

Vote 34

Science and Technology

Adjusted budget summary

2014/15				
R thousand	Main appropriation	Adjusted appropriation	Decrease	Increase
Amount to be appropriated of which:	6 470 190	6 479 890	–	9 700
Current payments	486 723	494 512	–	7 789
Transfers and subsidies	5 981 158	5 983 069	–	1 911
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			

Aim

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 2014/15 as published in the 2014 ENE	Achieved in the first six months of 2014/15 (April to September)	Changed target for 2014/15
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 Partnership		21	1	–
Total number of postgraduate research students awarded bursaries, as reflected in the National Research Foundation's project reports	Research Development and Support		11 440	9 000	–
Total number of researchers awarded research grants through National Research Foundation managed programmes, as reflected in the foundation project report	Research Development and Support		3 876	2 500	–
Value of foreign science, technology and innovative funds secured for knowledge production, technology transfer, enhanced innovation and science, technology and innovative human 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	R354.6m	R70.831m	–
Number of South African researchers and students participating in international research and innovation opportunities per year	International Cooperation and Resources		1 456	548	–
Number of innovation support interventions developed/supported in key strategic areas per year	Technology Innovation		285	3	–
Number of new technology innovation products developed/supported in key strategic areas	Technology Innovation		6	0	–

Mid-year progress

The progress on innovation support interventions developed in key strategic areas was slow in the first half of 2014/15, as the guideline for the establishment of the incentive scheme for intellectual property creators has not yet been fully developed and communicated to stakeholders. Extensive consultation is necessary due

to the broad impact of the incentive scheme and the need to avoid any unintended consequences. As a result, the target of incentivising 285 innovation partnership creators will not be achieved in 2014/15.

Slow progress in the new technology innovation products developed and supported in key strategic areas is as a result of delays in finalising funding for the Cape Peninsula University of Technology programme. The funding has been earmarked for the institution through the National Research Foundation and delays in negotiations with the Water Research Commission on the water demonstrations programme are further reasons for the slow 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 end of March 2015.

Adjusted Estimates of National Expenditure 2014

Programme	Main appropriation R thousand	2014/15						Adjusted appropriation	
		Adjustments appropriation							
		Roll-overs	Unforeseeable/ unavoidable	Virements and shifts	Function shifts	Declared unspent funds	Other adjustments		
Administration	290 960	–	–	980	–	–	–	980 291 940	
Technology Innovation	991 623	–	–	17 300	–	–	–	17 300 1 008 923	
International Cooperation and Resources	119 699	–	–	(380)	–	–	–	(380) 119 319	
Research, Development and Support	3 503 762	9 700	–	(16 515)	–	–	–	(6 815) 3 496 947	
Socio Economic Innovation Partnerships	1 564 146	–	–	(1 385)	–	–	–	(1 385) 1 562 761	
Total	6 470 190	9 700	–	–	–	–	–	9 700 6 479 890	
Economic classification									
Current payments	486 723	–	–	7 789	–	–	–	7 789 494 512	
Compensation of employees	283 818	–	–	1 054	–	–	–	1 054 284 872	
Goods and services	202 905	–	–	6 735	–	–	–	6 735 209 640	
Transfers and subsidies	5 981 158	9 700	–	(7 789)	–	–	–	1 911 5 983 069	
Departmental agencies and accounts	4 409 261	–	–	(15 589)	–	–	–	(15 589) 4 393 672	
Higher education institutions	21 360	–	–	17 500	–	–	–	17 500 38 860	
Public corporations and private enterprises	1 140 830	9 700	–	(5 000)	–	–	–	4 700 1 145 530	
Non-profit institutions	409 707	–	–	(4 700)	–	–	–	(4 700) 405 007	
Payments for capital assets	2 309	–	–	–	–	–	–	– 2 309	
Machinery and equipment	2 309	–	–	–	–	–	–	– 2 309	
Total	6 470 190	9 700	–	–	–	–	–	9 700 6 479 890	

