32.3%
To provide customer-centric early stage commercialisation for technology development	340 687	400 781	192 756	288 015	-5.4%	56.5%	193 572	175 149	198 327	-11.7%	42.9%
To provide an enabling environment for technology innovation	17 090	28 581	152 679	83 344	69.6%	12.4%	121 958	135 217	141 432	19.3%	24.8%
Total	478 340	575 845	585 595	552 718	4.9%	100.0%	457 188	463 364	503 232	-3.1%	100.0%

Statements of historical financial performance and position

Table 30.43 Technology Innovation Agency statements of historical financial performance and position

Statement of financial performance									Outcome/ Budget Average (%)
	Budget	Audited outcome	Budget	Audited outcome	Budget	Audited outcome	Budget estimate	Revised estimate	
R thousand	2011/12		2012/13		2013/14		2014/15		2011/12 - 2014/15
Revenue									
Non-tax revenue	-	61 111	7 151	65 756	49 812	87 642	73 948	71 387	218.4%
Sale of goods and services other than capital assets	-	46 389	112	26 062	40 123	-	58 948	-	73.0%
of which:									
Administrative fees	-	2 143	112	2 000	123	-	45 000	-	9.2%
Sales by market establishment	-	44 246	-	24 062	40 000	-	13 948	-	126.6%
Other non-tax revenue	-	14 722	7 039	39 694	9 689	87 642	15 000	71 387	672.7%
Transfers received	-	442 688	455 196	456 350	481 081	481 081	380 717	380 717	133.7%
Total revenue	-	539 210	462 347	522 106	530 893	568 723	454 665	452 104	143.8%

Table 30.43 Technology Innovation Agency statements of estimates of financial performance and position

Statement of financial position	Revised estimate	Average growth rate (%)	Expenditure/ Total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/ Total: Average (%)
				2014/15	2011/12 - 2014/15	2015/16		
R thousand								
Expenses								
Current expenses	255 290	177 526	250 932	197 189	240 160	255 146	181 359	147.3%
Compensation of employees	101 107	86 487	113 274	93 725	125 307	130 198	122 406	148.9%
Goods and services	145 332	86 714	126 844	94 564	104 029	113 806	47 916	143.7%
Depreciation	8 801	4 325	10 700	8 900	10 711	11 037	11 037	170.0%
Interest, dividends and rent on land	50	–	114	–	113	105	–	263.8%
Transfers and subsidies	223 050	236 118	324 913	319 110	345 435	266 634	371 359	153.9%
Total expenses	478 340	413 644	575 845	516 299	585 595	521 780	552 718	151.0%
Surplus/(Deficit)	60 870	48 703	(53 739)	14 594	(16 872)	(67 115)	(100 614)	–
Statement of financial position								
Carrying value of assets	24 156	28 955	23 746	26 888	22 560	23 473	13 578	106.0%
<i>of which:</i>								
<i>Acquisition of assets</i>	7 835	15 459	10 631	15 058	9 870	11 037	2 055	73.1%
Investments	18 532	135 000	17 386	46 900	63 700	66 342	25 068	50.2%
Loans	52 967	–	55 864	55 700	26 729	28 164	13 383	177.6%
Receivables and prepayments	3 698	5 557	4 371	2 425	5 880	2 236	6 233	197.5%
Cash and cash equivalents	287 789	129 163	228 712	180 900	162 194	–	21 176	225.7%
Total assets	387 142	298 675	330 079	312 813	281 063	120 215	79 438	147.3%
Accumulated surplus/(deficit)	322 992	69 916	270 085	269 663	252 664	73 000	60 073	219.5%
Capital and reserves	–	161 809	–	–	–	–	–	–
Capital reserve fund	44 310	–	27 274	15 800	9 387	13 948	–	272.2%
Finance lease	246	35 889	114	–	458	547	458	3.5%
Deferred income	180	–	–	–	–	–	–	–
Trade and other payables	18 547	21 457	30 634	17 500	14 724	30 178	15 077	114.2%
Taxation	–	–	–	–	2 169	2 170	2 169	199.9%
Provisions	–	9 604	–	8 200	–	–	–	–
Derivatives financial instruments	867	–	1 972	1 650	1 661	372	1 661	304.7%
Total equity and liabilities	387 142	298 675	330 079	312 813	281 063	120 215	79 438	147.3%

