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ANNOUNCEMENTS,
TABLINGS AND
COMMITTEE REPORTS

THURSDAY, 18 JULY 2024

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ANNOUNCEMENTS

National Assembly

The Speaker

1. Referral to Committees of papers tabled

- (1) The following paper is referred to the **Portfolio Committee on Mineral and Petroleum Resources**:
 - (a) Report of Commission for Gender Equality – Gender Transformation in the South African Mining Industry (2023/2024).
- (2) The following paper is referred to the **Portfolio Committee on Cooperative Government and Traditional Affairs** for consideration:
 - (a) Report of Commission for Gender Equality – The State of Gender Transformation within Local Government (2023/2024).
- (3) The following paper is referred to the **Portfolio Committee on Health** for consideration:
 - (a) Report of Commission for Gender Equality – The State of Maternity and Neonatal Health Care in the Eastern Cape (2023/2024).
- (4) The following paper is referred to the **Portfolio Committee on Public Service and Administration**:
 - (a) Report of Commission for Gender Equality – Progress Report: Gender Transformation in Public and Private Sectors (2023/2024).
- (5) The following paper is referred to the **Portfolio Committee on Higher Education and Training** for consideration:
 - (a) Report of Commission for Gender Equality – The State of Gender Transformation at Tertiary Institutions (2023/2024).
- (6) The following paper is referred to the **Portfolio Committee on Correctional Services**:
 - (a) Report of Commission for Gender Equality – Gender Mainstreaming and Transformation within Correctional Services (2023/2024).
- (7) The following papers are referred to the **Portfolio Committee on Justice and Constitutional Development** for consideration and report:

- (a) Annual Performance Plan of the South African Human Rights Commission for 2024/25.
 - (b) Strategic Plan of the South African Human Rights Commission for 2020 – 2025.
- (8) The following paper is referred to the **Portfolio Committee on Justice and Constitutional Development, Portfolio Committee on Police, Portfolio Committee on Planning, Monitoring and Evaluation, Portfolio Committee on Social Development and Portfolio Committee on Communications and Digital Technologies** for consideration:
- (a) Report of the South African Human Rights Commission on the Investigative Hearing into the July 2021 Unrest in Gauteng and KwaZulu-Natal – 29 January 2024.
- (9) The following papers are referred to the **Portfolio Committee on Social Development** for consideration and report:
- (a) Annual Performance Plan of the Department of Social Development for 2024/25.
 - (b) Strategic Plan of the Department of Social Development for 2020 – 2025.
 - (c) Annual Performance Plan of the National Development Agency for 2024/2025.
 - (d) Strategic Plan of the National Development Agency for 2024 – 2029.
 - (e) Annual Performance Plan of the South African Social Security Agency for 2024/25.
 - (f) Strategic Plan of the South African Social Security Agency for 2020 – 2024.
- (10) The following papers are referred to the **Portfolio Committee on Science, Technology and Innovation** for consideration and report:
- (a) Annual Performance Plan of the Department of Science and Innovation for 2024/25.
 - (b) Strategic Plan of the Department of Science and Innovation for 2020 – 2025.
 - (c) Annual Performance Plan of the Academy of Science of South Africa for 2024/2025.
 - (d) Strategic Plan of the Academy of Science of South Africa for 2020 – 2025.
 - (e) Shareholder's Compact of the Council for Scientific and Industrial Research for 2024/25.

- (f) Strategic Plan of the Council for Scientific and Industrial Research for 2020 – 2025.
 - (g) Annual Performance Plan of the Human Science Research Council for 2024/25.
 - (h) Strategic Plan of the Human Science Research Council for 2020 – 2025.
 - (i) Annual Performance Plan of the National Advisory Council on Innovation for 2024/2025.
 - (j) Strategic Plan of the National Advisory Council on Innovation for 2020 – 2025.
 - (k) Annual Performance Plan of the National Research Foundation for 2024/25.
 - (l) Strategic Plan of the National Research Foundation for 2020 – 2025.
 - (m) Annual Performance Plan of the South African Council for National Scientific Professions for 2024/25.
 - (n) Strategic Plan of the South African Council for National Scientific Professions for 2020 – 2025.
 - (o) Annual Performance Plan of the South African National Space Agency for 2024/25.
 - (p) Strategic Plan of the South African National Space Agency for 2020 – 2025.
 - (q) Annual Performance Plan of the Technology Innovation Agency for 2024/25.
 - (r) Strategic Plan of the Technology Innovation Agency for 2020 – 2025.
- (11) The following papers are referred to the **Portfolio Committee on Trade, Industry and Competition** for consideration and report:
- (a) Annual Performance Plan of the Department of Trade, Industry and Competition for 2024/25.
 - (b) Strategic Plan of the Department of Trade, Industry and Competition for 2020 – 2025.
- (12) The following papers are referred to the **Portfolio Committee on Sport, Arts and Culture** for consideration and report:
- (a) Annual Performance Plan of the Department of Sport, Arts and Culture for 2024/2025.
 - (b) Strategic Plan of the Department of Sport, Arts and Culture for 2020 – 2025.

