

Vote 30

Science and Technology

Adjusted budget summary

| R thousand | 2016/17 | | | |
|----------------------------------|--|------------------------|----------|----------|
| | Main appropriation | Adjusted appropriation | Decrease | Increase |
| Amount to be appropriated | 7 428 996 | 7 428 996 | - | - |
| of which: | | | | |
| Current payments | 509 703 | 532 334 | - | 22 631 |
| Transfers and subsidies | 6 916 984 | 6 872 197 | (44 787) | - |
| Payments for capital assets | 2 309 | 24 465 | - | 22 156 |
| Executive authority | Minister of Science and Technology | | | |
| Accounting officer | Director-General of Science and Technology | | | |
| Website address | www.dst.gov.za | | | |

Vote purpose

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

Mid-year performance status

| Indicator | Programme | Outcome | Annual performance | | |
|--|---|--|--|--|----------------------------|
| | | | Projected for 2016/17 as published in the 2016 ENE | Achieved in the first six months of 2016/17 (April to September) | Changed target for 2016/17 |
| Number of instruments (space science, energy, bio innovation, nanotechnology, robotics, photonics, indigenous knowledge systems, intellectual property management, technology transfer and technology commercialisation) funded in support of knowledge utilisation per year | Technology Innovation | Outcome 4: Decent employment through inclusive economic growth | 25 | 12 | - |
| Number of knowledge application products funded in designated areas (prototypes, technology demonstrators) per year ¹ | Technology Innovation | | 13 | 0 | - |
| Amount of international funds per year directly invested in research and science, technology and innovation human capital development programmes, as well as research infrastructure investments in South Africa accounted for as part of cooperation initiatives implemented by the Department of Science and Technology | International Cooperation and Resources | | R400m | - | - |
| Number of international partner organisations (legal entities) per year collaborating with South African partners within the framework of formalised collaborative research and innovation or science, technology and innovation human capital development projects as part of cooperation initiatives facilitated by the Department of Science and Technology | International Cooperation and Resources | | 450 | 95 | - |
| Total number of PhD students awarded bursaries as reflected in National Research Foundation project reports | Research, Development and Support | | 3 136 | 2 892 | - |

2016 Adjusted Estimates of National Expenditure

| Indicator | Programme | Outcome | Annual performance | | |
|---|--|--|--|--|----------------------------|
| | | | Projected for 2016/17 as published in the 2016 ENE | Achieved in the first six months of 2016/17 (April to September) | Changed target for 2016/17 |
| Total number of pipeline postgraduate students (BTech and honours, and masters), awarded bursaries through programmes managed by the National Research Foundation and the Department of Science and Technology, as reflected in the foundation's and the department's project reports | Research, Development and Support | Outcome 5: A skilled and capable workforce to support an inclusive growth path | 10 996 | 8 044 | - |
| Total number of researchers awarded research grants through programmes managed by the National Research Foundation, as reflected in the foundation's project reports | Research, Development and Support | | 4 539 | 3 805 | - |
| Number of knowledge and innovation products (patents, prototypes, technology demonstrators or technology transfer packages) added to the intellectual property portfolio through fully funded or co-funded research initiatives per year | Socio-Economic Innovation Partnerships | Outcome 4: Decent employment through inclusive economic growth | 35 | 3 | - |

1. There are no targets set for the first two quarters.

Mid-year progress

While the performance for some indicators for the first six months of 2016/17 has been slow and below target, the department expects to achieve all its targets by year-end.

Progress was slow on the amount of international funds per year directly invested in the research and science, technology and innovation human capital development programme, as well as research infrastructure investment in South Africa accounted for as part of cooperation initiatives implemented by the department. This was because all the criteria for finalising the partnership have not yet been met.

Progress was also slow for the number of international partner organisations per year collaborating with South African partners within the framework of formalised collaborative research and innovation or science, technology and innovation human capital development projects as part of cooperation initiatives facilitated by the department. This was because the official documentation confirming the participation of the international partner organisations in the international cooperation initiative is dependent on the protocols of the partner government responsible for the cooperation initiative and often results in delays in obtaining documentation.

