

Vote 30

Science and Technology

Adjusted budget summary

		2015/16		
R thousand	Main appropriation	Adjusted appropriation	Decrease	Increase
Amount to be appropriated	7 482 120	7 466 106	(16 014)	-
<i>of which:</i>				
Current payments	496 378	494 991	(1 387)	-
Transfers and subsidies	6 983 433	6 968 806	(14 627)	-
Payments for capital assets	2 309	2 309	-	-
Executive authority	Minister of Science and Technology			
Accounting officer	Director-General of Science and Technology			
Website address	www.dst.gov.za			

Vote purpose

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

Mid-year performance status

Indicator	Programme	Outcome	Annual performance		
			Projected for 2015/16 as published in the 2015 ENE	Achieved in the first six months of 2015/16 (April to September)	Changed target for 2015/16
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	7	5	-
Number of commercial biotechnology products, prototypes and services developed per year	Technology Innovation		8	1	-
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	R388.6m	R114.2m	-
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			1 571	957	-
Total number of postgraduate research students awarded bursaries as reflected in the National Research Foundation project reports	Research, Development and Support	Outcome 4: Decent employment through inclusive economic growth	14 880	7 117	-

2015 Adjusted Estimates of National Expenditure

Indicator	Programme	Outcome	Annual performance		
			Projected for 2015/16 as published in the 2015 ENE	Achieved in the first six months of 2015/16 (April to September)	Changed target for 2015/16
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	Outcome 4: Decent employment through inclusive economic growth	4 539	2 275	-
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		27	12	-

Mid-year progress

While the performance for some indicators for the first six months of the financial year has been slow and below target, the department expects to achieve all its targets by year-end.

The progress on the number of commercial bio-technology products, prototypes and services developed per year was slow in the first half of 2015/16. Pre-breeding work has been initiated and networks established, workshops have been held and partnerships negotiated. In addition, a proposal is being developed for endorsements by all relevant stakeholders, including from industry. A potential co-funder has been approached and the project is on track for implementation before the end of 2015/16.

Adjusted Estimates of National Expenditure 2015

Programme	Main appropriation R thousand	2015/16						Adjusted appropriation
		Roll-overs	Unforeseeable/ unavoidable	Virements and shifts	Declared unspent funds	Other adjustments	Total adjustments appropriation	
Administration	299 776	-	-	1 382	(2 565)	1 944	761	300 537
Technology Innovation	1 008 817	-	-	(395)	(475)	567	(303)	1 008 514
International Cooperation and Resources	121 997	-	-	(420)	(816)	598	(638)	121 359
Research, Development and Support	4 247 066	-	-	(259)	(8 393)	411	(8 241)	4 238 825
Socio-Economic Innovation Partnerships	1 804 464	-	-	(308)	(7 751)	466	(7 593)	1 796 871
Total	7 482 120	-	-	-	(20 000)	3 986	(16 014)	7 466 106
Economic classification								
Current payments	496 378	-	-	(373)	(5 000)	3 986	(1 387)	494 991
Compensation of employees	291 302	-	-	-	-	3 986	3 986	295 288
Goods and services	205 076	-	-	(373)	(5 000)	-	(5 373)	199 703
Transfers and subsidies	6 983 433	-	-	373	(15 000)	-	(14 627)	6 968 806
Departmental agencies and accounts	5 465 951	-	-	(1 327)	(7 500)	-	(8 827)	5 457 124
Higher education institutions	114 580	-	-	-	-	-	-	114 580
Public corporations and private enterprises	1 253 347	-	-	4 000	(7 500)	-	(3 500)	1 249 847
Non-profit institutions	149 555	-	-	(2 300)	-	-	(2 300)	147 255
Payments for capital assets	2 309	-	-	-	-	-	-	2 309
Machinery and equipment	2 309	-	-	-	-	-	-	2 309
Total	7 482 120	-	-	-	(20 000)	3 986	(16 014)	7 466 106