2. Membership of Committees

- (1) Ms TG Shiviti has been elected as Chairperson of the Portfolio Committee on Science, Technology and Innovation, with effect from 17 July 2024.
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TABLINGS

National Assembly and National Council of Provinces

1. The Minister of Transport

- (a) Revised Annual Performance Plan of the South African Civil Aviation Authority (SACAA) for 2023/24.
 - (b) Revised Annual Performance Plan of the Road Traffic Infringement Agency for 2023 – 2024.
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COMMITTEE REPORTS

National Assembly

1. REPORT OF THE PORTFOLIO COMMITTEE ON SCIENCE, TECHNOLOGY AND INNOVATION ON BUDGET VOTE 35: SCIENCE AND INNOVATION (2024/25), DATED 18 JULY 2024.

The Portfolio Committee on Science, Technology and Innovation, having considered Budget Vote 35: Science and Innovation and the Annual Performance Plan (2024/25) of the Department of Science and Innovation, reports as follows:

1. INTRODUCTION

The Constitution of the Republic of South Africa, 1996, the Rules of Parliament and the Money Bills Amendment Procedure and Related Matters Act (No. 9 of 2009) mandates the Portfolio Committee on Science, Technology and Innovation (hereafter, the Committee) to oversee the activities and performance of the Department of Science and Innovation (hereafter, the Department or DSI) and the entities that report to it. Hence, the Committee annually reviews whether the Department's and entities' Annual Performance Plans (APPs) are aligned to national strategic objectives and the appropriated budget.

The Department briefed the Committee on 17 July 2024. This briefing provided the Committee with an overview of the strategic context within which the Department functions, its achievements against strategic objectives, the 2024/25 performance indicators and their concomitant targets and the 2024/25 budget allocations.

2. VOTE 35: SCIENCE AND INNOVATION (2024/25)

Vote 35: Science and Innovation comprises the Department and its entities¹ who aim to realise the full potential of science and technology in social and economic development by developing human resources, research and innovation.

Science, technology and innovation (STI) have significant socio-economic development potential. For developing countries, STI, and specifically innovation, can support economic growth and employment, create sustainable livelihoods and improve performance and service delivery. While innovation is not the only factor in faster economic growth, industrialisation and inclusive development, it remains a significant and fundamental catalyst.²

In South Africa, the 1996 White Paper on Science and Technology introduced the concept of the National System of Innovation (NSI) whereby a set of functioning institutions and government policy instruments interact to advance STI and its contribution to economic development and improved living standards. The NSI is inclusive of government departments; universities; science, engineering and technology institutions (SETIs); the private sector; non-governmental organisations; international bodies and individual citizens involved in STI. Through the NSI, the country seeks to create, acquire, diffuse and put into practice new knowledge. The NSI therefore, extends beyond the Department and its entities.

3. POLICY CONTEXT

National Development Plan 2030 and the 2019-2024 Medium Term Strategic Framework

The National Development Plan (NDP) 2030 characterises STI as crucial for accelerating economic transformation and improving the country's global competitiveness because countries that have effectively alleviated poverty by growing their economies, have done so by investing in and developing strong STI environments and capabilities. Hence, the NDP states that South Africa needs to “sharpen its innovative edge,” which requires that the NSI must be expanded because South Africa's NSI is small in comparison to its population, be more effective and be aligned with the sectors that will realise the country's growth objectives. This necessitates that:

1. DSI Entities: Academy of Science of South Africa (ASSAf); Council for Scientific and Industrial Research (CSIR); Human Sciences Research Council (HSRC); National Advisory Council on Innovation (NACI); National Research Foundation (NRF); South African Council for Natural Scientific Professions (SACNASP); South African National Space Agency (SANSa); and Technology Innovation Agency (TIA).

2 Department of Science and Innovation, March 2022. Revised 2020-2025 Strategic Plan (https://www.dst.gov.za/images/DSI_Approved_Revised_2020-2025_SP_March_2022.pdf).

- South Africa invests more in research and development (R&D).
- The STI institutional arrangement improves the link between innovation and the productive needs of industry.
- Government should collaborate with the private sector to raise the level of research, development and innovation (RDI) in companies.
- Public investments in research infrastructure should be focussed on and fulfil the needs of a modern economy.

Recognising that the impact of STI is not realisable in the short term and that the NSI is the principal tool for creating new knowledge, applying knowledge in production processes, and disseminating knowledge through teaching and research collaboration, the NDP proposed entrenching the contribution of STI to economic growth in three phases. The anticipated outcomes of these three phases are:

Phase 1 (2012 to 2017): Focus on intensifying R&D spending, emphasising opportunities linked to existing industries.

Phase 2 (2018 to 2023): Lay the foundations for more intensive improvements in productivity where innovation across state, business and social sectors should start to become pervasive. Innovation should also focus on improved public services and on goods and services aimed at low-income sectors.

Phase 3 (Approaching 2030): Emphasis should be on consolidating the gains of Phase 2 with greater emphasis on innovation, improved productivity, more intensive pursuit of a knowledge economy and better exploitation of comparative and competitive advantages in an integrated continent.