Statements of estimates of financial performance and position**Table 30.44 Technology Innovation Agency statements of estimates of financial performance and position**

Statement of financial position	Revised estimate	Average growth rate (%)	Expenditure/ Total: Average (%)	Medium-term estimate			Average growth rate (%)	Expenditure/ Total: Average (%)
				2014/15	2011/12 - 2014/15	2015/16		
R thousand								
Revenue								
Non-tax revenue	71 387	5.3%	13.8%	72 000	76 000	96 500	10.6%	16.8%
Other non-tax revenue	71 387	69.3%	10.4%	72 000	76 000	96 500	10.6%	16.8%
Transfers received	380 717	-4.9%	84.6%	385 188	387 364	406 732	2.2%	83.2%
Total revenue	452 104	-5.7%	100.0%	457 188	463 364	503 232	3.6%	100.0%
Expenses								
Current expenses	181 359	-10.8%	42.7%	141 658	152 998	163 473	-3.4%	32.3%
Compensation of employees	122 406	6.6%	21.1%	87 229	94 207	101 743	-6.0%	20.4%
Goods and services	47 916	-30.9%	19.7%	47 491	50 356	52 224	2.9%	10.1%
Depreciation	11 037	7.8%	1.9%	6 938	8 435	9 506	-4.9%	1.8%
Transfers and subsidies	371 359	18.5%	57.3%	315 530	310 366	339 759	-2.9%	67.7%
Total expenses	552 718	4.9%	100.0%	457 188	463 364	503 232	-3.1%	100.0%
Surplus/(Deficit)	(100 614)	-218.2%	–	–	–	–	-100.0%	–
Statement of financial position								
Carrying value of assets	13 578	-17.5%	9.6%	13 578	13 578	13 578	–	24.1%
<i>of which:</i>								
<i>Acquisition of assets</i>	2 055	-36.0%	2.8%	8 000	6 000	4 000	24.9%	9.3%
Investments	25 068	10.6%	16.1%	5 068	5 068	5 068	-41.3%	15.3%
Loans	13 383	-36.8%	14.2%	7 383	4 602	1 821	-48.6%	10.8%
Receivables and prepayments	6 233	19.0%	3.1%	6 607	7 003	7 423	6.0%	12.2%
Cash and cash equivalents	21 176	-58.1%	57.0%	21 176	21 176	21 176	–	37.6%
Total assets	79 438	-41.0%	100.0%	53 812	51 427	49 066	-14.8%	100.0%
Accumulated surplus/(deficit)	60 073	-42.9%	82.7%	34 073	31 292	28 511	-22.0%	64.5%
Finance lease	458	23.0%	0.2%	458	458	458	–	0.8%
Trade and other payables	15 077	-6.7%	9.6%	15 451	15 847	16 267	2.6%	27.9%
Taxation	2 169	–	0.9%	2 169	2 169	2 169	–	3.8%
Derivatives financial instruments	1 661	24.2%	0.9%	1 661	1 661	1 661	–	2.9%
Total equity and liabilities	79 438	-41.0%	100.0%	53 812	51 427	49 066	-19.4%	100.0%

Personnel information

Table 30.45 Technology Innovation Agency personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2015		Number and cost ¹ of personnel posts filled / planned for on funded establishment															Number		
Number of funded posts	Number of posts on approved establishment	Actual			Revised estimate			Medium-term expenditure estimate									Average growth rate (%)	Salary level/total: Average (%)	
		2013/14			2014/15			2015/16			2016/17			2017/18					2014/15 - 2017/18
		Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost	Number	Cost	Unit Cost			
Technology Innovation Agency	228	230	125.3	0.5	228	122.4	0.5	142	87.2	0.6	142	94.2	0.7	142	101.7	0.7	-6.0%	100.0%	
Salary level																			
1 – 6	37	42	5.6	0.1	37	4.3	0.1	40	6.4	0.2	25	3.8	0.2	13	1.4	0.1	-32.1%	17.8%	
7 – 10	100	115	44.8	0.4	100	34.0	0.3	41	14.1	0.3	46	17.1	0.4	65	19.6	0.3	-16.7%	37.7%	
11 – 12	43	49	41.0	0.8	43	28.8	0.7	7	5.3	0.8	24	18.3	0.8	15	11.1	0.7	-27.1%	12.8%	
13 – 16	44	23	31.9	1.4	44	47.4	1.1	49	51.2	1.0	42	44.3	1.1	38	44.8	1.2	-1.9%	27.5%	
17 – 22	4	1	2.0	2.0	4	7.9	2.0	5	10.2	2.0	5	10.7	2.1	11	24.9	2.3	46.5%	4.1%	