The slow progress in the number of knowledge and innovation products (patents, prototypes, technology demonstrators or technology transfer packages) added to the intellectual property portfolio through fully funded or co-funded research initiatives per year is because the initiatives are still in the planning phase. The department is monitoring the progress of the innovation products through the quarterly reports, which will be finalised in the fourth quarter of 2016/17.

Adjusted Estimates of National Expenditure 2016

| Programme | 2016/17 | | | | | | | |
|---|--------------------|---------------------------|----------------------|------------------------|-------------------|----------|---------------------------------|------------------------|
| | Main appropriation | Adjustments appropriation | | | | | Total adjustments appropriation | Adjusted appropriation |
| Roll-overs | | Unforeseeable/unavoidable | Virements and shifts | Declared unspent funds | Other adjustments | | | |
| R thousand | | | | | | | | |
| Administration | 303 988 | - | - | 41 154 | - | - | 41 154 | 345 142 |
| Technology Innovation | 1 007 073 | - | - | (1 655) | - | - | (1 655) | 1 005 418 |
| International Cooperation and Resources | 124 463 | - | - | - | - | - | - | 124 463 |
| Research, Development and Support | 4 200 596 | - | - | (29 599) | - | - | (29 599) | 4 170 997 |
| Socio-Economic Innovation Partnerships | 1 792 876 | - | - | (9 900) | - | - | (9 900) | 1 782 976 |
| Total | 7 428 996 | - | - | - | - | - | - | 7 428 996 |

| Economic classification | 2016/17 | | | | | | | |
|---|--------------------|---------------------------|---------------------------|----------------------|------------------------|-------------------|---------------------------------|------------------------|
| | Main appropriation | Adjustments appropriation | | | | | Total adjustments appropriation | Adjusted appropriation |
| | | Roll-overs | Unforeseeable/unavoidable | Virements and shifts | Declared unspent funds | Other adjustments | | |
| R thousand | | | | | | | | |
| Current payments | 509 703 | – | – | 22 631 | – | – | 22 631 | 532 334 |
| Compensation of employees | 309 156 | – | – | 4 637 | – | – | 4 637 | 313 793 |
| Goods and services | 200 547 | – | – | 17 994 | – | – | 17 994 | 218 541 |
| Transfers and subsidies | 6 916 984 | – | – | (44 787) | – | – | (44 787) | 6 872 197 |
| Departmental agencies and accounts | 5 344 684 | – | – | (33 263) | – | – | (33 263) | 5 311 421 |
| Higher education institutions | 115 153 | – | – | 469 | – | – | 469 | 115 622 |
| Public corporations and private enterprises | 1 307 369 | – | – | (7 999) | – | – | (7 999) | 1 299 370 |
| Non-profit institutions | 149 778 | – | – | (3 994) | – | – | (3 994) | 145 784 |
| Payments for capital assets | 2 309 | – | – | 22 156 | – | – | 22 156 | 24 465 |
| Machinery and equipment | 2 309 | – | – | 22 156 | – | – | 22 156 | 24 465 |
| Total | 7 428 996 | – | – | – | – | – | – | 7 428 996 |

Programme 1: Administration

| Subprogramme | 2016/17 | | | | | | | |
|------------------------------------|--------------------|---------------------------|---------------------------|----------------------|------------------------|-------------------|---------------------------------|------------------------|
| | Main appropriation | Adjustments appropriation | | | | | Total adjustments appropriation | Adjusted appropriation |
| | | Roll-overs | Unforeseeable/unavoidable | Virements and shifts | Declared unspent funds | Other adjustments | | |
| R thousand | | | | | | | | |
| Ministry | 4 369 | – | – | – | – | – | – | 4 369 |
| Management | 105 426 | – | – | – | – | – | – | 105 426 |
| Corporate Services | 180 325 | – | – | 41 154 | – | – | 41 154 | 221 479 |
| Governance | 9 307 | – | – | – | – | – | – | 9 307 |
| Office Accommodation | 4 561 | – | – | – | – | – | – | 4 561 |
| Total | 303 988 | – | – | 41 154 | – | – | 41 154 | 345 142 |
| Economic classification | | | | | | | | |
| Current payments | 288 819 | – | – | 18 998 | – | – | 18 998 | 307 817 |
| Compensation of employees | 149 820 | – | – | 4 637 | – | – | 4 637 | 154 457 |
| Goods and services | 138 999 | – | – | 14 361 | – | – | 14 361 | 153 360 |
| Transfers and subsidies | 12 860 | – | – | – | – | – | – | 12 860 |
| Non-profit institutions | 12 860 | – | – | – | – | – | – | 12 860 |
| Payments for capital assets | 2 309 | – | – | 22 156 | – | – | 22 156 | 24 465 |
| Machinery and equipment | 2 309 | – | – | 22 156 | – | – | 22 156 | 24 465 |
| Total | 303 988 | – | – | 41 154 | – | – | 41 154 | 345 142 |

