

Estimates of National Expenditure 2023

Vote 35: Science and Innovation

**National Treasury
Republic of South Africa**



Vote 35

Science and Innovation

Budget summary

R million	2023/24				2024/25	2025/26
	Current payments	Transfers and subsidies	Payments for capital assets	Total	Total	Total
MTEF allocation						
Administration	317.9	15.7	10.4	344.1	359.3	375.2
Technology Innovation	75.6	2 492.8	–	2 568.4	2 307.9	1 957.8
International Cooperation and Resources	73.2	76.7	–	149.9	156.6	163.5
Research, Development and Support	55.9	5 990.1	–	6 046.0	5 854.5	5 680.5
Socioeconomic Innovation Partnerships	55.4	1 710.5	–	1 765.9	1 845.4	1 928.0
Total expenditure estimates	578.0	10 285.8	10.4	10 874.2	10 523.7	10 105.0

Executive authority: Minister of Science and Innovation
 Accounting officer: Director-General of Science and Innovation
 Website: www.dst.gov.za

The Estimates of National Expenditure is available at www.treasury.gov.za. Additional tables in Excel format can be found at www.treasury.gov.za and www.vulekamali.gov.za.

Vote purpose

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

Mandate

The Department of Science and Innovation derives its mandate from the 1996 White Paper on Science and Technology, which introduced the concept of the national system of innovation – a set of interacting organisations and policies through which South Africa creates, acquires, diffuses and puts into practice new knowledge to help achieve individual and collective goals. A coordinated and efficient national system of innovation will help the country achieve its national development priorities by promoting change through innovation, and enable all South Africans to enjoy the economic, sociopolitical and intellectual benefits of science, technology and innovation.

Selected performance indicators

Table 35.1 Performance indicators by programme and related priority

Indicator	Programme	MTSF priority	Audited performance			Estimated performance	MTEF targets		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Number of commercial outputs in designated areas per year	Technology Innovation	Priority 2: Economic transformation and job creation	11	15	4	5	5	5	5
Number of technology demonstrations, prototypes, products and services developed per year	Technology Innovation		– ¹	18	10	20	25	30	30
Funds invested by international partners in their own organisations and initiatives targeted at cooperation with South African partners in the areas of research, innovation, science, technology and innovative human capital development as part of cooperation initiatives implemented by the department per year	International Cooperation and Resources	Priority 7: A better Africa and world	R300m	R300m	R300m	R300m	R400m	R400m	R400m

Table 35.1 Performance indicators by programme and related priority (continued)

Indicator	Programme	MTSF priority	Audited performance			Estimated performance	MTEF targets		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Number of doctoral students awarded bursaries per year, as reflected in reports from the National Research Foundation and relevant entities	Research, Development and Support	Priority 3: Education, skills and health	3 100	3 100	3 200	3 200	3 200	3 200	3 200
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		10 800	10 800	10 800	10 800	10 900	10 900	10 900
Number of researchers awarded research grants per year through programmes managed by the National Research Foundation, as reflected in the foundation's project reports	Research, Development and Support		4 500	4 600	4 700	4 700	4 700	4 700	4 700
Number of knowledge and innovation products added to the industrial development and green economy intellectual property portfolio per year through fully funded or co-funded research initiatives	Socioeconomic Innovation Partnerships	Priority 2: Economic transformation and job creation	57	70	70	70	70	70	70
Number of knowledge products on innovation for inclusive development published per year	Socioeconomic Innovation Partnerships		6	5	5	5	5	5	5

1. No historical data available.

Expenditure overview

Over the medium term, the department plans to focus on providing funding for research infrastructure to strengthen South Africa's research and innovation capabilities, including implementing the national space strategy; developing human capital; and advancing innovation to improve South Africa's competitiveness in the global market through measures such as supporting emerging farmers.

The department's expenditure is expected to increase at an average annual rate of 3.4 per cent, from R9.1 billion in 2022/23 to R10.1 billion in 2025/26. Transfers and subsidies account for an estimated 94 per cent (R29.7 billion) of total expenditure over the MTEF period. The second-largest cost driver is compensation of employees, spending on which increases from R357.7 million in 2022/23 to R403.8 million in 2025/26 at an average annual rate of 4.1 per cent.

Strengthening research infrastructure and innovation capabilities

In recognising that the availability of adequate research infrastructure is vital for the development of a robust and competitive national system of innovation, the department will continue to fund projects that are in line with the South African research infrastructure roadmap. These include constructing large national infrastructure platforms and facilities; acquiring scientific equipment; and developing pilot plants, technology demonstrators and specialised facilities such as drug development and aerospace platforms. In support of this, the department is allocated R3.9 billion over the period ahead in the *Basic Science and Infrastructure* subprogramme in the *Research Development and Support* programme.

The department's work is also geared towards strengthening research capabilities. Key among these are the South African National Space Agency's space infrastructure hub project, a multiyear infrastructure development project that involves the development of space infrastructure such as satellite imagery to map geographical information, satellite-based augmentation systems and earth observation satellites; and the Square Kilometre

Array, which is a global endeavour to construct the world's largest and most sensitive wavelength radio telescope. These initiatives are supported by additional allocations over the MTEF period of R1.2 billion to the South African National Space Agency for the space infrastructure hub project and R1.3 billion to the South African Radio Astronomy Observatory for the expansion of the Square Kilometre Array in the *Space Science* subprogramme in the *Technology Innovation* programme.

Developing human capital

Human capital is key to the development of a national system of innovation that is globally competitive and responsive to South Africa's developmental needs. In recognition of this, the department provides support through granting postgraduate bursaries and scholarships; sponsoring internships; and funding emerging and established researchers, including for strategic instruments such as the South African research chairs initiative and centres of excellence projects. To date, the department has awarded 257 research chairs, 240 of which are operational. Centres of excellence serve as hubs that draw a range of universities and science councils together to tackle challenges in areas such as health, food security, human development, energy and biodiversity. In support of these efforts, R8.7 billion is allocated over the MTEF period to the *Human Capital and Science Promotions* subprogramme in the *Research, Development and Support* programme.

Advancing innovation to improve South Africa's competitiveness in the global market

Over the medium term, the department plans to advance innovation and address key competitiveness challenges, including market sustainability and facilitating access to new export markets. To achieve this, it intends to support 15 commercial outputs in designated areas such as health care and 85 technology demonstrations, prototypes, products and services each year over the period ahead. These include locally developed fermentation-based skin care products and cotton baling machines for small-scale farmers. The department also plans to financially support black emerging farmers; train artisans in the space, energy and bioeconomy sectors; train graduates through experiential learning opportunities in the energy sector; and support learnership initiatives in publicly financed research and development institutions. Spending for these initiatives is expected to amount to R6.8 billion over the MTEF period in the *Technology Innovation* programme.

Expenditure trends and estimates

Table 35.2 Vote expenditure trends and estimates by programme and economic classification

Programmes												
1. Administration												
2. Technology Innovation												
3. International Cooperation and Resources												
4. Research, Development and Support												
5. Socioeconomic Innovation Partnerships												
Programme	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/Total (%)	
R million	2019/20	2020/21	2021/22	2022/23	2019/20 - 2022/23		2023/24	2024/25	2025/26	2022/23 - 2025/26		
Programme 1	352.1	262.2	304.5	352.1	0.0%	3.8%	344.1	359.3	375.2	2.1%	3.5%	
Programme 2	1 236.7	1 379.8	1 719.6	1 907.0	15.5%	18.7%	2 568.4	2 307.9	1 957.8	0.9%	21.5%	
Programme 3	136.0	114.2	131.8	149.4	3.2%	1.6%	149.9	156.6	163.5	3.1%	1.5%	
Programme 4	4 578.4	3 731.0	4 991.4	4 979.2	2.8%	54.8%	6 046.0	5 854.5	5 680.5	4.5%	55.5%	
Programme 5	1 778.2	1 678.0	1 814.7	1 757.6	-0.4%	21.1%	1 765.9	1 845.4	1 928.0	3.1%	18.0%	
Total	8 081.4	7 165.3	8 962.0	9 145.3	4.2%	100.0%	10 874.2	10 523.7	10 105.0	3.4%	100.0%	
Change to 2022 Budget estimate				12.0			1 629.6	863.9	12.5			

Table 35.2 Vote expenditure trends and estimates by programme and economic classification (continued)

Economic classification	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)	
	2019/20	2020/21	2021/22				2022/23	2019/20	2022/23			2023/24
R million												
Current payments	558.7	429.0	485.6	579.9	1.2%	6.2%	578.0	603.9	630.9	2.9%	5.9%	
Compensation of employees	336.7	321.9	332.8	357.7	2.0%	4.0%	370.5	386.8	403.8	4.1%	3.7%	
Goods and services ¹	222.1	107.0	152.8	222.2	0.0%	2.1%	207.5	217.1	227.2	0.7%	2.1%	
of which:												
Advertising	13.2	4.3	21.3	11.3	-5.0%	0.2%	13.6	14.2	14.8	9.4%	0.1%	
Consultants: Business and advisory services	12.4	10.3	13.9	21.2	19.7%	0.2%	17.3	18.0	18.8	-4.0%	0.2%	
Agency and support/outsourced services	9.2	10.2	14.2	12.7	11.4%	0.1%	16.4	17.1	17.9	12.2%	0.2%	
Property payments	42.3	13.3	16.2	14.5	-30.1%	0.3%	14.5	15.2	15.8	3.1%	0.1%	
Travel and subsistence	61.9	7.3	16.3	58.9	-1.6%	0.4%	61.0	63.9	66.9	4.3%	0.6%	
Venues and facilities	17.5	1.5	2.3	16.0	-2.9%	0.1%	15.6	16.2	16.8	1.7%	0.2%	
Transfers and subsidies¹	7 514.8	6 729.7	8 467.4	8 554.1	4.4%	93.0%	10 285.8	9 909.2	9 463.4	3.4%	94.0%	
Departmental agencies and accounts	5 165.3	4 721.3	6 017.0	6 547.8	8.2%	67.3%	8 269.1	7 798.6	7 258.3	3.5%	73.5%	
Higher education institutions	-	252.9	240.5	-	0.0%	1.5%	-	-	-	0.0%	0.0%	
Foreign governments and international organisations	-	-	2.0	-	0.0%	0.0%	-	-	-	0.0%	0.0%	
Public corporations and private enterprises	1 811.7	1 495.8	1 957.5	1 512.7	-5.8%	20.3%	1 604.4	1 679.7	1 755.0	5.1%	16.1%	
Non-profit institutions	533.6	259.1	249.2	493.6	-2.6%	4.6%	412.3	430.8	450.1	-3.0%	4.4%	
Households	4.2	0.5	1.1	-	-100.0%	0.0%	-	-	-	0.0%	0.0%	
Payments for capital assets	7.8	6.1	8.9	11.3	13.2%	0.1%	10.4	10.6	10.7	-1.7%	0.1%	
Machinery and equipment	7.8	6.1	8.9	11.3	13.2%	0.1%	10.4	10.6	10.7	-1.7%	0.1%	
Payments for financial assets	0.1	0.5	0.1	-	-100.0%	0.0%	-	-	-	0.0%	0.0%	
Total	8 081.4	7 165.3	8 962.0	9 145.3	4.2%	100.0%	10 874.2	10 523.7	10 105.0	3.4%	100.0%	

1. Tables with expenditure trends, annual budget, adjusted appropriation and audited outcome are available at www.treasury.gov.za and www.vulekamali.gov.za.

Transfers and subsidies expenditure trends and estimates

Table 35.3 Vote transfers and subsidies trends and estimates

	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)	
	2019/20	2020/21	2021/22				2022/23	2019/20	2022/23			2023/24
R thousand												
Households												
Social benefits												
Current	2 644	478	1 070	-	-100.0%	-	-	-	-	-	-	-
Households	2 644	478	1 070	-	-100.0%	-	-	-	-	-	-	-
Departmental agencies and accounts												
Departmental agencies (non-business entities)												
Current	4 070 309	3 941 266	4 496 668	4 752 876	5.3%	55.2%	5 660 218	5 535 330	5 329 869	3.9%	55.7%	
Various institutions: Institutional and programme support research	1 838	315	-	-	-100.0%	-	-	-	-	-	-	-
Various institutions: Biofuels research	2 000	7 889	9 130	-	-100.0%	0.1%	-	-	-	-	-	-
Various institutions: Technology transfer offices: Support of research units	2 188	3 646	3 471	-	-100.0%	-	-	-	-	-	-	-
Various institutions: Implementation of bioeconomy strategy	31 258	47 080	44 130	-	-100.0%	0.4%	-	-	-	-	-	-
Various institutions: Energy grand challenge research	-	47 232	43 318	54 451	-	0.5%	44 622	46 626	48 715	-3.6%	0.5%	
Various institutions: Health innovation research	49 020	52 686	103 752	-	-100.0%	0.7%	-	-	-	-	-	-
Various institutions: HIV and AIDS prevention and treatment technologies research	27 866	29 205	30 225	31 019	3.6%	0.4%	31 139	32 537	33 995	3.1%	0.3%	
Various institutions: Hydrogen strategy research	-	43 776	42 580	-	-	0.3%	-	-	-	-	-	-
Various institutions: Innovation projects research	14 868	125 000	168 946	468 294	215.8%	2.5%	521 389	544 804	569 211	6.7%	5.5%	
Various institutions: Space science research: Economic competitiveness and support package	54 400	36 202	42 390	111 121	26.9%	0.8%	33 419	34 920	36 484	-31.0%	0.6%	
National Research Foundation: Research and development in indigenous knowledge systems	1 623	500	4 968	13 765	103.9%	0.1%	6 792	7 097	7 415	-18.6%	0.1%	
Technology Innovation Agency	440 929	408 825	447 703	458 370	1.3%	5.6%	460 131	480 795	502 335	3.1%	5.0%	
South African National Space Agency	143 464	161 196	202 193	162 439	4.2%	2.1%	163 063	170 386	178 019	3.1%	1.8%	
Medical Research Council: Social impact bond	-	33 422	-	-	-	0.1%	-	-	-	-	-	-

Table 35.3 Vote transfers and subsidies trends and estimates (continued)

	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)
	2019/20	2020/21	2021/22				2022/23	2023/24	2024/25		
R thousand											
Various institutions: Space science research: Space Infrastructure Hub	–	–	–	–	–	–	775 000	434 000	–	–	3.2%
National Research Foundation: Bilateral cooperation for global science development	15 876	2 583	14 670	17 077	2.5%	0.2%	17 143	17 913	18 716	3.1%	0.2%
Various institutions: Global science: International multilateral agreements	18 279	25 949	26 049	–	-100.0%	0.2%	–	–	–	–	–
Various institutions: Global science: African multilateral agreements	–	6 764	1 307	–	–	–	–	–	–	–	–
Academy of Science of South Africa	26 983	24 840	33 210	33 839	7.8%	0.4%	33 970	35 496	37 086	3.1%	0.4%
Various institutions: Astronomy research and development	32 789	32 469	20 668	41 715	8.4%	0.4%	41 876	43 757	45 717	3.1%	0.5%
Various institutions: Policy development on human and social development dynamics	27 116	28 266	35 276	37 944	11.9%	0.4%	38 090	39 801	41 584	3.1%	0.4%
National Research Foundation: Human resources development for science and engineering	922 337	762 252	954 004	1 005 661	2.9%	11.7%	1 010 719	1 056 110	1 103 424	3.1%	10.9%
National Research Foundation: Human resources development for science and engineering: Economic competitiveness and support package	–	23 057	–	19 104	–	0.1%	19 178	20 039	20 937	3.1%	0.2%
National Research Foundation	943 385	859 469	962 587	997 408	1.9%	12.0%	1 001 295	1 046 051	1 092 914	3.1%	10.8%
Various institutions: Science awareness, research and initiatives to encourage youth participation in science	64 273	30 000	57 943	80 763	7.9%	0.7%	94 428	98 669	103 089	8.5%	1.0%
National Research Foundation: South African research chairs initiative to develop human resources in science	566 305	544 508	588 550	602 902	2.1%	7.4%	605 218	632 398	660 729	3.1%	6.5%
Various institutions: Strategic science platforms for research and development	191 335	166 154	135 600	97 332	-20.2%	1.9%	242 258	253 138	264 479	39.5%	2.2%
Various institutions: Economic competitiveness and support package: Local manufacturing capacity research and technical support	33 823	–	–	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Economic competitiveness and support package: Local systems of innovation for the cold chain technologies project	39 565	–	–	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Advanced manufacturing technology strategy implementation	904	752	18 760	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Innovative research and development	24 829	30 446	60 348	46 777	23.5%	0.5%	49 784	52 020	54 350	5.1%	0.5%
Human Sciences Research Council	324 155	289 325	314 394	321 098	-0.3%	4.0%	322 332	336 808	351 897	3.1%	3.5%
Various institutions: Local manufacturing capacity research and technical support	28 689	75 672	50 363	86 574	44.5%	0.8%	82 897	83 550	87 293	0.3%	0.9%
Various institutions: Local systems of innovation for the cold chain technologies project	–	–	10 717	15 453	–	0.1%	15 513	16 210	16 936	3.1%	0.2%
National Research Foundation: Research information management system	8 448	6 232	10 750	–	-100.0%	0.1%	–	–	–	–	–
Human Science Research Council: Develop and monitor science and technology indicators	12 404	11 252	15 221	15 557	7.8%	0.2%	15 617	16 318	17 049	3.1%	0.2%
Various institutions: Environmental innovation	19 360	24 302	43 445	34 213	20.9%	0.4%	34 345	35 887	37 495	3.1%	0.4%
Capital	1 094 997	780 060	1 520 355	1 794 911	17.9%	16.6%	2 608 890	2 263 318	1 928 406	2.4%	22.5%
Various institutions: Hydrogen strategy (capital)	–	48 693	81 199	–	–	0.4%	–	–	–	–	–
Various institutions: Infrastructure projects for research and development	408 023	253 712	420 982	699 695	19.7%	5.7%	899 583	939 983	982 094	12.0%	9.2%
National Research Foundation: Square Kilometre Array: Capital contribution to research	686 974	477 655	1 018 174	1 095 216	16.8%	10.5%	1 709 307	1 323 335	946 312	-4.8%	13.3%

Table 35.3 Vote transfers and subsidies trends and estimates (continued)

	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)
	2019/20	2020/21	2021/22				2022/23	2023/24	2024/25		
R thousand											
Households											
Other transfers to households											
Current	1 605	50	60	-	-100.0%	-	-	-	-	-	-
Households	245	-	60	-	-100.0%	-	-	-	-	-	-
Various institutions: Policy development on human and social development dynamics	280	-	-	-	-100.0%	-	-	-	-	-	-
National Research Foundation: Human resources development for science and engineering	1 080	-	-	-	-100.0%	-	-	-	-	-	-
Various institutions: Strategic science platforms for research and development	-	50	-	-	-	-	-	-	-	-	-
Foreign governments and international organisations											
Current	-	-	2 000	-	-	-	-	-	-	-	-
National Research Foundation: Bilateral cooperation for global science development	-	-	2 000	-	-	-	-	-	-	-	-
Public corporations and private enterprises											
Other transfers to public corporations											
Current	456 766	445 033	520 742	299 002	-13.2%	5.5%	304 105	321 044	335 426	3.9%	3.3%
Various institutions: Technology transfer offices: Support of research units	8 353	5 059	7 745	-	-100.0%	0.1%	-	-	-	-	-
Various institutions: Implementation of bioeconomy strategy	7 100	1 000	6 000	-	-100.0%	-	-	-	-	-	-
Various institutions: Energy grand challenge research	3 550	-	-	-	-100.0%	-	-	-	-	-	-
Various institutions: Health innovation research	-	-	2 300	-	-	-	-	-	-	-	-
Various institutions: Hydrogen strategy research	25 884	-	-	-	-100.0%	0.1%	-	-	-	-	-
Various institutions: Hydrogen strategy (capital)	13 086	-	-	-	-100.0%	-	-	-	-	-	-
Various institutions: Innovation projects research	450	3 383	77 284	-	-100.0%	0.3%	-	-	-	-	-
Various institutions: Space science research: Economic competitiveness and support package	5 000	22 600	29 070	-	-100.0%	0.2%	-	-	-	-	-
National Research Foundation: Research and development in indigenous knowledge systems	3 200	1 000	-	-	-100.0%	-	-	-	-	-	-
Various institutions: Emerging research areas	80 700	80 500	84 700	119 750	14.1%	1.2%	120 210	125 609	131 236	3.1%	1.3%
Various institutions: Global science: International multilateral agreements	3 636	393	2 440	-	-100.0%	-	-	-	-	-	-
Various institutions: Global science: African multilateral agreements	4 380	2 785	4 000	-	-100.0%	-	-	-	-	-	-
National Research Foundation: Human resources development for science and engineering	41 234	42 000	32 128	-	-100.0%	0.4%	-	-	-	-	-
National Research Foundation: Human resources development for science and engineering: Economic competitiveness and support package	22 000	-	18 607	-	-100.0%	0.1%	-	-	-	-	-
Various institutions: Science awareness, research and initiatives to encourage youth participation in science	-	-	18 732	-	-	0.1%	-	-	-	-	-
Various institutions: Strategic science platforms for research and development	14 900	20 100	17 633	-	-100.0%	0.2%	-	-	-	-	-
Various institutions: Economic competitiveness and support package: Local manufacturing capacity research and technical support	46 178	-	-	-	-100.0%	0.1%	-	-	-	-	-
Various institutions: Advanced manufacturing technology strategy implementation	58 356	56 737	26 454	36 000	-14.9%	0.6%	38 000	40 000	41 792	5.1%	0.4%
Various institutions: Innovative research and development	1 000	-	5 758	-	-100.0%	-	-	-	-	-	-
Various institutions: Information Communication Technology	27 975	33 915	35 475	42 929	15.3%	0.4%	43 094	45 029	47 046	3.1%	0.5%
Various institutions: Local manufacturing capacity research and technical support	-	40 574	30 358	-	-	0.2%	-	-	-	-	-