The 2019-2024 Medium Term Strategic Framework (MTSF) aims to address the nation's challenges through three pillars; namely, achieving a more capable state; driving a strong and inclusive economy; and building and strengthening the capabilities of South Africans. These three pillars underpin the seven priorities of the 2019-2024 MTSF. Although the apex priorities are all interrelated, the Department's focus and commitments are mainly on Priority 2 (Economic transformation and job creation) and Priority 3 (Education, skills and health).

2019 White Paper on Science, Technology and Innovation and the 2022-2032 Science, Technology and Innovation Decadal Plan

The 2019 White Paper on STI sets the current long-term policy direction for the NSI and seeks to ensure an increasing role for and use of STI to accelerate inclusive economic growth, increase the

competitiveness of the economy and improve the livelihoods of South Africa's citizens. The 2022-2032 STI Decadal Plan is the implementation plan of the 2019 White Paper on STI and identifies:

Five System Goals related to ensuring an inclusive and coherent NSI; expanding and transforming the research system; increasing and developing future-proof human capabilities; enabling an innovation driven environment; and significantly increasing funding for the NSI.

Three Societal Grand Challenges related to climate change and environmental sustainability; future-proof education and skills; and the future of society.

Six STI Priorities related to modernising the manufacturing, agriculture and mining sectors of the economy; new sources of growth within the digital and circular economies; health research and innovation; energy research and innovation; innovation to enable a capable state; and innovation in support of socio-economic progress.

4. STRATEGIC FOCUS

The Department seeks to realise the vision of *“Increased well-being and prosperity through STI.”* Thus, the Department is responsible for developing, coordinating and managing the NSI by providing policy leadership and creating an enabling environment for STI. To ensure that the NSI expands its positive impact on reducing poverty, inequality and unemployment as envisioned by the 2019 STI White Paper, the Department identified the following six strategic outcome goals (inclusive of indicators and targets³) for the period 2020-2025:

Outcome 1: A transformed, inclusive, responsive and coherent NSI

The four outcome indicators against which performance will be measured are:

- i) Number of formalised partnerships between different category actors of the NSI that advance Decadal Plan priorities. The 5-year target is 10.
- ii) Number of STI missions introduced and adopted by Cabinet that crowd in resources and capabilities across the NSI. The 5-year target is 5.

³ Department of Science and Innovation, March 2022. Revised 2020-2025 Strategic Plan (https://www.dst.gov.za/images/DSI_Approved_Revised_2020-2025_SP_March_2022.pdf).

- iii) Percentage of STI investment support by government, domestic business, non-governmental sector and foreign/international sources that advances gross expenditure on R&D (GERD) towards 1.1% of GDP by 2024/25.
- iv) Number of approved strategies that give effect to the agreed dimensions of transformation in the NSI. The 5-year target is 3.

Outcome 2: Human capabilities and skills for the economy and for development

The five outcome indicators against which performance will be measured are:

- i) Number of Department-funded PhDs graduating annually as a contribution to the NDP target of 100 PhDs per million population by 2030. The 5-year target is 4 700.
- ii) Number of artisans and technicians absorbed into the economy in sectors where the Department has active programmes. The 5-year target is 60.
- iii) Percentage of women and Black researchers in South Africa's research workforce. The 5-year target for Women is 49% and for Blacks is 67%.
- iv) Percentage of PhD-qualified staff in the higher education research and academic workforce. The 5-year target is 60%.
- v) Improved knowledge about science among the public. The 5-year target is "50% of the sample of the South African population surveyed".

Outcome 3: Increase knowledge generation and innovation output

The two outcome indicators against which performance will be measured are:

- i) Percentage of South Africa's share of global publication outputs. The 5-year target is 1%.
- ii) Percentage of prototypes, technology demonstrators and pilot plants that advance industrialisation through innovation. The 5-year target is 10%.

Outcome 4: Knowledge utilisation for economic development in (a) revitalising existing industries and (b) stimulating R&D-led industrial development

The four outcome indicators against which performance will be measured are:

- i) Rand value of RDI investment attracted to support RDI needs identified through the sectoral masterplans process. The 5-year target is R100 million.
- ii) Percentage investment in Small, Medium and Micro Enterprises (SMMEs), Co-operatives or Start-ups to secure new opportunities through support provided by the Department and its entities. The 5-year target is 3%.
- iii) Number of new commercialised disclosures from publicly financed R&D. The 5-year target is 75.

- iv) Number of new R&D-led industrial development opportunities initiated by the Department. The 5-year target is 1.

Outcome 5: Knowledge utilisation for inclusive development

The two outcome indicators against which performance will be measured are:

- i) Number of grassroots innovations whose commercialisation has been facilitated by the support/access of the multi-tiered support package provided by the Department and its entities. The 5-year target is 180.
- ii) Number of publicly financed intellectual property (IP) made available (accessible) in support of grassroots innovators. The 5-year target is 250.

Outcome 6: Innovation in support of a capable and development state

The two outcome indicators against which performance will be measured are:

- i) Number of demonstrators that have successfully introduced a new way of delivering a service. The 5-year target is 420.
- ii) Number of districts/metropolitan municipalities supported with technology-based applications as part of the District Development Model for Service Delivery Improvement. The 5-year target is 5.