Programme 1: Administration

Subprogramme	Main appropriation R thousand	2014/15						Adjusted appropriation	
		Adjustments appropriation							
		Roll-overs	Unforeseeable/ unavoidable	Virements and shifts	Function shifts	Declared unspent funds	Other adjustments		
Ministry	4 065	–	–	–	–	–	–	– 4 065	
Management	102 198	–	–	(500)	–	–	–	(500) 101 698	
Corporate Services	170 737	–	–	1 760	–	–	–	1 760 172 497	
Governance	9 281	–	–	(280)	–	–	–	(280) 9 001	
Office Accommodation	4 679	–	–	–	–	–	–	– 4 679	
Total	290 960	–	–	980	–	–	–	980 291 940	
Economic classification									
Current payments	276 564	–	–	980	–	–	–	980 277 544	
Compensation of employees	137 041	–	–	–	–	–	–	– 137 041	
Goods and services	139 523	–	–	980	–	–	–	980 140 503	
Transfers and subsidies	12 087	–	–	–	–	–	–	– 12 087	
Non-profit institutions	12 087	–	–	–	–	–	–	– 12 087	
Payments for capital assets	2 309	–	–	–	–	–	–	– 2 309	
Machinery and equipment	2 309	–	–	–	–	–	–	– 2 309	
Total	290 960	–	–	980	–	–	–	980 291 940	

Programme 2: Technology Innovation

Subprogramme	Main appropriation	2014/15						Total adjustments appropriation	Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Function shifts	Declared unspent funds	Other adjustments		
R thousand									
Space Science	169 939	–	–	(30)	–	–	–	(30)	169 909
Hydrogen and Energy	146 430	–	–	(34)	–	–	–	(34)	146 396
Bio economy	132 869	–	–	(4 755)	–	–	–	(4 755)	128 114
Innovation Priorities and Instruments	517 277	–	–	3 619	–	–	–	3 619	520 896
National Intellectual Property Management Office	25 108	–	–	18 500	–	–	–	18 500	43 608
Total	991 623	–	–	17 300	–	–	–	17 300	1 008 923
Economic classification									
Current payments	63 923	–	–	(3 969)	–	–	–	(3 969)	59 954
Compensation of employees	41 976	–	–	(569)	–	–	–	(569)	41 407
Goods and services	21 947	–	–	(3 400)	–	–	–	(3 400)	18 547
Transfers and subsidies	927 700	–	–	21 269	–	–	–	21 269	948 969
Departmental agencies and accounts	635 639	–	–	4 669	–	–	–	4 669	640 308
Higher education institutions	15 000	–	–	17 500	–	–	–	17 500	32 500
Non-profit institutions	277 061	–	–	(900)	–	–	–	(900)	276 161
Total	991 623	–	–	17 300	–	–	–	17 300	1 008 923

Programme 3: International Cooperation and Resources

Subprogramme	Main appropriation	2014/15						Total adjustments appropriation	Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Function shifts	Declared unspent funds	Other adjustments		
R thousand									
Multilateral Cooperation and Africa	27 486	–	–	(145)	–	–	–	(145)	27 341
International Resources	54 983	–	–	(119)	–	–	–	(119)	54 864
Overseas Bilateral Cooperation	37 230	–	–	(116)	–	–	–	(116)	37 114
Total	119 699	–	–	(380)	–	–	–	(380)	119 319
Economic classification									
Current payments	65 095	–	–	3 420	–	–	–	3 420	68 515
Compensation of employees	43 418	–	–	–	–	–	–	–	43 418
Goods and services	21 677	–	–	3 420	–	–	–	3 420	25 097
Transfers and subsidies	54 604	–	–	(3 800)	–	–	–	(3 800)	50 804
Non-profit institutions	54 604	–	–	(3 800)	–	–	–	(3 800)	50 804
Total	119 699	–	–	(380)	–	–	–	(380)	119 319