1. Rand million.

Additional table

Table 30.A Summary of expenditure on infrastructure

Project name	Service delivery outputs	Current project stage	Total project cost	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
				2011/12	2012/13	2013/14		2015/16	2016/17	2017/18
Infrastructure transfers to other spheres, agencies and departments										
Square Kilometre Array	Construction of telescopes	Construction	1 649 195	218 738	218 738	328 107	647 793	687 415	690 756	724 931
Space infrastructure	Construction of satellite	Construction	290 791	–	36 000	45 000	40 000	37 466	37 653	39 536
Hydrogen strategy	Purchase of equipment	Various	440 714	51 900	54 498	57 223	60 772	63 568	63 886	67 080
National nanotechnology centres	Equipping of centres	Various	309 954	42 400	44 500	46 835	39 775	41 151	40 911	42 957
Cyber infrastructure	Creation of broadband network connectivity and high performance computing	Various	833 190	104 710	129 946	101 943	204 045	213 479	214 546	225 273
Total			3 523 844	417 748	483 682	579 108	992 385	1 043 079	1 047 752	1 099 777

Table 30.B Summary of donor funding

Donor	Project	Programme	Period of commitment	Amount committed	Main economic classification	Spending focus	Audited outcome		Estimate 2014/15	Medium-term expenditure estimate	
							2011/12	2012/13		2013/14	2015/16
R thousand Foreign In cash											
Canadian International Development Agency	Epidemiological modelling for HIV and AIDS policy in South Africa	Technology Innovation	5 years	20 000	Foreign governments and international organisations	Improve region, age and gender specific epidemiological measures incorporated into routine surveillance. Increase the capacity of young South Africans to perform gender sensitive, policy impacting epidemiological research	4 251	4 717	-	-	-
European Union	Innovation for poverty alleviation	Socio-Economic Innovation Partnerships	3 years	300 000	Departmental agencies and accounts	Contribute to South Africa's sustainable economic and social development through programmes and measures designed to reduce poverty and encourage economic growth that benefits the poor.	78 655	10 000	-	-	-
Finland	South Africa-Finland knowledge partnership on ICT	International Cooperation and Resources	3 years	30 000	Departmental agencies and accounts	Narrow the digital divide by introducing interventions that will help South Africa become an inclusive knowledge society with a strong ICT brand, reflecting research excellence and demonstrating improvements in quality of life and economic competitiveness	768	9 232	-	-	-
Finland	Southern African-Finland partnership on biosciences	International Cooperation and Resources	3 years	30 000	Foreign governments and international organisations	Strengthen the Southern Africa Biosciences Network secretariat; develop the operating environment; develop capacity; create and dissemination network; and identify, develop and implement projects	7 608	2 392	-	-	-
United States Agency for International Development	SADC capacity building in relation to the risk and vulnerability atlas	Socio-Economic Innovation Partnerships	4 years	3 097	Departmental agencies and accounts	Build capacity in the SADC member states in understanding information on climate change impact and risk in the context of SADC early warning mechanisms	355	965	-	-	-
United States Agency for International Development	Development of propagation of pathogen free potato seed for yield improvement in Malawi	Technology Innovation	2 years	488	Departmental agencies and accounts	Provide technical assistance to the Malawi government and higher education sector in the proposed project that aims at increased production of good quality seed of high yielding potato varieties in Malawi	100	-	-	-	-
Australia	Regional support for science and technology policy training and the development of a science and technology climate change framework	International Cooperation and Resources	3 years	3 000	Goods and services	Provide regional support for science and technology policy training and the development of a science and technology climate change framework	794	1 756	-	-	-