5. 2024/25 BUDGET⁴ AND ANNUAL PERFORMANCE PLAN OF THE DEPARTMENT OF SCIENCE AND INNOVATION⁵

In 2024/25, consolidated government expenditure on innovation, science and technology decreases from R20.7 billion to R20.2 billion. Of significance to a sector that remains underfunded, is that over the medium-term, the Department's budget decreases at an average annual rate of 3.4% due to Cabinet-approved reductions of R3 billion. Furthermore, the Department has been advised to reprioritise existing funds to meet any new mandates or responsibilities, as is evidenced by the Minister of Finance's response⁶ to the 2023 Science and Innovation Budgetary Review and Recommendation Report of the former Portfolio Committee on Higher Education, Science and Innovation:

⁴ National Treasury, 2024. Vote 35: Science and Innovation. Estimates of National Expenditure (<https://www.treasury.gov.za/documents/National%20Budget/2024/ene/Vote%2035%20Science%20and%20Innovation.pdf>).

⁵ Department of Science and Innovation, 2024. Annual Performance Plan 2024/25.

⁶ National Treasury, 2024. Budget Review

(<https://www.treasury.gov.za/documents/National%20Budget/2024/review/FullBR.pdf>).

Recommendation: The Minister of Higher Education, Science and Innovation should continue his efforts with the National Treasury around the Science, Technology and Innovation (STI) Public Budget Coordination Mechanism to secure additional funding for the science and innovation portfolio.

Response: The National Treasury is part of the STI budget coordination task team, which was established to improve planning and budget coordination of science, technology and innovation. The introduction of the STI budget coordination process will give STI more prominence in intergovernmental planning and is expected to improve the coordination of public funding for STI across government. Priority sectors have been identified for tagging to help monitor and track spending in upcoming budget processes.

Recommendation: The National Treasury, cognisant of the need for the country to grow its technological capabilities to enhance its competitiveness, exempts the science and innovation portfolio from any proposed budget cuts.

Response: The National Treasury notes the committee's concerns about budget reductions. However, the fiscal constraints remain serious, and this has made spending reductions to departments and entities unavoidable. The Department of Science and Innovation is advised to reprioritise existing funds for emerging priorities.

In the 2024/25 financial year, the Department continues its focus on providing funding for research infrastructure, developing human capital and advancing innovation capabilities. Hence, as is the norm, approximately 93% of the Department's total budget is designated for Transfers and subsidies to its implementing entities and partners. Operationally, the Department's budget funds five programmes. These are (1) Administration, (2) Technology Innovation, (3) International Cooperation and Resources, (4) Research, Development and Support, and (5) Socio-economic Innovation Partnerships.

The Department's 2024/25 budget allocation decreases by R1.1 billion from R10.6 billion in the 2023/24 financial year to R9.5 billion (Table 1). The Department's allocation is estimated to further decline to R9.1 billion in 2025/26. In terms of economic classification, the percentage apportionment of the Department's budget allocation of R9.5 billion remains similar to previous years. Hence, the budget allocation comprises Current payments of R603.9 million (6.4% of the total allocation) where R387 million is earmarked for salaries, which is R3 million less than in 2023/24; Transfers and subsidies of R8.9 billion (93.5% of the total allocation and R1.4 billion less than in 2023/24); and Payments for capital assets of R10.6 million (0.1% of the total allocation). The percentage budget allocation to the Programmes remain essentially the same as in previous financial years and Programmes 2, 4 and 5 that are responsible for the Transfers to the Department's entities, receive 94.7% of the Department's total budget allocation. These three Programmes also account for the R1 billion reduction in the Department's

2024/25 budget, with Programme 2's budget decreasing by R567.3 million. Baseline allocations to the Department's entities amount to R2.8 billion. Allocations to key infrastructure projects amount to R2.83 billion.

For 2024/25, the Department has translated its planned performance into 69 (73 in 2023/24) performance indicators and targets. The reduction in performance targets, as well as the revision of some performance targets, are mainly due to the reduction in the Department's 2024/25 budget allocation.

Table 1: Budget summary and performance indicators of the Department of Science and Innovation

Programmes				
R'million	2023/24 Adjusted appropriation	2024/25 Budget allocation	Nominal percentage change in 2024/25	Number of performance targets for 2024/25
1. Administration	427.2	359.3	-15.9	6
2. Technology Innovation	2 490.5	1 923.2	-22.8	16
3. International Cooperation and Resources	146.1	146.2	0.1	9
4. Research, Development and Support	5 767.9	5 413.6	-6.1	16
5. Socio-economic Innovation Partnerships	1 731.4	1 626.2	-6.1	22
Total	10 563.0	9 468.5	-10.4	69
Economic classification				
Current payments	676.4	603.9	-10.7	
Transfers and subsidies	9 876.1	8 854.1	-10.3	
Payments for capital assets	10.4	10.6	1.9	
Total	10 563.0	9 468.5	-10.4	

Programme 1: Administration

Programme 1 provides strategic leadership, management and support services to the Department. Its R359.3 million allocation will mainly be spent on salaries (R183.7 million) and on Goods and services (R148.7 million), which have both declined by R5.2 million and R63 million respectively in comparison to last year due to National Treasury's cost containment measures. The sub-programmes, Institutional Planning and Support and Corporate Services, being responsible for strategic and operational planning, governance, monitoring and evaluation, receive the bulk of Programme's 1 allocation; namely, R347.3 million. Programme 1 administers and funds the operations of the National Advisory Council on Innovation (NACI) and transfers R16.4 million to Non-profit institutions for Institutional and programme support research.

