

Vote 30

Science and Technology

Adjusted budget summary

R thousand	2019/20			
	Appropriation	Adjustments appropriation		Adjusted appropriation
		Decrease	Increase	
Amount to be appropriated	8 150 969	(15 093)	10 300	8 146 176
<i>of which:</i>				
Current payments	635 271	(15 093)	–	620 178
Transfers and subsidies	7 513 025	–	10 300	7 523 325
Payments for capital assets	2 673	–	–	2 673
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.

2019 National macro organisation of government

The Department of Science and Technology has been renamed the Department of Science and Innovation, reporting to Minister of Higher Education, Science and Technology, but still existing as a separate vote. The departments are expected to finalise the transitional arrangements by 1 April 2020.

Mid-year performance status

Indicator	Programme	MTSF outcome	Annual performance		
			Projected for 2019/20 as published in the 2019 ENE	Achieved in the first half of 2019/20 (April to September)	Changed target for 2019/20
Number of instruments funded in support of knowledge utilisation per year	Technology Innovation	Outcome 4: Decent employment through inclusive growth	21	7	–
Number of commercial outputs in designated areas per year	Technology Innovation		8	0	–
Amount of funds invested by international partners in their own organisations and initiatives targeted at cooperation with South African partners in the areas of research, innovation and science, technology and innovation human capital development as part of cooperation initiatives implemented by the department per year	International Cooperation and Resources		R300m	0	–
Number of doctoral students awarded bursaries per year, as reflected in reports from the National Research Foundation and relevant entities	Research, Development and Support	Outcome 5: A skilled and capable workforce to support an inclusive growth path	3 100	2 721	–

2019 Adjusted Estimates of National Expenditure

Indicator	Programme	MTSF outcome	Annual performance		
			Projected for 2019/20 as published in the 2019 ENE	Achieved in the first half of 2019/20 (April to September)	Changed target for 2019/20
Number of pipeline postgraduate students (BTech, honours and masters students) awarded bursaries per year, as reflected in reports from the National Research Foundation and relevant entities	Research, Development and Support	Outcome 5: A skilled and capable workforce to support an inclusive growth path	10 800	7 710	–
Number of researchers awarded research grants per year through programmes managed by the National Research Foundation reflected in the foundation's project reports	Research, Development and Support		4 500	2 557	–
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	Socioeconomic Innovation Partnerships	Outcome 4: Decent employment through inclusive growth	50	8	–

Mid-year progress

In the first half of 2019/20, 7 instruments were funded in support of knowledge utilisation against a target of 21 for the year, due to a shortage of personnel. Although there were no commercial outputs in designated areas by mid-year, the department has conducted consultations, which will be implemented in the second half of the year to realise the targeted outputs. The department also expects to achieve its targeted amount of funds invested by international partners in the second half of 2019/20. By mid-year, 8 knowledge and innovation products (patents, prototypes, technology demonstrators or technology transfer packages) were added to the intellectual property portfolio against an annual target of 50. The department plans to achieve the remainder of the target in the second half of 2019/20.

Adjusted estimates

Programme	2019/20							
	Appropriation	Adjustments appropriation					Total adjustments appropriation	Adjusted appropriation
		Roll-overs	Virements and shifts	Shifts between votes	Declared unspent funds	Other adjustments		
R thousand								
Administration	380 282	–	(10 300)	–	(4 793)	–	(15 093)	365 189
Technology Innovation	1 224 305	–	–	–	–	–	–	1 224 305
International Cooperation and Resources	149 008	–	–	–	–	–	–	149 008
Research, Development and Support	4 572 935	–	–	–	–	–	–	4 572 935
Socioeconomic Innovation Partnerships	1 824 439	–	10 300	–	–	–	10 300	1 834 739
Total	8 150 969	–	–	–	(4 793)	–	(4 793)	8 146 176
Economic classification								
Current payments	635 271	–	(10 300)	–	(4 793)	–	(15 093)	620 178
Compensation of employees	380 466	–	–	–	(4 793)	–	(4 793)	375 673
Goods and services	254 805	–	(10 300)	–	–	–	(10 300)	244 505
Transfers and subsidies	7 513 025	–	10 300	–	–	–	10 300	7 523 325
Departmental agencies and accounts	5 605 144	–	10 300	–	–	–	10 300	5 615 444
Public corporations and private enterprises	1 541 908	–	–	–	–	–	–	1 541 908
Non-profit institutions	365 973	–	–	–	–	–	–	365 973
Payments for capital assets	2 673	–	–	–	–	–	–	2 673
Machinery and equipment	2 673	–	–	–	–	–	–	2 673
Total	8 150 969	–	–	–	(4 793)	–	(4 793)	8 146 176

