

Vote 33

Science and Technology

Adjusted budget summary

2010/11				
R thousand	Main appropriation	Adjusted appropriation	Decrease	Increase
Amount to be appropriated	4 615 541	4 127 983	(487 558)	–
<i>of which:</i>				
Current payments	361 969	370 089	–	8 120
Transfers and subsidies	4 249 472	3 752 822	(496 650)	–
Payments for capital assets	4 100	5 072	–	972
Executive authority	Minister of Science and Technology			
Accounting officer	Director-General of Science and Technology			
Website address	www.dst.gov.za			

Aim

The aim of the Department of Science and Technology is to realise the full potential of science and technology in social and economic development, through the development of human resources, research and innovation.

Mid-year performance status

Indicator	Programme	Outcome	Annual performance		
			Projected for 2010/11 as published in the 2010 ENE	Achieved in the first six months of 2010/11	Changed estimate for 2010/11
As published in the 2010 ENE	Programme linked to the indicator	Outcome the indicator is linked to (if relevant)			
Size of the portfolio of intellectual property, including the number of patents, patents applications and trademarks resulting from publicly funded research	Research, Development and Innovation, and Socioeconomic Partnerships	Decent employment through inclusive economic growth	20	4	–
Number of companies provided with a technology assistance package per year to facilitate successful participation in infrastructure public procurement processes	Socioeconomic Partnerships	An efficient, competitive and responsive economic infrastructure network	24	26	–
Total number of research chairs established at higher education institutions	Human Capital and Knowledge Systems, and Socioeconomic Partnerships	An efficient, competitive and responsive economic infrastructure network	102	82	–
Total number of peer reviewed scientific and technical papers published		A skilled and capable workforce	620	109	–
Total number of internships awarded		Decent employment through inclusive economic growth	348	121	–
Number of students registered for Masters and PhDs per year and supported by targeted human capital development instruments		A skilled and capable workforce	1 400	90	–
Amount of foreign funds leveraged in support of science, technology and innovation cooperation	International Cooperation and Resources	A skilled and capable workforce	R196.3m	R157.7m	–
Total number of functional centres of excellence	Research, Development and Innovation, Human Capital and Knowledge Systems, and Socioeconomic Partnerships	A skilled and capable workforce	9	–	–

Indicator	Programme	Outcome	Annual performance		
			Projected for 2010/11 as published in the 2010 ENE	Achieved in the first six months of 2010/11	Changed estimate for 2010/11
As published in the 2010 ENE	Programme linked to the indicator	Outcome the indicator is linked to (if relevant)			
Number of learners benefiting per year from targeted mathematics, science, English, engineering and technology capacity building programmes	Research, Development and Innovation, Human Capital and Knowledge Systems, and Socioeconomic Partnerships	A skilled and capable workforce	2 700	3 150	-
Number of new joint science, technology and innovation initiatives with African partners	Research, Development and Innovation, Human Capital and Knowledge Systems, and Socioeconomic Partnerships	A skilled and capable workforce	8	-	-
Number of new technologies under development	Research, Development and Innovation, Human Capital and Knowledge Systems, and Socioeconomic Partnerships	Create a better South Africa and contribute to a better and safer Africa and world	22	5	-
Number of new technology based companies established as a result of products developed through funded research and development programmes	Research, Development and Innovation, Human Capital and Knowledge Systems, and Socioeconomic Partnerships	An efficient, competitive and responsive economic infrastructure network	17	-	-
Number of households benefiting from technology based interventions per year	Socioeconomic Partnerships	An efficient, competitive and responsive economic infrastructure network	2 800	420	-

The size of the portfolio of intellectual property is significantly smaller in the first half of 2010/11 than estimated for the year as a whole, because of the necessary delay between the development of an idea and the registration of that idea into a patent or trademark. In addition, due to delays in finalising the National Intellectual Property Management Office, which will coordinate patent and trademark applications, the estimate will be adjusted down in the 2011 ENE process.

The total number of peer reviewed scientific and technical papers published in the first half of 2010/11 reflects as significantly lower than the estimate for the year as a whole, because the department will be reporting once-off on this target at the end of the financial year. This arrangement with the department's partners avoids multiple counting of publications appearing in successive quarterly reports.