Because of the policy shift proposed by the STI White Paper and Decadal Plan, the Department is continuing with the review of its current 2014 approved organisational structure to ensure that it can deliver on its revised mandate.

Amendments to Programme 1's performance indicators

Performance indicators	Revised performance indicators – from 2023/24 APP
Annual Presidential STI Plenary between government, business, academia and civil society hosted by 31 March 2025.	Removed. Last year, when this was a new performance indicator, the Department had to wait for the Presidency to indicate when the Plenary could be held since it was contingent on the President's availability.
Percentage of approved funded positions filled annually. Target: 94%	Amended. The target decreases to 90%.

The Department reported to the Committee that it currently has a staff complement of 495 with 106 vacancies. In relation to the vacancies, 57 are designated as critical and 49 are unfunded. With the available budget of R6.6 million, the Department will only be able to fill six of the 57 vacant critical posts.

Programme 2: Technology Innovation

Programme 2 enables R&D in space science and technology, energy, the bioeconomy, nanotechnology, robotics, photonics, indigenous knowledge systems (IKS), IP management, technology transfer and technology commercialisation. Programme 2 has four key sub-programmes and one specialised service delivery unit (SSDU). These are Space Science, Hydrogen and Energy, Bio-innovation, Innovation Priorities and Instruments (IPI), and the SSDU, the National Intellectual Property Management Office (NIPMO).

Programme 2 gets 20.3% of the Department's total allocation, which decreases from R2.5 billion to R1.9 billion, with the percentage distribution of the allocation between sub-programmes remaining the same as in previous financial years. The IPI sub-programme that supports and strengthens the policy initiatives that aim to create and sustain an enabling environment for innovation, technology development and the commercialisation of products from publicly funded R&D, continues to receive the largest share of Programme 2's budget at R898.6 million (R1.1 billion in 2023/24). Only the allocation to the Bio-innovation sub-programme increases by R10.9 million to R221.5 million, all the other sub-programmes and NIPMO have reduced allocations. The Space Science sub-programme accounts for the most significant decrease in Programme 2, i.e. from R951.2 million to R550.3 million, due in most part to the

Transfer payment for the Space Infrastructure Hub⁷ decreasing from R740 million (allocated for the first time in 2023/24) to R346.3 million. The Space Infrastructure Hub is not allocated any further funds over the remainder of the medium term.

Approximately 96% of Programme 2's budget is allocated to Transfers and subsidies. In 2024/25, Transfer payments decrease from R2.4 billion to R1.8 billion. The Department's entities, the Technology Innovation Agency (TIA) and the South African National Space Agency (SANSA) are allocated R432.7 million (R459.4 million in 2023/24) and R153.3 million (R162.9 million in 2023/24) respectively. Additional notable Transfer payments include R329.1 million for Innovation projects research and a R25.3 million increase in the Transfer payment to the National Research Foundation (NRF) for R&D in IKS to reach R57.1 million.

Strategic policy initiatives that will continue to receive attention include:

- Continuing to implement the Innovation Fund, which supports the commercialisation of locally developed IP.
- Updating the implementation of the Hydrogen Society Roadmap.
- Amending the Intellectual Property Rights from Publicly Financed Research and Development Act (IPR Act) that is implemented by NIPMO.
- Developing the STI Plans for health, energy and agriculture research and innovation.

Amendments to Programme 2's performance indicators

Performance indicators	Revised performance indicators – from 2023/24 APP
Number of maritime domain awareness (MDA) missions completed in support of Operation Phakisa Oceans Economy. Target: Manufacture 3 or more Cube satellites, annually until 2025/26. The first three Cube satellites were launched in January 2023.	Removed due to budget cuts.
Number of new disclosures received from publicly financed R&D institutions by NIPMO. Target: 235	Removed. NIPMO found this target difficult to predict because it was outside of its control.
Number of disclosures licensed for the first time received from publicly financed R&D institutions by NIPMO. Target: 15	Removed. NIPMO found this target difficult to predict because it was outside of its control.

⁷ Space Infrastructure Hub - 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. The Space Infrastructure Hub and the MeerKAT and SKA project form part of the digital infrastructure sector. The Space Infrastructure Hub is a R4.4 billion project by the South African National Space Agency.