Table 30.B Summary of donor funding

Donor	Project	Programme	Period of commitment	Amount committed	Main economic classification	Spending focus	Audited outcome		Estimate 2014/15	Medium-term expenditure estimate	
							2011/12	2012/13		2013/14	2015/16
R thousand United States Agency for International Development	Mozambique marine finfish sea cage farming project	Socio-Economic Innovation Partnerships	2 years	1 864	Goods and services	Provide technical assistance to the Mozambique government and higher education sector in the proposed project that aims at sustainable and competitive aquaculture in Mozambique.	–	932	–	–	–
United States Agency for International Development	Human health risks and coping mechanisms relating to environmental pollution in the Lower Olfants water catchment area	Technology Innovation	2 years	1 724	Goods and services	Determine the extent to which water and air pollution might impact on the health of two communities in the Lower Olfants water catchment area	–	862	–	–	–
European Union	Promoting Africa-EU research infrastructure	International Cooperation and Resources	2 years	450	Goods and services	Develop a database of African research infrastructure and influence policy dialogue in the region	–	225	–	–	–
European Union	Incontact-One World	International Cooperation and Resources	4 years	2 735	Goods and services	Cooperate with EU associated member states and developing countries on science and technology innovation	942	684	–	–	–
European Union	Network for the Coordination and Advancement of Sub-Saharan Africa-EU Science and Technology Cooperation (phase 1)	International Cooperation and Resources	4 years	2 055	Goods and services	Promote mutual understanding of Africa-EU cooperation in critical science and technology areas of mutual interest	74	–	–	–	–
European Union	SAccess	International Cooperation and Resources	4 years	2 055	Goods and services	Promote mutual understanding of Africa-EU cooperation in critical science and technology areas of mutual interest	64	–	–	–	–
European Union	European-South African science and technology advancement programme (phase 1)	International Cooperation and Resources	3 years	5 000	Goods and services	Advance South Africa-EU collaboration	775	–	–	–	–
European Union	Europe research area: Africa	International Cooperation and Resources	3 years	2 345	Goods and services	Implement wide dialogue with the aim of reaching consensus among EU and African programme owners	–	782	–	–	–
European Union	Nanocode programme	Research, Development and Support	2 years	594	Goods and services	Facilitate close collaboration between South Africa and other national contact points across the world in the area of food, agriculture, fisheries and biotechnology	165	–	–	–	–
European Union	BioCircles2	International Cooperation and Resources	2 years	419	Higher education institutions	Increase the participation of researchers from outside Europe in research projects under the theme of food, agriculture, fisheries and biotechnology	–	209	–	–	–
European Union	Science and technology opportunities for practical public policy	Socio-Economic Innovation Partnerships	3 years	143 500	Foreign governments and international organisations	Establish the link between science and technology opportunities for practical policy influence	–	35 900	–	59 800	–
European Union	Network for the Coordination and Advancement of Sub-Saharan Africa-EU Science and Technology Cooperation (phase 2)	International Cooperation and Resources	3 years	1 300	Goods and services	Promote mutual understanding of Africa-EU cooperation in critical science and technology areas of mutual interest	–	–	450	400	–