The total number of internships awarded in the first half of 2010/11 reflects as significantly lower than the estimate for the year as a whole, because the department will be reporting once-off on this target at the end of the financial year. Quarterly figures are susceptible to changes, as interns drop out of the programme when they secure employment and there is more than one call for interns per year.

The number of students registered for Masters and PhDs and supported by targeted human capital development instruments in the first half of 2010/11 reflects as significantly lower than the estimate for the year as a whole, because the department will report once-off on this target at the end of the financial year. The number in the table is based on progress in calling for and awarding bursaries.

The number of learners benefiting from targeted mathematics, science, English, engineering and technology capacity building programmes in the first half of 2010/11 has exceeded the estimate for the year as a whole because the participation population per grade (grades 10 to 12) is set at 50 learners. However, some schools have between 50 and 80 learners in Grade 12 who are performing well and the school offered support to all of them.

The number of new technologies under development in the first half of 2010/11 is significantly lower than the estimate for the year as a whole, because of the necessary delay between research and the development of an idea into a new technology. In addition, due to delays in establishing the Technology Innovation Agency, the estimate will be adjusted down in the 2011 ENE process.

The number of households benefiting from technology based interventions in the first half of 2010/11 reflects as significantly lower than the estimate for the year as a whole because this is an annual target. The work is ongoing and requires extensive negotiations and development before each initiative is finalised. The department expects to meet this target by the end of 2010/11.

Adjusted Estimates of National Expenditure 2010

Programme	2010/11						
	Main appropriation	Adjustments appropriation				Total adjustments appropriation	Adjusted appropriation
Roll-overs		Unforeseeable/unavoidable	Virements and shifts	Other adjustments			
R thousand							
1. Administration	182 932	-	-	-	2 751	2 751	185 683
2. Research, Development and Innovation	1 284 040	-	-	51 110	(508 302)	(457 192)	826 848
3. International Cooperation and Resources	135 111	-	-	-	867	867	135 978
4. Human Capital and Knowledge Systems	1 748 671	-	-	14 699	594	15 293	1 763 964
5. Socioeconomic Partnerships	1 264 787	15 717	-	(65 809)	815	(49 277)	1 215 510
Total	4 615 541	15 717	-	-	(503 275)	(487 558)	4 127 983
Economic classification							
Current payments	361 969	-	-	2 520	5 600	8 120	370 089
Compensation of employees	214 971	-	-	3 120	5 600	8 720	223 691
Goods and services	146 998	-	-	(600)	-	(600)	146 398
Transfers and subsidies	4 249 472	15 717	-	(3 492)	(508 875)	(496 650)	3 752 822
Departmental agencies and accounts	2 081 974	15 717	-	168 902	-	184 619	2 266 593
Universities and technikons	-	-	-	32 880	-	32 880	32 880
Public corporations and private enterprises	900 637	-	-	101 808	-	101 808	1 002 445
Non-profit institutions	1 266 861	-	-	(307 082)	(508 875)	(815 957)	450 904
Payments for capital assets	4 100	-	-	972	-	972	5 072
Machinery and equipment	4 100	-	-	972	-	972	5 072
Total	4 615 541	15 717	-	-	(503 275)	(487 558)	4 127 983

Programme 1: Administration

Subprogramme	2010/11						
	Main appropriation	Adjustments appropriation				Total adjustments appropriation	Adjusted appropriation
Roll-overs		Unforeseeable/unavoidable	Virements and shifts	Other adjustments			
R thousand							
Minister	1 816	-	-	-	-	-	1 816
Deputy Minister	1 496	-	-	-	-	-	1 496
Management	66 542	-	-	-	1 019	1 019	67 561
Corporate Services	100 281	-	-	-	1 547	1 547	101 828
Governance	8 988	-	-	-	185	185	9 173
Office Accommodation	3 809	-	-	-	-	-	3 809
Total	182 932	-	-	-	2 751	2 751	185 683

Programme 1: Administration (continued)

Subprogramme	2010/11						Adjusted appropriation
	Main appropriation	Adjustments appropriation				Total adjustments appropriation	
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Other adjustments		
R thousand							
Economic classification							
Current payments	179 097	–	–	(710)	2 751	2 041	181 138
Compensation of employees	105 600	–	–	–	2 751	2 751	108 351
Goods and services	73 497	–	–	(710)	–	(710)	72 787
Transfers and subsidies	1 000	–	–	–	–	–	1 000
Non-profit institutions	1 000	–	–	–	–	–	1 000
Payments for capital assets	2 835	–	–	710	–	710	3 545
Machinery and equipment	2 835	–	–	710	–	710	3 545
Total	182 932	–	–	–	2 751	2 751	185 683