Performance indicators	Revised performance indicators – from 2023/24 APP
Number of IP rights filed based on RDI conducted in designated areas. Target: 10	Amended. The target increases to 20.
Number of trainees upskilled in IP management and technology transfer. Target: 325	Amended. The target decreases to 280 due to budget cuts.
Number of youth supported under the TT100 Learnership/ Internship Programme. Target: 40	Amended. The target decreases to 20 due to budget cuts.
Number of technology demonstrations, prototypes, products and services developed. Target: 15	Amended. The target increases to 40.
Number of SMMEs contracted and/or assisted for business development and commercialisation. Target: 35	Amended. The target increases to 45.
Percentage of eligible claims from institutions awarded a rebate annually from the IP Fund in line with the requirements of the IP Fund Guidelines.	New: The target is 100%.

Programme 3: International Cooperation and Resources

Programme 3 develops, promotes and manages international partnerships, opportunities and science and technology agreements that both strengthen the NSI and enable an exchange of knowledge, capacity and resources between South Africa and its international partners. Programme 3 has three key sub-programmes; namely, Multilateral Cooperation and Africa, International Resources, and Overseas Bilateral Cooperation.

Programme 3's allocation increases marginally from R146.1 million to R146.2 million, with the percentage distribution of the allocation between sub-programmes remaining the same as in previous financial years. The International Resources sub-programme is allocated R71.6 million and the remainder is split almost equally between the other two sub-programmes. Transfers and subsidies amount to R69.8 million (R65.1 million in 2023/24), comprising R8 million for the NRF, who manages Bilateral cooperation for global science development on behalf of the Department; R50.5 million for Non-profit institutions for Global science: International multilateral agreements and R11.3 million for Global science: African multilateral agreements. The latter two transfers to Non-profit institutions have increased significantly from 2020/21 levels, when international multilaterals was allocated approximately R5 million, and African multilaterals was allocated R200 000.

Strategic policy initiatives that will continue to receive attention include:

- Ensuring alignment to the STI Decadal Plan.

- Continuing the various EU and Brazil, Russia, India, China and South Africa grouping (BRICS) engagements.
- Strengthening international research cooperation.

Amendments to Programme 3's performance indicators

Performance indicators	Revised performance indicators – from 2023/24 APP
Number of new South African students participating in international training programmes. Target: 420	Removed.
Number of international leveraging opportunities for South African students participating in international training programmes. Target: 43	New.
Number of international policy dialogues and technical exchanges to support the policy intents of the White Paper on STI. Target: 45	Amended. The target increases to 115.

Programme 4: Research, Development and Support

Programme 4 provides an enabling environment for research and knowledge production that promotes the strategic development of basic sciences and priority science areas through science promotion, human capital development and the provision of research infrastructure and relevant research support, in pursuit of South Africa's transition to a knowledge economy. Programme 4 has four key sub-programmes; namely, Human Capital and Science Promotions, Science Missions, Basic Science and Infrastructure, and Astronomy.

Programme 4 gets 57.7% of the Department's total allocation, which decreases from R5.8 billion to R5.4 billion. The percentage distribution of the allocation between sub-programmes remains the same as in previous financial years, with Human Capital and Science Promotions allocated the largest proportion at 48% (R2.6 billion). The decrease in Programme 4's total allocation is largely driven by a R407 million reduction in the Astronomy sub-programme, from R1.8 billion to R1.4 billion, and largely comprises work under the SKA project. Only the allocation to the Basic Science and Infrastructure sub-programme increases by R188.8 million to R1.2 billion and comprises continued infrastructure development under the South African Research Infrastructure Roadmap (SARIR) and the National Integrated Cyberinfrastructure System (NICIS).

Approximately 99% of Programme 4's budget is allocated to Transfers and subsidies and in 2024/25, Transfer payments decrease from R5.7 billion to R5.35 billion. The Academy of Science of South Africa

(ASSAf) is allocated R31.9 million (R34 million in 2023/24). The NRF is allocated R3.85 billion (R4.3 billion in 2023/24) for human capital development, the SKA and initiatives to promote science awareness and youth participation. The Council for Scientific and Industrial Research (CSIR) is allocated R282.8 million (R244.2 million in 2023/24) for the further development and management of NICIS.

Strategic policy initiatives that will continue to attention include:

- Finalising and implementing the Innovation and Skills Compact.
- Continuing the development of a Transformation Policy.
- Implementing and monitoring the Postgraduate Funding Policy.
- Getting approval for the National Astro Tourism Strategy.
- Setting up a multiwavelength astronomy coordination structure that will coordinate astronomy activities.

Amendments to Programme 4's performance indicators

Performance indicators	Revised performance indicators – from 2023/24 APP
Number of PhD students awarded bursaries annually. Target: 2 000	Amended. The target decreases to 1 800 due to budget cuts.
Number of pipeline postgraduate students awarded bursaries annually. Target: 4 000	Amended. The target decreases to 3 600 due to budget cuts.
Number of researchers awarded research grants. Target: 3 500	Amended. The target decreases to 2 500 due to budget cuts.
Number of emerging researchers awarded research grants. Target: 1 500	Amended. The target decreases to 1 350 due to budget cuts.
Number of black female emerging researchers awarded research grants through NRF-managed programmes. Target: 500	Amended. The target decreases to 450 due to budget cuts.
Number of research articles published by NRF-funded researchers and cited in the Web of Science Citation Database. Target: 8 700	Amended. The target decreases to 5 000.
Number of research infrastructure grants awarded. Target: 30	Amended. The target decreases to 25 due to budget cuts.
Number of initiatives conducted to promote public awareness of and engagement with science. Target: 15	Amended. The target decreases to 12.
Implementation of the Palaeosciences strategy aligned with the STI Decadal Plan priorities. Target: DSI-approved revised strategy, with implementation set from 2025/26.	Still included. However, page 214 of the 2024/25 APP states that this indicator was removed due to budget cuts.
Number of IKS-based smart villages established in the country. Target: 10 communities benefiting from the IKS-based smart village programme in KwaZulu-Natal	Removed.