Programme 1: Administration

Subprogramme		2019/20						Adjusted appropriation
		Adjustments appropriation					Total adjustments appropriation	
R thousand	Appropriation	Roll-overs	Virements and shifts	Shifts between votes	Declared unspent funds	Other Adjustments		
Ministry	5 496	–	–	–	–	–	5 496	
Institutional Planning and Support	166 354	–	–	–	(4 793)	–	161 561	
Corporate Services	145 117	–	–	–	–	–	145 117	
Office Accommodation	63 315	–	(10 300)	–	–	–	53 015	
Total	380 282	–	(10 300)	–	(4 793)	–	365 189	
Economic classification								
Current payments	362 523	–	(10 300)	–	(4 793)	–	347 430	
Compensation of employees	173 998	–	–	–	(4 793)	–	169 205	
Goods and services	188 525	–	(10 300)	–	–	–	178 225	
Transfers and subsidies	15 086	–	–	–	–	–	15 086	
Non-profit institutions	15 086	–	–	–	–	–	15 086	
Payments for capital assets	2 673	–	–	–	–	–	2 673	
Machinery and equipment	2 673	–	–	–	–	–	2 673	
Total	380 282	–	(10 300)	–	(4 793)	–	365 189	

Programme 2: Technology Innovation

Subprogramme		2019/20						Adjusted appropriation
		Adjustments appropriation					Total adjustments appropriation	
R thousand	Appropriation	Roll-overs	Virements and shifts	Shifts between votes	Declared unspent funds	Other Adjustments		
Space Science	189 361	–	20 000	–	–	–	209 361	
Hydrogen and Energy	178 526	–	–	–	–	–	178 526	
Bio-innovation	193 262	–	–	–	–	–	193 262	
Innovation Priorities and Instruments	605 388	–	(20 000)	–	–	–	585 388	
National Intellectual Property Management Office	53 607	–	–	–	–	–	53 607	
Office of the Deputy Director-General: Technology Innovation	4 161	–	–	–	–	–	4 161	
Total	1 224 305	–	–	–	–	–	1 224 305	
Economic classification								
Current payments	78 807	–	–	–	–	–	78 807	
Compensation of employees	56 744	–	–	–	–	–	56 744	
Goods and services	22 063	–	–	–	–	–	22 063	
Transfers and subsidies	1 145 498	–	–	–	–	–	1 145 498	
Departmental agencies and accounts	737 962	–	–	–	–	–	737 962	
Public corporations and private enterprises	112 672	–	–	–	–	–	112 672	
Non-profit institutions	294 864	–	–	–	–	–	294 864	
Total	1 224 305	–	–	–	–	–	1 224 305	

Programme 5: Socioeconomic Innovation Partnerships

Subprogramme		2019/20						Adjusted appropriation
		Adjustments appropriation					Total adjustments appropriation	
R thousand	Appropriation	Roll-overs	Virements and shifts	Shifts between votes	Declared unspent funds	Other Adjustments		
Sector Innovation and Green Economy	1 046 003	–	–	–	–	–	1 046 003	

Programme 5: Socioeconomic Innovation Partnerships (continued)