Programme 2: Research, Development and Innovation

Subprogramme	2010/11						Adjusted appropriation
	Main appropriation	Adjustments appropriation				Total adjustments appropriation	
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Other adjustments		
R thousand							
Economic classification							
Current payments	45 913	–	–	137	573	710	46 623
Compensation of employees	22 021	–	–	3 120	573	3 693	25 714
Goods and services	23 892	–	–	(2 983)	–	(2 983)	20 909
Transfers and subsidies	1 237 917	–	–	50 809	(508 875)	(458 066)	779 851
Departmental agencies and accounts	302 224	–	–	182 991	–	182 991	485 215
Universities and technikons	–	–	–	27 900	–	27 900	27 900
Public corporations and private enterprises	–	–	–	12 773	–	12 773	12 773
Non-profit institutions	935 693	–	–	(172 855)	(508 875)	(681 730)	253 963
Payments for capital assets	210	–	–	164	–	164	374
Machinery and equipment	210	–	–	164	–	164	374
Total	1 284 040	–	–	51 110	(508 302)	(457 192)	826 848

Programme 3: International Cooperation and Resources

Subprogramme		2010/11					
R thousand	Main appropriation	Adjustments appropriation				Total adjustments appropriation	Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Other adjustments		
Multilateral Cooperation and Africa	56 543	-	-	-	238	238	56 781
International Resources	48 919	-	-	-	341	341	49 260
Overseas Bilateral Cooperation	29 649	-	-	-	288	288	29 937
Total	135 111	-	-	-	867	867	135 978
Economic classification							
Current payments	58 869	-	-	(1 542)	867	(675)	58 194
Compensation of employees	33 278	-	-	-	867	867	34 145
Goods and services	25 591	-	-	(1 542)	-	(1 542)	24 049
Transfers and subsidies	75 750	-	-	1 522	-	1 522	77 272
Departmental agencies and accounts	30 594	-	-	3 177	-	3 177	33 771
Universities and technikons	-	-	-	3 580	-	3 580	3 580
Public corporations and private enterprises	-	-	-	6 702	-	6 702	6 702
Non-profit institutions	45 156	-	-	(11 937)	-	(11 937)	33 219
Payments for capital assets	492	-	-	20	-	20	512
Machinery and equipment	492	-	-	20	-	20	512
Total	135 111	-	-	-	867	867	135 978

Programme 4: Human Capital and Knowledge Systems

Subprogramme		2010/11					
R thousand	Main appropriation	Adjustments appropriation				Total adjustments appropriation	Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Other adjustments		
Human Capital and Science Platforms	1 233 835	-	-	14 699	280	14 979	1 248 814
Indigenous Knowledge Systems	27 370	-	-	-	181	181	27 551
Emerging Research Areas and Infrastructure	487 466	-	-	-	133	133	487 599
Total	1 748 671	-	-	14 699	594	15 293	1 763 964
Economic classification							
Current payments	31 360	-	-	4 883	594	5 477	36 837
Compensation of employees	22 796	-	-	-	594	594	23 390
Goods and services	8 564	-	-	4 883	-	4 883	13 447
Transfers and subsidies	1 717 206	-	-	9 686	-	9 686	1 726 892
Departmental agencies and accounts	1 372 021	-	-	4 633	-	4 633	1 376 654
Universities and technikons	-	-	-	1 400	-	1 400	1 400
Public corporations and private enterprises	98 783	-	-	87 333	-	87 333	186 116
Non-profit institutions	246 402	-	-	(83 680)	-	(83 680)	162 722
Payments for capital assets	105	-	-	130	-	130	235
Machinery and equipment	105	-	-	130	-	130	235
Total	1 748 671	-	-	14 699	594	15 293	1 763 964