Programme 4: Research, Development and Support

Subprogramme	Main appropriation	2014/15						Total adjustments appropriation	Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Function shifts	Declared unspent funds	Other adjustments		
R thousand									
Human Capital and Science Promotions	1 874 660	9 700	–	(50)	–	–	–	9 650	1 884 310
Science Missions	176 804	–	–	(16 365)	–	–	–	(16 365)	160 439
Basic Science and Infrastructure	774 088	–	–	(50)	–	–	–	(50)	774 038
Astronomy	678 210	–	–	(50)	–	–	–	(50)	678 160
Total	3 503 762	9 700	–	(16 515)	–	–	–	(6 815)	3 496 947

Programme 4: Research, Development and Support (continued)

Economic classification R thousand	Main appropriation	2014/15						Adjusted appropriation	
		Adjustments appropriation							
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Function shifts	Declared unspent funds	Other adjustments		
Current payments	37 670	—	—	6 558	—	—	—	6 558 44 228	
Compensation of employees	27 502	—	—	1 623	—	—	—	1 623 29 125	
Goods and services	10 168	—	—	4 935	—	—	—	4 935 15 103	
Transfers and subsidies	3 466 092	9 700	—	(23 073)	—	—	—	(13 373) 3 452 719	
Departmental agencies and accounts	3 189 732	—	—	(23 073)	—	—	—	(23 073) 3 166 659	
Higher education institutions	6 360	—	—	—	—	—	—	— 6 360	
Public corporations and private enterprises	204 045	9 700	—	—	—	—	—	9 700 213 745	
Non-profit institutions	65 955	—	—	—	—	—	—	— 65 955	
Total	3 503 762	9 700	—	(16 515)	—	—	—	(6 815) 3 496 947	

Programme 5: Socio Economic Innovation Partnerships

Subprogramme	Main appropriation	2014/15						Adjusted appropriation	
		Adjustments appropriation							
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Function shifts	Declared unspent funds	Other adjustments		
Sector Innovation and Green Economy	856 361	—	—	22 265	—	—	—	22 265 878 626	
Innovation for Inclusive Development	353 919	—	—	(12 050)	—	—	—	(12 050) 341 869	
Science and Technology Investment	28 341	—	—	(50)	—	—	—	(50) 28 291	
Technology Localisation, Beneficiation and Advanced Manufacturing	325 525	—	—	(11 550)	—	—	—	(11 550) 313 975	
Total	1 564 146	—	—	(1 385)	—	—	—	(1 385) 1 562 761	
Economic classification									
Current payments	43 471	—	—	800	—	—	—	800 44 271	
Compensation of employees	33 881	—	—	—	—	—	—	— 33 881	
Goods and services	9 590	—	—	800	—	—	—	800 10 390	
Transfers and subsidies	1 520 675	—	—	(2 185)	—	—	—	(2 185) 1 518 490	
Departmental agencies and accounts	583 890	—	—	2 815	—	—	—	2 815 586 705	
Public corporations and private enterprises	936 785	—	—	(5 000)	—	—	—	(5 000) 931 785	
Total	1 564 146	—	—	(1 385)	—	—	—	(1 385) 1 562 761	

Details of adjustments to the Estimates of National Expenditure 2014

Roll-overs – R9.7 million

Programme 4: Research, Development and Support

R9.7 million has been rolled over for the construction of the Cofimvaba Science Centre in the Eastern Cape.