Subprogramme	2019/20							Adjusted appropriation
	Appropriation	Adjustments appropriation					Total adjustments appropriation	
		Roll-overs	Virements and shifts	Shifts between votes	Declared unspent funds	Other adjustments		
R thousand								
Innovation for Inclusive Development	367 768	–	10 300	–	–	–	10 300	378 068
Science and Technology Investment	34 923	–	–	–	–	–	–	34 923
Technology Localisation, Beneficiation and Advanced Manufacturing	372 287	–	–	–	–	–	–	372 287
Office of the Deputy Director - General: Socioeconomic Innovation Partnership	3 458	–	–	–	–	–	–	3 458
Total	1 824 439	–	10 300	–	–	–	10 300	1 834 739
Economic classification								
Current payments	58 343	–	–	–	–	–	–	58 343
Compensation of employees	48 628	–	–	–	–	–	–	48 628
Goods and services	9 715	–	–	–	–	–	–	9 715
Transfers and subsidies	1 766 096	–	10 300	–	–	–	10 300	1 776 396
Departmental agencies and accounts	588 546	–	10 300	–	–	–	10 300	598 846
Public corporations and private enterprises	1 177 550	–	–	–	–	–	–	1 177 550
Total	1 824 439	–	10 300	–	–	–	10 300	1 834 739

Details of adjustments to the 2019 Estimates of National Expenditure**Virements and shifts within the vote**

Programmes					
1. Administration					
2. Technology Innovation					
3. International Cooperation and Resources					
4. Research, Development and Support					
5. Socioeconomic Innovation Partnerships					
From:			To:		
Programme by economic classification	Motivation	R thousand	Programme by economic classification	Motivation	R thousand
Programme 1		(10 300)	Programme 5		10 300
Goods and services	Property payments ¹	(10 300)	Departmental agencies and accounts	Building maintenance (Human Sciences Research Council) ¹	10 300
Shifts within the programme as a percentage of the programme budget		0.0%			
Virements to other programmes as a percentage of the programme budget		2.7%			
Programme 2		(51 680)	Programme 2		51 680
Non-profit institutions	South African National AIDS Council ¹	(31 680)	Non-profit institutions	South African Medical Research Council (social impact bond on HIV, and sexual and gender-based violence against adolescent girls and young women) ¹	31 680
Departmental agencies and accounts	Various institutions: Innovation projects research ¹	(20 000)	Departmental agencies and accounts	Space Weather Centre ¹	20 000
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%			
Total		(61 980)			61 980

1. National Treasury approval has been obtained.

Declared unspent funds – R4.793 million

Programme 1: Administration

R4.793 million in unspent funds has been declared on compensation of employees in the *Institutional Planning and Support* subprogramme due to projected under expenditure by 31 March 2020.

Expenditure outcome for 2018/19 and actual expenditure for 2019/20

Programme	2018/19					2019/20			
	Adjusted appropriation	Outcome		Apr 18 - Mar 19	Apr 18 - Mar 19 % of adjusted appropriation	Adjusted appropriation	Adjusted appropriation/ Total (%)	Actual expenditure	
Apr 18 - Sep 18		Apr 18 - Sep 18 % of adjusted appropriation	Apr 19 - Sep 19					Apr 19 - Sep 19 % of adjusted appropriation	
R thousand									
Administration	383 802	157 050	40.9	340 493	88.7	365 189	4.5	135 772	37.2
Technology Innovation International	1 131 723	534 596	47.2	1 143 715	101.1	1 224 305	15.0	469 581	38.4
Cooperation and Resources	136 399	49 124	36.0	139 872	102.5	149 008	1.8	56 053	37.6
Research, Development and Support	4 528 204	3 143 122	69.4	4 516 626	99.7	4 572 935	56.1	2 555 714	55.9
Socioeconomic Innovation Partnerships	1 778 260	717 100	40.3	1 751 220	98.5	1 834 739	22.5	881 139	48.0
Total	7 958 388	4 600 992	57.8	7 891 926	99.2	8 146 176	100.0	4 098 259	50.3
Economic classification									
Current payments	603 305	262 553	43.5	546 152	90.5	620 178	7.6	235 578	38.0
Compensation of employees	352 468	163 974	46.5	330 750	93.8	375 673	4.6	160 026	42.6
Goods and services	250 837	98 579	39.3	215 402	85.9	244 505	3.0	75 552	30.9
Transfers and subsidies	7 342 889	4 334 640	59.0	7 336 589	99.9	7 523 325	92.4	3 856 425	51.3
Departmental agencies and accounts	6 601 920	3 324 854	50.4	5 003 551	75.8	5 615 444	68.9	3 215 992	57.3
Public corporations and private enterprises	306 852	908 955	296.2	1 850 374	603.0	1 541 908	18.9	566 373	36.7
Non-profit institutions	434 117	100 579	23.2	481 367	110.9	365 973	4.5	72 726	19.9
Households	–	252	–	1 297	–	–	–	1 334	–
Payments for capital assets	12 194	3 692	30.3	9 042	74.2	2 673	0.0	6 247	233.7
Machinery and equipment	12 194	3 692	30.3	9 042	74.2	2 673	0.0	6 247	233.7
Payments for financial assets	–	107	–	143	–	–	–	9	–
Total	7 958 388	4 600 992	57.8	7 891 926	99.2	8 146 176	100.0	4 098 259	50.3