Programme 1: Administration

Subprogramme	Main appropriation	2015/16						Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Declared unspent funds	Other adjustments	Total adjustments appropriation	
R thousand								
Ministry	4 252	–	–	–	–	–	–	4 252
Management	103 016	–	–	(700)	(1 496)	788	(1 408)	101 608
Corporate Services	178 722	–	–	2 232	(961)	1 016	2 287	181 009
Governance	9 070	–	–	(150)	(108)	140	(118)	8 952
Office Accommodation	4 716	–	–	–	–	–	–	4 716
Total	299 776	–	–	1 382	(2 565)	1 944	761	300 537
Economic classification								
Current payments	284 671	–	–	1 382	(2 565)	1 944	761	285 432
Compensation of employees	141 978	–	–	–	–	1 944	1 944	143 922
Goods and services	142 693	–	–	1 382	(2 565)	–	(1 183)	141 510
Transfers and subsidies	12 796	–	–	–	–	–	–	12 796
Non-profit institutions	12 796	–	–	–	–	–	–	12 796
Payments for capital assets	2 309	–	–	–	–	–	–	2 309
Machinery and equipment	2 309	–	–	–	–	–	–	2 309
Total	299 776	–	–	1 382	(2 565)	1 944	761	300 537

Programme 2: Technology Innovation

Subprogramme	Main appropriation	2015/16						Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Declared unspent funds	Other adjustments	Total adjustments appropriation	
R thousand								
Space Science	167 184	–	–	(83)	(105)	129	(59)	167 125
Hydrogen and Energy	152 339	–	–	(80)	(107)	93	(94)	152 245
Bioeconomy	137 740	–	–	(80)	(141)	158	(63)	137 677
Innovation Priorities and Instruments	526 206	–	–	(80)	(61)	78	(63)	526 143
National Intellectual Property	25 348	–	–	(72)	(61)	109	(24)	25 324
Management Office								
Total	1 008 817	–	–	(395)	(475)	567	(303)	1 008 514
Economic classification								
Current payments	62 736	–	–	(1 395)	(475)	567	(1 303)	61 433
Compensation of employees	41 428	–	–	–	–	567	567	41 995
Goods and services	21 308	–	–	(1 395)	(475)	–	(1 870)	19 438
Transfers and subsidies	946 081	–	–	1 000	–	–	1 000	947 081
Departmental agencies and accounts	646 250	–	–	4 300	–	–	4 300	650 550
Higher education institutions	114 580	–	–	–	–	–	–	114 580
Public corporations and private enterprises	96 011	–	–	(1 000)	–	–	(1 000)	95 011
Non-profit institutions	89 240	–	–	(2 300)	–	–	(2 300)	86 940
Total	1 008 817	–	–	(395)	(475)	567	(303)	1 008 514

Programme 3: International Cooperation and Resources

Subprogramme	Main appropriation	2015/16						Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Declared unspent funds	Other adjustments	Total adjustments appropriation	
R thousand								
Multilateral Cooperation and Africa	27 703	–	–	(140)	(313)	183	(270)	27 433
International Resources	56 612	–	–	(140)	(142)	195	(87)	56 525
Overseas Bilateral Cooperation	37 682	–	–	(140)	(361)	220	(281)	37 401
Total	121 997	–	–	(420)	(816)	598	(638)	121 359
Economic classification								
Current payments	60 948	–	–	(420)	(816)	598	(638)	60 310
Compensation of employees	43 729	–	–	–	–	598	598	44 327
Goods and services	17 219	–	–	(420)	(816)	–	(1 236)	15 983
Transfers and subsidies	61 049	–	–	–	–	–	–	61 049
Departmental agencies and accounts	13 530	–	–	–	–	–	–	13 530
Non-profit institutions	47 519	–	–	–	–	–	–	47 519
Total	121 997	–	–	(420)	(816)	598	(638)	121 359

Programme 4: Research, Development and Support

Subprogramme	Main appropriation	2015/16					Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Declared unspent funds	Other adjustments	
R thousand							
Human Capital and Science Promotions	2 345 412	–	–	162	(7 723)	133	(7 428)
Science Missions	165 913	–	–	(95)	(160)	128	(127)
Basic Science and Infrastructure	1 010 014	–	–	(304)	(182)	83	(403)
Astronomy	725 727	–	–	(22)	(328)	67	(283)
Total	4 247 066	–	–	(259)	(8 393)	411	(8 241)
Economic classification							
Current payments	44 948	–	–	368	(893)	411	(114)
Compensation of employees	30 054	–	–	–	–	411	411
Goods and services	14 894	–	–	368	(893)	–	(525)
Transfers and subsidies	4 202 118	–	–	(627)	(7 500)	–	(8 127)
Departmental agencies and accounts	3 988 639	–	–	(627)	(7 500)	–	(8 127)
Public corporations and private enterprises	213 479	–	–	–	–	–	213 479
Total	4 247 066	–	–	(259)	(8 393)	411	(8 241)
							4 238 825