Table 35.3 Vote transfers and subsidies trends and estimates (continued)

	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)
	2019/20	2020/21	2021/22				2022/23	2019/20 - 2022/23	2023/24		
R thousand											
Council for Scientific and Industrial Research: Mining research and development	21 139	43 863	63 506	65 073	45.5%	0.6%	65 323	68 257	71 315	3.1%	0.7%
Various institutions: Local systems of innovation for the cold chain technologies project	6 793	29 495	4 329	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Resource-based industries research and development	52 852	45 884	37 223	35 250	-12.6%	0.5%	37 478	42 149	44 037	7.7%	0.4%
Various institutions: Environmental innovation	9 000	15 745	17 000	–	-100.0%	0.1%	–	–	–	–	–
Capital	376 282	142 555	315 100	211 439	-17.5%	3.3%	294 188	307 400	321 172	15.0%	3.0%
Council for Scientific and Industrial Research: Cyberinfrastructure research and development	251 686	60 218	237 121	211 439	-5.6%	2.4%	294 188	307 400	321 172	15.0%	3.0%
Various institutions: Infrastructure projects for research and development	124 596	82 337	77 979	–	-100.0%	0.9%	–	–	–	–	–
Higher education institutions											
Current	–	131 948	123 499	–	–	0.8%	–	–	–	–	–
Various institutions: Institutional and programme support research	–	9 384	3 121	–	–	–	–	–	–	–	–
Various institutions: Technology transfer offices: Support of research units	–	27 412	33 805	–	–	0.2%	–	–	–	–	–
Various institutions: Implementation of the bioeconomy strategy	–	600	–	–	–	–	–	–	–	–	–
Various institutions: Health innovation research	–	–	500	–	–	–	–	–	–	–	–
Various institutions: Hydrogen strategy research	–	7 966	–	–	–	–	–	–	–	–	–
Various institutions: Space science research: Economic competitiveness and support package	–	13 657	2 237	–	–	0.1%	–	–	–	–	–
National Research Foundation: Research and development in indigenous knowledge systems	–	23 615	1 601	–	–	0.1%	–	–	–	–	–
Various institutions: Emerging research areas	–	18 100	24 208	–	–	0.1%	–	–	–	–	–
National Research Foundation: Bilateral cooperation for global science development	–	4 349	–	–	–	–	–	–	–	–	–
Various institutions: Global science: International multilateral agreements	–	6 356	11 115	–	–	0.1%	–	–	–	–	–
Various institutions: Global science: African multilateral agreements	–	602	1 299	–	–	–	–	–	–	–	–
Various institutions: Astronomy research and development	–	60	–	–	–	–	–	–	–	–	–
Various institutions: Policy development on human and social development dynamics	–	2 139	–	–	–	–	–	–	–	–	–
National Research Foundation: Human resources development for science and engineering	–	2 000	6 798	–	–	–	–	–	–	–	–
Various institutions: Science awareness, research and initiatives to encourage youth participation in science	–	3 498	13 105	–	–	0.1%	–	–	–	–	–
Various institutions: Strategic science platforms for research and development	–	12 210	17 560	–	–	0.1%	–	–	–	–	–
Various institutions: Innovative research and development	–	–	8 150	–	–	–	–	–	–	–	–
Capital	–	121 000	117 027	–	–	0.8%	–	–	–	–	–
Various institutions: Hydrogen strategy (capital)	–	20 613	–	–	–	0.1%	–	–	–	–	–
Various institutions: Infrastructure projects for research and development	–	100 387	117 027	–	–	0.7%	–	–	–	–	–

Table 35.3 Vote transfers and subsidies trends and estimates (continued)

	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)
	2019/20	2020/21	2021/22				2022/23	2023/24	2024/25		
R thousand											
Non-profit institutions											
Current	316 900	110 012	106 955	409 502	8.9%	3.0%	324 510	339 084	354 275	-4.7%	3.7%
Various institutions: Institutional and programme support research	18 484	5 896	12 021	15 665	-5.4%	0.2%	15 726	16 432	17 168	3.1%	0.2%
Various institutions: Biofuels research	5 640	–	–	9 365	18.4%	–	9 401	9 823	10 263	3.1%	0.1%
Various institutions: Implementation of the bioeconomy strategy	2 200	7 895	–	39 335	161.5%	0.2%	44 683	46 690	48 782	7.4%	0.5%
Various institutions: Energy grand challenge research	37 396	–	–	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Health innovation research	50	–	–	94 986	1138.5%	0.3%	55 197	57 676	60 260	-14.1%	0.7%
Various institutions: Hydrogen strategy research	16 574	–	–	93 630	78.1%	0.4%	43 797	45 764	47 814	-20.1%	0.6%
Various institutions: Innovation projects research	4 135	31 946	5 000	–	-100.0%	0.1%	–	–	–	–	–
International Centre for Genetic Engineering and Biotechnology	40 815	14 981	26 135	17 973	-23.9%	0.3%	16 626	17 373	18 151	0.3%	0.2%
Various institutions: Space science research: Economic competitiveness and support package	10 000	–	–	–	-100.0%	–	–	–	–	–	–
Various institutions: Technology transfer offices: Support for research units	27 369	1 630	–	44 073	17.2%	0.2%	44 242	46 229	48 300	3.1%	0.5%
National Research Foundation: Research and development in indigenous knowledge systems	9 100	900	–	–	-100.0%	–	–	–	–	–	–
Medical Research Council: Social impact bond	–	–	–	35 125	–	0.1%	35 260	36 844	38 495	3.1%	0.4%
Various institutions: Emerging research areas	31 900	–	–	–	-100.0%	0.1%	–	–	–	–	–
National Research Foundation: Bilateral cooperation for global science development	–	3 783	–	–	–	–	–	–	–	–	–
Various institutions: Global science: International multilateral agreements	21 162	5 136	7 003	48 581	31.9%	0.3%	48 768	50 958	53 241	3.1%	0.5%
Various institutions: Global science: African multilateral agreements	3 652	200	3 887	10 769	43.4%	0.1%	10 810	11 295	11 801	3.1%	0.1%
Various institutions: Astronomy research and development	–	4 985	4 955	–	–	–	–	–	–	–	–
Various institutions: Policy development on human and social development dynamics	1 500	1 582	1 670	–	-100.0%	–	–	–	–	–	–
National Research Foundation: Human resources development for science and engineering	11 157	1 800	9 950	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Science awareness, research and initiatives to encourage youth participation in science	17 020	–	838	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Strategic science platforms for research and development	15 930	1 000	600	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Economic competitiveness and support package: Local systems of innovation for the cold chain technologies project	17 524	–	–	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Advanced manufacturing technology strategy implementation	100	–	–	–	-100.0%	–	–	–	–	–	–
Various institutions: Innovative research and development	13 076	3 954	2 852	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Information Communication Technology	10 274	4 000	6 343	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Local systems of innovation for the cold chain technologies project	–	17 424	–	–	–	0.1%	–	–	–	–	–
Various institutions: Resource-based industries research and development	800	–	–	–	-100.0%	–	–	–	–	–	–
Various institutions: Environmental innovation	1 042	2 900	25 701	–	-100.0%	0.1%	–	–	–	–	–
Capital	216 690	149 105	142 292	84 103	-27.1%	1.9%	87 810	91 753	95 864	4.5%	0.9%
Various institutions: Hydrogen strategy (capital)	61 859	–	–	84 103	10.8%	0.5%	87 810	91 753	95 864	4.5%	0.9%
Various institutions: Infrastructure projects for research and development	154 831	149 105	142 292	–	-100.0%	1.4%	–	–	–	–	–

Table 35.3 Vote transfers and subsidies trends and estimates (continued)

	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2019/20	2020/21	2021/22				2022/23	2023/24	2024/25		
R thousand											
Public corporations and private enterprises											
Other transfers to private enterprises											
Current	12 796	14 614	143 210	–	-100.0%	0.5%	–	–	–	–	–
Various institutions: Technology transfer offices: Support of research units	2 625	4 421	–	–	-100.0%	–	–	–	–	–	–
Various institutions: Implementation of bioeconomy strategy	1 069	–	–	–	-100.0%	–	–	–	–	–	–
Various institutions: Health innovation research	2 161	–	1 500	–	-100.0%	–	–	–	–	–	–
Various institutions: Innovation projects research	–	–	140 000	–	–	0.4%	–	–	–	–	–
Various institutions: Space science research: Economic competitiveness and support package	–	–	977	–	–	–	–	–	–	–	–
National Research Foundation: Research and development in indigenous knowledge systems	1 200	–	–	–	-100.0%	–	–	–	–	–	–
Various institutions: Global science: International multilateral agreements	669	3 264	733	–	-100.0%	–	–	–	–	–	–
Various institutions: Strategic science platforms for research and development	–	2 000	–	–	–	–	–	–	–	–	–
Various institutions: Economic competitiveness and support package: Local systems of innovation for the cold chain technologies project	4 900	–	–	–	-100.0%	–	–	–	–	–	–
Various institutions: Advanced manufacturing technology strategy implementation	172	87	–	–	-100.0%	–	–	–	–	–	–
Various institutions: Local systems of innovation for the cold chain technologies project	–	4 842	–	–	–	–	–	–	–	–	–
Public corporations and private enterprises											
Subsidies on products and production											
Current	965 823	893 581	978 449	1 002 269	1.2%	12.3%	1 006 119	1 051 303	1 098 401	3.1%	10.9%
Council for Scientific and Industrial Research	965 823	893 581	978 449	1 002 269	1.2%	12.3%	1 006 119	1 051 303	1 098 401	3.1%	10.9%
Total	7 514 812	6 729 702	8 467 427	8 554 102	4.4%	100.0%	10 285 840	9 909 232	9 463 413	3.4%	100.0%

Personnel information

Table 35.4 Vote personnel numbers and cost by salary level and programme¹

Programmes		Number of posts estimated for 31 March 2023	Number and cost ² of personnel posts filled/planned for on funded establishment															Average growth rate (%)	Average: Salary level/ Total (%)	
			Actual			Revised estimate			Medium-term expenditure estimate					2022/23 - 2025/26						
		Number of funded posts	Number of posts additional to the establishment	2021/22		2022/23		2023/24			2024/25		2025/26							
				Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost		
Science and Innovation		495	5	371	332.8	0.9	378	357.7	0.9	399	370.5	0.9	389	386.8	1.0	402	403.8	1.0	2.1%	100.0%
1 – 6	70	2	56	15.8	0.3	51	14.9	0.3	55	15.5	0.3	53	15.8	0.3	55	16.9	0.3	2.8%	13.7%	
7 – 10	143	2	96	42.9	0.4	101	47.8	0.5	111	51.8	0.5	105	52.0	0.5	112	56.5	0.5	3.4%	27.3%	
11 – 12	152	–	116	118.8	1.0	120	128.9	1.1	125	133.8	1.1	124	140.8	1.1	126	145.3	1.2	1.6%	31.6%	
13 – 16	126	1	98	147.1	1.5	102	161.3	1.6	104	164.6	1.6	103	173.0	1.7	105	179.9	1.7	1.0%	26.4%	
Other	4	–	5	8.2	1.6	4	4.8	1.2	4	4.8	1.2	4	5.1	1.3	4	5.2	1.3	–	1.0%	
Programme	495	5	371	332.8	0.9	378	357.7	0.9	399	370.5	0.9	389	386.8	1.0	402	403.8	1.0	2.1%	100.0%	
Programme 1	247	5	188	155.0	0.8	196	169.2	0.9	211	175.9	0.8	206	183.7	0.9	210	191.7	0.9	2.3%	52.5%	
Programme 2	62	–	46	44.7	1.0	48	48.9	1.0	51	53.4	1.0	49	55.8	1.1	51	58.2	1.1	2.0%	12.7%	
Programme 3	69	–	49	48.3	1.0	49	53.6	1.1	52	55.1	1.1	50	57.5	1.1	53	60.0	1.1	2.7%	13.0%	
Programme 4	55	–	45	42.6	0.9	41	40.8	1.0	39	40.2	1.0	38	42.0	1.1	41	43.8	1.1	0.2%	10.2%	
Programme 5	62	–	43	42.2	1.0	44	45.2	1.0	46	47.9	1.0	46	47.9	1.0	47	50.0	1.1	2.2%	11.7%	

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

2. Rand million.

Departmental receipts

Table 35.5 Departmental receipts by economic classification

R thousand	Audited outcome			Adjusted estimate	Revised estimate	Average growth rate (%)	Average Receipt item/ Total (%)	Medium-term receipts estimate			Average growth rate (%)	Average Receipt item/ Total (%)
	2019/20	2020/21	2021/22					2022/23	2019/20	2022/23		
Departmental receipts	19 416	2 241	1 090	726	726	-66.6%	100.0%	683	733	783	2.6%	100.0%
Sales of goods and services produced by department	67	69	69	70	70	1.5%	1.2%	60	60	60	-5.0%	8.5%
Other sales	67	69	69	70	70	1.5%	1.2%	60	60	60	-5.0%	8.5%
of which:												
Services rendered:												
Commission on insurance	67	69	69	70	70	1.5%	1.2%	60	60	60	-5.0%	8.5%
Sales of scrap, waste, arms and other used current goods	2	2	4	6	6	44.2%	0.1%	3	3	3	-20.6%	0.5%
of which:												
Sales: Scrap, waste and other goods	2	2	4	6	6	44.2%	0.1%	3	3	3	-20.6%	0.5%
Interest, dividends and rent on land	13	13	37	30	30	32.1%	0.4%	20	20	20	-12.6%	3.1%
Interest	13	13	37	30	30	32.1%	0.4%	20	20	20	-12.6%	3.1%
Sales of capital assets	-	-	235	-	-	-	1.0%	-	-	-	-	-
Transactions in financial assets and liabilities	19 334	2 157	745	620	620	-68.2%	97.4%	600	650	700	4.1%	87.9%
Total	19 416	2 241	1 090	726	726	-66.6%	100.0%	683	733	783	2.6%	100.0%

Programme 1: Administration

Programme purpose

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

Expenditure trends and estimates

Table 35.6 Administration expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)	
	2019/20	2020/21	2021/22				2022/23	2019/20	2022/23			2023/24
R million												
Ministry	2.9	4.9	2.6	5.8	26.3%	1.3%	5.7	6.0	6.3	2.4%	1.7%	
Institutional Planning and Support	170.1	113.2	145.3	162.7	-1.5%	46.5%	169.5	177.1	184.9	4.4%	48.5%	
Corporate Services	144.2	134.9	145.9	177.8	7.2%	47.4%	163.1	170.3	177.8	-	48.2%	
Office Accommodation	34.8	9.2	10.7	5.7	-45.3%	4.8%	5.7	6.0	6.2	3.1%	1.7%	
Total	352.1	262.2	304.5	352.1	-	100.0%	344.1	359.3	375.2	2.1%	100.0%	
Change to 2022 Budget estimate				17.0			10.8	11.1	11.4			
Economic classification												
Current payments	321.5	239.9	279.6	325.1	0.4%	91.8%	317.9	332.3	347.4	2.2%	92.5%	
Compensation of employees	161.4	151.6	155.0	169.2	1.6%	50.1%	175.9	183.7	191.7	4.2%	50.4%	
Goods and services	160.1	88.3	124.6	155.9	-0.9%	41.6%	142.0	148.7	155.6	-0.1%	42.1%	
of which:												
Advertising	11.4	4.3	21.3	10.1	-4.0%	3.7%	12.3	12.9	13.5	10.2%	3.4%	
Consultants: Business and advisory services	9.0	5.2	8.4	15.1	19.1%	3.0%	11.0	11.6	12.1	-7.2%	3.5%	
Agency and support/outsourced services	7.2	7.8	9.8	4.8	-12.5%	2.3%	7.3	7.6	8.0	18.3%	1.9%	
Operating leases	2.7	4.1	3.7	4.7	21.0%	1.2%	7.4	8.0	8.7	22.5%	2.0%	
Property payments	42.3	13.3	16.2	13.5	-31.7%	6.7%	13.5	14.1	14.8	3.1%	3.9%	
Travel and subsistence	33.7	4.5	11.0	36.8	3.0%	6.8%	36.9	38.6	40.3	3.1%	10.7%	
Transfers and subsidies	22.7	15.8	15.8	15.7	-11.7%	5.5%	15.7	16.4	17.2	3.1%	4.5%	
Departmental agencies and accounts	1.8	0.3	-	-	-100.0%	0.2%	-	-	-	-	-	
Higher education institutions	-	9.4	3.1	-	-	1.0%	-	-	-	-	-	
Non-profit institutions	18.5	5.9	12.0	15.7	-5.4%	4.1%	15.7	16.4	17.2	3.1%	4.5%	
Households	2.4	0.2	0.7	-	-100.0%	0.3%	-	-	-	-	-	
Payments for capital assets	7.8	6.1	8.9	11.3	13.2%	2.7%	10.4	10.6	10.7	-1.7%	3.0%	
Machinery and equipment	7.8	6.1	8.9	11.3	13.2%	2.7%	10.4	10.6	10.7	-1.7%	3.0%	
Payments for financial assets	0.1	0.5	0.1	-	-100.0%	0.1%	-	-	-	-	-	
Total	352.1	262.2	304.5	352.1	-	100.0%	344.1	359.3	375.2	2.1%	100.0%	
Proportion of total programme expenditure to vote expenditure	4.4%	3.7%	3.4%	3.8%	-	-	3.2%	3.4%	3.7%	-	-	

Table 35.6 Administration expenditure trends and estimates by subprogramme and economic classification (continued)

Details of transfers and subsidies				Adjusted appropriation	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
Audited outcome			2022/23				2019/20 - 2022/23	2023/24	2024/25		
R million	2019/20	2020/21	2021/22	2022/23	2019/20 - 2022/23	2023/24	2024/25	2025/26	2022/23 - 2025/26		
Households											
Social benefits											
Current	2.4	0.1	0.4	–	-100.0%	0.2%	–	–	–	–	–
Households	2.4	0.1	0.4	–	-100.0%	0.2%	–	–	–	–	–
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	1.8	0.3	–	–	-100.0%	0.2%	–	–	–	–	–
Various institutions: Institutional and programme support research	1.8	0.3	–	–	-100.0%	0.2%	–	–	–	–	–
Non-profit institutions											
Current	18.5	5.9	12.0	15.7	-5.4%	4.1%	15.7	16.4	17.2	3.1%	4.5%
Various institutions: Institutional and programme support research	18.5	5.9	12.0	15.7	-5.4%	4.1%	15.7	16.4	17.2	3.1%	4.5%
Higher education institutions											
Current	–	9.4	3.1	–	–	1.0%	–	–	–	–	–
Various institutions: Institutional and programme support research	–	9.4	3.1	–	–	1.0%	–	–	–	–	–

Personnel information

Table 35.7 Administration personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2023		Number and cost ² of personnel posts filled/planned for on funded establishment															Average growth rate (%)	Average: Salary level/ Total (%)	
Number of funded posts	Number of posts additional to the establishment	Actual			Revised estimate			Medium-term expenditure estimate						2022/23 - 2025/26					
		2021/22		2022/23		2023/24		2024/25		2025/26									
Administration		Number	Unit cost	Number	Unit cost	Number	Unit cost	Number	Unit cost	Number	Unit cost	Number	Unit cost	Number	Unit cost				
Salary level	247	5	188	155.0	0.8	196	169.2	0.9	211	175.9	0.8	206	183.7	0.9	210	191.7	0.9	2.3%	100.0%
1 – 6	50	2	39	10.9	0.3	37	10.8	0.3	43	11.8	0.3	41	12.1	0.3	42	12.6	0.3	4.3%	19.8%
7 – 10	86	2	57	24.3	0.4	64	29.1	0.5	71	31.8	0.4	69	32.9	0.5	70	34.0	0.5	3.0%	33.3%
11 – 12	59	–	47	49.0	1.0	47	52.4	1.1	48	53.4	1.1	48	56.6	1.2	48	57.6	1.2	0.7%	23.2%
13 – 16	48	1	40	62.5	1.6	44	72.3	1.6	45	74.1	1.6	44	76.9	1.7	46	82.3	1.8	1.5%	21.8%
Other	4	–	5	8.2	1.6	4	4.8	1.2	4	4.8	1.2	4	5.1	1.3	4	5.2	1.3	–	1.9%

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

2. Rand million.

Programme 2: Technology Innovation

Programme purpose

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

Objectives

- Facilitate and make strategic investments in space science and technology, energy, the bioeconomy, nanotechnology, robotics, photonics, indigenous knowledge systems, intellectual property management, technology transfer and technology commercialisation over the medium term by:
 - funding and/or maintaining 60 instruments to support the use of knowledge
 - generating 366 knowledge products (including published peer-reviewed scientific articles and the filing of applications for, or the registration or granting of, intellectual property rights)
 - developing and approving 14 science, technology and innovation strategic policy directives to enhance understanding and analyses that support the implementation of relevant interventions
 - developing and/or maintaining 12 decision support interventions to improve the delivery of government services or functions.