Programme 5: Socio-economic Innovation Partnerships

Programme 5 enhances the growth and development priorities of government through targeted STI interventions and the development of strategic partnerships with all levels of government, industry, research institutions and communities. Programme 5 has four key sub-programmes; namely, Sector Innovation and Green Economy, Innovation for Inclusive Development, Science and Technology Investment, and Technology Localisation, Beneficiation and Advanced Manufacturing.

Programme 5 gets 17.7% of the Department's total allocation, which decreases from R1.7 billion to R1.6 billion. The percentage distribution of the allocation between sub-programmes remains the same as in previous financial years, with Sector Innovation and Green Economy allocated the largest proportion at 62% (R1.01 billion). The allocation to all sub-programmes decrease with Sector Innovation and Green

Economy decreasing by R47 million, Technology Localisation, Beneficiation and Advanced Manufacturing decreasing by R31 million to R224.5 million, Innovation for Inclusive Development decreasing by R21 million to R363.8 million, and Science and Technology Investment decreasing by R6.4 million to R24.4 million.

Approximately 96% of Programme 5's budget is allocated to Transfers and subsidies and in 2024/25, Transfer payments decrease from R1.67 billion to R1.57 billion. The Human Sciences Research Council (HSRC) is allocated R300.6 million (R322.3 million in 2023/24) and the CSIR is allocated R938.4 million (R971.4 million in 2023/24). The HSRC is also allocated R14.3 million to develop and monitor science and technology indicators via the Centre for Science, Technology and Innovation Indicators (CeSTII). The CSIR is also allocated R59 million for Mining R&D via the Mandela Mining Precinct.

Strategic policy initiatives that will continue to receive attention include:

- Improving inclusion and building more linkages across the NSI.
- Enhancing policy coherence and programme coordination in the NSI.
- Adopting a broader conceptualisation of innovation beyond R&D.
- Using public procurement as a vehicle to further innovation.
- Increasing support for and collaboration with the business sector.
- Increasing the spatial footprint of innovation.
- Increasing support for social and grassroots innovation.
- Exploiting new sources of growth.
- Strengthening government's role as an enabler of innovation.

Amendments to Programme 5's performance indicators

Performance indicators	Revised performance indicators – from 2023/24 APP
Number of technology demonstrations, transfers and diffusions of solutions in support of SMMEs and township and rural enterprise development. Target: 8	Amended. The target decreases to 4.
Number of Young Engineers Changemaker Programme (YECMP) participants supported by the DSI in collaboration with the Water Research Commission (WRC) and municipalities. Target: 20	Amended. The target decreases to 10.
Number of innovation intermediaries supported through DSI funding instruments to achieve innovation for inclusivity. Target: 4	Amended. The target decreases to 2.
Number of grassroots innovators given support to commercialise their technology products through DSI funding instruments. Target: 200	Amended. The target decreases to 160.
Number of localised facilities (e.g. living labs) supported through DSI funding instruments to increase the footprint of innovation in rural and township communities. Target: 20	Amended. The target decreases to 18.
Number of knowledge and innovation products added to the industrial development and green economy IP portfolios through fully funded or co-funded research initiatives. Target: 50	Amended. Target increases to 60.
Number of Sector Innovation Fund (SIF) interventions implemented to support the development of human capacity and skills as well as knowledge and innovation outputs for socio-economic development. Target: 6	Amended. Target decreases to 5.
Number of instruments funded in support of increased localisation, competitiveness and R&D-led industry development. Target: 4	Removed.
Number of SMMEs provided with technological support. Target: 20	New.

6. SECTOR CONSIDERATIONS

Science, technology and innovation are important drivers of sustainable economic growth, economic competitiveness, socio-economic development and environmental sustainability. However, the impact of STI is not achievable in the short term. Research and development are long-term endeavours, as many of the successes claimed today as part of the Department's performance have been many years in the

making. For example, the SKA project originated in 2006/07, building on the KAT-7 engineering expertise. The Hydrogen and Fuel Cell Technologies RDI Strategy, on which the Hydrogen South Africa programme (now in the third phase of its implementation) and the Hydrogen Society Roadmap are based, was approved in 2009. Furthermore, the STI-enabled national response to the COVID-19 pandemic was only possible because of South Africa's historical investment in building national STI capability. It was this capability that was immediately mobilised to, among many others, enhance South Africa's ability to test for COVID-19, monitor and track the rates of infection, ensure that we participate in global efforts to develop a vaccine, direct efforts to investigate prophylactic measures based on indigenous knowledge, assess the public's attitudes to and perceptions of the virus and the measures instituted to mitigate its effects, and locally develop and manufacture ventilators. In addition, our genomic surveillance programme led to South Africa discovering the first variant of COVID-19, which informed the global scientific community how this virus mutates. In regard to the latter, Professor Tulio de Oliveira, who is Director of the Centre for Epidemic Response and Innovation (CERI) at Stellenbosch University and the Director of the KwaZulu-Natal Research Innovation and Sequencing Platform (KRISP) at the University of KwaZulu-Natal (UKZN), received his second recognition as one of the world's 100 most influential individuals on health.⁸