Expenditure trends for the first half of 2019/20

Total expenditure in 2018/19 was R7.9 billion, 99.2 per cent of the adjusted appropriation for the year. Mid-year expenditure in 2018/19 was R4.6 billion, 57.8 per cent of the 2018/19 adjusted appropriation, whereas mid-year expenditure in 2019/20 was R4.1 billion, 50.3 per cent of the adjusted appropriation of R 8.1 billion for the year. Compared to the first half of 2018/19, mid-year expenditure over the same period in 2019/20 decreased by R502.7 million, 10.9 per cent, mainly due to projects that were processed for payment ahead of schedule in 2018/19.

Departmental receipts

R thousand	2018/19					2019/20				
	Adjusted estimate	Outcome				Budget estimate	Adjusted estimate	Adjusted receipts estimate/ Total (%)	Actual receipts	
		Apr 18 - Sep 18	Apr 18 - Sep 18 % of adjusted estimate	Apr 18 - Mar 19	Apr 18 - Mar 19 % of adjusted estimate				Apr 19 - Sep 19	Apr 19 - Sep 19 % of adjusted estimate
Departmental receipts	9 644	6 376	66.1	32 749	339.6	545	20 081	100.0	16 856	83.9
Sales of goods and services produced by department	55	31	56.4	64	116.4	35	66	0.3	33	50.0
Interest, dividends and rent on land	20	10	50.0	27	135.0	10	15	0.1	3	20.0
Sales of capital assets	217	217	100.0	217	100.0	–	–	–	–	–
Transactions in financial assets and liabilities	9 352	6 118	65.4	32 441	346.9	500	20 000	99.6	16 820	84.1
Total	9 644	6 376	66.1	32 749	339.6	545	20 081	100.0	16 856	83.9

Revenue trends for the first half of 2019/20

Mid-year revenue in 2018/19 was R6.4 million, 66.1 per cent of the 2018/19 adjusted estimate, whereas mid-year revenue in 2019/20 was R16.9 million, 83.9 per cent of the adjusted estimate for the year. Compared to the first half of 2018/19, mid-year revenue over the same period in 2019/20 increased by R10.5 million, 164.4 per cent, mainly due to money paid back from projects. These funds were paid back to the department.

Changes to transfers and subsidies

Summary of changes to transfers and subsidies per programme

R thousand	Appropriation	2019/20					Total adjustments appropriation	Adjusted appropriation
		Adjustments appropriation						
		Roll-overs	Virements and shifts	Shifts between votes	Declared unspent funds	Other adjustments		
Technology Innovation Departmental agencies and accounts								
Departmental agencies (non-business entities)								
Current	65 318	–	–	–	–	–	65 318	
Various institutions:	35 318	–	(20 000)	–	–	(20 000)	15 318	
Innovation projects research								
Various institutions: Space science research (economic competitiveness and support package)	30 000	–	20 000	–	–	20 000	50 000	
Non-profit institutions								
Current	82 840	–	–	–	–	–	82 840	
Various institutions: Health innovation research	51 160	–	31 680	–	–	31 680	82 840	
South African National AIDS Council	31 680	–	(31 680)	–	–	(31 680)	–	
Socioeconomic Innovation Partnerships								
Departmental agencies and accounts								
Departmental agencies (non-business entities)								
Current	313 855	–	10 300	–	–	10 300	324 155	
Human Sciences Research Council	313 855	–	10 300	–	–	10 300	324 155	