Subprogrammes

- *Space Science* supports the creation of an environment conducive to the implementation of the national space strategy and the South African Earth observation strategy, and one that addresses the development of innovative applications and human capital to respond to national priorities and support socioeconomic development.
- *Hydrogen and Energy* supports a reduction in greenhouse gas emissions and air pollution while contributing to a more diverse and sustainable energy mix by enabling the widespread commercialisation of battery, fuel cell, renewable and net-zero carbon technologies. The implementation of the energy research development and innovation strategies also supports the penetration of clean and alternative energy technologies through research, development and validation efforts to be competitive with current technologies in terms of cost and performance. It also encourages the fostering of strategic partnerships between the public and private sectors to reduce institutional and market barriers to the commercialisation of these technologies.
- *Bio-innovation* leads the implementation of the national bioeconomy strategy approved by Cabinet in 2013. This aids projects, programmes and initiatives in support of bio-innovation in agriculture, health, industry, the environment and indigenous knowledge systems with the goal of growing the South African bioeconomy.
- *Innovation Priorities and Instruments* supports and strengthens the innovation policy package aimed at creating and sustaining an enabling environment for innovation, technology and development, and the commercialisation of publicly funded research and development initiatives.
- *National Intellectual Property Management Office* provides for the effective use of intellectual property that emanates from publicly financed research and development.
- *Office of the Deputy Director-General: Technology Innovation* provides management and administrative support to the programme and the office of the deputy director-general.

Expenditure trends and estimates

Table 35.8 Technology Innovation expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation 2022/23	Average growth rate (%) 2019/20 - 2022/23	Average Expenditure/ Total (%) 2019/20 - 2022/23	Medium-term expenditure estimate			Average growth rate (%) 2022/23 - 2025/26	Average Expenditure/ Total (%) 2022/23 - 2025/26
	2019/20	2020/21	2021/22				2023/24	2024/25	2025/26		
R million											
Space Science	225.2	241.7	286.3	286.0	8.3%	16.6%	986.5	655.0	230.9	-6.9%	24.7%
Hydrogen and Energy	176.9	184.5	184.8	253.4	12.7%	12.8%	198.0	206.8	216.1	-5.2%	10.0%
Bio-innovation	194.9	227.0	237.1	248.9	8.5%	14.5%	210.3	219.8	229.6	-2.6%	10.4%
Innovation Priorities and Instruments	578.1	671.9	953.9	1 058.6	22.3%	52.3%	1 112.4	1 162.4	1 214.4	4.7%	52.0%
National Intellectual Property Management Office	55.2	51.0	53.3	56.3	0.6%	3.5%	56.3	58.8	61.5	3.0%	2.7%
Office of the Deputy Director-General: Technology Innovation	6.4	3.6	4.2	3.9	-15.2%	0.3%	4.9	5.1	5.3	10.8%	0.2%
Total	1 236.7	1 379.8	1 719.6	1 907.0	15.5%	100.0%	2 568.4	2 307.9	1 957.8	0.9%	100.0%
Change to 2022 Budget estimate				123.0			775.1	434.0	(0.0)		
Economic classification											
Current payments	67.4	47.2	52.5	69.2	0.9%	3.8%	75.6	78.9	82.4	6.0%	3.5%
Compensation of employees	43.8	40.3	44.7	48.9	3.7%	2.8%	53.4	55.8	58.2	6.0%	2.5%
Goods and services	23.6	6.9	7.9	20.3	-4.9%	0.9%	22.2	23.2	24.2	6.0%	1.0%
<i>of which:</i>											
Communication	0.9	1.1	1.0	1.1	8.7%	0.1%	1.1	1.2	1.2	3.1%	0.1%
Consultants: Business and advisory services	2.5	3.5	2.2	1.5	-15.6%	0.2%	1.9	2.0	2.1	10.5%	0.1%
Agency and support/outsourced services	0.7	1.5	2.3	5.7	105.9%	0.2%	7.0	7.4	7.7	10.4%	0.3%
Entertainment	0.0	-	0.0	3.6	962.7%	0.1%	1.9	2.0	2.1	-16.4%	0.1%
Travel and subsistence	9.4	0.6	1.5	3.7	-26.6%	0.2%	5.6	5.8	6.1	17.6%	0.2%
Venues and facilities	6.4	0.1	0.7	2.6	-25.7%	0.2%	2.6	2.7	2.9	3.1%	0.1%
Transfers and subsidies	1 169.2	1 332.6	1 667.1	1 837.8	16.3%	96.2%	2 492.8	2 228.9	1 875.3	0.7%	96.5%
Departmental agencies and accounts	767.6	1 045.4	1 224.0	1 299.5	19.2%	69.5%	2 035.6	1 751.2	1 376.2	1.9%	73.9%
Higher education institutions	-	112.0	62.4	-	-	2.8%	-	-	-	-	-
Public corporations and private enterprises	154.4	118.0	349.6	119.8	-8.1%	11.9%	120.2	125.6	131.2	3.1%	5.7%
Non-profit institutions	247.0	57.4	31.1	418.6	19.2%	12.1%	337.0	352.2	367.9	-4.2%	16.9%
Households	0.2	-	0.0	-	-100.0%	-	-	-	-	-	-
Payments for financial assets	0.0	-	-	-	-100.0%	-	-	-	-	-	-
Total	1 236.7	1 379.8	1 719.6	1 907.0	15.5%	100.0%	2 568.4	2 307.9	1 957.8	0.9%	100.0%
Proportion of total programme expenditure to vote expenditure	15.3%	19.3%	19.2%	20.9%	-	-	23.6%	21.9%	19.4%	-	-

Table 35.8 Technology Innovation expenditure trends and estimates by subprogramme and economic classification (continued)

Details of transfers and subsidies			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)	
											Audited outcome
R million	2019/20	2020/21	2021/22	2022/23	2019/20 - 2022/23	2023/24	2024/25	2025/26	2022/23 - 2025/26		
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	767.6	996.7	1 142.8	1 299.5	19.2%	67.4%	2 035.6	1 751.2	1 376.2	1.9%	73.9%
Various institutions: Biofuels research	2.0	7.9	9.1	–	-100.0%	0.3%	–	–	–	–	–
Various institutions: Technology transfer offices: Support of research units	2.2	3.6	3.5	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Implementation of bioeconomy strategy	31.3	47.1	44.1	–	-100.0%	2.0%	–	–	–	–	–
Various institutions: Energy grand challenge research	–	47.2	43.3	54.5	–	2.3%	44.6	46.6	48.7	-3.6%	2.2%
Various institutions: Health innovation research	49.0	52.7	103.8	–	-100.0%	3.3%	–	–	–	–	–
Various institutions: HIV and AIDS prevention and treatment technologies research	27.9	29.2	30.2	31.0	3.6%	1.9%	31.1	32.5	34.0	3.1%	1.5%
Various institutions: Hydrogen strategy research	–	43.8	42.6	–	–	1.4%	–	–	–	–	–
Various institutions: Innovation projects research	14.9	125.0	168.9	468.3	215.8%	12.4%	521.4	544.8	569.2	6.7%	24.1%
Various institutions: Space science research: Economic competitiveness and support package	54.4	36.2	42.4	111.1	26.9%	3.9%	33.4	34.9	36.5	-31.0%	2.5%
National Research Foundation: Research and development in indigenous knowledge systems	1.6	0.5	5.0	13.8	103.9%	0.3%	6.8	7.1	7.4	-18.6%	0.4%
Technology Innovation Agency	440.9	408.8	447.7	458.4	1.3%	28.1%	460.1	480.8	502.3	3.1%	21.8%
South African National Space Agency	143.5	161.2	202.2	162.4	4.2%	10.7%	163.1	170.4	178.0	3.1%	7.7%
Medical Research Council: Social impact bond	–	33.4	–	–	–	0.5%	–	–	–	–	–
Various institutions: Space science research: Space Infrastructure Hub	–	–	–	–	–	–	775.0	434.0	–	–	13.8%
Capital	–	48.7	81.2	–	–	2.1%	–	–	–	–	–
Various institutions: Hydrogen strategy (capital)	–	48.7	81.2	–	–	2.1%	–	–	–	–	–
Public corporations and private enterprises											
Public corporations											
Other transfers to public corporations											
Current	147.3	113.5	207.1	119.8	-6.7%	9.4%	120.2	125.6	131.2	3.1%	5.7%
Various institutions: Technology transfer offices: Support of research units	8.4	5.1	7.7	–	-100.0%	0.3%	–	–	–	–	–
Various institutions: Implementation of bioeconomy strategy	7.1	1.0	6.0	–	-100.0%	0.2%	–	–	–	–	–
Various institutions: Energy grand challenge research	3.6	–	–	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Health innovation research	–	–	2.3	–	–	–	–	–	–	–	–
Various institutions: Hydrogen strategy research	25.9	–	–	–	-100.0%	0.4%	–	–	–	–	–
Various institutions: Hydrogen strategy (capital)	13.1	–	–	–	-100.0%	0.2%	–	–	–	–	–
Various institutions: Innovation projects research	0.5	3.4	77.3	–	-100.0%	1.3%	–	–	–	–	–
Various institutions: Space science research: Economic competitiveness and support package	5.0	22.6	29.1	–	-100.0%	0.9%	–	–	–	–	–
National Research Foundation: Research and development in indigenous knowledge systems	3.2	1.0	–	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Emerging research areas	80.7	80.5	84.7	119.8	14.1%	5.9%	120.2	125.6	131.2	3.1%	5.7%
Public corporations and private enterprises											
Private enterprises											
Other transfers to private enterprises											
Current	7.1	4.4	141.5	–	-100.0%	2.5%	–	–	–	–	–
Various institutions: Technology transfer offices: Support of research units	2.6	4.4	–	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Implementation of bioeconomy strategy	1.1	–	–	–	-100.0%	–	–	–	–	–	–
Various institutions: Health innovation research	2.2	–	1.5	–	-100.0%	0.1%	–	–	–	–	–
Various institutions: Innovation projects research	–	–	140.0	–	–	2.2%	–	–	–	–	–
National Research Foundation: Research and development in indigenous knowledge systems	1.2	–	–	–	-100.0%	–	–	–	–	–	–

Table 35.8 Technology Innovation expenditure trends and estimates by subprogramme and economic classification (continued)

Details of transfers and subsidies		Audited outcome			Adjusted appropriation 2022/23	Average growth rate (%) 2019/20 - 2022/23	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%) 2022/23 - 2025/26	Average: Expenditure/ Total (%)
		2019/20	2020/21	2021/22				2023/24	2024/25	2025/26		
R million												
Non-profit institutions												
Current												
		185.2	57.4	31.1	334.5	21.8%	9.7%	249.2	260.4	272.1	-6.7%	12.8%
Various institutions: Biofuels research		5.6	–	–	9.4	18.4%	0.2%	9.4	9.8	10.3	3.1%	0.4%
Various institutions: Implementation of the bioeconomy strategy		2.2	7.9	–	39.3	161.5%	0.8%	44.7	46.7	48.8	7.4%	2.1%
Various institutions: Energy grand challenge research		37.4	–	–	–	-100.0%	0.6%	–	–	–	–	–
Various institutions: Health innovation research		0.1	–	–	95.0	1138.5%	1.5%	55.2	57.7	60.3	-14.1%	3.1%
Various institutions: Hydrogen strategy research		16.6	–	–	93.6	78.1%	1.8%	43.8	45.8	47.8	-20.1%	2.6%
Various institutions: Innovation projects research		4.1	31.9	5.0	–	-100.0%	0.7%	–	–	–	–	–
International Centre for Genetic Engineering and Biotechnology		40.8	15.0	26.1	18.0	-23.9%	1.6%	16.6	17.4	18.2	0.3%	0.8%
Various institutions: Space science research: Economic competitiveness and support package		10.0	–	–	–	-100.0%	0.2%	–	–	–	–	–
Various institutions: Technology transfer offices: Support for research units		27.4	1.6	–	44.1	17.2%	1.2%	44.2	46.2	48.3	3.1%	2.1%
National Research Foundation: Research and development in indigenous knowledge systems		9.1	0.9	–	–	-100.0%	0.2%	–	–	–	–	–
Medical Research Council: Social impact bond		–	–	–	35.1	–	0.6%	35.3	36.8	38.5	3.1%	1.7%
Various institutions: Emerging research areas		31.9	–	–	–	-100.0%	0.5%	–	–	–	–	–
Capital		61.9	–	–	84.1	10.8%	2.3%	87.8	91.8	95.9	4.5%	4.1%
Various institutions: Hydrogen strategy (capital)		61.9	–	–	84.1	10.8%	2.3%	87.8	91.8	95.9	4.5%	4.1%
Higher education institutions												
Current												
		–	90.8	61.9	–	–	2.4%	–	–	–	–	–
Various institutions: Technology transfer offices: Support of research units		–	27.4	33.8	–	–	1.0%	–	–	–	–	–
Various institutions: Hydrogen strategy research		–	8.0	–	–	–	0.1%	–	–	–	–	–
Various institutions: Space science research: Economic competitiveness and support package		–	13.7	2.2	–	–	0.3%	–	–	–	–	–
National Research Foundation: Research and development in indigenous knowledge systems		–	23.6	1.6	–	–	0.4%	–	–	–	–	–
Various institutions: Emerging research areas		–	18.1	24.2	–	–	0.7%	–	–	–	–	–
Capital		–	20.6	–	–	–	0.3%	–	–	–	–	–
Various institutions: Hydrogen strategy (capital)		–	20.6	–	–	–	0.3%	–	–	–	–	–

Personnel information

Table 35.9 Technology Innovation personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2023		Number and cost ² of personnel posts filled/planned for on funded establishment									Average growth rate (%)	Average: Salary level/ Total (%)							
		Actual			Revised estimate			Medium-term expenditure estimate											
Number of funded posts	Number of posts additional to the establishment	2021/22			2022/23			2023/24			2024/25			2025/26			2022/23 - 2025/26		
		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost			
Technology Innovation																			
Salary level	62	–	46	44.7	1.0	48	48.9	1.0	51	53.4	1.0	49	55.8	1.1	51	58.2	1.1	2.0%	100.0%
1 – 6	6	–	5	1.3	0.3	6	1.7	0.3	5	1.3	0.3	5	1.4	0.3	5	1.5	0.3	-5.9%	10.6%
7 – 10	9	–	5	2.0	0.4	3	1.2	0.4	2	0.8	0.4	0	(0.1)	0.4	1	0.4	0.4	-33.9%	2.9%
11 – 12	25	–	18	17.4	1.0	21	21.3	1.0	25	25.3	1.0	25	26.8	1.1	26	28.3	1.1	7.4%	48.8%
13 – 16	22	–	18	23.9	1.3	18	24.7	1.4	19	26.0	1.4	19	27.6	1.5	19	28.1	1.5	1.8%	37.7%

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

2. Rand million.

Programme 3: International Cooperation and Resources

Programme purpose

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

Objectives

- Maximise South Africa's strategic interests in science, technology and innovation through international cooperation and promote a transformed, inclusive, responsive and coherent national system of innovation by leveraging resources through 129 projects with donor funders by March 2025.
- Develop human capabilities and skills for the economy by securing opportunities for 1 270 South African students to participate in international programmes over the medium term.
- Use knowledge for economic development in revitalising existing industries and stimulating research and development-led industrials by supporting 51 initiatives targeting the objectives of Agenda 63 and 51 initiatives focused on the Southern African Development Community's regional indicative strategic development plan by March 2025.
- Support innovation within a capable state by engaging with 36 science, technology and innovation leaders in multilateral forums by March 2025.

Subprogrammes

- *Multilateral Cooperation and Africa* advances and facilitates South Africa's participation in bilateral science, technology and innovation cooperation initiatives with other African partners; in African multilateral programmes, especially those of the Southern African Development Community and the African Union; and in broader multilateral science, technology and innovation partnerships, with a strategic focus on South-South cooperation.
- *International Resources* works to increase the flow of international funding into South African science, technology and innovation initiatives, as well as African regional and continental programmes, to promote foreign investment and the fostering of strategic partnerships with partners such as the European Union, philanthropic foundations and organisations, and the multinational private sector.
- *Overseas Bilateral Cooperation* promotes and facilitates South Africa's bilateral cooperation on science, technology and innovation cooperation with partners in Europe, the Americas, Asia and Australasia, especially for human capital development and collaborative research and innovation; and secures support for cooperation with other African partners.
- *Office of the Deputy Director-General: International Cooperation and Resources* provides management and administrative support to the programme and the office of the deputy director-general.