Programme 5: Socio-Economic Innovation Partnerships

Subprogramme	Main appropriation	2015/16					Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Declared unspent funds	Other adjustments	
R thousand							
Sector Innovation and Green Economy	881 319	–	–	(77)	(7 541)	102	(7 516)
Innovation for Inclusive Development	370 043	–	–	(5 077)	(38)	94	(5 021)
Science and Technology Investment	29 001	–	–	(77)	(33)	132	22
Technology Localisation, Beneficiation and Advanced Manufacturing	524 101	–	–	4 923	(139)	138	4 922
Total	1 804 464	–	–	(308)	(7 751)	466	(7 593)
Economic classification							
Current payments	43 075	–	–	(308)	(251)	466	(93)
Compensation of employees	34 113	–	–	–	–	466	466
Goods and services	8 962	–	–	(308)	(251)	–	(559)
Transfers and subsidies	1 761 389	–	–	–	(7 500)	–	(7 500)
Departmental agencies and accounts	817 532	–	–	(5 000)	–	–	(5 000)
Public corporations and private enterprises	943 857	–	–	5 000	(7 500)	–	(2 500)
Total	1 804 464	–	–	(308)	(7 751)	466	(7 593)
							1 796 871

Details of adjustments to the Estimates of National Expenditure 2015

Virements and shifts

Programmes

1. Administration
2. Technology Innovation
3. International Cooperation and Resources
4. Research, Development and Support
5. Socio-Economic Innovation Partnerships

FROM:	TO:				
Programme by economic classification	Motivation	R thousand	Programme by economic classification	Motivation	R thousand
Programme 2		(5 695)	Programme 2		2 000
Goods and services	Reallocation of funds due to slow spending on consultants and professional services	(2 000)	Departmental agencies and accounts	Support for the establishment of the Khetlapela manufacturing project, an emerging priority area ¹	2 000

FROM:			TO:		
Programme by economic classification	Motivation	R thousand	Programme by economic classification	Motivation	R thousand
Non-profit institutions	Centralisation of training and development	(395)	Programme 1		395
	Reclassification of funds due to an incorrect classification in the 2015 ENE ²	(2 300)	Goods and services	Centralisation of training and development	395
	Cost containment measures effected on emerging research areas ²	(1 000)	Programme 2		3 300
Public corporations and private enterprises			Departmental agencies and accounts	Support for the establishment of the Khetlaphela manufacturing project and the indigenous knowledge system unit	2 300
			Goods and services	Funding for a study to establish the nano technology research and development landscape	1 000
Shifts within the programme as a percentage of the programme budget			0.5%		
Virements to other programmes as a percentage of the programme budget			0.0%		
Programme 3		(420)	Programme 1		420
Goods and services	Centralisation of training and development	(420)	Goods and services	Centralisation of training and development	420
Shifts within the programme as a percentage of the programme budget			0.0%		
Virements to other programmes as a percentage of the programme budget			0.3%		
Programme 4		(1 124)	Programme 1		259
Goods and services	Centralisation of training and development	(259)	Goods and services	Centralisation of training and development	259
Departmental agencies and accounts	Cost containment measures effected on strategic science platforms ²	(627)	Programme 4		865
	Cost containment measures effected on research and development infrastructure ²	(238)	Goods and services	Additional expenses incurred for consulting services on the Indigenous Knowledge System Bill; and travel costs for the South African Women in Science awards	627
			Departmental agencies and accounts	Funds for the supply chain management position at the Academy of Science of South Africa	238
Shifts within the programme as a percentage of the programme budget			0.0%		
Virements to other programmes as a percentage of the programme budget			0.0%		
Programme 5		(5 308)	Programme 1		308
Goods and services	Centralisation of training and development	(308)	Goods and services	Centralisation of training and development	308
Departmental agencies and accounts	Cost containment measures effected on the innovation for inclusive development programme ²	(5 000)	Programme 5		5 000
			Public corporations and private enterprises	Advanced manufacturing technology strategy for the resource based industries	5 000
Shifts within the programme as a percentage of the programme budget			0.3%		
Virements to other programmes as a percentage of the programme budget			0.0%		
Total		(12 547)			12 547