It has been found that because STI is crucial for the creation of wealth and improving the quality of life in modern society, countries that increase their investment in STI during times of economic crisis fared better in recovering from its effects than those that maintain or decrease STI investment levels. Despite this, and the fact that STI underpins all social and economic functions, it remains largely undervalued and underfunded.

Due to the R1.1 billion cut from the Department's 2024/25 budget, a number of performance targets had to be revised downward. Key among these are the targets that pertain to human capital development and knowledge production. In addition, baseline allocations or parliamentary grants to the Department's entities also decrease, exacerbating already difficult fiscal conditions for these entities who have had to contend with successive budget cuts over a number of years. The key risks in the operating environment of the Department and its entities include suboptimal resource availability, which affects the ability to develop and transform skills, maintain existing and develop new infrastructure and capabilities, and roll-out technology solutions at scale for social and economic development. The misalignment between the skills being developed by the higher education sector (exacerbated by the inadequate outcomes in science

⁸ Professor Tulio de Oliveira selected for TIME100 Health 2024: 2nd recognition as one of world's 100 most influential individuals (<https://www.krisp.org.za/news.php?id=749>).

and mathematics at basic education level) and the market demand for science, engineering and technology skills and the premium rate placed on these skills, makes it difficult for the entities to attract and retain these skills. Furthermore, the fragmentation of the NSI needs correcting to ensure that effort and impact can be optimised.

It is therefore key that the 2019 White Paper on STI and the 2022-2032 STI Decadal Plan seeks to address systemic weaknesses by improving coordination and planning around STI, skills development and resource allocation. However, the success of this new policy trajectory for STI hinges on the extent to which the whole of government adopts STI in its policy development, and in its planning for and implementation of services. Furthermore, without the necessary resource allocation, the sought after impact from STI will be weakened.

7. COMMITTEE OBSERVATIONS

Stemming from its engagement with the Department, the Committee noted the following:

- 7.1.** The budget allocation of the Department, which decreases by R1.1 billion, was concerning given that STI are key drivers of economic growth and sustainable development. In addition, the significance of the work of the Department is not supported by the resources allocated to it. Hence, the Committee emphasised the need to increase partnerships with the private sector to drive greater investment in R&D and enhance South Africa's global competitiveness.
- 7.2.** Government planning and resources for innovation must be coordinated across government to ensure that South Africa achieves its' growth objectives.
- 7.3.** Intellectual property derived from publicly funded R&D must support socio-economic development, as opposed to individual benefit.
- 7.4.** The transformation of the STI sector is crucial and starts at the basic education level. Hence, the training of mathematics and science teachers is important for the creation of a pipeline of students pursuing careers in science, mathematics and engineering. Collaboration with the Departments of Education is necessary to support this.
- 7.5.** Science awareness and literacy programmes are needed to educate the public about the importance of STI.
- 7.6.** Given the budget cuts, the Committee wanted to know how these cuts will affect the Department's planned performance, and what additional support will be required in this regard. Furthermore, the Department's Key Performance Indicators were not presented in detail, which hampered the Committee's ability to interrogate any changes made. Hence, the

Committee will require more detailed briefings about specific programmes. For example, the global change programme, grassroots innovation programme, support initiatives for basic education, transformation framework, science engagement strategy, R&D investment, hydrogen economy, circular economy and mineral beneficiation.

- 7.7. In relation to the NDP phases for innovation, the Committee wanted to know what progress has been achieved to date.

8. COMMITTEE RECOMMENDATIONS

The Portfolio Committee on Science, Technology and Innovation, having considered Budget Vote 35: Science and Innovation, recommends that:

- 8.1. The Minister of Science, Technology and Innovation continues his efforts with National Treasury, the private sector and international partners to secure additional funding for the science and innovation portfolio.
- 8.2. The Department provides a detailed account on the impact of the budget cuts on its planned performance, as well as that of its entities.
- 8.3. The Department enhance collaboration with other government departments on matters of common interest.
- 8.4. A workshop on the Department and its entities' mandates and programmes be scheduled in Parliament's second term to enhance members' understanding of the portfolio.
- 8.5. The Department prioritises transformation, which will address the Committee's concerns around having a transformed, representative and inclusive science system. Henceforth, reporting must include information around transformation and demographics. Furthermore, the Department should provide detailed information on the programmes that will specifically promote science literacy and access in Black and rural communities.
- 8.6. The Committee, together with the Department, considers facilitating a National Dialogue on the importance of STI.

The Democratic Alliance and Economic Freedom Fighters have reserved their opinion on the Vote.

Report to be considered.