Expenditure trends and estimates

Table 35.10 International Cooperation and Resources expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation 2022/23	Average growth rate (%) 2019/20 - 2022/23	Average: Expenditure/Total (%) 2019/20 - 2022/23	Medium-term expenditure estimate			Average growth rate (%) 2022/23 - 2025/26	Average: Expenditure/Total (%) 2022/23 - 2025/26
	2019/20	2020/21	2021/22				2023/24	2024/25	2025/26		
R million											
Multilateral Cooperation and Africa	30.5	26.4	28.5	33.4	3.0%	22.3%	33.1	34.6	36.1	2.7%	22.1%
International Resources	61.5	57.7	65.0	69.0	3.9%	47.6%	68.9	72.0	75.2	2.9%	46.0%
Overseas Bilateral Cooperation	37.4	24.4	32.4	44.3	5.8%	26.0%	42.7	44.6	46.6	1.7%	28.8%
Office of the Deputy Director-General: International Cooperation and Resources	6.7	5.8	5.9	2.8	-25.2%	4.0%	5.1	5.4	5.6	26.2%	3.1%
Total	136.0	114.2	131.8	149.4	3.2%	100.0%	149.9	156.6	163.5	3.1%	100.0%
Change to 2022 Budget estimate				(0.5)			0.4	0.4	0.4		

Table 35.10 International Cooperation and Resources expenditure trends and estimates by subprogramme and economic classification (continued)

Economic classification	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/Total (%)	
	2019/20	2020/21	2021/22				2022/23	2019/20	2022/23			2023/24
R million												
Current payments	68.1	51.9	57.0	73.0	2.3%	47.0%	73.2	76.4	79.8	3.0%	48.8%	
Compensation of employees	48.4	47.3	48.3	53.6	3.5%	37.2%	55.1	57.5	60.0	3.9%	36.5%	
Goods and services	19.8	4.6	8.6	19.4	-0.7%	9.9%	18.1	18.9	19.8	0.6%	12.3%	
<i>of which:</i>												
Communication	1.1	1.9	1.6	1.7	16.6%	1.2%	1.7	1.8	1.9	3.1%	1.2%	
Agency and support/outsourced services	0.1	-	0.0	0.8	95.1%	0.2%	0.8	0.8	0.9	3.1%	0.5%	
Entertainment	0.2	0.0	0.0	0.9	77.2%	0.2%	0.9	1.0	1.0	3.1%	0.6%	
Travel and subsistence	8.3	1.3	1.9	7.5	-3.5%	3.6%	7.5	7.8	8.2	3.1%	5.0%	
Operating payments	2.7	0.5	4.3	1.4	-20.1%	1.7%	0.7	0.7	0.8	-17.8%	0.6%	
Venues and facilities	6.5	0.1	0.3	4.2	-13.4%	2.1%	3.5	3.7	3.8	-2.8%	2.5%	
Transfers and subsidies	67.9	62.2	74.8	76.4	4.0%	52.9%	76.7	80.2	83.8	3.1%	51.2%	
Departmental agencies and accounts	34.2	35.3	42.0	17.1	-20.6%	24.2%	17.1	17.9	18.7	3.1%	11.4%	
Higher education institutions	-	11.3	12.4	-	-	4.5%	-	-	-	-	-	
Foreign governments and international organisations	-	-	2.0	-	-	0.4%	-	-	-	-	-	
Public corporations and private enterprises	8.7	6.4	7.2	-	-100.0%	4.2%	-	-	-	-	-	
Non-profit institutions	24.8	9.1	10.9	59.4	33.7%	19.6%	59.6	62.3	65.0	3.1%	39.8%	
Households	0.2	0.1	0.3	-	-100.0%	0.1%	-	-	-	-	-	
Payments for financial assets	-	0.1	-	-	-	-	-	-	-	-	-	
Total	136.0	114.2	131.8	149.4	3.2%	100.0%	149.9	156.6	163.5	3.1%	100.0%	
Proportion of total programme expenditure to vote expenditure	1.7%	1.6%	1.5%	1.6%	-	-	1.4%	1.5%	1.6%	-	-	
Details of transfers and subsidies												
Departmental agencies and accounts												
Departmental agencies (non-business entities)												
Current	34.2	35.3	42.0	17.1	-20.6%	24.2%	17.1	17.9	18.7	3.1%	11.4%	
National Research Foundation: Bilateral cooperation for global science development	15.9	2.6	14.7	17.1	2.5%	9.4%	17.1	17.9	18.7	3.1%	11.4%	
Various institutions: Global science: International multilateral agreements	18.3	25.9	26.0	-	-100.0%	13.2%	-	-	-	-	-	
Various institutions: Global science: African multilateral agreements	-	6.8	1.3	-	-	1.5%	-	-	-	-	-	
Foreign governments and international organisations												
Current	-	-	2.0	-	-	0.4%	-	-	-	-	-	
National Research Foundation: Bilateral cooperation for global science development	-	-	2.0	-	-	0.4%	-	-	-	-	-	
Public corporations and private enterprises												
Public corporations												
Other transfers to public corporations	8.0	3.2	6.4	-	-100.0%	3.3%	-	-	-	-	-	
Various institutions: Global science: International multilateral agreements	3.6	0.4	2.4	-	-100.0%	1.2%	-	-	-	-	-	
Various institutions: Global science: African multilateral agreements	4.4	2.8	4.0	-	-100.0%	2.1%	-	-	-	-	-	
Public corporations and private enterprises												
Private enterprises												
Other transfers to private enterprises	0.7	3.3	0.7	-	-100.0%	0.9%	-	-	-	-	-	
Various institutions: Global science: International multilateral agreements	0.7	3.3	0.7	-	-100.0%	0.9%	-	-	-	-	-	
Non-profit institutions												
Current	24.8	9.1	10.9	59.4	33.7%	19.6%	59.6	62.3	65.0	3.1%	39.8%	
National Research Foundation: Bilateral cooperation for global science development	-	3.8	-	-	-	0.7%	-	-	-	-	-	
Various institutions: Global science: International multilateral agreements	21.2	5.1	7.0	48.6	31.9%	15.4%	48.8	51.0	53.2	3.1%	32.5%	
Various institutions: Global science: African multilateral agreements	3.7	0.2	3.9	10.8	43.4%	3.5%	10.8	11.3	11.8	3.1%	7.2%	
Higher education institutions												
Current	-	11.3	12.4	-	-	4.5%	-	-	-	-	-	
National Research Foundation: Bilateral cooperation for global science development	-	4.3	-	-	-	0.8%	-	-	-	-	-	
Various institutions: Global science: International multilateral agreements	-	6.4	11.1	-	-	3.3%	-	-	-	-	-	
Various institutions: Global science: African multilateral agreements	-	0.6	1.3	-	-	0.4%	-	-	-	-	-	

Personnel information

Table 35.11 International Cooperation and Resources personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2023		Number and cost ² of personnel posts filled/planned for on funded establishment															Average growth rate (%)	Average: Salary level/ Total (%)			
		Actual			Revised estimate			Medium-term expenditure estimate													
Number of funded posts	Number of posts additional to the establishment	2021/22			2022/23			2023/24			2024/25			2025/26			2022/23 - 2025/26				
		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost					
International Cooperation and Resources		69	–	–	49	48.3	1.0	49	53.6	1.1	52	55.1	1.1	50	57.5	1.1	53	60.0	1.1	2.7%	100.0%
Salary level		69	–	–	49	48.3	1.0	49	53.6	1.1	52	55.1	1.1	50	57.5	1.1	53	60.0	1.1	2.7%	100.0%
1 – 6	4	–	–	–	4	1.5	0.4	2	0.8	0.4	3	1.1	0.4	2	0.8	0.4	3	1.2	0.4	14.5%	4.9%
7 – 10	26	–	–	–	20	10.9	0.5	20	11.5	0.6	22	12.5	0.6	21	12.7	0.6	23	14.1	0.6	4.8%	42.1%
11 – 12	19	–	–	–	13	16.5	1.3	12	16.0	1.3	12	16.0	1.3	12	16.9	1.4	12	17.2	1.4	–	23.6%
13 – 16	20	–	–	–	12	19.4	1.6	15	25.4	1.7	15	25.5	1.7	15	27.0	1.8	15	27.4	1.8	–	29.4%

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

2. Rand million.

Programme 4: Research Development and Support

Programme purpose

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

Objectives

- Contribute to the development of representative, high-level human capital that can pursue locally relevant, globally competitive research and innovation activities over the medium term by:
 - awarding 9 600 bursaries to doctoral students
 - awarding 12 000 bursaries to pipeline postgraduate (BTech, honours and masters) students.
 - placing 2 250 graduates and students in department-funded work preparation programmes in science, engineering and technology institutions.
- Contribute to a transformed, inclusive, responsive and coherent national system of innovation by:
 - maintaining the number of research infrastructure grants at 30 over the medium term
 - increasing the total available broadband capacity provided by the South African National Research Network from 6 500 Gbps in 2023/24 to 7 100 Gbps in 2025/26.
- Increase knowledge generation and innovation output by:
 - maintaining the total number of researchers awarded grants through programmes managed by the National Research Foundation at more than 10 500 over the medium term
 - maintaining the number of research articles published by researchers funded by the National Research Foundation and cited in the Web of Science database at more than 23 400 over the medium term
 - completing the production of the L-band receivers for the additional MeerKAT antennae by 2023/24 and installing the receivers by 2024/25
 - installing 4 MeerKAT extension antennae by 2023/24 and 9 MeerKAT extension antennae by 2024/25, and fully commissioning and integrating 13 MeerKAT antennae with the 64-dish MeerKAT telescope by 2025/26
 - conducting 45 initiatives promoting public awareness of and engagement with science over the medium term
 - publishing the South African public relationship with science survey report by 2023/24 and conducting a country comparison study by 2025/26.

Subprogrammes

- *Human Capital and Science Promotions* formulates and implements policies and strategies that address the availability of human capital for science, technology and innovation; provides fundamental support for research activities; and contributes to the development of a society that is scientifically literate and knowledgeable about science.
- *Science Missions* promotes the development of research, the production of scientific knowledge and human capital in science areas in which South Africa enjoys a geographic advantage.
- *Basic Science and Infrastructure* facilitates the strategic implementation of research and innovation equipment and facilities to promote knowledge production in areas of national priority and sustain innovation led by research and development.
- *Astronomy* supports the development of astronomical sciences around a new multi-wavelength astronomy strategy and provides strategic guidance and support to relevant astronomy institutions for the implementation of strategic astronomy programmes.
- *Office of the Deputy Director-General: Research, Development and Support* provides management and administrative support to the programme and the office of the deputy director-general.

Expenditure trends and estimates

Table 35.12 Research, Development and Support expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2019/20	2020/21	2021/22		2022/23	2019/20 - 2022/23	2023/24	2024/25	2025/26	2022/23 - 2025/26	Average: Expenditure/ Total (%)
R million											
Human Capital and Science Promotions	2 629.8	2 305.8	2 710.7	2 756.2	1.6%	56.9%	2 780.4	2 905.0	3 034.8	3.3%	50.9%
Science Missions	239.2	215.7	186.7	112.6	-22.2%	4.1%	257.0	268.7	280.8	35.6%	4.1%
Basic Science and Infrastructure	978.7	687.2	1 042.0	958.8	-0.7%	20.1%	1 241.5	1 297.1	1 355.4	12.2%	21.5%
Astronomy	728.4	520.2	1 050.0	1 147.4	16.4%	18.9%	1 763.1	1 379.5	1 005.0	-4.3%	23.5%
Office of the Deputy Director-General: Research, Development and Support	2.3	2.1	2.1	4.1	21.2%	0.1%	4.1	4.3	4.4	2.5%	0.1%
Total	4 578.4	3 731.0	4 991.4	4 979.2	2.8%	100.0%	6 046.0	5 854.5	5 680.5	4.5%	100.0%
Change to 2022 Budget estimate				(125.9)			842.6	417.7	0.1		
Economic classification											
Current payments	52.7	42.9	47.4	56.1	2.1%	1.1%	55.9	58.4	60.9	2.8%	1.0%
Compensation of employees	39.9	40.6	42.6	40.8	0.7%	0.9%	40.2	42.0	43.8	2.4%	0.7%
Goods and services	12.8	2.3	4.8	15.4	6.4%	0.2%	15.7	16.4	17.1	3.7%	0.3%
of which:											
Administrative fees	0.4	0.0	0.0	0.7	17.7%	–	0.7	0.7	0.8	3.1%	–
Communication	0.7	0.5	0.9	0.8	7.9%	–	0.8	0.9	0.9	3.1%	–
Consultants: Business and advisory services	0.7	0.6	1.5	1.4	26.9%	–	1.4	1.4	1.5	3.1%	–
Agency and support/outsourced services	0.3	0.0	0.2	1.1	57.2%	–	1.1	1.1	1.2	3.1%	–
Travel and subsistence	8.3	0.7	1.6	7.0	-5.3%	0.1%	7.6	8.0	8.5	6.5%	0.1%
Venues and facilities	1.0	0.1	0.1	2.4	32.3%	–	2.1	2.2	2.2	-3.8%	–
Transfers and subsidies	4 525.7	3 688.0	4 944.1	4 923.0	2.8%	98.9%	5 990.1	5 796.2	5 619.5	4.5%	99.0%
Departmental agencies and accounts	3 869.5	3 202.4	4 227.0	4 711.6	6.8%	87.6%	5 695.9	5 488.8	5 298.4	4.0%	93.9%
Higher education institutions	–	120.3	154.5	–	–	1.5%	–	–	–	–	–
Public corporations and private enterprises	454.4	206.7	402.2	211.4	-22.5%	7.0%	294.2	307.4	321.2	15.0%	5.0%
Non-profit institutions	200.4	158.5	160.3	–	-100.0%	2.8%	–	–	–	–	–
Households	1.4	0.2	0.1	–	-100.0%	–	–	–	–	–	–
Payments for financial assets	0.0	0.0	–	–	-100.0%	–	–	–	–	–	–
Total	4 578.4	3 731.0	4 991.4	4 979.2	2.8%	100.0%	6 046.0	5 854.5	5 680.5	4.5%	100.0%
Proportion of total programme expenditure to vote expenditure	56.7%	52.1%	55.7%	54.4%	–	–	55.6%	55.6%	56.2%	–	–

Table 35.12 Research, Development and Support expenditure trends and estimates by subprogramme and economic classification (continued)

Details of transfers and subsidies	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)	
	2019/20	2020/21	2021/22				2022/23	2023/24	2024/25			2025/26
	2019/20	2020/21	2021/22				2022/23	2023/24	2024/25			2025/26
R million												
Households												
Other transfers to households												
Current	1.1	–	–	–	-100.0%	–	–	–	–	–	–	
National Research Foundation: Human resources development for science and engineering	1.1	–	–	–	-100.0%	–	–	–	–	–	–	
Departmental agencies and accounts												
Departmental agencies (non-business entities)												
Current	2 774.5	2 471.0	2 787.8	2 916.7	1.7%	59.9%	3 087.0	3 225.5	3 370.0	4.9%	55.8%	
Academy of Science of South Africa	27.0	24.8	33.2	33.8	7.8%	0.7%	34.0	35.5	37.1	3.1%	0.6%	
Various institutions: Astronomy research and development	32.8	32.5	20.7	41.7	8.4%	0.7%	41.9	43.8	45.7	3.1%	0.8%	
Various institutions: Policy development on human and social development dynamics	27.1	28.3	35.3	37.9	11.9%	0.7%	38.1	39.8	41.6	3.1%	0.7%	
National Research Foundation: Human resources development for science and engineering	922.3	762.3	954.0	1 005.7	2.9%	19.9%	1 010.7	1 056.1	1 103.4	3.1%	18.5%	
National Research Foundation: Human resources development for science and engineering: Economic competitiveness and support package	–	23.1	–	19.1	–	0.2%	19.2	20.0	20.9	3.1%	0.4%	
National Research Foundation Various institutions: Science awareness, research and initiatives to encourage youth participation in science	943.4	859.5	962.6	997.4	1.9%	20.6%	1 001.3	1 046.1	1 092.9	3.1%	18.3%	
	64.3	30.0	57.9	80.8	7.9%	1.3%	94.4	98.7	103.1	8.5%	1.7%	
National Research Foundation: South African research chairs initiative to develop human resources in science	566.3	544.5	588.6	602.9	2.1%	12.6%	605.2	632.4	660.7	3.1%	11.1%	
Various institutions: Strategic science platforms for research and development	191.3	166.2	135.6	97.3	-20.2%	3.2%	242.3	253.1	264.5	39.5%	3.8%	
Capital	1 095.0	731.4	1 439.2	1 794.9	17.9%	27.7%	2 608.9	2 263.3	1 928.4	2.4%	38.1%	
Various institutions: Infrastructure projects for research and development	408.0	253.7	421.0	699.7	19.7%	9.8%	899.6	940.0	982.1	12.0%	15.6%	
National Research Foundation: Square Kilometre Array: Capital contribution to research	687.0	477.7	1 018.2	1 095.2	16.8%	17.9%	1 709.3	1 323.3	946.3	-4.8%	22.5%	
Public corporations and private enterprises												
Public corporations												
Other transfers to public corporations												
Current	78.1	62.1	87.1	–	-100.0%	1.2%	–	–	–	–	–	
National Research Foundation: Human resources development for science and engineering	41.2	42.0	32.1	–	-100.0%	0.6%	–	–	–	–	–	
National Research Foundation: Human resources development for science and engineering: Economic competitiveness and support package	22.0	–	18.6	–	-100.0%	0.2%	–	–	–	–	–	
Various institutions: Science awareness, research and initiatives to encourage youth participation in science	–	–	18.7	–	–	0.1%	–	–	–	–	–	
Various institutions: Strategic science platforms for research and development	14.9	20.1	17.6	–	-100.0%	0.3%	–	–	–	–	–	
Capital	376.3	142.6	315.1	211.4	-17.5%	5.7%	294.2	307.4	321.2	15.0%	5.0%	
Council for Scientific and Industrial Research: Cyberinfrastructure research and development	251.7	60.2	237.1	211.4	-5.6%	4.2%	294.2	307.4	321.2	15.0%	5.0%	
Various institutions: Infrastructure projects for research and development	124.6	82.3	78.0	–	-100.0%	1.6%	–	–	–	–	–	

Table 35.12 Research, Development and Support expenditure trends and estimates by subprogramme and economic classification (continued)

Details of transfers and subsidies				Adjusted appropriation	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)
Audited outcome			2022/23				2019/20	2022/23	2023/24		
R million	2019/20	2020/21	2021/22	2022/23	2019/20	2022/23	2023/24	2024/25	2025/26	2022/23 - 2025/26	2022/23 - 2025/26
Public corporations and private enterprises											
Private enterprises											
Other transfers to private enterprises											
Current											
Various institutions: Strategic science platforms for research and development	-	2.0	-	-	-	-	-	-	-	-	-
Non-profit institutions											
Current											
Various institutions: Astronomy research and development	45.6	9.4	18.0	-	-100.0%	0.4%	-	-	-	-	-
Various institutions: Policy development on human and social development dynamics	1.5	1.6	1.7	-	-100.0%	-	-	-	-	-	-
National Research Foundation: Human resources development for science and engineering	11.2	1.8	10.0	-	-100.0%	0.1%	-	-	-	-	-
Various institutions: Science awareness, research and initiatives to encourage youth participation in science	17.0	-	0.8	-	-100.0%	0.1%	-	-	-	-	-
Various institutions: Strategic science platforms for research and development	15.9	1.0	0.6	-	-100.0%	0.1%	-	-	-	-	-
Capital											
Various institutions: Infrastructure projects for research and development	154.8	149.1	142.3	-	-100.0%	2.4%	-	-	-	-	-
Higher education institutions											
Current											
Various institutions: Policy development on human and social development dynamics	-	19.8	37.5	-	-	0.3%	-	-	-	-	-
National Research Foundation: Human resources development for science and engineering	-	2.1	-	-	-	-	-	-	-	-	-
Various institutions: Science awareness, research and initiatives to encourage youth participation in science	-	2.0	6.8	-	-	-	-	-	-	-	-
Various institutions: Science awareness, research and initiatives to encourage youth participation in science	-	3.5	13.1	-	-	0.1%	-	-	-	-	-
Various institutions: Strategic science platforms for research and development	-	12.2	17.6	-	-	0.2%	-	-	-	-	-
Capital											
Various institutions: Infrastructure projects for research and development	-	100.4	117.0	-	-	1.2%	-	-	-	-	-
Various institutions: Infrastructure projects for research and development	-	100.4	117.0	-	-	1.2%	-	-	-	-	-

Personnel information

Table 35.13 Research, Development and Support personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2023		Number and cost ² of personnel posts filled/planned for on funded establishment															Average growth rate (%)	Average Salary level/ Total (%)	
Number of funded posts	Number of posts additional to the establishment	Actual			Revised estimate			Medium-term expenditure estimate											
		2021/22			2022/23			2023/24			2024/25			2025/26			2022/23 - 2025/26		
Research, Development and Support		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost			
Salary level	55	-	45	42.6	0.9	41	40.8	1.0	39	40.2	1.0	38	42.0	1.1	41	43.8	1.1	0.2%	100.0%
1-6	4	-	4	1.1	0.3	2	0.6	0.3	0	0.1	0.3	0	0.1	0.3	0	0.1	0.3	-41.9%	2.0%
7-10	10	-	7	2.7	0.4	7	3.0	0.4	7	3.0	0.4	6	2.5	0.4	9	3.7	0.4	8.3%	18.0%
11-12	24	-	19	17.2	0.9	20	18.8	0.9	20	18.7	0.9	20	19.8	1.0	20	20.1	1.0	-	50.0%
13-16	17	-	15	21.6	1.4	12	18.4	1.5	12	18.5	1.5	12	19.6	1.6	12	19.9	1.7	-	30.0%

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

2. Rand million.

Programme 5: Socioeconomic Innovation Partnerships

Programme purpose

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

Objectives

- Inform and influence how science and technology can be used to achieve inclusive development through knowledge, evidence and learning over the medium term by:
 - publishing 30 knowledge products on innovation for inclusive development
 - maintaining and improving 14 decision support systems
 - generating 46 learning interventions.
- Identify, grow and sustain niche, high-potential science, technology and innovation capabilities for sustainable development and the greening of society and the economy by fully funding and co-funding 384 honours, masters and doctoral students, and adding 30 knowledge and innovation products to the intellectual property portfolio over the medium term.
- Identify, grow and sustain niche, high-potential science, technology and innovation capabilities that improve the competitiveness of existing industries with growth potential in aerospace, advanced manufacturing, chemicals, advanced metals, mining, ICT and sector innovation funds; and facilitate the development of new targeted industries led by research and development over the medium term by:
 - fully funding or co-funding 1 465 masters and doctoral students, and 600 interns
 - adding 145 knowledge and innovation products to South Africa's intellectual property portfolio
 - funding 15 instruments in support of increased localisation, competitiveness and industrial development led by research and development.
- Introduce and manage interventions and incentive programmes that increase the level of private-sector investment in scientific or technological research and development by providing pre-approval decisions within 90 days of the date of receipt of applications for the research and development tax incentive on an ongoing basis.

Subprogrammes

- *Sector Innovation and Green Economy* provides policy, strategy and direction for growth in strategic sectors of the economy led by research and development, and supports the transition to a green economy.
- *Innovation for Inclusive Development* supports the development of science and technology-based innovations for tackling poverty, including the creation of sustainable jobs and human settlements and the enhanced delivery of basic services.
- *Science and Technology Investment* leads and supports the development of indicators and instruments for monitoring investments in science and technology, the performance of the national system of innovation, and ways of strengthening policy in relation to the national system of innovation.
- *Technology Localisation, Beneficiation and Advanced Manufacturing* funds development programmes for technology and innovation to advance strategic and sustainable economic growth, sector development priorities and service delivery over the medium and long terms.
- *Office of the Deputy Director-General: Socioeconomic Innovation Partnership* provides management and administrative support to the programme and the office of the deputy director-general.