1. National Treasury approval has been obtained.

2. Only the legislature may approve this virement in terms of the Public Finance Management Act(1999).

Declared unspent funds – R20 million

R20 million in unspent funds has been declared due to cost containment measures, mainly on travel and subsistence, as follows:

Programme 1: Administration

R2.565 million

Programme 2: Technology Innovation

R475 000

Programme 3: International Cooperation and Resources

R816 000

Programme 4: Research, Development and Support

R893 000

R7.500 million from the National Research Foundation

Programme 5: Socio-Economic Innovation Partnerships

R251 000

R7.500 million from the Council for Scientific and Industrial Research

Other adjustments – R3.986 million

Adjustments due to significant and unforeseeable economic and financial events – R3.986 million

An additional R3.986 million has been allocated to the department to cover the costs of increases in personnel remuneration that were higher than that provided for in the main Budget, as follows:

Programme 1: Administration

R1.944 million

Programme 2: Technology Innovation

R567 000

Programme 3: International Cooperation and Resources

R598 000

Programme 4: Research, Development and Support

R411 000

Programme 5: Socio-Economic Innovation Partnership

R466 000

Expenditure outcome for 2014/15 and actual expenditure for 2015/16

Programme	2014/15 Audited outcome					2015/16 Actual expenditure				
	R thousand	Adjusted appropriation	Apr 14 - Sep 14	% of adjusted appropriation	Apr 14 - Mar 15	% of adjusted appropriation	Adjusted appropriation	Apr 15 - Sep 15	% of adjusted appropriation	
Administration	291 940	131 674	45.1		278 412	95.4	300 537	4.0	136 326	45.4
Technology Innovation	1 008 923	615 340	61.0		974 040	96.5	1 008 514	13.5	530 441	52.6
International Cooperation and Resources	119 319	48 514	40.7		107 589	90.2	121 359	1.6	40 098	33.0
Research, Development and Support	3 496 947	2 206 797	63.1		3 489 837	99.8	4 238 825	56.8	3 463 962	81.7
Socio-Economic Innovation Partnerships	1 562 761	606 191	38.8		1 539 166	98.5	1 796 871	24.1	679 451	37.8
Total	6 479 890	3 608 516	55.7		6 389 044	98.6	7 466 106	100.0	4 850 278	65.0
Economic classification										
Current payments	495 702	214 124	43.2		445 850	89.9	494 991	6.6	226 595	45.8
Compensation of employees	284 872	133 542	46.9		276 001	96.9	295 288	4.0	151 160	51.2
Goods and services	210 830	80 582	38.2		169 849	80.6	199 703	2.7	75 435	37.8

R thousand	Economic classification	2014/15 Audited outcome				2015/16 Actual expenditure			
		Apr 14 - Sep 14 % of adjusted appropriation		Apr 14 - Mar 15 % of adjusted appropriation		Adjusted appropriation/ appropriation Total (%)		Apr 15 - Sep 15 % of adjusted appropriation	
		Adjusted appropriation	Apr 14 - Sep 14 adjusted appropriation	Apr 14 - Mar 15	adjusted appropriation	Adjusted appropriation	Adjusted appropriation/ Total (%)	Apr 15 - Sep 15	adjusted appropriation
Transfers and subsidies	5 983 069	3 391 015	56.7	5 936 872	99.2	6 968 806	93.3	4 618 933	66.3
Departmental agencies and accounts	4 492 412	2 556 593	56.9	4 011 036	89.3	5 457 124	73.1	3 437 383	63.0
Higher education institutions	127 700	117 244	91.8	228 033	178.6	114 580	1.5	140 565	122.7
Public corporations and private enterprises	1 228 181	699 602	57.0	1 573 066	128.1	1 249 847	16.7	1 000 831	80.1
Non-profit institutions	134 776	17 010	12.6	120 289	89.3	147 255	2.0	39 962	27.1
Households	-	566	-	4 448	-	-	-	192	-
Payments for capital assets	1 119	3 377	301.8	6 230	556.7	2 309	-	4 685	202.9
Machinery and equipment	1 119	3 377	301.8	6 230	556.7	2 309	-	4 685	202.9
Payments for financial assets	-	-	-	92	-	-	-	65	-
Total	6 479 890	3 608 516	55.7	6 389 044	98.6	7 466 106	100.0	4 850 278	65.0

Expenditure trends for the first half of 2015/16

Total expenditure in 2014/15 was 98.6 per cent of the 2014/15 adjusted appropriation. Expenditure in the first six months of 2015/16 was R4.9 billion, or 65 per cent of the adjusted appropriation of R7.5 billion for the year. In comparison, mid-year expenditure in 2014/15 was R3.6 billion, or 55.7 per cent of the 2014/15 adjusted appropriation. Compared to the first six months of 2014/15, expenditure over the same period in 2015/16 increased by R1.2 billion, or 34.4 per cent. This was mainly due to an increase in the allocation for 2015/16 and some projects for which payments were processed ahead of schedule.