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		(5 169)	Programme 2		3 500
Goods and services	Cost containment measures effected, in particular the decision to not use consultants for the Ketlaphela project ¹	(3 500)	Departmental agencies and accounts	Funding of the African Clinical Research Organisation ¹	3 500
	Movement of the recruitment budget to corporate services, and cost containment measures effected on consultants, and venues and facilities	(200)	Programme 1	Centralisation of the recruitment budget	200
			Programme 2		1 469
Compensation of employees	Vacant posts ¹	(569)	Departmental agencies and accounts	Funding of the African Clinical Research Organisation ¹	569
Non-profit institutions	Reclassification of funds due to an incorrect classification in the 2014 ENE ¹	(300)	Goods and services	Reclassification of funds due to an incorrect classification in the 2014 ENE ¹	300
	Unspent funds due to delays in the implementation of the biotechnology demonstration project ¹	(600)	Departmental agencies and accounts	Funding of the African Clinical Research Organisation ¹	600
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		(4 180)	Programme 1		380
Goods and services	Movement of the recruitment budget to corporate services	(380)	Goods and services	Centralisation of the recruitment budget	380
Non-profit institutions	Reclassification of funds due to an incorrect classification in the 2014 ENE ¹	(3 800)	Programme 3		3 800
			Goods and services	Implementation of a policy and practical training programme on mineral processing and beneficiation for the states in the Non-Aligned Movement ¹	3 800
Shifts within the programme as a percentage of the programme budget			3.2%		
Virements to other programmes as a percentage of the programme budget			0.3%		
Programme 4		(23 273)	Programme 1		200
Goods and services	Movement of the recruitment budget to corporate services; and cost containment measures effected on consultants, and venues and facilities	(200)	Goods and services	Centralisation of the recruitment budget	200
			Programme 4		6 758
Departmental agencies and accounts	Reclassification of funds due to an incorrect classification in the 2014 ENE ¹	(1 623)	Compensation of employees	New posts for the Square Kilometre Array African Very Long Baseline Interferometry Network and astronomers ¹	1 623
	Reclassification of funds due to the Square Kilometre Array being incorrectly classified in the 2014 ENE ¹	(5 135)	Goods and services	Meetings on indigenous knowledge systems legislation, and operational costs for the Square Kilometre Array African Very Long Baseline Interferometry Network and astronomy ¹	5 135
	Reclassification of funds due to incorrect classification in the 2014 ENE ¹	(16 315)	Programme 5		16 315
			Departmental agencies and accounts	Environmental innovation programme ¹	16 315
Shifts within the programme as a percentage of the programme budget			0.2%		
Virements to other programmes as a percentage of the programme budget			0.5%		

2014 Adjusted Estimates of National Expenditure

FROM:		TO:			
Programme by economic classification	Motivation	R thousand	Programme by economic classification	Motivation	R thousand
Programme 5		(18 700)	Programme 1		200
Goods and services	Cost containment measures effected on consultants; and movement of the recruitment budget to corporate services	(200)	Goods and services	Centralisation of the recruitment budget	200
Departmental agencies and accounts	Projects that are funded from sector budget support and general budget support from the advanced manufacturing technology strategy ¹	(12 500)	Programme 2		12 500
	Reclassification of funds due to local systems of innovation incorrectly classified in the 2014 ENE ¹	(1 000)	Programme 5		1 000
Public corporations and private enterprises	Unspent funds due to delays in finalising the roadmap for the advanced manufacturing technology strategy ¹	(5 000)	Goods and services	Special services for the development of an online system to manage the sector specific innovation funds ¹	1 000
			Programme 2		5 000
			Higher education institutions	The National Intellectual Property Management Office unfunded mandate ¹	5 000
Shifts within the programme as a percentage of the programme budget	0.1%				
Virements to other programmes as a percentage of the programme budget	1.1%				
Total		(51 322)			51 322