Expenditure trends and estimates

Table 35.14 Socioeconomic Innovation Partnerships expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2019/20	2020/21	2021/22		2022/23	2019/20 - 2022/23	2023/24	2024/25	2025/26	2022/23 - 2025/26	Average: Expenditure/ Total (%)
R million											
Sector Innovation and Green Economy	1 042.7	984.3	1 117.7	1 092.3	1.6%	60.3%	1 096.0	1 145.2	1 196.6	3.1%	62.1%
Innovation for Inclusive Development	373.1	332.6	399.2	381.7	0.8%	21.1%	384.7	402.0	420.0	3.2%	21.8%
Science and Technology Investment	34.0	30.7	39.0	25.4	-9.3%	1.8%	25.3	26.4	27.6	2.9%	1.4%
Technology Localisation, Beneficiation and Advanced Manufacturing	323.6	325.7	251.8	256.1	-7.5%	16.5%	256.4	268.1	280.0	3.0%	14.5%
Office of the Deputy Director-General: Socioeconomic Innovation Partnership	4.9	4.7	7.0	2.2	-23.2%	0.3%	3.4	3.6	3.8	19.9%	0.2%
Total	1 778.2	1 678.0	1 814.7	1 757.6	-0.4%	100.0%	1 765.9	1 845.4	1 928.0	3.1%	100.0%
Change to 2022 Budget estimate				(1.6)			0.8	0.8	0.8		
Economic classification											
Current payments	49.0	47.0	49.1	56.4	4.8%	2.9%	55.4	57.8	60.4	2.3%	3.2%
Compensation of employees	43.2	42.2	42.2	45.2	1.5%	2.5%	45.9	47.9	50.0	3.4%	2.6%
Goods and services	5.8	4.8	6.9	11.2	25.0%	0.4%	9.5	10.0	10.4	-2.6%	0.6%
<i>of which:</i>											
Advertising	0.0	-	-	0.2	161.0%	-	0.3	0.3	0.3	3.4%	-
Catering: Departmental activities	0.0	-	0.0	0.4	125.0%	-	0.4	0.4	0.4	3.0%	-
Communication	0.8	2.4	1.1	1.2	17.2%	0.1%	1.2	1.3	1.4	3.1%	0.1%
Consultants: Business and advisory services	0.2	1.0	1.8	2.9	140.5%	0.1%	2.7	2.7	2.8	-0.8%	0.2%
Travel and subsistence	2.2	0.1	0.3	3.9	21.0%	0.1%	3.4	3.6	3.8	-0.6%	0.2%
Venues and facilities	0.1	0.0	0.0	1.0	162.3%	-	1.0	1.0	1.0	3.0%	0.1%
Transfers and subsidies	1 729.2	1 631.0	1 765.6	1 701.2	-0.5%	97.1%	1 710.5	1 787.5	1 867.6	3.2%	96.8%
Departmental agencies and accounts	492.2	438.0	524.0	519.7	1.8%	28.1%	520.5	540.8	565.0	2.8%	29.4%
Higher education institutions	-	-	8.2	-	-	0.1%	-	-	-	-	-
Public corporations and private enterprises	1 194.2	1 164.7	1 198.6	1 181.5	-0.4%	67.4%	1 190.0	1 246.7	1 302.6	3.3%	67.4%
Non-profit institutions	42.8	28.3	34.9	-	-100.0%	1.5%	-	-	-	-	-
Households	0.1	-	-	-	-100.0%	-	-	-	-	-	-
Total	1 778.2	1 678.0	1 814.7	1 757.6	-0.4%	100.0%	1 765.9	1 845.4	1 928.0	3.1%	100.0%
Proportion of total programme expenditure to vote expenditure	22.0%	23.4%	20.2%	19.2%	-	-	16.2%	17.5%	19.1%	-	-
Details of transfers and subsidies											
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	491.3	438.0	524.0	519.7	1.9%	28.1%	520.5	540.8	565.0	2.8%	29.4%
Various institutions: Economic competitiveness and support package: Local manufacturing capacity research and technical support	33.8	-	-	-	-100.0%	0.5%	-	-	-	-	-
Various institutions: Economic competitiveness and support package: Local systems of innovation for the cold chain technologies project	39.6	-	-	-	-100.0%	0.6%	-	-	-	-	-
Various institutions: Advanced manufacturing technology strategy implementation	-	0.8	18.8	-	-	0.3%	-	-	-	-	-
Various institutions: Innovative research and development	24.8	30.4	60.3	46.8	23.5%	2.3%	49.8	52.0	54.4	5.1%	2.8%
Human Sciences Research Council	324.2	289.3	314.4	321.1	-0.3%	17.8%	322.3	336.8	351.9	3.1%	18.3%
Various institutions: Local manufacturing capacity research and technical support	28.7	75.7	50.4	86.6	44.5%	3.4%	82.9	83.6	87.3	0.3%	4.7%
Various institutions: Local systems of innovation for the cold chain technologies project	-	-	10.7	15.5	-	0.4%	15.5	16.2	16.9	3.1%	0.9%
National Research Foundation: Research information management system	8.4	6.2	10.8	-	-100.0%	0.4%	-	-	-	-	-
Human Science Research Council: Develop and monitor science and technology indicators	12.4	11.3	15.2	15.6	7.8%	0.8%	15.6	16.3	17.0	3.1%	0.9%
Various institutions: Environmental innovation	19.4	24.3	43.4	34.2	20.9%	1.7%	34.3	35.9	37.5	3.1%	1.9%

Table 35.14 Socioeconomic Innovation Partnerships expenditure trends and estimates by subprogramme and economic classification (continued)

Details of transfers and subsidies	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2019/20	2020/21	2021/22				2022/23	2019/20 - 2022/23	2023/24		
R million											
Public corporations and private enterprises											
Public corporations											
Other transfers to public corporations											
Current	223.3	266.2	220.1	179.3	-7.1%	12.6%	183.9	195.4	204.2	4.4%	10.5%
Various institutions: Economic competitiveness and support package: Local manufacturing capacity research and technical support	46.2	-	-	-	-100.0%	0.7%	-	-	-	-	-
Various institutions: Advanced manufacturing technology strategy implementation	58.4	56.7	26.5	36.0	-14.9%	2.5%	38.0	40.0	41.8	5.1%	2.1%
Various institutions: Innovative research and development	1.0	-	5.8	-	-100.0%	0.1%	-	-	-	-	-
Various institutions: Information Communication Technology	28.0	33.9	35.5	42.9	15.3%	2.0%	43.1	45.0	47.0	3.1%	2.4%
Various institutions: Local manufacturing capacity research and technical support	-	40.6	30.4	-	-	1.0%	-	-	-	-	-
Council for Scientific and Industrial Research: Mining research and development	21.1	43.9	63.5	65.1	45.5%	2.8%	65.3	68.3	71.3	3.1%	3.7%
Various institutions: Local systems of innovation for the cold chain technologies project	6.8	29.5	4.3	-	-100.0%	0.6%	-	-	-	-	-
Various institutions: Resource-based industries research and development	52.9	45.9	37.2	35.3	-12.6%	2.4%	37.5	42.1	44.0	7.7%	2.2%
Various institutions: Environmental innovation	9.0	15.7	17.0	-	-100.0%	0.6%	-	-	-	-	-
Public corporations and private enterprises											
Private enterprises											
Other transfers to private enterprises											
Current	4.9	4.8	-	-	-100.0%	0.1%	-	-	-	-	-
Various institutions: Economic competitiveness and support package: Local systems of innovation for the cold chain technologies project	4.9	-	-	-	-100.0%	0.1%	-	-	-	-	-
Various institutions: Local systems of innovation for the cold chain technologies project	-	4.8	-	-	-	0.1%	-	-	-	-	-
Public corporations and private enterprises											
Public corporations											
Public corporations (subsidies on products and production)											
Current	965.8	893.6	978.4	1 002.3	1.2%	54.6%	1 006.1	1 051.3	1 098.4	3.1%	57.0%
Council for Scientific and Industrial Research	965.8	893.6	978.4	1 002.3	1.2%	54.6%	1 006.1	1 051.3	1 098.4	3.1%	57.0%
Non-profit institutions											
Current	41.9	28.3	34.9	-	-100.0%	1.5%	-	-	-	-	-
Various institutions: Economic competitiveness and support package: Local systems of innovation for the cold chain technologies project	17.5	-	-	-	-100.0%	0.2%	-	-	-	-	-
Various institutions: Innovative research and development	13.1	4.0	2.9	-	-100.0%	0.3%	-	-	-	-	-
Various institutions: Information Communication Technology	10.3	4.0	6.3	-	-100.0%	0.3%	-	-	-	-	-
Various institutions: Local systems of innovation for the cold chain technologies project	-	17.4	-	-	-	0.2%	-	-	-	-	-
Various institutions: Environmental innovation	1.0	2.9	25.7	-	-100.0%	0.4%	-	-	-	-	-
Higher education institutions											
Current	-	-	8.2	-	-	0.1%	-	-	-	-	-
Various institutions: Innovative research and development	-	-	8.2	-	-	0.1%	-	-	-	-	-

Personnel information

Table 35.15 Socioeconomic Innovation Partnerships personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2023		Number and cost ² of personnel posts filled/planned for on funded establishment															Average growth rate (%)	Average: Salary level/ Total (%)	
Number of funded posts	Number of posts additional to the establishment	Actual			Revised estimate			Medium-term expenditure estimate									2022/23 - 2025/26		
		2021/22		2022/23		2023/24			2024/25			2025/26							
Socioeconomic Innovation Partnerships		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost			
Salary level	62	–	43	42.2	1.0	44	45.2	1.0	46	45.9	1.0	46	47.9	1.0	47	50.0	1.1	2.2%	100.0%
1 – 6	6	–	4	1.1	0.3	4	1.1	0.3	4	1.1	0.3	5	1.4	0.3	5	1.5	0.3	7.7%	9.8%
7 – 10	12	–	7	2.9	0.4	7	3.0	0.4	9	3.8	0.4	9	4.0	0.4	9	4.3	0.5	8.8%	18.5%
11 – 12	25	–	19	18.6	1.0	20	20.5	1.0	20	20.4	1.0	19	20.6	1.1	20	22.1	1.1	0.0%	43.2%
13 – 16	19	–	13	19.6	1.5	13	20.5	1.6	13	20.6	1.6	13	21.8	1.7	13	22.2	1.7	–	28.4%

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

2. Rand million.

Entities

Academy of Science of South Africa

Selected performance indicators

Table 35.16 Academy of Science of South Africa performance indicators by programme/objective/activity and related priority

Indicator	Programme/Objective/Activity	MTSF priority	Audited performance			Estimated performance	MTEF targets		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Number of special lectures per year	Liaison	Priority 3: Education, skills and health	3	3	5	5	5	5	5
Number of activities supported with other African academies per year	Liaison	Priority 1: A capable, ethical and developmental state	1	1	4	4	4	4	4
Number of young scientist activities supported per year	Liaison	Priority 3: Education, skills and health	1	1	4	4	4	4	4
Number of strategic partnerships per year	Liaison	Priority 1: A capable, ethical and developmental state	– ¹	– ¹	4	4	4	4	4
Number of proceedings reports, policy-maker booklets and statements per year	Science advisory programme	Priority 3: Education, skills and health	2	2	8	8	8	8	8
Number of new journal titles on the Scientific Electronic Library Online open-access platform per year	Scholarly publishing programme		7	7	2	2	2	2	2
Number of South African Journal of Science articles published per year	Scholarly publishing programme		6	6	6	6	6	6	6
Number of Quest: Science magazines produced per year	Scholarly publishing programme		4	4	4	4	4	4	4

1. No historical data available.

Entity overview

The Academy of Science of South Africa was established in terms of the Academy of Science of South Africa Act (2001), as amended, to promote outstanding achievements in all fields of scientific inquiry, recognise excellence, and provide evidence-based scientific advice to government and other stakeholders.

Over the medium term, the academy aims to enhance South Africa's capacity to produce and publish research, provide evidence-based policy advice to government, and increase the quality and visibility of South African research publications. This entails undertaking various consensus studies in the categories of health, education, climate change, energy, the science-policy nexus, biosafety and biosecurity, poverty reduction, gender-responsive issues, young people and people with disabilities. To complement this work, the academy aims to host 15 lectures on scientific topics, form 12 strategic partnerships with players in the science community and publish 6 journal titles on the Scientific Electronic Library Online open-access platform over the MTEF period.

Expenditure is expected to increase at an average annual rate of 3 per cent, from R35.5 million in 2022/23 to R38.8 million in 2025/26. Transfers from the department account for an estimated 95.4 per cent (R106.6 million) of total revenue over the period ahead, increasing from R33.8 million in 2022/23 to R37.1 million in 2025/26 at an average annual rate of 3.1 per cent.

Programmes/Objectives/Activities

Table 35.17 Academy of Science of South Africa expenditure trends and estimates by programme/objective/activity

R million	Audited outcome			Revised estimate 2022/23	Average growth rate (%) 2019/20 - 2022/23	Average: Expenditure/ Total (%) 2019/20 - 2022/23	Medium-term expenditure estimate			Average growth rate (%) 2022/23 - 2025/26	Average: Expenditure/ Total (%) 2022/23 - 2025/26
	2019/20	2020/21	2021/22				2023/24	2024/25	2025/26		
Administration	22.7	16.8	13.6	12.8	-17.4%	43.2%	12.5	13.0	13.6	2.0%	35.3%
Liaison	13.9	6.9	4.8	6.4	-22.7%	20.1%	6.6	6.9	7.2	3.7%	18.4%
Science advisory programme	6.0	3.3	2.6	4.8	-7.6%	10.7%	4.8	5.0	5.3	3.4%	13.5%
Scholarly publishing programme	10.5	8.2	8.5	11.5	3.1%	26.1%	11.7	12.3	12.8	3.7%	32.8%
Total	53.2	35.1	29.5	35.5	-12.6%	100.0%	35.6	37.2	38.8	3.0%	100.0%

Statements of financial performance, cash flow and financial position

Table 35.18 Academy of Science of South Africa statements of financial performance, cash flow and financial position

Statement of financial performance											
R million	Audited outcome			Revised estimate 2022/23	Average growth rate (%) 2019/20 - 2022/23	Average: Expenditure/ Total (%) 2019/20 - 2022/23	Medium-term expenditure estimate			Average growth rate (%) 2022/23 - 2025/26	Average: Expenditure/ Total (%) 2022/23 - 2025/26
	2019/20	2020/21	2021/22				2023/24	2024/25	2025/26		
Revenue											
Non-tax revenue	2.7	1.6	1.6	1.7	-15.5%	4.6%	1.7	1.7	1.7	1.7%	4.6%
Sale of goods and services other than capital assets	0.5	0.5	0.5	0.4	-8.3%	1.2%	0.4	0.4	0.4	1.9%	1.1%
Other non-tax revenue	2.2	1.1	1.1	1.2	-17.5%	3.4%	1.2	1.2	1.3	1.6%	3.4%
Transfers received	50.5	34.1	37.0	33.8	-12.5%	95.4%	34.0	35.5	37.1	3.1%	95.4%
Total revenue	53.2	35.6	38.6	35.5	-12.6%	100.0%	35.6	37.2	38.8	3.0%	100.0%
Expenses											
Current expenses	53.2	35.1	29.5	35.5	-12.6%	100.0%	35.6	37.2	38.8	3.0%	100.0%
Compensation of employees	28.3	26.9	20.8	18.8	-12.7%	63.4%	18.8	19.6	19.6	1.5%	52.3%
Goods and services	24.7	8.0	8.6	16.7	-12.2%	36.3%	16.8	17.5	19.2	4.8%	47.7%
Depreciation	0.2	0.2	0.1	-	-100.0%	0.3%	-	-	-	-	-
Total expenses	53.2	35.1	29.5	35.5	-12.6%	100.0%	35.6	37.2	38.8	3.0%	100.0%
Surplus/(Deficit)	-	-	9.1	-	-	-	-	-	-	-	-
Cash flow statement											
Cash flow from operating activities	2.2	0.7	8.2	0.1	-62.5%	100.0%	-	-	-	-100.0%	-
Receipts											
Non-tax receipts	2.1	1.9	1.7	1.7	-7.8%	4.6%	1.7	1.7	1.7	1.7%	4.6%
Sales of goods and services other than capital assets	0.7	0.9	0.7	0.5	-12.1%	1.7%	0.5	0.5	0.4	-1.1%	1.2%
Other sales	0.1	0.1	0.0	0.0	-34.9%	0.2%	0.0	0.0	-	-100.0%	0.1%
Other tax receipts	1.4	1.0	1.0	1.2	-5.9%	2.9%	1.2	1.2	1.3	2.7%	3.3%
Transfers received	50.5	34.7	37.6	33.8	-12.5%	95.4%	34.0	35.5	37.1	3.1%	95.4%
Total receipts	52.6	36.6	39.3	35.5	-12.3%	100.0%	35.6	37.2	38.8	3.0%	100.0%
Payment											
Current payments	50.4	36.0	31.1	35.4	-11.1%	100.0%	35.6	37.2	38.8	3.1%	100.0%
Compensation of employees	28.2	26.9	20.8	18.8	-12.6%	62.7%	18.8	19.6	19.6	1.5%	52.4%
Goods and services	22.2	9.0	10.3	16.6	-9.3%	37.3%	16.8	17.5	19.2	5.0%	47.6%
Total payments	50.4	36.0	31.1	35.4	-11.1%	100.0%	35.6	37.2	38.8	3.1%	100.0%
Net cash flow from investing activities	(1.0)	(0.9)	(1.3)	(0.8)	-6.3%	100.0%	(0.8)	(0.8)	-	-100.0%	-
Acquisition of property, plant, equipment and intangible assets	(0.0)	(0.1)	(0.6)	(0.3)	184.7%	23.4%	(0.3)	(0.3)	-	-100.0%	-
Other flows from investing activities	(1.0)	(0.8)	(0.7)	(0.5)	-19.6%	76.6%	(0.5)	(0.5)	-	-100.0%	-
Net increase/(decrease) in cash and cash equivalents	1.2	(0.2)	7.0	(0.7)	-182.8%	5.8%	(0.8)	(0.8)	-	-100.0%	-1.6%

Table 35.18 Academy of Science of South Africa statements of financial performance, cash flow and financial position (continued)

Statement of financial position	Audited outcome			Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)			
	2019/20	2020/21	2021/22				2022/23	2019/20 - 2022/23	2023/24			2024/25	2025/26	2022/23 - 2025/26
	R million													
Carrying value of assets	0.2	0.1	0.5	0.1	-16.3%	1.0%	0.1	0.1	0.1	1.5%	0.6%			
<i>of which:</i>														
Acquisition of assets	(0.0)	(0.1)	(0.6)	(0.3)	184.7%	100.0%	(0.3)	(0.3)	-	-100.0%	-			
Investments	13.1	13.8	14.6	14.0	2.2%	62.7%	14.0	14.0	14.0	-	71.5%			
Receivables and prepayments	2.3	1.3	0.6	0.3	-52.5%	5.2%	0.3	0.3	0.3	1.5%	1.3%			
Cash and cash equivalents	5.8	5.6	12.5	5.2	-3.5%	31.1%	5.2	5.2	5.2	-	26.5%			
Total assets	21.4	20.9	28.3	19.6	-3.0%	100.0%	19.6	19.6	19.6	-	100.0%			
Capital and reserves	7.8	8.3	17.4	8.8	4.5%	45.7%	8.8	8.8	8.8	-	45.2%			
Capital reserve fund	8.1	9.5	8.1	8.0	-0.5%	38.1%	8.0	8.0	8.0	-	40.9%			
Trade and other payables	1.8	0.2	0.2	0.2	-53.8%	2.8%	0.2	0.2	0.2	-	0.9%			
Provisions	3.8	2.8	1.2	2.5	-12.3%	12.1%	2.5	2.5	2.5	0.2%	13.0%			
Derivatives financial instruments	-	-	1.4	-	-	1.2%	-	-	-	-	-			
Total equity and liabilities	21.4	20.9	28.3	19.6	-3.0%	100.0%	19.6	19.6	19.6	-	100.0%			

Personnel information

Table 35.19 Academy of Science of South Africa personnel numbers and cost by salary level

Number of posts estimated for 31 March 2023		Number and cost ¹ of personnel posts filled/planned for on funded establishment											Average growth rate of personnel posts (%)	Average: Salary level/ Total (%)					
Number of approved funded posts	Number of posts on establishment	Actual			Revised estimate			Medium-term expenditure estimate											
		2021/22		2022/23		2023/24		2024/25		2025/26		2022/23 - 2025/26							
Academy of Science of South Africa		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost			
Salary level	30	30	29	20.8	0.7	30	18.8	0.6	30	18.8	0.6	30	19.6	0.7	30	19.6	0.7	-	100.0%
1-6	4	4	3	0.8	0.3	4	0.9	0.2	4	0.9	0.2	4	0.9	0.2	4	0.9	0.2	-	13.3%
7-10	20	20	20	11.4	0.6	20	10.4	0.5	20	10.4	0.5	20	10.9	0.5	20	10.9	0.5	-	66.7%
11-12	2	2	2	2.1	1.1	2	1.8	0.9	2	1.8	0.9	2	1.9	0.9	2	1.9	0.9	-	6.7%
13-16	4	4	4	6.4	1.6	4	5.7	1.4	4	5.7	1.4	4	5.9	1.5	4	5.9	1.5	-	13.3%

1. Rand million.

Council for Scientific and Industrial Research

Selected performance indicators

Table 35.20 Council for Scientific and Industrial Research performance indicators by programme/objective/activity and related priority

Indicator	Programme/Objective/Activity	MTSF priority	Audited performance			Estimated performance	MTEF targets		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Number of journal articles published per year	Science, engineering and technology operating units and centres	Priority 3: Education, skills and health	300	310	315	320	320	320	320
Number of conference papers delivered per year	Science, engineering and technology operating units and centres		330	335	337	338	340	342	345
Number of new technology demonstrators per year	Science, engineering and technology operating units and centres	Priority 2: Economic transformation and job creation	66	63	63	64	69	69	69
Value of contract research and development income per year	Science, engineering and technology operating units and centres		R2.2bn	R2.3bn	R2.3bn	R2.4bn	R2.5bn	R2.6bn	R2.6bn
Number of science, engineering and technology staff per year	Science, engineering and technology operating units and centres	Priority 3: Education, skills and health	1 619	1 410	1 497	1 572	1 651	1 733	1 781
Percentage of black science engineering and technology staff per year	Science, engineering and technology operating units and centres		62% (1 452/ 2 342)	63% (1 465/ 2 342)	63% (1 465/ 2 342)	66%	67%	67%	69%
Number of science, engineering and technology staff with doctorates per year	Science, engineering and technology operating units and centres		356	310	344	369	396	424	425
Number of new patents granted per year	Science, engineering and technology operating units and centres		13	10	8	16	18	19	19

Entity overview

The Council for Scientific and Industrial Research was established in 1945 and is governed in terms of the Scientific Research Council Act (1988). The council fosters industrial and scientific development in the national interest through multidisciplinary research and technological innovation to improve the ability of the state to efficiently deliver basic services in fields such as health, education, social security, energy and shelter to all South Africans, and, in doing so, reduce inequality.