Departmental receipts

R thousand	Adjusted estimate	2014/15 Audited outcome				2015/16 Actual receipts				
		Apr 14 - Sep 14 % of adjusted estimate		Apr 14 - Mar 15 % of adjusted estimate		Budget estimate	Adjusted estimate	Adjusted receipts estimate/ Total (%)	Apr 15 - Sep 15 % of adjusted estimate	
		Apr 14 - Sep 14	adjusted estimate	Apr 14 - Mar 15	adjusted estimate					
Departmental receipts	116	41	35.3	1 602	1 381.0	121	357	100.0	239	66.9
Sales of goods and services produced by department	28	16	57.1	50	178.6	29	29	8.1	25	86.2
Interest, dividends and rent on land	8	-	-	3	37.5	8	8	2.2	3	37.5
Transactions in financial assets and liabilities	80	25	31.3	1 549	1 936.3	84	320	89.6	211	65.9
Total	116	41	35.3	1 602	1 381.0	121	357	100.0	239	66.9

Revenue trends for the first half of 2015/16

Revenue in the first six months of 2015/16 was R239 000, or 66.9 per cent of the adjusted revenue estimate of R357 000 for the year. In comparison, mid-year revenue in 2014/15 was R41 000, or 35.3 per cent of the 2014/15 adjusted estimate. Compared to the first six months of 2014/15, revenue over the same period in 2015/16 increased by R198 000, or 482.9 per cent. This was mainly due to unspent funds returned from projects, money received from employees for lost assets and/or damaged assets, and bursaries paid back by employees.

Changes to transfers and subsidies, including conditional grants

Summary of changes to transfers and subsidies per programme

	Main appropriation	2015/16					Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Declared unspent funds	Other adjustments	
R thousand							
Technology Innovation							
Departmental agencies and accounts							
Departmental agencies (non-business entities)							
Current	27 999	–	–	4 300	–	–	4 300
HIV and AIDS prevention and treatment technologies	23 635	–	–	2 800	–	–	2 800
Indigenous knowledge systems	4 364	–	–	1 500	–	–	1 500
Public corporations and private enterprises							
Public corporations							
Other transfers							
Current	45 582	–	–	(1 000)	–	–	(1 000)
Emerging research areas	45 582	–	–	(1 000)	–	–	(1 000)
Non-profit institutions							
Current	79 243	–	–	(2 300)	–	–	(2 300)
Biotechnology strategy	35 618	–	–	(1 500)	–	–	(1 500)
Health innovation	43 625	–	–	(800)	–	–	(800)
Research, Development and Support							
Departmental agencies and accounts							
Departmental agencies (non-business entities)							
Current	1 072 664	–	–	(389)	(7 500)	–	(7 889)
Academy of Science of South Africa	22 991	–	–	238	–	–	238
Human and social development dynamics	10 435	–	–	(27)	–	–	(27)
National Research Foundation	885 899	–	–	–	(7 500)	–	(7 500)
Strategic science platforms	153 339	–	–	(600)	–	–	(600)
Capital	777 991	–	–	(238)	–	–	(238)
Research and development infrastructure	777 991	–	–	(238)	–	–	(238)
Socio-Economic Innovation Partnerships							
Departmental agencies and accounts							
Departmental agencies (non-business entities)							
Current	73 558	–	–	(5 000)	–	–	(5 000)
Innovation for Inclusive Development	73 558	–	–	(5 000)	–	–	(5 000)
Public corporations and private enterprises							
Public corporations							
Subsidies on production or products							
Current	827 704	–	–	–	(7 500)	–	(7 500)
Council for Scientific and Industrial Research	827 704	–	–	–	(7 500)	–	(7 500)
Public corporations and private enterprises							
Public corporations							
Other transfers							
Current	40 502	–	–	5 000	–	–	5 000
Advanced manufacturing technology strategy	40 502	–	–	5 000	–	–	5 000