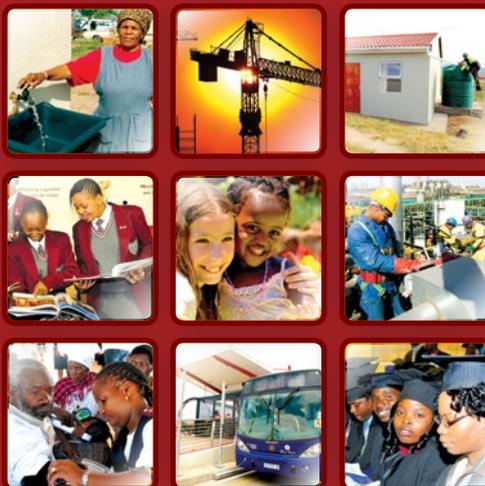
Table 30.B Summary of donor funding

Donor	Project	Programme	Period of commitment	Amount committed	Main economic classification	Spending focus	Audited outcome		Estimate 2014/15	Medium-term expenditure estimate	
							2011/12	2012/13		2013/14	2015/16
R thousand World Wide Fund for Nature South Africa	Energy access to rural communities	Socio-Economic Innovation Partnerships	3 years	1 700	Goods and services	Develop a social infrastructure lead approach to addressing lack of access to energy through renewable or clean technologies	-	-	485	486	-
Argentina	Argentinian Bureau for Enhancing Cooperation with the European Community in the Science, Technology and Innovation Area (phase 2)	International Cooperation and Resources	3 year	196	Goods and services	Support the enhancement of cooperation with the European community in the areas of science, technology and innovation	-	196	-	-	-
European Union	EU-South Africa science and technology advancement programme (phase 2)	International Cooperation and Resources	3 year	2 500	Goods and services	Extend the advancement of South Africa-EU collaboration	-	833	833	-	-
European Union	ICT innovation to support government service delivery	Socio-Economic Innovation Partnerships	3 years	120 000.0	Departmental agencies and accounts	Demonstrate newly developed local technologies and implement them with the aim of improving service delivery	-	-	42 700	48 100	29 200
Foreign In kind											
Japan	Science centre senior volunteers to provinces	Research, Development and Support	4 years	12 402	Foreign governments and international organisations	Support science centres in developing teaching material for science and mathematics education, and develop exhibitions. Systematise the newly developed exhibitions to ensure knowledge gain by science centres	-	2 300	2 100	-	-
Japan	Hitachi scholarships	Research, Development and Support	4 years	2 400	Goods and services	3 Hitachi scholarships for South African engineers in the area of electricity generation and transmission	-	900	-	-	-
Japan	Climate simulation and projections for adaptation impact in Southern Africa	Socio-Economic Innovation Partnerships	3 years	30 000	Foreign governments and international organisations	Build capacity in ocean atmosphere coupled circulation models in Southern Africa and translate this into an early warning system	-	10 000	-	-	-
Japan	Observational study to mitigate seismic risks in mines	Socio-Economic Innovation Partnerships	5 years	16 000	Foreign governments and international organisations	Improve the accuracy of predicting and control of seismicity and earthquakes	-	3 200	3 200	-	-
France	Extension of the contract of the scientific director on the French- South African Institute in the electronics programme at Tshwane University of Technology and Cape Peninsula University of Technology	Research, Development and Support	3 years	14 850	Foreign governments and international organisations	Extend the contract of the scientific director on the French-South African Institute in electronics programme at Tshwane University of Technology and Cape Peninsula University of Technology	-	1 764	-	-	-
United States Agency for International Development	Tenofovir microbicide gel for HIV prevention	Technology Innovation	3 years	127 800	Foreign governments and international organisations	FACTS 001 study. Confirmation of the results of the Centre for the AIDS Programme of Research in South Africa through a phase 3 clinical trial	-	60 000	7 800	-	-
Canadian International Development Agency	South African participation in the grand challenge call on point of care diagnostics	Technology Innovation	3 years	6 892	Higher education institutions	Support the development of new technology in improving existing point of care diagnostic tests	-	2 424	1 970	-	-

Table 30.B Summary of donor funding

Donor	Project	Programme	Period of commitment	Amount committed	Main economic classification	Spending focus	Audited outcome		Medium-term expenditure estimate				
							2011/12	2012/13	2013/14	Estimate 2014/15	2015/16	2016/17	2017/18
R thousand													
Japan	Short term training programme	Technology Innovation	1 Year	108	Goods and services	Provide technical training in the field of the management of electric power pools	-	108	-	-	-	-	-
Bill and Melinda Gates Foundation	Training of the next generation of African researchers in legume sciences	Technology Innovation	5 years	10 000	Higher education institutions	Train the next generation of African researchers in legume sciences	-	2 000	2 000	2 000	-	-	-
United Kingdom Department for International Development	Human Sciences Research Council longitudinal study on single mothers in South Africa	Socio-Economic Innovation Partnerships	1 year	395	Departmental agencies and accounts	Improve the understanding of the role of social security in respecting and protecting dignity	-	395	-	-	-	-	-
Total				895 869			94 551	152 776	68 777	109 468	50 986	29 200	-

Photos provided by GCIS.



BUDGET 2015

Private Bag X115 Pretoria 0001 | 40 Church square Pretoria 0002 | Tel +27 12 395 6697 | Fax +27 12 406 9055



national treasury

Department:
National Treasury
REPUBLIC OF SOUTH AFRICA