Programme 5: Socioeconomic Partnerships

Subprogramme	2010/11							
	Main appropriation	Adjustments appropriation					Total adjustments appropriation	Adjusted appropriation
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Other adjustments			
R thousand								
Science and Technology for Economic Impact	981 322	15 717	–	(65 809)	431	(49 661)	931 661	
Science and Technology for Social Impact	260 794	–	–	–	184	184	260 978	
Science and Technology Investment	22 671	–	–	–	200	200	22 871	
Total	1 264 787	15 717	–	(65 809)	815	(49 277)	1 215 510	
Economic classification								
Current payments	46 730	–	–	(248)	815	567	47 297	
Compensation of employees	31 276	–	–	–	815	815	32 091	
Goods and services	15 454	–	–	(248)	–	(248)	15 206	
Transfers and subsidies	1 217 599	15 717	–	(65 509)	–	(49 792)	1 167 807	
Departmental agencies and accounts	377 135	15 717	–	(21 899)	–	(6 182)	370 953	
Public corporations and private enterprises	801 854	–	–	(5 000)	–	(5 000)	796 854	
Non-profit institutions	38 610	–	–	(38 610)	–	(38 610)	–	
Payments for capital assets	458	–	–	(52)	–	(52)	406	
Machinery and equipment	458	–	–	(52)	–	(52)	406	
Total	1 264 787	15 717	–	(65 809)	815	(49 277)	1 215 510	

Details of adjustments to Estimates of National Expenditure 2010**Roll-overs – R15.717 million**

Programme 5: Socioeconomic Partnerships

R15.717 million has been rolled over as follows:

R2.465 million for Business Global Change: Inkaba ye Afrika research programme

R3.322 million for the resource based industries research programme

R9.93 million for the research management information system

Virements and shifts**Programmes**

1. Administration
2. Research, Development and Innovation
3. International Cooperation and Resources
4. Human Capital and Knowledge Systems
5. Socioeconomic Partnerships

FROM:			TO:		
Programme by economic classification	Motivation	R thousand	Programme by economic classification	Motivation	R thousand
Programme 1		(710)	Programme 1		710
Goods and services	Reduction mainly on communication, contractors and operating payments	(710)	Machinery and equipment	For motor vehicles in the minister's office	710
Percentage of programme budget		0.4%			

FROM:			TO:		
Programme by economic classification	Motivation	R thousand	Programme by economic classification	Motivation	R thousand
Programme 2		(412 328)	Programme 2		412 328
Goods and services	Reduction on agency and support services	(2 000)	Departmental agencies and accounts	For business plans for the Fischer-Tropsch energy centres of competence	2 000
	Reduction on agency and support services	(3 918)	Non-profit institutions	For a strategy to strengthen the bioeconomy	3 918
Departmental agencies and accounts	Funds shifted from the Innovation Fund for specific innovation projects	(3 120)	Compensation of employees	For National Intellectual Property Management Office (NIPMO) transitional project management personnel	3 120
	Funds shifted from the Innovation Fund for specific innovation projects	(2 935)	Goods and services	For NIPMO transitional project management office operational costs	2 935
	Funds shifted from the Innovation Fund for specific innovation projects	(164)	Machinery and equipment	For NIPMO transitional project management office furniture and equipment	164
	Funds shifted from the Innovation Fund for specific innovation projects ²	(204 518)	Departmental agencies and accounts	For baseline funding for the Technology Innovation Agency	204 518
	Funds incorrectly classified in the 2010 ENE were reclassified	(18 900)	Universities and technikons	Funds incorrectly classified in the 2010 ENE were reclassified	18 900
Non-profit institutions (current)	Reduction on Biotechnology Strategy ²	(155 000)	Departmental agencies and accounts	For baseline funding for the Technology Innovation Agency	155 000
	Funds incorrectly classified in the 2010 ENE were reclassified	(8 588)	Public corporations and private enterprises	Funds incorrectly classified in the 2010 ENE were reclassified	8 588
	Funds incorrectly classified in the 2010 ENE were reclassified	(9 000)	Universities and technikons	Funds incorrectly classified in the 2010 ENE were reclassified	9 000
Non-profit institutions (capital)	Funds incorrectly classified in the 2010 ENE were reclassified	(4 185)	Public corporations and private enterprises	Funds incorrectly classified in the 2010 ENE were reclassified	4 185
Percentage of programme budget		32.1%			
Programme 3		(13 479)	Programme 3		13 479
Goods and services	Reduction on administrative fees	(20)	Machinery and equipment	For computer hardware and systems	20
	Reduction mainly on travel and subsistence and contractors ¹	(1 522)	Departmental agencies and accounts	For the National Research Foundation for the science and technology agreement	1 522
Non-profit institutions	Funds incorrectly classified in the 2010 ENE were reclassified	(1 655)	Departmental agencies and accounts	Funds incorrectly classified in the 2010 ENE were reclassified	1 655
	Funds incorrectly classified in the 2010 ENE were reclassified	(6 702)	Public corporations and private enterprises	Funds incorrectly classified in the 2010 ENE were reclassified	6 702
	Funds incorrectly classified in the 2010 ENE were reclassified	(3 580)	Universities and technikons	Funds incorrectly classified in the 2010 ENE were reclassified	3 580
Percentage of programme budget		10.0%			