Programme 2: Technology Innovation

| Subprogramme | 2016/17 | | | | | | | |
|--|--------------------|---------------------------|---------------------------|----------------------|------------------------|-------------------|---------------------------------|------------------------|
| | Main appropriation | Adjustments appropriation | | | | | Total adjustments appropriation | Adjusted appropriation |
| | | Roll-overs | Unforeseeable/unavoidable | Virements and shifts | Declared unspent funds | Other adjustments | | |
| R thousand | | | | | | | | |
| Space Science | 166 916 | – | – | – | – | – | – | 166 916 |
| Hydrogen and Energy | 152 611 | – | – | (385) | – | – | (385) | 152 226 |
| Bioeconomy | 138 151 | – | – | (84) | – | – | (84) | 138 067 |
| Innovation Priorities and Instruments | 523 079 | – | – | (1 655) | – | – | (1 655) | 521 424 |
| National Intellectual Property Management Office | 26 316 | – | – | 469 | – | – | 469 | 26 785 |
| Total | 1 007 073 | – | – | (1 655) | – | – | (1 655) | 1 005 418 |
| Economic Classification | | | | | | | | |
| Current payments | 64 384 | – | – | – | – | – | – | 64 384 |
| Compensation of employees | 43 543 | – | – | – | – | – | – | 43 543 |
| Goods and services | 20 841 | – | – | – | – | – | – | 20 841 |
| Transfers and subsidies | 942 689 | – | – | (1 655) | – | – | (1 655) | 941 034 |
| Departmental agencies and accounts | 642 329 | – | – | 1 870 | – | – | 1 870 | 644 199 |
| Higher education institutions | 115 153 | – | – | 469 | – | – | 469 | 115 622 |
| Public corporations and private enterprises | 96 045 | – | – | – | – | – | – | 96 045 |
| Non-profit institutions | 89 162 | – | – | (3 994) | – | – | (3 994) | 85 168 |
| Total | 1 007 073 | – | – | (1 655) | – | – | (1 655) | 1 005 418 |

Programme 4: Research, Development and Support

| Subprogramme | 2016/17 | | | | | | | |
|---|--------------------|---------------------------|----------------------|------------------------|-------------------|----------|---------------------------------|------------------------|
| | Main appropriation | Adjustments appropriation | | | | | Total adjustments appropriation | Adjusted appropriation |
| Roll-overs | | Unforeseeable/unavoidable | Virements and shifts | Declared unspent funds | Other adjustments | | | |
| R thousand | | | | | | | | |
| Human Capital and Science | 2 356 414 | - | - | 1 000 | - | - | 1 000 | 2 357 414 |
| Promotions | | | | | | | | |
| Science Missions | 164 335 | - | - | 51 188 | - | - | 51 188 | 215 523 |
| Basic Science and Infrastructure | 988 306 | - | - | (81 787) | - | - | (81 787) | 906 519 |
| Astronomy | 691 541 | - | - | - | - | - | - | 691 541 |
| Total | 4 200 596 | - | - | (29 599) | - | - | (29 599) | 4 170 997 |
| Economic classification | | | | | | | | |
| Current payments | 46 728 | - | - | 604 | - | - | 604 | 47 332 |
| Compensation of employees | 31 805 | - | - | - | - | - | - | 31 805 |
| Goods and services | 14 923 | - | - | 604 | - | - | 604 | 15 527 |
| Transfers and subsidies | 4 153 868 | - | - | (30 203) | - | - | (30 203) | 4 123 665 |
| Departmental agencies and accounts | 3 939 322 | - | - | (30 203) | - | - | (30 203) | 3 909 119 |
| Public corporations and private enterprises | 214 546 | - | - | - | - | - | - | 214 546 |
| Total | 4 200 596 | - | - | (29 599) | - | - | (29 599) | 4 170 997 |