1. National Treasury approval has been obtained.

Expenditure outcome for 2013/14 and actual expenditure for 2014/15

Programme	2013/14 Audited outcome					2014/15 Actual expenditure				
	R thousand	Adjusted appropriation	Apr 13 - Sep 13	% of adjusted appropriation	Apr 13 - Mar 14	% of adjusted appropriation	Adjusted appropriation	Adjusted appropriation/ Total (%)	Apr 14 - Sep 14	% of adjusted appropriation
Administration	245 658	124 243	50.6		257 471	104.8	291 940	4.5	131 674	45.1
Technology Innovation	1 122 062	1 313 098	117.0		1 669 678	148.8	1 008 923	15.6	615 339	61.0
International Cooperation and Resources	110 193	84 405	76.6		139 783	126.9	119 319	1.8	48 515	40.7
Research, Development and Support	3 233 832	1 712 832	53.0		2 462 720	76.2	3 496 947	54.0	2 206 797	63.1
Socio-Economic Innovation Partnerships	1 486 410	802 059	54.0		1 639 837	110.3	1 562 761	24.1	606 191	38.8
Total	6 198 155	4 036 637	65.1	6 169 489	99.5	6 479 890	100.0	3 608 516	55.7	
Economic classification										
Current payments	414 074	203 411	49.1	402 595	97.2	494 512	7.6	214 126	43.3	
Compensation of employees	251 403	121 327	48.3	241 621	96.1	284 872	4.4	133 545	46.9	
Goods and services	162 671	82 084	50.5	160 974	99.0	209 640	3.2	80 581	38.4	
Transfers and subsidies	5 754 403	3 801 037	66.1	5 703 875	99.1	5 983 069	92.3	3 391 014	56.7	
Departmental agencies and accounts	4 303 545	2 634 915	61.2	3 762 927	87.4	4 393 672	67.8	2 464 806	56.1	
Higher education institutions	115 811	105 842	91.4	156 163	134.8	38 860	0.6	117 245	301.7	
Foreign governments and international organisations	-	-	0.0	452	0.0	-	0.0	-	0.0	
Public corporations and private enterprises	1 132 887	1 032 115	91.1	1 697 974	149.9	1 145 530	17.7	791 387	69.1	
Non-profit institutions	202 160	28 165	13.9	84 701	41.9	405 007	6.3	17 010	4.2	
Households	-	-	0.0	1 658	0.0	-	0.0	566	0.0	
Payments for capital assets	29 678	32 189	108.5	63 019	212.3	2 309	0.0	3 376	146.2	
Machinery and equipment	29 678	4 689	15.8	8 156	27.5	2 309	0.0	3 376	146.2	
Software and other intangible assets	-	27 500	0.0	54 863	0.0	-	0.0	-	0.0	
Total	6 198 155	4 036 637	65.1	6 169 489	99.5	6 479 890	100.0	3 608 516	55.7	

Expenditure trends for the first half of 2014/15

Total expenditure in 2013/14 was 99.5 per cent of the 2013/14 adjusted appropriation. Expenditure in the first six months of 2014/15 was R3.609 billion, or 55.7 per cent of the adjusted appropriation of R6.480 billion for the year. In comparison, mid-year expenditure in 2013/14 was R4.037 billion, or 65.1 per cent of the 2013/14 adjusted appropriation. Compared to the first six months of 2013/14, expenditure over the same period in 2014/15 decreased by R428.121 million, or 10.6 per cent. This was mainly due to delays in projects.

Departmental receipts

	R thousand	2013/14				2014/15				
		Audited outcome		Actual receipts			Budget estimate	Adjusted estimate	Adjusted receipts estimate/Total (%)	Apr 14 - Sep 14
		Apr 13 - Sep 13	% of adjusted estimate	Apr 13 - Mar 14	adjusted estimate					
Departmental receipts	1 792	870	48.5	1 658	92.5	116	116	100.0	41	35.3
Sales of goods and services produced by department	28	19	67.9	47	167.9	28	28	24.1	16	57.1
Interest, dividends and rent on land	12	7	58.3	8	66.7	8	8	6.9	–	0.0
Transactions in financial assets and liabilities	1 752	844	48.2	1 603	91.5	80	80	69.0	25	31.3
Total	1 792	870	48.5	1 658	92.5	116	116	100.0	41	35.3