Over the medium term, the council will focus on conducting high-quality and relevant research, pursuing technological innovation to foster industrial and scientific development, and building on industrial development opportunities in fields such as pharmaceutical innovation and agro-processing. To achieve this, the council aims to support 56 registered patents and publish 960 journal articles over the medium term. The council also plans to implement a range of research, development and innovation programmes in areas such as health, energy, defence and security. Spending on these activities amounts to an estimated R8.4 billion over the MTEF period.

As the council's work requires highly specialised skills and is labour intensive, spending on compensation of employees accounts for 55.6 per cent (R5.6 billion) of planned expenditure over the medium term, increasing at an average annual rate of 9.1 per cent, from R1.7 billion in 2022/23 to R2.1 billion in 2025/26.

Transfers from the department account for an estimated 22.2 per cent (R2.3 billion) of the council's total revenue over the period ahead. The remainder is set to be generated from services rendered, such as contract research and development, income from intellectual property, proceeds from technology transfers, and royalties. Total revenue over the period ahead is projected to be R10.8 billion.

Programmes/Objectives/Activities

Table 35.21 Council for Scientific and Industrial Research expenditure trends and estimates by programme/objective/activity

R million	Audited outcome			Revised estimate 2022/23	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2019/20	2020/21	2021/22		2019/20	2022/23	2023/24	2024/25	2025/26	2022/23	2025/26
Administration	602.3	525.3	558.8	730.1	6.6%	22.0%	583.6	611.1	653.5	-3.6%	18.8%
Science, engineering and technology operating units and centres	2 156.7	1 989.1	2 014.1	2 359.9	3.0%	78.0%	2 802.1	2 926.2	3 133.8	9.9%	81.2%
Total	2 759.0	2 514.4	2 572.9	3 089.9	3.8%	100.0%	3 385.7	3 537.3	3 787.3	7.0%	100.0%

Statements of financial performance, cash flow and financial position

Table 35.22 Council for Scientific and Industrial Research statements of financial performance, cash flow and financial position

Statement of financial performance											
R million	Audited outcome			Revised estimate 2022/23	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2019/20	2020/21	2021/22		2019/20	2022/23	2023/24	2024/25	2025/26	2022/23	2025/26
Revenue											
Non-tax revenue	1 907.7	1 783.0	1 790.0	2 343.0	7.1%	69.4%	2 652.7	2 825.0	2 990.4	8.5%	77.8%
Sale of goods and services other than capital assets	1 838.5	1 741.0	1 731.8	2 161.5	5.5%	66.4%	2 464.4	2 636.1	2 792.3	8.9%	72.3%
Other non-tax revenue	69.2	42.0	58.2	181.5	37.9%	3.0%	188.3	188.9	198.1	3.0%	5.5%
Transfers received	920.2	827.6	922.6	741.6	-6.9%	30.6%	744.5	777.9	812.7	3.1%	22.2%
Total revenue	2 827.9	2 610.6	2 712.6	3 084.6	2.9%	100.0%	3 397.2	3 602.9	3 803.1	7.2%	100.0%
Expenses											
Current expenses	2 759.0	2 514.4	2 572.9	2 959.2	2.4%	98.9%	3 254.5	3 400.2	3 644.0	7.2%	96.1%
Compensation of employees	1 453.7	1 434.5	1 475.1	1 653.5	4.4%	55.1%	1 843.2	1 990.7	2 149.9	9.1%	55.2%
Goods and services	1 241.7	1 026.2	1 047.0	1 104.8	-3.8%	40.6%	1 261.9	1 311.2	1 389.9	8.0%	36.7%
Depreciation	62.1	52.5	49.8	200.9	47.9%	3.2%	149.4	98.3	104.2	-19.6%	4.1%
Interest, dividends and rent on land	1.5	1.1	1.1	-	-100.0%	-	-	-	-	-	-
Transfers and subsidies	-	-	-	130.7	-	1.1%	131.2	137.1	143.3	3.1%	3.9%
Total expenses	2 759.0	2 514.4	2 572.9	3 089.9	3.8%	100.0%	3 385.7	3 537.3	3 787.3	7.0%	100.0%
Surplus/(Deficit)	68.9	96.3	139.7	(5.4)	-142.8%	-	11.5	65.6	15.8	-243.0%	-

Table 35.22 Council for Scientific and Industrial Research statements of financial performance, cash flow and financial position (continued)

R million	Audited outcome				Revised estimate	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)		
	2019/20	2020/21	2021/22	2022/23				2019/20	2022/23	2023/24			2024/25	2025/26
													2022/23 - 2025/26	
Cash flow statement														
Cash flow from operating activities	56.3	220.2	49.5	195.5	51.4%	100.0%	160.9	202.1	160.6	-6.4%	100.0%			
Receipts														
Tax receipts	–	–	–	130.7	–	1.1%	131.2	137.1	143.3	3.1%	3.9%			
Non-tax receipts	1 970.4	1 945.7	1 985.2	2 212.2	3.9%	72.9%	2 521.5	2 687.9	2 847.1	8.8%	73.9%			
Sales of goods and services other than capital assets	1 919.0	1 903.5	1 930.6	2 161.5	4.0%	71.1%	2 464.4	2 636.1	2 792.3	8.9%	72.3%			
Other tax receipts	51.4	42.2	54.5	50.7	-0.5%	1.8%	57.1	51.7	54.8	2.6%	1.6%			
Transfers received	758.1	670.0	725.5	741.6	-0.7%	26.1%	744.5	777.9	812.7	3.1%	22.2%			
Total receipts	2 728.5	2 615.8	2 710.7	3 084.6	4.2%	100.0%	3 397.2	3 602.9	3 803.1	7.2%	100.0%			
Payment														
Current payments	2 672.2	2 395.5	2 661.2	2 758.3	1.1%	98.9%	3 105.1	3 263.6	3 499.3	8.3%	95.9%			
Compensation of employees	1 453.7	1 370.5	1 475.1	1 653.5	4.4%	56.1%	1 843.2	1 990.7	2 149.9	9.1%	57.9%			
Goods and services	1 218.3	1 024.1	1 185.3	1 104.8	-3.2%	42.8%	1 261.9	1 273.0	1 349.4	6.9%	37.9%			
Interest and rent on land	0.1	0.9	0.8	–	-100.0%	–	–	–	–	–	–			
Transfers and subsidies	–	–	–	130.7	–	1.1%	131.2	137.1	143.3	3.1%	4.1%			
Total payments	2 672.2	2 395.5	2 661.2	2 889.0	2.6%	100.0%	3 236.3	3 400.8	3 642.5	8.0%	100.0%			
Net cash flow from investing activities	(43.3)	(36.2)	(51.0)	(120.0)	40.5%	100.0%	(209.3)	(120.0)	(127.2)	2.0%	100.0%			
Acquisition of property, plant, equipment and intangible assets	(44.0)	(36.2)	(51.0)	(120.0)	39.7%	100.4%	(209.3)	(120.0)	(127.2)	2.0%	100.0%			
Proceeds from the sale of property, plant, equipment and intangible assets	0.8	–	–	–	-100.0%	-0.4%	–	–	–	–	–			
Net cash flow from financing activities	(0.7)	(2.7)	(1.6)	–	-100.0%	–	–	–	–	–	–			
Other flows from financing activities	(0.7)	(2.7)	(1.6)	–	-100.0%	–	–	–	–	–	–			
Net increase/(decrease) in cash and cash equivalents	12.4	181.3	(3.1)	75.5	82.8%	2.5%	(48.4)	82.1	33.4	-23.8%	1.1%			
Statement of financial position														
Carrying value of assets of which:	774.0	753.7	745.2	804.1	1.3%	29.6%	863.4	885.1	908.1	4.1%	30.7%			
Acquisition of assets	(44.0)	(36.2)	(51.0)	(120.0)	39.7%	100.0%	(209.3)	(120.0)	(127.2)	2.0%	100.0%			
Investments	2.4	2.4	2.4	2.4	0.4%	0.1%	2.4	2.4	2.4	–	0.1%			
Inventory	115.2	143.2	186.7	145.2	8.0%	5.7%	160.4	170.7	180.2	7.5%	5.8%			
Receivables and prepayments	312.0	293.5	307.9	348.4	3.7%	12.1%	385.1	409.7	432.6	7.5%	13.9%			
Cash and cash equivalents	1 248.8	1 435.1	1 432.1	1 340.8	2.4%	52.5%	1 339.6	1 428.6	1 473.3	3.2%	49.5%			
Total assets	2 452.5	2 628.0	2 674.4	2 640.9	2.5%	100.0%	2 751.0	2 896.6	2 996.6	4.3%	100.0%			
Accumulated surplus/(deficit)	1 071.4	1 167.6	1 308.9	1 361.4	8.3%	47.2%	1 327.0	1 392.6	1 408.4	1.1%	48.7%			
Finance lease	13.9	8.8	11.3	6.8	-21.1%	0.4%	6.1	5.5	5.0	-10.0%	0.2%			
Trade and other payables	1 343.0	1 438.6	1 342.0	1 260.4	-2.1%	51.9%	1 405.4	1 485.9	1 570.6	7.6%	50.6%			
Provisions	24.3	12.9	12.2	12.3	-20.2%	0.6%	12.4	12.6	12.7	1.0%	0.4%			
Total equity and liabilities	2 452.5	2 628.0	2 674.4	2 640.9	2.5%	100.0%	2 751.0	2 896.6	2 996.6	4.3%	100.0%			

Personnel information**Table 35.23 Council for Scientific and Industrial Research personnel numbers and cost by salary level**

Number of funded posts	Number of posts estimated for 31 March 2023		Number and cost ¹ of personnel posts filled/planned for on funded establishment															Average growth rate of personnel posts (%)	Average: Salary level/ Total (%)
	Number of approved posts	Number of posts on establishment	Actual					Revised estimate					Medium-term expenditure estimate						
			2021/22		2022/23		2023/24		2024/25		2025/26		2022/23 - 2025/26						
			Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost		
	2 487	2 487	2 478	1 475.1	0.6	2 487	1 653.5	0.7	2 497	1 843.2	0.7	2 682	1 990.7	0.7	2 772	2 149.9	0.8	3.7%	100.0%
1 – 6	416	416	414	40.2	0.1	416	45.1	0.1	421	50.8	0.1	449	54.3	0.1	455	58.6	0.1	3.0%	16.7%
7 – 10	1 195	1 195	1 189	499.8	0.4	1 195	560.2	0.5	1 197	624.3	0.5	1 286	674.5	0.5	1 309	728.4	0.6	3.1%	47.8%
11 – 12	463	463	463	363.4	0.8	463	407.4	0.9	464	451.8	1.0	497	490.5	1.0	533	529.7	1.0	4.8%	18.7%
13 – 16	387	387	386	499.7	1.3	387	560.1	1.4	389	623.0	1.6	424	674.3	1.6	426	728.3	1.7	3.3%	15.6%
17 – 22	26	26	26	72.0	2.8	26	80.7	3.1	26	93.3	3.6	26	97.1	3.7	49	104.9	2.1	23.5%	1.2%

Human Sciences Research Council

Selected performance indicators

Table 35.24 Human Sciences Research Council performance indicators by programme/objective/activity and related priority

Indicator	Programme/Objective/Activity	MTSF priority	Audited performance			Estimated performance	MTEF targets		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Number of Human Sciences Research Council research articles that achieved a citation count of at least 10 within 5 years of initial publication per year	Administration	Priority 1: A capable, ethical and developmental state	313	179	176	165	170	170	175
Number of curated datasets downloaded for secondary use per year	Administration		608	556	574	574	603	605	608
Number of historically disadvantaged institutions with which the council has actively collaborated per year	Administration	Priority 3: Education, skills and health	- ¹	6	6	6	7	7	7
Percentage of researchers (excluding trainees) with PhDs per year	Administration		- ¹	78% (327/420)	78% (327/420)	78%	78%	78%	78%
Number of PhD trainees per year	Administration		47	31	27	28	30	32	35
Number of peer-reviewed journal articles published per Human Sciences Research Council researcher per year	Research, development and innovation	Priority 1: A capable, ethical and developmental state	0.78	1.17	1.17	1.1	1.1	1.1	1.1
Number of scholarly book chapters published by council researchers per year	Research, development and innovation		86	118	40	48	49	50	50
Number of policy briefs and/or evidence reviews completed and published per year	Research, development and innovation		12	12	18	12	12	13	13
Number of community innovations supported or enabled by Human Sciences Research Council research per year	Research, development and innovation		- ¹	1	1	1	1	1	1
Number of incoming international exchange visits or fellowships active per year	Research, development and innovation	Priority 7: A better Africa and world	7	4	7	6	8	8	8

¹. No historical data available.

Entity overview

The Human Sciences Research Council was established in 1968 to undertake, promote and coordinate research in the human and social sciences. The council is mandated to initiate, undertake and foster strategic, basic and applied research in human sciences; and address developmental challenges by gathering, analysing and publishing relevant data, especially through projects linked to collaborative programmes geared towards the public sector. The council's research outputs are widely disseminated to support policy development at all levels of government. Over the medium term, the council will continue to focus on producing research that serves the public; contributing to good governance and public service delivery; helping to address the challenges of poverty, inequality and unemployment; and building the capacity of scholars and researchers.

Human capital is essential for the council to produce research outputs, for fundraising and to implement contract research projects. As such, spending on compensation of employees accounts for an estimated 47.3 per cent (R932.9 million) of the council's total expenditure over the medium term, increasing at an average annual rate of 4.6 per cent, from R283.6 million in 2022/23 to R324.7 million in 2025/26.

The council is set to receive 50.4 per cent (R1 billion) of its revenue through transfers from the department, increasing at an average annual rate of 8 per cent, from R279.2 million in 2022/23 to R351.5 million in 2025/26. It plans to generate the remainder of its projected revenue through research contracts and grants from national and international agencies, government departments and private-sector foundations.

Programmes/Objectives/Activities

Table 35.25 Human Sciences Research Council expenditure trends and estimates by programme/objective/activity

R million	Audited outcome			Revised estimate	Average growth rate (%)	Average: Expenditure/Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/Total (%)
	2019/20	2020/21	2021/22				2022/23	2019/20 - 2022/23	2023/24		
Administration	124.5	119.5	169.0	185.9	14.3%	28.4%	271.2	275.4	281.1	14.8%	40.0%
Research, development and innovation	296.8	271.7	374.3	648.0	29.7%	71.6%	299.6	331.5	346.6	-18.8%	60.0%
Total	421.3	391.2	543.3	833.9	25.6%	100.0%	570.8	606.9	627.7	-9.0%	100.0%

Statements of financial performance, cash flow and financial position

Table 35.26 Human Sciences Research Council statements of financial performance, cash flow and financial position

Statement of financial performance											
R million	Audited outcome			Revised estimate	Average growth rate (%)	Average: Expenditure/Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/Total (%)
	2019/20	2020/21	2021/22				2022/23	2019/20 - 2022/23	2023/24		
Revenue											
Non-tax revenue	160.7	159.6	315.6	554.7	51.1%	49.0%	248.5	270.1	275.8	-20.8%	49.6%
Sale of goods and services other than capital assets	119.7	118.8	281.4	522.9	63.5%	41.7%	214.0	235.1	239.8	-22.9%	44.3%
Other non-tax revenue	41.0	40.8	34.3	31.7	-8.2%	7.2%	34.5	35.1	36.0	4.3%	5.3%
Transfers received	272.9	251.6	273.4	279.2	0.8%	51.0%	322.3	336.8	351.9	8.0%	50.4%
Total revenue	433.6	411.2	589.0	833.9	24.4%	100.0%	570.8	606.9	627.6	-9.0%	100.0%
Expenses											
Current expenses	421.3	346.4	505.9	833.9	25.6%	95.4%	521.7	556.9	576.6	-11.6%	93.8%
Compensation of employees	291.8	231.6	255.4	283.6	-1.0%	52.4%	297.5	310.7	324.7	4.6%	47.3%
Goods and services	118.7	104.9	232.8	537.2	65.4%	40.6%	205.3	226.9	232.3	-24.4%	43.7%
Depreciation	9.4	9.3	16.6	13.1	11.8%	2.3%	17.3	17.6	18.0	11.0%	2.6%
Interest, dividends and rent on land	1.4	0.5	1.1	-	-100.0%	0.2%	1.6	1.6	1.7	-	0.2%
Transfers and subsidies	-	44.9	37.4	-	-	4.6%	49.1	50.1	51.1	-	6.2%
Total expenses	421.3	391.2	543.3	833.9	25.6%	100.0%	570.8	606.9	627.7	-9.0%	100.0%
Surplus/(Deficit)	12.3	20.0	45.7	-	-100.0%	-	-	-	-	-	-
Cash flow statement											
Cash flow from operating activities	108.6	62.0	(11.6)	13.1	-50.5%	100.0%	55.6	45.2	252.6	167.9%	100.0%
Receipts											
Non-tax receipts	322.4	327.1	609.4	554.7	19.8%	58.4%	365.1	367.4	374.7	-12.3%	55.8%
Sales of goods and services other than capital assets	314.1	320.6	602.3	545.7	20.2%	57.4%	356.0	358.1	365.2	-12.5%	54.6%
Other sales	194.4	201.7	321.0	22.7	-51.1%	24.8%	142.0	123.0	125.5	76.8%	14.5%
Other tax receipts	8.3	6.5	7.0	9.0	2.7%	1.0%	9.1	9.3	9.5	1.8%	1.3%
Transfers received	313.9	319.2	314.4	279.2	-3.8%	41.6%	322.3	336.8	351.9	8.0%	44.2%
Total receipts	636.3	646.3	923.7	833.9	9.4%	100.0%	687.4	704.2	726.6	-4.5%	100.0%
Payment											
Current payments	508.8	563.9	889.2	820.7	17.3%	97.0%	581.3	613.9	428.0	-19.5%	93.9%
Compensation of employees	285.6	252.0	331.8	283.6	-0.2%	41.8%	256.7	261.1	266.3	-2.1%	42.7%
Goods and services	223.2	311.9	557.5	537.2	34.0%	55.2%	324.6	352.8	161.7	-33.0%	51.1%
Transfers and subsidies	18.9	20.4	46.1	-	-100.0%	3.0%	50.5	45.1	46.0	-	6.1%
Total payments	527.7	584.3	935.4	820.7	15.9%	100.0%	631.8	659.0	474.0	-16.7%	100.0%
Net cash flow from investing activities	(2.0)	(7.2)	(19.7)	(7.8)	57.9%	100.0%	(8.1)	(8.1)	(8.0)	0.8%	100.0%
Acquisition of property, plant, equipment and intangible assets	(2.0)	(7.2)	(19.7)	(7.8)	56.9%	100.5%	(8.1)	(8.1)	(8.0)	0.8%	100.0%
Proceeds from the sale of property, plant, equipment and intangible assets	0.0	-	0.0	-	-100.0%	-0.5%	-	-	-	-	-
Net increase/(decrease) in cash and cash equivalents	106.6	54.8	(31.3)	5.4	-63.1%	8.5%	47.6	37.1	244.7	257.1%	13.5%