Programme 5: Socio-Economic Innovation Partnerships

| Subprogramme | 2016/17 | | | | | | | |
|---|--------------------|---------------------------|----------------------|------------------------|-------------------|----------|---------------------------------|------------------------|
| | Main appropriation | Adjustments appropriation | | | | | Total adjustments appropriation | Adjusted appropriation |
| Roll-overs | | Unforeseeable/unavoidable | Virements and shifts | Declared unspent funds | Other adjustments | | | |
| R thousand | | | | | | | | |
| Sector Innovation and Green Economy | 937 080 | - | - | (4 418) | - | - | (4 418) | 932 662 |
| Innovation for Inclusive Development | 349 970 | - | - | (457) | - | - | (457) | 349 513 |
| Science and Technology Investment | 29 548 | - | - | (1 040) | - | - | (1 040) | 28 508 |
| Technology Localisation, Beneficiation and Advanced Manufacturing | 476 278 | - | - | (3 985) | - | - | (3 985) | 472 293 |
| Total | 1 792 876 | - | - | (9 900) | - | - | (9 900) | 1 782 976 |
| Economic Classification | | | | | | | | |
| Current payments | 46 663 | - | - | 3 029 | - | - | 3 029 | 49 692 |
| Compensation of employees | 37 838 | - | - | - | - | - | - | 37 838 |
| Goods and services | 8 825 | - | - | 3 029 | - | - | 3 029 | 11 854 |
| Transfers and subsidies | 1 746 213 | - | - | (12 929) | - | - | (12 929) | 1 733 284 |
| Departmental agencies and accounts | 749 435 | - | - | (4 930) | - | - | (4 930) | 744 505 |
| Public corporations and private enterprises | 996 778 | - | - | (7 999) | - | - | (7 999) | 988 779 |
| Total | 1 792 876 | - | - | (9 900) | - | - | (9 900) | 1 782 976 |

Details of adjustments to the Estimates of National Expenditure 2016**Virements and shifts within votes**

| Programmes | | | | | |
|---|--|----------------|--------------------------------------|---|--------------|
| 1. Administration | | | | | |
| 2. Technology Innovation | | | | | |
| 3. International Cooperation and Resources | | | | | |
| 4. Research, Development and Support | | | | | |
| 5. Socio-Economic Innovation Partnerships | | | | | |
| FROM: | | | TO: | | |
| Programme by economic classification | Motivation | R thousand | Programme by economic classification | Motivation | R thousand |
| Programme 2 | | (3 994) | Programme 2 | | 2 339 |
| Non-profit institutions | Reclassification of funds due to the Top Technology 100 Awards ¹ | (1 870) | Departmental agencies and accounts | Establishment of the sovereign innovation fund ¹ | 1 870 |
| | Cost containment measures effected through the scaling down of projects from the biofuel and biotechnology strategy ¹ | (469) | Higher education institutions | Technology transfer offices ¹ | 469 |
| | Performance bonuses ² | (1 655) | Programme 1 | | 1 655 |
| | | | Compensation of employees | Performance bonuses ² | 1 655 |
| Shifts within the programme as a percentage of the programme budget | | 0.2% | | | |
| Virements to other programmes as a percentage of the programme budget | | 0.2% | | | |