2010 Adjusted Estimates of National Expenditure

FROM:			TO:		
Programme by economic classification	Motivation	R thousand	Programme by economic classification	Motivation	R thousand
Programme 4		(30 696)	Programme 4		30 696
Departmental agencies and accounts	Reduction on Learnerships	(750)	Goods and services	For the Women in Science Awards	750
	Reduction on Learnerships	(50)	Machinery and equipment	For equipment	50
	Reduction on Learnerships	(3 300)	Departmental agencies and accounts	For the research professional development programme and internships in the science themes	3 300
Non-profit institutions	Reduction on Emerging Research Areas	(1 550)	Goods and services	For the impact study for the implementation of the nanotechnology strategy and for research capacity development in nanotechnology	1 550
	Reduction on Science and Youth	(80)	Machinery and equipment	For computer hardware	80
	Funds incorrectly classified in the 2010 ENE were reclassified	(6 630)	Departmental agencies and accounts	Funds incorrectly classified in the 2010 ENE were reclassified	6 630
	Funds incorrectly classified in the 2010 ENE were reclassified	(3 323)	Public corporations and private enterprises	Funds incorrectly classified in the 2010 ENE were reclassified	3 323
	Funds incorrectly classified in the 2010 ENE were reclassified	(1 400)	Universities and technikons	Funds incorrectly classified in the 2010 ENE were reclassified	1 400
	Funds incorrectly classified in the 2010 ENE were reclassified	(13 613)	Public corporations and private enterprises	Funds incorrectly classified in the 2010 ENE were reclassified	13 613
Percentage of programme budget		5.9%			
Programme 5		(137 712)	Programme 5		1 052
Goods and services	Reduction on business and advisory services	(1 000)	Departmental agencies and accounts	For the Green Economy Summit	1 000
Machinery and equipment	Reduction on computer hardware	(52)	Advertising	For marketing research and development tax incentives	52
			Programme 2		7 500
Departmental agencies and accounts	Reduction on Local Manufacturing Capacity ²	(7 500)	Departmental agencies and accounts	For baseline funding for the Technology Innovation Agency	7 500
			Programme 4		14 699
	Reduction on Global Change Science and Technology, and Natural Resource and Public Assets	(14 699)	Departmental agencies and accounts	For baseline funding for the National Research Foundation	14 699
			Programme 5		18 815
	Reduction on South African Research Chairs for Human Sciences	(700)	Goods and services	For a scoping study on the impact on South Africa of the 2010 FIFA World Cup	700
	Reduction on South African Research Chairs for Human Sciences	(17 615)	Departmental agencies and accounts	For short term research grants on human and social dynamics in development and for baseline funding for the National Research Foundation and the Human Sciences Research Council	17 615
	Funds incorrectly classified in the 2010 ENE were reclassified	(500)	Public corporations and private enterprises	Funds incorrectly classified in the 2010 ENE were reclassified	500

FROM:			TO:		
Programme by economic classification	Motivation	R thousand	Programme by economic classification	Motivation	R thousand
			Programme 2		43 610
Non-profit institutions	Reduction on Tshumisano Trust ²	(38 610)	Departmental agencies and accounts	For baseline funding for the Technology Innovation Agency	38 610
Public corporations and private enterprises	Reduction on Advanced Manufacturing Technology Strategy ²	(5 000)	Departmental agencies and accounts	For baseline funding for the Technology Innovation Agency	5 000
	Funds incorrectly classified in the 2010 ENE were reclassified	(500)	Programme 5		52 036
	Reduction on Information Communication Technology	(51 536)	Departmental agencies and accounts	Funds incorrectly classified in the 2010 ENE were reclassified	500
			Public corporations and private enterprises	For baseline funding for the Council for Scientific and Industrial Research	51536
Percentage of programme budget		10.9%			
Total		(594 925)			
					594 925