Table 35.26 Human Sciences Research Council statements of financial performance, cash flow and financial position (continued)

Statement of financial position		Audited outcome			Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
		2019/20	2020/21	2021/22				2022/23	2019/20 - 2022/23	2023/24		
R million												
Carrying value of assets of which:		414.5	274.1	277.8	299.2	-10.3%	55.7%	305.1	311.0	317.3	2.0%	62.1%
Acquisition of assets		(2.0)	(7.2)	(19.7)	(7.8)	56.9%	100.0%	(8.1)	(8.1)	(8.0)	0.8%	100.0%
Inventory		4.8	3.4	5.1	3.5	-9.7%	0.7%	3.0	3.1	2.1	-16.5%	0.6%
Receivables and prepayments		39.4	80.9	115.3	47.9	6.7%	12.5%	36.5	34.7	35.3	-9.6%	7.8%
Cash and cash equivalents		151.4	206.2	174.9	164.0	2.7%	30.9%	132.0	145.0	147.9	-3.4%	29.6%
Taxation		-	1.2	4.4	0.1	-	0.2%	0.1	0.1	0.1	19.3%	-
Total assets		610.2	565.8	577.6	514.7	-5.5%	100.0%	476.7	493.9	502.7	-0.8%	100.0%
Accumulated surplus/(deficit)		70.6	80.4	126.1	37.5	-19.0%	13.7%	33.4	38.5	39.3	1.5%	7.5%
Capital and reserves		392.8	255.1	256.0	255.1	-13.4%	50.8%	255.1	255.1	259.2	0.5%	51.6%
Deferred income		90.9	159.1	131.0	167.0	22.5%	24.5%	132.0	143.2	146.1	-4.4%	29.6%
Trade and other payables		28.5	56.4	50.2	36.0	8.1%	7.6%	36.7	37.2	38.0	1.8%	7.4%
Taxation		7.6	-	-	-	-100.0%	0.3%	-	-	-	-	-
Provisions		17.4	14.7	14.3	16.4	-1.9%	2.8%	16.8	17.1	17.4	2.0%	3.4%
Derivatives financial instruments		2.3	-	-	2.6	3.5%	0.2%	2.6	2.7	2.8	2.0%	0.5%
Total equity and liabilities		610.2	565.8	577.6	514.7	-5.5%	100.0%	476.7	493.9	502.7	-0.8%	100.0%

Personnel information

Table 35.27 Human Sciences Research Council personnel numbers and cost by salary level

Number of posts estimated for 31 March 2023		Number and cost ¹ of personnel posts filled/planned for on funded establishment															Average growth rate of personnel posts (%)	Average: Salary level/ Total (%)		
		Actual			Revised estimate			Medium-term expenditure estimate												
Number of funded posts	Number of approved establishment	2021/22			2022/23			2023/24			2024/25			2025/26			2022/23 - 2025/26			
		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost				
Human Sciences Research Council		420	420	464	255.4	0.6	420	283.6	0.7	463	297.5	0.6	463	310.7	0.7	463	324.7	0.7	3.3%	100.0%
Salary level																				
1 – 6	128	128	157	62.5	0.4	128	27.3	0.2	142	42.4	0.3	142	46.6	0.3	142	50.4	0.4	3.5%	30.6%	
7 – 10	216	216	219	111.0	0.5	216	142.0	0.7	193	108.6	0.6	193	113.6	0.6	193	117.4	0.6	-3.7%	44.1%	
11 – 12	50	50	62	64.0	1.0	50	62.6	1.3	90	87.9	1.0	90	89.9	1.0	90	91.9	1.0	21.6%	17.6%	
13 – 16	26	26	26	17.9	0.7	26	51.6	2.0	38	58.6	1.5	38	60.7	1.6	38	65.0	1.7	13.5%	7.7%	

1. Rand million.

National Research Foundation

Selected performance indicators

Table 35.28 National Research Foundation performance indicators by programme/objective/activity and related priority

Indicator	Programme/Objective/Activity	MTSF priority	Audited performance			Estimated performance	MTEF targets		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Number of grants awarded per year directed towards science engagement	Science engagement		- ¹	- ¹	55	120	130	140	145
Number of science engagement interventions implemented by research and science engagement infrastructure facilities across the national system of innovation per year	Science engagement	Priority 3: Education, skills and health	19	9	21	22	22	22	22
Number of postgraduate students funded by the National Research Foundation per year	Research and innovation support and advancement		11 167	11 093	7 414	6 308	5 554	5 466	5 451

Table 35.28 National Research Foundation performance indicators by programme/objective/activity and related priority (continued)

Indicator	Programme/Objective/Activity	MTSF priority	Audited performance			Estimated performance	MTEF targets		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Number of researchers funded by the National Research Foundation per year	Research and innovation support and advancement	Priority 3: Education, skills and health	3 985	3 000	4 521	4 118	4 119	4 119	4 723
Foreign income derived from the National Research Foundation's activities or operations per year	National research infrastructure platforms	Priority 2: Economic transformation and job creation	- ¹	R61.8m	R63.8m	R171.7m	R248.3m	R329.9m	R330.5m
Number of patient doses generated from radioisotopes produced by iThemba Labs per year	National research infrastructure platforms	Priority 3: Education, Skills and Health	- ¹	147 000	167 500	225 000	300 000	350 000	350 000
Number of active intellectual property products at the end of the relevant reporting period per year	National research infrastructure platforms	Priority 2: Economic transformation and job creation	- ¹	- ¹	10	8	10	8	8
Number of technical/policy briefs produced by the National Research Foundation per year	National research infrastructure platforms		- ¹	- ¹	30	28	29	28	28

1. No historical data available.

Entity overview

The National Research Foundation was established in terms of the National Research Foundation Act (1998), as amended. In terms of this legislation, the foundation is mandated to fund research, develop human resources and provide research facilities to enable knowledge creation, innovation and development in all fields of science and technology. It is also mandated to promote indigenous knowledge.

Over the MTEF period, the foundation will focus on implementing its 10-year strategy, Vision 2030. This involves interventions to catalyse transformation in the science and technology system through measures such as creating grant funding instruments that focus on women and black researchers; scaling up the development of a research and innovation workforce for renewing, regenerating and replenishing the cohort of South African researchers; establishing a transformed knowledge workforce with a greater diversity of people and ideas to lead the knowledge enterprise; and advancing the international competitiveness of the scientific workforce.

An estimated R5.4 billion over the MTEF period is allocated for capital expenditure. Included in this amount is R1.3 billion in new funding for major infrastructure investments for the Square Kilometre Array, which includes the science processing and regional centres, the science operations centre building, the engineering operations centre building, and fencing for the MeerKAT national park. Expenditure is expected to increase at an average annual rate of 5.3 per cent, from R4.3 billion in 2022/23 to R5 billion in 2025/26.

The foundation receives funding primarily through transfers from the department, which accounts for an estimated 88.6 per cent (R14.4 billion) of projected revenue over the MTEF period. These are expected to increase at an average annual rate of 1.5 per cent, from R4.3 billion in 2022/23 to R4.5 billion in 2025/26, due to the additional funding for infrastructure investments in the Square Kilometre Array. The remainder of the foundation's revenue is set to be derived through contract funding from other government departments and entities for specific projects and programmes, and income from sales and interest.

Programmes/Objectives/Activities**Table 35.29 National Research Foundation expenditure trends and estimates by programme/objective/activity**

R million	Audited outcome			Revised estimate	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2019/20	2020/21	2021/22		2022/23	2019/20 - 2022/23	Average: Expenditure/ Total (%)	2023/24	2024/25	2025/26	2022/23 - 2025/26
Administration	100.9	90.5	112.5	156.1	15.7%	2.8%	160.5	165.9	171.0	3.1%	3.4%
Science engagement	121.0	110.4	117.0	116.7	-1.2%	2.9%	123.8	127.9	132.1	4.2%	2.6%
Research and innovation support and advancement	2 471.3	2 235.3	2 498.3	2 486.7	0.2%	59.9%	2 909.4	2 747.1	2 844.0	4.6%	57.7%
National research infrastructure platforms	1 296.9	1 233.9	1 503.7	1 540.7	5.9%	34.4%	1 678.0	1 803.6	1 877.2	6.8%	36.2%
Total	3 990.2	3 670.1	4 231.5	4 300.2	2.5%	100.0%	4 871.7	4 844.5	5 024.3	5.3%	100.0%

Statements of financial performance, cash flow and financial position**Table 35.30 National Research Foundation statements of financial performance, cash flow and financial position**

Statement of financial performance											
R million	Audited outcome			Revised estimate	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2019/20	2020/21	2021/22		2022/23	2019/20 - 2022/23	Average: Expenditure/ Total (%)	2023/24	2024/25	2025/26	2022/23 - 2025/26
Revenue											
Non-tax revenue	447.7	417.2	493.5	496.3	3.5%	11.1%	680.6	664.8	575.9	5.1%	11.4%
Sale of goods and services other than capital assets	82.1	69.8	94.8	101.8	7.4%	2.1%	110.8	130.1	161.1	16.5%	2.4%
Other non-tax revenue	365.6	347.4	398.7	394.5	2.6%	9.0%	569.8	534.7	414.8	1.7%	9.0%
Transfers received	3 496.5	3 157.1	3 972.8	4 334.2	7.4%	88.9%	5 244.9	4 654.6	4 526.8	1.5%	88.6%
Total revenue	3 944.3	3 574.2	4 466.4	4 830.4	7.0%	100.0%	5 925.5	5 319.4	5 102.7	1.8%	100.0%
Expenses											
Current expenses	1 590.5	1 542.9	1 809.6	1 904.9	6.2%	42.2%	2 088.0	2 227.6	2 331.8	7.0%	44.9%
Compensation of employees	763.3	822.7	801.3	1 033.9	10.6%	21.1%	1 115.4	1 209.7	1 275.6	7.3%	24.3%
Goods and services	553.5	447.1	756.1	553.7	-	14.2%	656.8	675.0	691.6	7.7%	13.5%
Depreciation	273.7	273.1	252.1	317.3	5.0%	6.9%	315.7	342.9	364.6	4.7%	7.0%
Interest, dividends and rent on land	0.0	0.0	0.0	-	-100.0%	-	-	-	-	-	-
Transfers and subsidies	2 399.7	2 127.2	2 422.0	2 395.3	-0.1%	57.8%	2 783.8	2 617.0	2 692.5	4.0%	55.1%
Total expenses	3 990.2	3 670.1	4 231.5	4 300.2	2.5%	100.0%	4 871.7	4 844.5	5 024.3	5.3%	100.0%
Surplus/(Deficit)	(45.9)	(95.9)	234.9	530.2	-326.1%		1 053.7	474.8	78.3	-47.1%	
Cash flow statement											
Cash flow from operating activities	403.9	167.7	348.3	807.7	26.0%	100.0%	1 345.3	806.4	428.7	-19.0%	100.0%
Receipts											
Non-tax receipts	129.9	109.7	87.2	180.8	11.7%	3.0%	146.8	176.2	196.6	2.8%	3.4%
Sales of goods and services other than capital assets	71.4	74.3	47.0	155.8	29.7%	2.0%	121.8	151.1	171.6	3.3%	2.9%
Other tax receipts	58.5	35.4	40.2	25.0	-24.7%	1.0%	25.0	25.0	25.0	-	0.5%
Transfers received	3 737.4	3 111.1	4 026.3	4 334.2	5.1%	90.3%	5 244.9	4 654.6	4 526.8	1.5%	89.1%
Financial transactions in assets and liabilities	340.0	141.9	381.7	285.1	-5.7%	6.7%	504.7	460.5	362.6	8.4%	7.6%
Total receipts	4 207.2	3 362.7	4 495.3	4 800.0	4.5%	100.0%	5 896.4	5 291.2	5 086.0	1.9%	100.0%
Payment											
Current payments	1 411.3	1 220.4	1 710.0	1 582.2	3.9%	39.0%	1 777.3	1 887.8	1 969.7	7.6%	40.8%
Compensation of employees	767.5	805.0	803.8	1 033.9	10.4%	22.7%	1 115.4	1 209.7	1 275.6	7.3%	26.2%
Goods and services	643.8	415.3	906.1	548.3	-5.2%	16.4%	661.9	678.1	694.1	8.2%	14.6%
Interest and rent on land	-	0.0	0.0	-	-	-	-	-	-	-	-
Transfers and subsidies	2 392.0	1 974.7	2 436.9	2 410.2	0.3%	61.0%	2 773.8	2 597.0	2 687.5	3.7%	59.2%
Total payments	3 803.3	3 195.0	4 146.9	3 992.4	1.6%	100.0%	4 551.1	4 484.8	4 657.3	5.3%	100.0%
Net cash flow from investing activities	(200.6)	(196.2)	(483.8)	(854.8)	62.1%	100.0%	(1 375.3)	(826.4)	(448.7)	-19.3%	100.0%
Acquisition of property, plant, equipment and intangible assets	(173.9)	(173.0)	(474.1)	(849.8)	69.7%	93.1%	(1 368.5)	(821.3)	(445.5)	-19.4%	99.4%
Acquisition of software and other intangible assets	(27.3)	(23.3)	(10.1)	(5.0)	-43.2%	7.0%	(6.7)	(5.1)	(3.2)	-14.2%	0.6%
Proceeds from the sale of property, plant, equipment and intangible assets	0.6	0.1	0.5	-	-100.0%	-0.1%	-	-	-	-	-
Net cash flow from financing activities	(0.0)	-	-	-	-100.0%	-	-	-	-	-	-
Repayment of finance leases	(0.0)	-	-	-	-100.0%	-	-	-	-	-	-
Net increase/(decrease) in cash and cash equivalents	203.3	(28.5)	(135.5)	(47.1)	-161.4%	-	(30.0)	(20.0)	(20.0)	-24.9%	-0.6%

Table 35.30 National Research Foundation statements of financial performance, cash flow and financial position (continued)

Statement of financial position		Audited outcome			Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
		2019/20	2020/21	2021/22				2022/23	2019/20 - 2022/23	2023/24		
R million												
Carrying value of assets		2 553.9	2 470.6	2 700.4	3 237.9	8.2%	60.0%	4 297.4	4 780.9	4 865.0	14.5%	71.9%
of which:												
Acquisition of assets		(173.9)	(173.0)	(474.1)	(849.8)	69.7%	100.0%	(1 368.5)	(821.3)	(445.5)	-19.4%	100.0%
Investments		12.6	7.4	543.5	558.4	254.0%	5.9%	548.4	528.4	523.4	-2.1%	9.2%
Inventory		5.1	7.9	12.6	8.3	17.7%	0.2%	8.4	8.5	9.0	2.9%	0.1%
Receivables and prepayments		1 024.3	964.8	556.9	505.0	-21.0%	17.0%	496.5	476.5	466.0	-2.6%	8.3%
Cash and cash equivalents		861.1	832.6	697.1	650.0	-8.9%	16.8%	620.0	600.0	580.0	-3.7%	10.5%
Defined benefit plan assets		2.2	2.4	0.5	0.5	-39.3%	-	0.5	-	-	-100.0%	-
Total assets		4 459.2	4 285.8	4 510.9	4 960.0	3.6%	100.0%	5 971.1	6 394.3	6 443.4	9.1%	100.0%
Accumulated surplus/(deficit)		5.6	3.2	7.3	-	-100.0%	0.1%	-	-	-	-	-
Capital and reserves		114.4	104.2	105.2	105.2	-2.8%	2.4%	99.4	90.7	84.9	-6.9%	1.6%
Capital reserve fund		2 553.9	2 470.6	2 700.4	3 237.9	8.2%	60.0%	4 297.4	4 780.9	4 865.0	14.5%	71.9%
Deferred income		1 667.5	1 566.7	1 559.2	1 477.0	-4.0%	34.6%	1 439.4	1 390.7	1 363.5	-2.6%	24.2%
Trade and other payables		117.8	141.1	138.9	140.0	5.9%	3.0%	135.0	132.0	130.0	-2.4%	2.3%
Total equity and liabilities		4 459.2	4 285.8	4 510.9	4 960.0	3.6%	100.0%	5 971.1	6 394.3	6 443.4	9.1%	100.0%

Personnel information

Table 35.31 National Research Foundation personnel numbers and cost by salary level

Number of posts estimated for 31 March 2023		Number and cost ¹ of personnel posts filled/planned for on funded establishment										Average growth rate of personnel posts (%)	Average: Salary level/ Total (%)				
Number of approved funded posts	Number of posts on establishment	Actual		Revised estimate			Medium-term expenditure estimate							2022/23 - 2025/26			
		2021/22		2022/23			2023/24		2024/25		2025/26						
National Research Foundation		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	
Salary level	1 386	1 386	1 386	801.3	0.6	1 386	1 033.9	0.7	1 386	1 115.4	0.8	1 386	1 209.7	0.9	1 386	1 275.6	0.9
1 – 6	210	210	210	36.5	0.2	210	55.9	0.3	210	59.8	0.3	210	64.8	0.3	210	68.3	0.3
7 – 10	851	851	851	393.6	0.5	851	471.6	0.6	851	498.6	0.6	851	540.7	0.6	851	570.2	0.7
11 – 12	213	213	213	193.3	0.9	213	265.5	1.2	213	296.6	1.4	213	321.7	1.5	213	339.2	1.6
13 – 16	107	107	107	160.8	1.5	107	228.7	2.1	107	232.4	2.2	107	252.0	2.4	107	265.8	2.5
17 – 22	5	5	5	17.1	3.4	5	12.2	2.4	5	28.0	5.6	5	30.4	6.1	5	32.1	6.4

1. Rand million.

South African National Space Agency

Selected performance indicators

Table 35.32 South African National Space Agency performance indicators by programme/objective/activity and related priority

Indicator	Programme/Objective/Activity	MTSF priority	Audited performance			Estimated performance	MTEF targets		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Number of students and interns supported for formalised training per year	Earth observation	Priority 3: Education, skills and health	54	60	50	70	90	90	90
Total revenue generated from space operation activities per year	Space operation	Priority 2: Economic transformation and job creation	R100m	R75.7m	R69m	R70m	R72m	R73m	R73m
Number of students and interns supported for formalised training per year	Space science	Priority 3: Education, skills and health	25	25	21	28	36	40	40
Number of joint initiatives undertaken through formal international partnerships per year	Space science	Priority 1: A capable, ethical and developmental state	- ¹	5	3	3	3	5	5

Table 35.32 South African National Space Agency performance indicators by programme/objective/activity and related priority (continued)

Indicator	Programme/Objective/Activity	MTSF priority	Audited performance			Estimated performance	MTEF targets		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Number of joint initiatives undertaken through formal national partnerships per year	Earth observation	Priority 1: A capable, ethical and developmental state	- ¹	- ¹	8	9	10	12	12
Number of awareness and training interventions to key users of space-related products and services per year	Space science		- ¹	9	5	5	5	8	8

1. No historical data available.

Entity overview

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

Space services provide an indispensable tool for the formulation of government decisions and policies by helping to provide knowledge on and address challenges in industries such as agriculture, water, energy, health, safety and security. Over the medium term, the agency will continue to focus on activities that ensure that these services are integrated into service delivery. Key among these is the space infrastructure hub project, where the agency plans to develop spacecraft and ground segment infrastructure to support deep space operations, earth observation and space science operations. The build phase to develop satellites is expected to begin in 2023/24 and operations in 2024/25. The agency is allocated an additional R775 million in 2023/24 and R434 million 2024/25 for this purpose.

The agency's expenditure is expected to decrease at an average annual rate of 16.5 per cent, from R563.4 million in 2022/23 to R327.5 million in 2025/26, due to one-off allocations of R774 million in 2023/24 and R434 million in 2024/25 for the space infrastructure hub project. As the agency relies on highly skilled professionals to fulfil its mandate, compensation of employees comprises an estimated 34.6 per cent (R651.4 million) of total spending over the period ahead.

Transfers from the department account for an estimated 75.2 per cent (R1.9 billion) of the agency's revenue over the period ahead, decreasing at an average annual rate of 11.9 per cent, from R343.8 million in 2022/23 to R235.4 million in 2025/26, as a result of the additional allocation for the space infrastructure hub project.