| FROM: | | | TO: | | |
|---|---|-----------------|--------------------------------------|---|---------------|
| Programme by economic classification | Motivation | R thousand | Programme by economic classification | Motivation | R thousand |
| Programme 4 | | (82 391) | Programme 4 | | 52 792 |
| Departmental agencies and accounts | Reallocation of funds incorrectly allocated in the 2016 ENE ¹ | (604) | Goods and services | Review of the Protection, Promotion, Development And Management of Indigenous Knowledge Systems Bill ¹ | 604 |
| | Cost containment measures effected on research and development infrastructure ¹ | (52 188) | Departmental agencies and accounts | Strategic science platform Academy of Science of South Africa ¹ | 52 188 |
| | Cost containment measures effected on the new high end infrastructure projects ² | (22 156) | Programme 1 | | 29 599 |
| | Cost containment measures effected on the new high end infrastructure projects ² | (4 461) | Machinery and equipment | IT infrastructure and services | 22 156 |
| | Cost containment measures effected on the new high end infrastructure projects ² | (2 982) | Goods and services | Maintenance services | 4 461 |
| | Cost containment measures effected on the new high end infrastructure projects ² | (2 982) | Compensation of employees | Performance bonuses ² | 2 982 |
| Shifts within the programme as a percentage of the programme budget | | 1.3% | | | |
| Virements to other programmes as a percentage of the programme budget | | 0.7% | | | |
| Programme 5 | | (13 525) | Programme 5 | | 3 029 |
| Departmental agencies and accounts | Realignment of the budget for forensic audit on the rural technology demonstration centre project ¹ | (3 029) | Goods and services | Forensic audit on the rural technology demonstration centre project | 3 029 |
| | Unspent funds due to delays in project implementation owing to capacity challenges and revised plans ² | (2 497) | Programme 1 | | 2 497 |
| | Unspent funds due to delays in project implementation owing to capacity challenges and revised plans ¹ | (596) | Goods and services | Maintenance services | 2 497 |
| Public corporations and private enterprises | Unspent funds due to delays in project implementation owing to capacity challenges and revised plans ¹ | (596) | Programme 5 | | 596 |
| | Unspent funds due to delays in project implementation owing to capacity challenges and revised plans ² | (7 403) | Departmental agencies and accounts | Various services for technology development | 596 |
| | | | Programme 1 | | 7 403 |
| | | | Goods and services | IT infrastructure and services | 7 403 |
| Shifts within the programme as a percentage of the programme budget | | 0.2% | | | |
| Virements to other programmes as a percentage of the programme budget | | 0.6% | | | |
| Total | | (99 910) | | | 99 910 |

1. National Treasury approval has been obtained.

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

Expenditure outcome for 2015/16 and actual expenditure for 2016/17

| Programme | 2015/16 Audited outcome | | | | | 2016/17 Actual expenditure | | | | |
|---|----------------------------|------------------|---------------|------------------|---------------|-------------------------------|-----------------------------------|------------------|---------------|--|
| | Adjusted appropriation | Apr 15 - Sep 15 | adjusted % of | Apr 15 - Mar 16 | adjusted % of | Adjusted appropriation | Adjusted appropriation/ Total (%) | Apr 16 - Sep 16 | adjusted % of | |
| R thousand | | | | | | | | | | |
| Administration | 300 537 | 136 326 | 45.4 | 301 996 | 100.5 | 345 142 | 4.6 | 157 840 | 45.7 | |
| Technology Innovation | 1 008 514 | 530 441 | 52.6 | 1 063 297 | 105.4 | 1 005 418 | 13.5 | 627 349 | 62.4 | |
| International Cooperation and Resources | 121 359 | 40 098 | 33.0 | 114 968 | 94.7 | 124 463 | 1.7 | 59 821 | 48.1 | |
| Research, Development and Support | 4 238 825 | 3 463 962 | 81.7 | 4 218 854 | 99.5 | 4 170 997 | 56.1 | 3 386 151 | 81.2 | |
| Socio-Economic Innovation Partnerships | 1 796 871 | 679 451 | 37.8 | 1 738 347 | 96.7 | 1 782 976 | 24.0 | 870 695 | 48.8 | |
| Total | 7 466 106 | 4 850 278 | 65.0 | 7 437 462 | 99.6 | 7 428 996 | 100.0 | 5 101 856 | 68.7 | |
| Economic classification | | | | | | | | | | |
| Current payments | 494 991 | 226 595 | 45.8 | 464 810 | 93.9 | 532 334 | 7.2 | 254 649 | 47.8 | |
| Compensation of employees | 295 288 | 151 160 | 51.2 | 301 085 | 102.0 | 313 793 | 4.2 | 158 761 | 50.6 | |
| Goods and services | 199 703 | 75 435 | 37.8 | 163 725 | 82.0 | 218 541 | 2.9 | 95 888 | 43.9 | |