1. In terms of the PFMA, only the legislature may approve this virement.

2. National Treasury approval has been obtained.

Other adjustments – R503.275 million

Adjustments due to significant and unforeseeable economic and financial events

An additional R5.6 million is allocated for higher personnel remuneration increases than the main budget provided for, including the increased housing allowance, as follows:

Programme 1: Administration

R2.751 million

Programme 2: Research, Development and Innovation

R573 000

Programme 3: International Cooperation and Resources

R867 million

Programme 4: Human Capital and Knowledge Systems

R594 000

Programme 5: Socioeconomic Partnerships

R815 000

Declared savings

Programme 2: Research, Development and Innovation

Savings of R508.875 million due to rescheduling the Square Kilometre Array demonstrator telescope have been declared.

Expenditure for 2009/10 and preliminary expenditure for 2010/11

Programme	2009/10					2010/11		
	Expenditure outcome					Preliminary expenditure		
R thousand	Adjusted appropriation	Apr 09 - Sep 09	Apr 09 - Sep 09 % of adjusted appropriation	Apr 09 - Mar 10	Apr 09 - Mar 10 % of adjusted appropriation	Adjusted appropriation	Apr 10 - Sep 10	Apr 10 - Sep 10 % of adjusted appropriation
1. Administration	173 569	69 536	40.1	159 123	91.7	185 683	81 266	43.8
2. Research, Development and Innovation	1 143 393	282 961	24.7	1 141 350	99.8	826 848	70 362	8.5
3. International Cooperation and Resources	131 963	67 806	51.4	117 474	89.0	135 978	60 422	44.4
4. Human Capital and Knowledge Systems	1 598 974	680 670	42.6	1 591 355	99.5	1 763 964	856 188	48.5
5. Socio Economic Partnerships	1 213 796	540 284	44.5	1 174 555	96.8	1 215 510	616 326	50.7
Total	4 261 695	1 641 257	38.5	4 183 857	98.2	4 127 983	1 684 564	40.8
Economic classification								
Current payments	342 390	127 637	37.3	284 242	83.0	370 089	149 937	40.5
Compensation of employees	200 160	82 846	41.4	167 487	83.7	223 691	95 386	42.6
Goods and services	142 230	44 791	31.5	116 755	82.1	146 398	54 551	37.3
Transfers and subsidies	3 914 820	1 510 356	38.6	3 891 873	99.4	3 752 822	1 532 497	40.8
Departmental agencies and accounts	2 230 799	718 559	32.2	2 310 883	103.6	2 266 593	855 006	37.7
Universities and technikons	119 875	89 095	74.3	113 447	94.6	32 880	18 203	55.4
Public corporations and private enterprises	1 204 031	584 806	48.6	1 183 334	98.3	1 002 445	648 261	64.7
Non-profit institutions	360 115	117 896	32.7	283 507	78.7	450 904	10 562	2.3
Households	–	–	0.0	702	0.0	–	465	0.0
Payments for capital assets	4 485	3 264	72.8	7 662	170.8	5 072	2 116	41.7
Machinery and equipment	4 485	3 264	72.8	7 662	170.8	5 072	2 116	41.7
Payments for financial assets	–	–	–	80	–	–	14	–
Total	4 261 695	1 641 257	38.5	4 183 857	98.2	4 127 983	1 684 564	40.8

Main expenditure trends for the first half of 2010/11

Total expenditure for 2009/10 was 98.2 per cent of the 2009/10 adjusted appropriation. Expenditure in the first six months of 2010/11 was R1.7 billion, or 40.8 per cent of the adjusted appropriation of R4.1 billion for the year as a whole. In comparison, mid-year expenditure in 2009/10 was R1.6 billion, or 38.5 per cent of the 2009/10 adjusted appropriation. Expenditure in the first six months of 2010/11 increased by R43.3 million or 2.6 per cent, compared to expenditure in the first six months of 2009/10.