Revenue trends for the first half of 2014/15

Revenue in the first six months of 2014/15 was R41 000, or 35.3 per cent of the adjusted revenue estimate of R116 000 for the year. In comparison, mid-year revenue in 2013/14 was R870 000, or 48.5 per cent of the 2013/14 adjusted estimate. Compared to the first six months of 2013/14, revenue over the same period in 2014/15 decreased by R829 000, or 95.3 per cent. This was mainly due to the fact that in 2013/14 the department received unspent funds from projects that came to an end.

Changes to transfers and subsidies, including conditional grants

Summary of changes to transfers and subsidies per programme

R thousand	Main appropriation	2014/15							Adjusted appropriation	
		Adjustments appropriation						Total adjustments appropriation		
		Roll-overs	Unforeseeable/ unavoidable	Virements and shifts	Function shifts	Declared unspent funds	Other adjustments			
Technology Innovation										
Departmental agencies and accounts										
Departmental agencies (non-business entities)										
Current	380 717	–	–	4 669	–	–	–	4 669	385 386	
Technology Innovation Agency	380 717	–	–	4 669	–	–	–	4 669	385 386	
Non-profit institutions										
Current	87 032	–	–	(900)	–	–	–	(900)	86 132	
Biotechnology strategy	34 156	–	–	(600)	–	–	–	(600)	33 556	
Emerging research areas	52 876	–	–	(300)	–	–	–	(300)	52 576	
International Cooperation and Resources										
Non-profit institutions										
Current	8 120	–	–	(3 800)	–	–	–	(3 800)	4 320	
Global science: African multilateral agreements	8 120	–	–	(3 800)	–	–	–	(3 800)	4 320	

Summary of changes to transfers and subsidies per programme (continued)

R thousand	Main appropriation	2014/15						Adjusted appropriation	
		Adjustments appropriation							
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Function shifts	Declared unspent funds	Other adjustments		
Research, Development and Support									
Departmental agencies and accounts									
Departmental agencies (non-business entities)									
Current	1 461 198	–	–	(16 915)	–	–	–	(16 915) 1 444 283	
National Research Foundation	851 186	–	–	100	–	–	–	100 851 286	
South African Research Chairs Initiative	451 879	–	–	(100)	–	–	–	(100) 451 779	
Strategic science platforms	158 133	–	–	(16 915)	–	–	–	(16 915) 141 218	
Capital	647 793	–	–	(6 158)	–	–	–	(6 158) 641 635	
Square Kilometre Array	647 793	–	–	(6 158)	–	–	–	(6 158) 641 635	
Public corporations and private enterprises									
Public corporations									
Other transfers									
Current	–	9 700	–	–	–	–	–	9 700 9 700	
Science awareness (Council for Scientific and Industrial Research: Cofimvaba Science Centre construction)	–	9 700	–	–	–	–	–	9 700 9 700	
Socio Economic Innovation Partnerships									
Departmental agencies and accounts									
Departmental agencies (non-business entities)									
Current	177 709	–	–	2 815	–	–	–	2 815 180 524	
Environmental innovation	–	–	–	16 315	–	–	–	16 315 16 315	
Local systems of innovation	107 563	–	–	(1 500)	–	–	–	(1 500) 106 063	
Technology for poverty alleviation	32 395	–	–	(7 000)	–	–	–	(7 000) 25 395	
Technology for sustainable livelihoods	37 751	–	–	(5 000)	–	–	–	(5 000) 32 751	
Public corporations and private enterprises									
Public corporations									
Other transfers									
Current	67 539	–	–	(5 000)	–	–	–	(5 000) 62 539	
Advanced manufacturing technology strategy	48 281	–	–	(10 000)	–	–	–	(10 000) 38 281	
Information communication technology	19 258	–	–	5 000	–	–	–	5 000 24 258	