| Economic classification | 2015/16 | | | | | 2016/17 | | | | |
|---|------------------------|---|-----------------|---|------------------------|-----------------------------------|-----------------|---|---|--|
| | Adjusted appropriation | Audited outcome | | Actual expenditure | | Adjusted appropriation/ Total (%) | Apr 16 - Sep 16 | Apr 16 - Sep 16 % of adjusted appropriation | | |
| Apr 15 - Sep 15 | | Apr 15 - Sep 15 % of adjusted appropriation | Apr 15 - Mar 16 | Apr 15 - Mar 16 % of adjusted appropriation | Adjusted appropriation | | | | Apr 16 - Sep 16 % of adjusted appropriation | |
| R thousand | | | | | | | | | | |
| Transfers and subsidies | 6 968 806 | 4 618 933 | 66.3 | 6 956 058 | 99.8 | 6 872 197 | 92.5 | 4 843 392 | 70.5 | |
| Departmental agencies and accounts | 5 457 124 | 3 437 383 | 63.0 | 4 762 435 | 87.3 | 5 311 421 | 71.5 | 3 738 750 | 70.4 | |
| Higher education institutions | 114 580 | 140 565 | 122.7 | 230 304 | 201.0 | 115 622 | 1.6 | 124 008 | 107.3 | |
| Public corporations and private enterprises | 1 249 847 | 1 000 831 | 80.1 | 1 833 674 | 146.7 | 1 299 370 | 17.5 | 909 995 | 70.0 | |
| Non-profit institutions | 147 255 | 39 962 | 27.1 | 128 822 | 87.5 | 145 784 | 2.0 | 70 452 | 48.3 | |
| Households | - | 192 | - | 823 | - | - | - | 187 | - | |
| Payments for capital assets | 2 309 | 4 685 | 202.9 | 16 467 | 713.2 | 24 465 | 0.3 | 3 723 | 15.2 | |
| Machinery and equipment | 2 309 | 4 685 | 202.9 | 16 467 | 713.2 | 24 465 | 0.3 | 3 723 | 15.2 | |
| Payments for financial assets | - | 65 | - | 127 | - | - | - | 92 | - | |
| Total | 7 466 106 | 4 850 278 | 65.0 | 7 437 462 | 99.6 | 7 428 996 | 100.0 | 5 101 856 | 68.7 | |

Expenditure trends for the first six months of 2016/17

Total expenditure in 2015/16 was 99.6 per cent of the 2015/16 adjusted appropriation. Expenditure in the first six months of 2016/17 was R5.1 billion or 68.7 per cent of the adjusted appropriation of R7.4 billion for the year. In comparison, mid-year expenditure in 2015/16 was R4.9 billion, or 65 per cent of the 2015/16 adjusted appropriation. Compared to the first six months of 2015/16, expenditure over the same period in 2016/17 increased by R251.6 million, or 5.2 per cent. This was mainly due to payments being made to some projects that were ahead of schedule.

Departmental receipts

| Economic classification | 2015/16 | | | | | 2016/17 | | | | |
|--|-------------------|--|-----------------|--|--|-----------------|-------------------|---------------------------------------|-----------------|--|
| | Adjusted estimate | Audited outcome | | Actual receipts | | Budget estimate | Adjusted estimate | Adjusted receipts estimate/ Total (%) | Apr 16 - Sep 16 | Apr 16 - Sep 16 % of adjusted estimate |
| Apr 15 - Sep 15 | | Apr 15 - Sep 15 % of adjusted estimate | Apr 15 - Mar 16 | Apr 15 - Mar 16 % of adjusted estimate | Apr 16 - Sep 16 % of adjusted estimate | | | | | |
| R thousand | | | | | | | | | | |
| Departmental receipts | 357 | 239 | 66.9 | 514 | 144.0 | 121 | 7 000 | 100.0 | 5 725 | 81.8 |
| Sales of goods and services produced by department | 29 | 25 | 86.2 | 51 | 175.9 | 29 | 29 | 0.4 | 26 | 89.7 |
| Interest, dividends and rent on land | 8 | 3 | 37.5 | 6 | 75.0 | 8 | 8 | 0.1 | 5 | 62.5 |
| Transactions in financial assets and liabilities | 320 | 211 | 65.9 | 457 | 142.8 | 84 | 6 963 | 99.5 | 5 694 | 81.8 |
| Total | 357 | 239 | 66.9 | 514 | 144.0 | 121 | 7 000 | 100.0 | 5 725 | 81.8 |

Revenue trends for the first six months of 2016/17

Revenue in the first six months of 2016/17 was R5.7 million, or 81.8 per cent of the adjusted revenue estimate of R7 million for the year. In comparison, mid-year revenue in 2015/16 was R239 000, or 66.9 per cent of the 2015/16 adjusted estimate. Compared to the first six months of 2015/16, revenue over the same period in 2016/17 increased by R5.5 million, or 2 295.4 per cent. This was mainly due to unspent funds returned from projects, money received from employees for lost or damaged assets, and bursaries paid back by employees.