The main expenditure increase compared to 2009/10 is due to increased spending to finalise the process to transfer projects to the Technology Innovation Agency and on the Square Kilometre Array demonstration project.

Departmental receipts

R thousand	2009/10					2010/11			
	Adjusted estimate	Audited outcome			Actual receipts				
		Apr 09 - Sep 09	Apr 09 - Sep 09 % of adjusted estimate	Apr 09 - Mar 09	Apr 09 - Mar 10 % of adjusted estimate	Budget estimate	Adjusted estimate	Apr 10 - Sep 10	Apr 10 - Sep 10 % of adjusted estimate
Departmental receipts	1 005	949	94.4	1 585	157.7	111	385	385	100.0
Sales of goods and services produced by department	25	13	52.0	30	120.0	26	17	17	100.0
Interest, dividends and rent on land	6	2	33.3	3	50.0	7	-	-	-
Transactions in financial assets and liabilities	974	934	95.9	1 552	159.3	78	368	368	100.0
Total	1 005	949	94.4	1 585	157.7	111	385	385	100.0

Main departmental revenue trends for the first half of 2010/11

Departmental revenue collection in the first six months of 2010/11 was R385 000, or 100 per cent of the adjusted revenue estimate of R385 000 for the year as a whole. In comparison, mid-year revenue collection in 2009/10 was R949 000, or 94.4 per cent of the 2009/10 adjusted estimate. Departmental revenue collection in the first six months of 2010/11 decreased by R564 000 or 59.4 per cent, compared to revenue in the first six months of 2009/10.

The main revenue decrease compared to 2009/10 is due to amounts received back from contracts which were not received in 2010/11.

Changes to transfers and subsidies, and conditional grants

Summary of changes to transfers and subsidies per programme

R thousand	Main appropriation	2010/11					Adjusted appropriation
		Adjustments appropriation					
		Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Other adjustments	Total adjustments appropriation	
2. Research, Development and Innovation							
Departmental agencies and accounts							
Departmental agencies (non-business entities)							
Current	261 494	-	-	182 991	-	182 991	444 485
South African National Energy Research Institute	41 976	-	-	(18 900)	-	(18 900)	23 076
Innovation Fund	189 518	-	-	(189 518)	-	(189 518)	-
Innovation Projects	30 000	-	-	(19 219)	-	(19 219)	10 781
Technology Innovation Agency	-	-	-	410 628	-	410 628	410 628
Universities and technikons							
Current	-	-	-	27 900	-	27 900	27 900
South African National Energy Research Institute	-	-	-	18 900	-	18 900	18 900
Hydrogen Strategy	-	-	-	9 000	-	9 000	9 000

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

		2010/11					
		Adjustments appropriation					
						Total	
R thousand	Main appropriation	Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Other adjustments	adjustments appropriation	Adjusted appropriation
Public corporations and private enterprises							
Public corporations							
Other transfers							
Current							
	-	-	-	8 588	-	8 588	8 588
Hydrogen Strategy	-	-	-	6 000	-	6 000	6 000
Space Science	-	-	-	2 588	-	2 588	2 588
Capital							
	-	-	-	4 185	-	4 185	4 185
Space Science	-	-	-	4 185	-	4 185	4 185
Non-profit institutions							
Current							
	284 195	-	-	(168 670)	-	(168 670)	115 525
Biotechnology Strategy	227 066	-	-	(151 082)	-	(151 082)	75 984
Hydrogen Strategy	28 638	-	-	(15 000)	-	(15 000)	13 638
Space Science	28 491	-	-	(2 588)	-	(2 588)	25 903
Capital							
	560 265	-	-	(4 185)	(508 875)	(513 060)	47 205
Space Science	51 390	-	-	(4 185)	-	(4 185)	47 205
Square Kilometre Array	508 875	-	-	-	(508 875)	(508 875)	-
3. International Cooperation and Resources							
Departmental agencies and accounts							
Departmental agencies (non-business entities)							
Current							
	-	-	-	3 177	-	3 177	3 177
Global Science	-	-	-	3 177	-	3 177	3 177
Universities and technikons							
Current							
	-	-	-	3 580	-	3 580	3 580
Global Science	-	-	-	3 580	-	3 580	3 580
Public corporations and private enterprises							
Public corporations							
Other transfers							
Current							
	-	-	-	6 702	-	6 702	6 702
Global Science	-	-	-	6 702	-	6 702	6 702
Non-profit institutions							
Current							
	35 156	-	-	(11 937)	-	(11 937)	23 219
Global Science	35 156	-	-	(11 937)	-	(11 937)	23 219