Programmes/Objectives/Activities

Table 35.33 South African National Space Agency expenditure trends and estimates by programme/objective/activity

R million	Audited outcome				Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2019/20	2020/21	2021/22	2022/23				2023/24	2024/25	2025/26		
Administration	51.0	60.1	68.9	94.9	23.0%	20.4%	56.6	58.7	73.2	-8.3%	12.7%	
Earth observation	68.1	66.5	66.7	122.4	21.6%	23.7%	158.9	379.5	73.6	-15.6%	25.1%	
Space operation	88.9	81.6	91.5	134.6	14.8%	29.7%	264.5	150.9	76.2	-17.3%	21.9%	
Space science	54.5	50.2	64.6	122.9	31.1%	20.7%	109.8	134.9	73.0	-16.0%	17.2%	
Space engineering	5.8	4.6	7.0	88.6	148.5%	5.5%	516.8	186.5	31.5	-29.2%	23.1%	
Total	268.3	263.1	298.7	563.4	28.1%	100.0%	1 106.7	910.5	327.5	-16.5%	100.0%	

Statements of financial performance, cash flow and financial position**Table 35.34 South African National Space Agency statements of financial performance, cash flow and financial position**

Statement of financial performance												
R million	Audited outcome				Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2019/20	2020/21	2021/22	2022/23				2019/20 - 2022/23	2023/24	2024/25		
Revenue												
Non-tax revenue	112.9	81.8	83.0	219.6	24.8%	32.1%	85.9	221.2	92.0	-25.2%	24.8%	
Sale of goods and services other than capital assets	102.9	75.6	75.0	81.7	-7.4%	24.0%	80.8	216.1	86.7	2.0%	18.0%	
Other non-tax revenue	10.0	6.1	8.0	137.9	139.6%	8.1%	5.1	5.1	5.4	-66.1%	6.8%	
Transfers received	205.3	200.8	249.8	343.8	18.8%	67.9%	1 020.7	689.3	235.4	-11.9%	75.2%	
Total revenue	318.2	282.5	332.8	563.4	21.0%	100.0%	1 106.7	910.5	327.5	-16.5%	100.0%	
Expenses												
Current expenses	263.0	256.4	276.6	516.1	25.2%	94.9%	1 084.3	890.2	327.1	-14.1%	96.8%	
Compensation of employees	125.1	130.5	155.4	174.6	11.7%	44.8%	199.1	249.7	202.6	5.1%	34.6%	
Goods and services	115.6	104.2	101.2	341.5	43.5%	44.3%	885.2	640.5	124.5	-28.6%	62.2%	
Depreciation	22.3	21.7	19.9	-	-100.0%	5.8%	-	-	-	-	-	
Transfers and subsidies	5.3	6.7	22.1	47.3	107.2%	5.1%	22.3	20.3	0.3	-80.7%	3.2%	
Total expenses	268.3	263.1	298.7	563.4	28.1%	100.0%	1 106.7	910.5	327.5	-16.5%	100.0%	
Surplus/(Deficit)	49.9	19.4	34.1	-	-100.0%	-	-	-	-	-	-	
Cash flow statement												
Cash flow from operating activities	122.3	74.0	75.2	199.9	17.8%	100.0%	51.7	48.7	12.9	-59.9%	100.0%	
Receipts												
Non-tax receipts	113.8	81.8	82.9	219.6	24.5%	32.1%	85.9	89.2	92.0	-25.2%	29.9%	
Sales of goods and services other than capital assets	105.0	77.3	78.2	214.2	26.8%	30.5%	81.3	84.5	87.2	-25.9%	28.6%	
Other sales	0.8	1.7	3.2	132.4	448.8%	6.3%	0.4	0.5	0.5	-84.6%	6.0%	
Other tax receipts	8.8	4.4	4.7	5.5	-14.5%	1.7%	4.7	4.7	4.9	-3.9%	1.3%	
Transfers received	205.3	200.8	249.8	343.8	18.8%	67.9%	245.7	255.3	226.1	-13.0%	70.1%	
Total receipts	319.0	282.5	332.7	563.4	20.9%	100.0%	331.7	344.5	318.2	-17.3%	100.0%	
Payment												
Current payments	196.7	208.6	257.4	363.5	22.7%	100.0%	280.0	295.8	305.3	-5.7%	100.0%	
Compensation of employees	125.1	130.5	153.1	174.6	11.7%	58.4%	188.3	198.0	203.7	5.3%	62.2%	
Goods and services	71.6	78.0	104.3	188.9	38.2%	41.6%	91.7	97.8	101.6	-18.7%	37.8%	
Total payments	196.7	208.6	257.4	363.5	22.7%	100.0%	280.0	295.8	305.3	-5.7%	100.0%	
Net cash flow from investing activities	(40.4)	(15.1)	(26.5)	(152.6)	55.8%	100.0%	(29.3)	(28.4)	(6.0)	-65.9%	100.0%	
Acquisition of property, plant, equipment and intangible assets	(32.9)	(13.7)	(24.7)	(150.5)	66.0%	91.0%	(29.3)	(28.2)	(5.5)	-66.8%	97.4%	
Acquisition of software and other intangible assets	(7.4)	(1.4)	(1.8)	(2.1)	-34.9%	9.0%	-	(0.2)	(0.5)	-37.6%	2.6%	
Net increase/(decrease) in cash and cash equivalents	81.9	58.8	48.7	47.3	-16.7%	19.4%	22.3	20.3	6.8	-47.5%	3.7%	
Statement of financial position												
Carrying value of assets	489.5	480.2	505.7	531.0	2.8%	62.6%	557.6	585.4	611.7	4.8%	60.4%	
<i>of which:</i>												
Acquisition of assets	(32.9)	(13.7)	(24.7)	(150.5)	66.0%	100.0%	(29.3)	(28.2)	(5.5)	-66.8%	100.0%	
Inventory	0.4	0.4	0.5	0.6	9.6%	0.1%	0.6	0.6	0.6	4.8%	0.1%	
Receivables and prepayments	38.9	24.7	20.1	21.1	-18.4%	3.3%	22.2	23.3	24.4	4.8%	2.4%	
Cash and cash equivalents	203.0	261.8	310.6	326.1	17.1%	34.0%	342.4	359.5	375.7	4.8%	37.1%	
Total assets	731.9	767.1	837.0	878.8	6.3%	100.0%	922.8	968.9	1 012.3	4.8%	100.0%	
Accumulated surplus/(deficit)	609.6	629.0	663.1	696.3	4.5%	80.9%	731.1	767.7	802.0	4.8%	79.2%	
Borrowings	-	0.2	0.1	0.1	-	-	0.1	0.1	0.2	4.8%	-	
Deferred income	90.3	101.2	114.1	119.9	9.9%	13.2%	125.8	132.1	138.1	4.8%	13.6%	
Trade and other payables	23.4	26.0	37.0	38.8	18.4%	3.9%	40.8	42.8	44.7	4.8%	4.4%	
Provisions	8.5	10.8	22.6	23.7	40.6%	2.0%	24.9	26.2	27.3	4.8%	2.7%	
Total equity and liabilities	731.9	767.1	837.0	878.8	6.3%	100.0%	922.8	968.9	1 012.3	4.8%	100.0%	

Personnel information**Table 35.35 South African National Space Agency personnel numbers and cost by salary level**

Number of posts estimated for 31 March 2023			Number and cost ¹ of personnel posts filled/planned for on funded establishment															Average growth rate of personnel posts (%)	Average: Salary level/ Total (%)
Number of funded posts	Number of approved posts on establishment	206	Actual			Revised estimate			Medium-term expenditure estimate									2022/23 - 2025/26	2022/23 - 2025/26
			2021/22		2022/23		2023/24			2024/25			2025/26						
			Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost		
South African National Space Agency			206	155.4	0.8	203	174.6	0.9	219	199.1	0.9	250	249.7	1.0	207	202.6	1.0	0.7%	100.0%
Salary level	206	206	206	155.4	0.8	203	174.6	0.9	219	199.1	0.9	250	249.7	1.0	207	202.6	1.0	0.7%	100.0%
1 – 6	6	6	6	1.2	0.2	6	0.8	0.1	6	0.9	0.1	6	0.9	0.2	6	1.0	0.2	–	2.7%
7 – 10	113	113	113	57.8	0.5	113	59.6	0.5	113	63.1	0.6	113	66.4	0.6	113	69.5	0.6	–	51.8%
11 – 12	26	26	26	22.7	0.9	26	23.4	0.9	27	26.0	1.0	27	27.3	1.0	26	27.3	1.0	–	12.1%
13 – 16	61	61	61	73.8	1.2	58	90.8	1.6	73	109.1	1.5	104	155.1	1.5	62	104.9	1.7	2.2%	33.4%

1. Rand million.

Technology Innovation Agency**Selected performance indicators****Table 35.36 Technology Innovation Agency performance indicators by programme/objective/activity and related priority**

Indicator	Programme/Objective/Activity	MTSF priority	Audited performance			Estimated performance	MTEF targets		
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Number of licensed or assigned technologies per year	Provide technology development funding and support in strategic high-impact areas	Priority 2: Economic transformation and job creation	– ¹	6	9	15	20	25	25
Number of successfully diffused technologies per year	Provide technology development funding and support in strategic high-impact areas		– ¹	5	9	15	20	24	24
Number of products launched per year	Provide technology development funding and support in strategic high-impact areas		– ¹	21	22	28	29	36	36
Total value leveraged through signed agreements entered into with other parties per year	Provide an enabling environment for technology innovation		– ¹	R1.37bn	R239m	R250m	R275m	R305m	R305m
Number of honours, masters and postdoctoral students admitted within technology station activities per year	Technology development stations		– ¹	– ¹	95	121	130	150	153
Number of patents, publication outputs and knowledge-based products (such as prototypes, technology demonstrators and technology assistance packages) produced per year	Technology development stations		– ¹	49	130	149	165	180	180
Number of existing, operational and functional technology platforms per year	Provide bioeconomy programmes and platforms	Priority 3: Education, skills and health	– ¹	7	8	8	8	8	8

1. No historical data available.

Entity overview

The Technology Innovation Agency draws its mandate from the Technology Innovation Agency Act (2008), as amended. The agency serves as the key institutional intervention to bridge the innovation gap between research and development outcomes from higher education institutions, science councils, public entities and private companies to maximise the potential of technological innovation for stimulating the economy.

Over the medium term, the agency will continue to focus on bridging the innovation gap between research and development; supporting technologies within the national system of innovation; scaling up all strategic programmes by increasing the pace at which applications and internal processes occur; creating a conducive environment for engaging with innovators, stakeholders and suppliers; adopting measures to support small, medium and micro enterprises in the sector; and increasing the participation of marginalised segments of society. To give effect to this focus, over the next 3 years, the agency aims to license 70 technological innovations, launch 101 products into the market and ensure that 24 technology innovations are operational and functional.

Transfers, mainly for supporting small, medium and micro enterprises with the commercialisation of innovative technologies, account for an estimated 72.7 per cent (R1.4 billion) of the agency’s planned expenditure over the period ahead. Expenditure is set to increase at an average annual rate of 0.2 per cent, from R649.8 million in 2022/23 to R653.4 million in 2025/26. As human resources are central to the agency’s operations, spending on compensation of employees accounts for an estimated 19.2 per cent (R367.5 million) of expenditure, increasing from R120.2 million in 2022/23 to R126.1 million in 2025/26 at an average annual rate of 1.6 per cent.

The agency receives most of its revenue through transfers from the department. These are set to increase at an average annual rate of 0.1 per cent, from R634.8 million in 2022/23 to R632.5 million in 2025/26.

Programmes/Objectives/Activities

Table 35.37 Technology Innovation Agency expenditure trends and estimates by programme/objective/activity

	Audited outcome			Revised estimate	Average growth rate (%)	Average: Expenditure/Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/Total (%)
	2019/20	2020/21	2021/22				2022/23	2019/20 - 2022/23	2023/24		
R million											
Administration	166.3	149.4	157.2	170.7	0.9%	26.3%	171.1	171.8	179.5	1.7%	27.3%
Provide customer-centric, early-stage commercialisation for technology development	84.0	79.6	86.0	103.2	7.1%	14.4%	75.6	80.6	84.2	-6.6%	13.5%
Provide an enabling environment for technology innovation	43.0	28.1	41.9	61.1	12.4%	7.0%	62.2	60.5	63.2	1.2%	9.7%
Provide bioeconomy programmes and platforms	228.5	197.2	218.9	242.2	2.0%	36.2%	210.8	220.5	230.3	-1.7%	35.6%
Technology development stations	98.0	114.4	107.3	72.7	-9.5%	16.2%	92.0	92.0	96.1	9.8%	13.9%
Total	619.7	568.7	611.3	649.8	1.6%	100.0%	611.7	625.4	653.4	0.2%	100.0%

Statements of financial performance, cash flow and financial position

Table 35.38 Technology Innovation Agency statements of financial performance, cash flow and financial position

Statement of financial performance											
	Audited outcome			Revised estimate	Average growth rate (%)	Average: Expenditure/Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/Total (%)
	2019/20	2020/21	2021/22				2022/23	2019/20 - 2022/23	2023/24		
R million											
Revenue											
Non-tax revenue	162.8	12.9	14.5	15.0	-54.8%	8.4%	16.0	20.0	20.9	11.7%	2.8%
Other non-tax revenue	162.8	12.9	14.5	15.0	-54.8%	8.4%	16.0	20.0	20.9	11.7%	2.8%
Transfers received	440.9	569.7	619.3	634.8	12.9%	91.6%	595.7	605.4	632.5	-0.1%	97.2%
Total revenue	603.8	582.6	633.9	649.8	2.5%	100.0%	611.7	625.4	653.4	0.2%	100.0%
Expenses											
Current expenses	166.3	149.4	157.2	170.7	0.9%	26.3%	171.1	171.8	179.5	1.7%	27.3%
Compensation of employees	109.0	101.1	107.9	120.2	3.3%	17.9%	120.7	120.7	126.1	1.6%	19.2%
Goods and services	51.1	43.9	45.7	43.9	-4.9%	7.5%	44.4	45.1	47.1	2.4%	7.1%
Depreciation	6.2	4.5	3.6	6.6	2.1%	0.8%	6.0	6.0	6.3	-1.6%	1.0%
Transfers and subsidies	453.5	419.2	454.1	479.1	1.9%	73.7%	440.6	453.6	473.9	-0.4%	72.7%
Total expenses	619.7	568.7	611.3	649.8	1.6%	100.0%	611.7	625.4	653.4	0.2%	100.0%
Surplus/(Deficit)	(16.0)	14.0	22.6	-	-100.0%	-	-	-	-	-	-

Table 35.38 Technology Innovation Agency statements of financial performance, cash flow and financial position (continued)

Cash flow statement		Audited outcome			Revised estimate	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
		2019/20	2020/21	2021/22		2019/20	2022/23	2023/24	2024/25	2025/26		
R million												
Cash flow from operating activities		(152.2)	(124.9)	(164.7)	0.0	-101.1%	100.0%	(0.0)	(0.0)	(0.0)	-220.2%	100.0%
Receipts												
Non-tax receipts		10.5	6.5	8.0	10.5	-	1.9%	10.5	13.5	14.1	10.3%	2.5%
Other tax receipts		10.5	6.5	8.0	10.5	-	1.9%	10.5	13.5	14.1	10.3%	2.5%
Transfers received		451.0	408.8	447.7	458.4	0.5%	97.4%	460.1	480.8	502.3	3.1%	96.4%
Financial transactions in assets and liabilities		3.5	1.4	2.6	4.5	8.6%	0.7%	5.5	6.5	6.8	14.7%	1.2%
Total receipts		465.0	416.7	458.3	473.4	0.6%	100.0%	476.1	500.8	523.2	3.4%	100.0%
Payment												
Current payments		241.1	133.4	173.3	170.7	-10.9%	31.9%	171.1	171.8	179.5	1.7%	35.1%
Compensation of employees		109.0	101.1	107.7	120.2	3.3%	19.8%	120.7	120.7	126.1	1.6%	24.7%
Goods and services		132.1	32.4	65.6	50.5	-27.4%	12.1%	50.4	51.1	53.4	1.9%	10.4%
Transfers and subsidies		376.0	408.2	449.8	302.7	-7.0%	68.1%	305.0	329.0	343.8	4.3%	64.9%
Total payments		617.2	541.6	623.1	473.4	-8.5%	100.0%	476.1	500.8	523.2	3.4%	100.0%
Net cash flow from investing activities		2.6	(0.4)	3.7	-	-100.0%	-	-	-	-	-	-
Acquisition of property, plant, equipment and intangible assets		(1.9)	(1.3)	(1.4)	-	-100.0%	-	-	-	-	-	-
Acquisition of software and other intangible assets		(0.7)	(0.2)	-	-	-100.0%	-	-	-	-	-	-
Proceeds from the sale of property, plant, equipment and intangible assets		-	-	0.1	-	-	-	-	-	-	-	-
Other flows from investing activities		5.1	1.1	5.0	-	-100.0%	-	-	-	-	-	-
Net cash flow from financing activities		127.9	222.3	355.3	-	-100.0%	-	-	-	0.0	-	-
Deferred income		143.3	222.3	355.3	-	-100.0%	-	-	-	0.0	-	-
Borrowing activities		(15.4)	-	-	-	-100.0%	-	-	-	-	-	-
Net increase/(decrease) in cash and cash equivalents		(21.7)	97.0	194.3	0.0	-102.1%	11.3%	(0.0)	(0.0)	(0.0)	-156.2%	-
Statement of financial position												
Carrying value of assets		13.1	8.5	5.9	18.6	12.3%	6.4%	20.6	23.0	24.0	8.9%	16.6%
<i>of which:</i>												
Acquisition of assets		(1.9)	(1.3)	(1.4)	-	-100.0%	-	-	-	-	-	-
Investments		9.3	12.5	9.2	3.0	-31.4%	3.3%	3.0	3.0	3.1	1.5%	2.3%
Loans		34.7	25.4	23.9	23.3	-12.4%	12.4%	23.3	23.3	24.3	1.5%	18.2%
Receivables and prepayments		4.8	4.5	7.9	4.1	-5.0%	2.2%	4.3	4.5	4.7	4.7%	3.4%
Cash and cash equivalents		147.5	242.0	436.2	71.9	-21.3%	75.7%	75.1	78.9	82.4	4.7%	59.5%
Total assets		209.5	293.0	483.1	121.0	-16.7%	100.0%	126.4	132.7	138.7	4.7%	100.0%
Accumulated surplus/(deficit)		66.2	80.1	102.7	72.5	3.1%	35.0%	75.8	79.6	83.2	4.7%	60.0%
Capital reserve fund		88.4	147.2	330.8	26.1	-33.4%	45.6%	27.3	28.7	29.9	4.7%	21.6%
Finance lease		0.3	0.2	0.1	0.5	17.9%	0.2%	0.6	0.6	0.6	4.7%	0.4%
Trade and other payables		53.9	65.0	49.2	21.4	-26.5%	19.0%	22.4	23.5	24.6	4.7%	17.7%
Derivatives financial instruments		0.7	0.4	0.2	0.3	-22.9%	0.2%	0.4	0.4	0.4	4.7%	0.3%
Total equity and liabilities		209.5	293.0	483.1	121.0	-16.7%	100.0%	126.4	132.7	138.7	4.7%	100.0%

Personnel information

Table 35.39 Technology Innovation Agency personnel numbers and cost by salary level

Number of posts estimated for 31 March 2023		Number and cost ¹ of personnel posts filled/planned for on funded establishment															Average growth rate of personnel posts (%)	Average: Salary level/ Total (%)		
		Actual			Revised estimate			Medium-term expenditure estimate												
Number of funded posts	Number of posts on approved establishment	2021/22			2022/23			2023/24			2024/25			2025/26			2022/23 - 2025/26			
		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost				
Technology Innovation Agency		158	178	153	107.9	0.7	153	120.2	0.8	155	120.7	0.8	160	120.7	0.8	165	126.1	0.8	2.5%	100.0%
Salary level																				
1 - 6	18	19	26	2.8	0.1	18	2.3	0.1	19	2.3	0.1	44	6.6	0.2	47	6.9	0.1	37.7%	20.0%	
7 - 10	74	74	75	40.0	0.5	74	41.4	0.6	75	41.4	0.6	85	53.5	0.6	85	55.9	0.7	4.7%	50.3%	
11 - 12	36	51	27	28.7	1.1	34	31.4	0.9	34	31.4	0.9	22	23.2	1.1	22	24.3	1.1	-13.5%	17.8%	
13 - 16	29	33	24	34.3	1.4	27	42.4	1.6	27	42.9	1.6	6	32.7	5.5	7	34.2	4.9	-36.2%	10.8%	
17 - 22	1	1	1	2.3	2.3	-	2.8	-	-	2.8	-	3	4.6	1.5	4	4.8	1.2	-	1.1%	

1. Rand million.