Changes to transfers and subsidies

Summary of changes to transfers and subsidies per programme

| R thousand | 2016/17 | | | | | | | |
|---|--------------------|---------------------------|---------------------------|----------------------|------------------------|-------------------|---------------------------------|------------------------|
| | Main appropriation | Adjustments appropriation | | | | | Total adjustments appropriation | Adjusted appropriation |
| | | Roll-overs | Unforeseeable/unavoidable | Virements and shifts | Declared unspent funds | Other adjustments | | |
| Technology Innovation | | | | | | | | |
| Departmental agencies and accounts | | | | | | | | |
| Departmental agencies (non-business entities) | | | | | | | | |
| Current | 30 107 | - | - | 1 870 | - | - | 1 870 | 31 977 |
| Various institutions: Innovation projects research | 30 107 | - | - | 1 870 | - | - | 1 870 | 31 977 |
| Non-profit institutions | | | | | | | | |
| Current | 89 162 | - | - | (3 994) | - | - | (3 994) | 85 168 |
| Various institutions: Biofuels | 6 522 | - | - | (385) | - | - | (385) | 6 137 |
| Various institutions: Implementation of biotechnology strategy | 35 505 | - | - | 816 | - | - | 816 | 36 321 |
| Various institutions: Health innovation research | 43 610 | - | - | (900) | - | - | (900) | 42 710 |
| South African Association of Science and Technology Centre | 3 525 | - | - | (3 525) | - | - | (3 525) | - |
| Research, Development and Support | | | | | | | | |
| Departmental agencies and accounts | | | | | | | | |
| Departmental agencies (non-business entities) | | | | | | | | |
| Current | 184 885 | - | - | 51 584 | - | - | 51 584 | 236 469 |
| Academy of Science of South Africa | 23 106 | - | - | 1 000 | - | - | 1 000 | 24 106 |
| Various institutions: Policy development on human and social development dynamics | 10 487 | - | - | (4) | - | - | (4) | 10 483 |
| Various institutions: Strategic science platforms for research and development | 151 292 | - | - | 50 588 | - | - | 50 588 | 201 880 |
| Capital | 754 880 | - | - | (81 787) | - | - | (81 787) | 673 093 |
| Various institutions: Infrastructure projects for research and development | 754 880 | - | - | (81 787) | - | - | (81 787) | 673 093 |
| Socio-Economic Innovation | | | | | | | | |
| Partnerships | | | | | | | | |
| Departmental agencies and accounts | | | | | | | | |
| Departmental agencies (non-business entities) | | | | | | | | |
| Current | 428 725 | - | - | (4 930) | - | - | (4 930) | 423 795 |
| Various institutions: Innovative research and development | 49 926 | - | - | (3 486) | - | - | (3 486) | 46 440 |
| Various institutions: Local manufacturing capacity research and technical support | 214 183 | - | - | 596 | - | - | 596 | 214 779 |
| Various institutions: Local systems of innovation for the cold chain technologies project | 154 043 | - | - | (1 000) | - | - | (1 000) | 153 043 |
| Human Science Research Council: Science and technology indicators | 10 573 | - | - | (1 040) | - | - | (1 040) | 9 533 |
| Public corporations and private enterprises | | | | | | | | |
| Public corporations | | | | | | | | |
| Other transfers | | | | | | | | |
| Current | 124 735 | - | - | (7 999) | - | - | (7 999) | 116 736 |
| Various institutions: Advanced manufacturing technology strategy implementation | 45 755 | - | - | (2 180) | - | - | (2 180) | 43 575 |
| Council for Scientific and Industrial Research | 30 745 | - | - | (4 418) | - | - | (4 418) | 26 327 |
| Various institutions: Resource based industries research and development | 48 235 | - | - | (1 401) | - | - | (1 401) | 46 834 |