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

		2010/11					
		Adjustments appropriation					
R thousand	Main appropriation	Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Other adjustments	Total adjustments appropriation	Adjusted appropriation
4. Human Capital and Knowledge Systems							
Departmental agencies and accounts							
Departmental agencies (non-business entities)							
	Current			20 529		20 529	1 171 139
Human Resources	351 179	-	-	1 450	-	1 450	352 629
Development							
Indigenous	-	-	-	130	-	130	130
Knowledge System							
Leaverships	7 129	-	-	(4 100)	-	(4 100)	3 029
National Research	734 443	-	-	14 699	-	14 699	749 142
Foundation							
Science and Youth	-	-	-	6 500	-	6 500	6 500
Science Themes	57 859	-	-	1 850	-	1 850	59 709
	Capital			(15 896)		(15 896)	205 515
Research and	221 411	-	-	(15 896)	-	(15 896)	205 515
Development							
Infrastructure							
Universities and technikons							
	Current			1 400		1 400	1 400
Indigenous	-	-	-	1 400	-	1 400	1 400
Knowledge System							
Public corporations and private enterprises							
Public corporations							
Other transfers							
	Current			3 323		3 323	3 323
Centre for High	-	-	-	1 623	-	1 623	1 623
Performance							
Computing							
Indigenous	-	-	-	500	-	500	500
Knowledge System							
Science and Youth	-	-	-	1 200	-	1 200	1 200
	Capital			84 010		84 010	84 010
Centre for High	-	-	-	70 397	-	70 397	70 397
Performance							
Computing							
Research and	-	-	-	13 613	-	13 613	13 613
Development							
Infrastructure							
Non-profit institutions							
	Current			(13 283)		(13 283)	110 661
Centre for High	1 623	-	-	(1 623)	-	(1 623)	-
Performance							
Computing							
Emerging Research	50 475	-	-	(1 550)	-	(1 550)	48 925
Areas							
Indigenous	17 407	-	-	(2 330)	-	(2 330)	15 077
Knowledge System							
Science and Youth	54 439	-	-	(7 780)	-	(7 780)	46 659
	Capital			(70 397)		(70 397)	-
Centre for High	70 397	-	-	(70 397)	-	(70 397)	-
Performance							
Computing							

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

		2010/11					
		Adjustments appropriation				Total adjustments appropriation	Adjusted appropriation
R thousand	Main appropriation	Roll-overs	Unforeseeable/unavoidable	Virements and shifts	Other adjustments		
5. Socioeconomic Partnerships							
Departmental agencies and accounts							
Departmental agencies (non-business entities)							
	344 551	15 717	–	(21 899)	–	(6 182)	338 369
Current							
Global Change Science and Technology	29 680	2 465	–	(8 449)	–	(5 984)	23 696
Human and Social Development Dynamics	36 174	–	–	(6 885)	–	(6 885)	29 289
Human Science Research Council	169 793	–	–	24 500	–	24 500	194 293
Local Manufacturing Capacity	28 178	–	–	(7 500)	–	(7 500)	20 678
Natural Resources and Public Assets Research	58 471	–	–	(5 250)	–	(5 250)	53 221
Information Management System	3 940	9 930	–	–	–	9 930	13 870
Resource Based Industries	–	3 322	–	–	–	3 322	3 322
South African Research Chairs Initiative for Human Sciences	18 315	–	–	(18 315)	–	(18 315)	–
Public corporations and private enterprises							
Public corporations							
Other transfers							
	748 548	–	–	(5 000)	–	(5 000)	743 548
Current							
Advanced Manufacturing Technology Strategy	50 480	–	–	(5 000)	–	(5 000)	45 480
Council for Scientific and Industrial Research	634 248	–	–	51 536	–	51 536	685 784
Information Communication Technology	63 820	–	–	(51 536)	–	(51 536)	12 284
Non-profit institutions							
	38 610	–	–	(38 610)	–	(38 610)	–
Current							
Tshumisano Trust	38 610	–	–	(38 610)	–	(38 610)	–