

Report of the Portfolio Committee on Higher Education, Science and Technology on the consideration of the Financial and Non-Financial Performance of the 2020/21 Third Quarter of the Department of Science and Innovation, 2 June 2021

The Portfolio on Higher Education, Science and Technology, having considered the Financial and Non-Financial Performance of the 2020/21 Third Quarter of the Department of Science and Innovation, reports as follows:

1. Introduction

Section 5 of the Money Bills Amendment Procedure and Related Matters Act (9 of 2009) (hereafter, the Money Bills Act), as amended by Act 13 of 2018, requires the National Assembly, through its committees, to annually assess the performance of each national department. This culminates in a committee submitting a Budgetary Review and Recommendation (BRR) Report where the committee may make recommendations on the forward use of resources to address the implementation of policy priorities and services, as the relevant department may require additional, reduced or re-configured resources to achieve these priorities and services.

To give effect to the requirement of Section 5 of the Money Bills Act, the Portfolio Committee on Higher Education, Science and Technology (hereafter, the Committee), on 9 March 2021, considered the 2020/21 third quarter financial and non-financial performance of the Department of Science and Innovation (hereafter, the Department or DSI).

2. Department of Science and Innovation

The 2019 White Paper on Science, Technology and Innovation, which seeks to specifically enhance the role of innovation, now sets the current long-term policy direction for the National System of Innovation (NSI) and seeks to ensure an increasing role for science, technology and innovation (STI) to accelerate inclusive economic growth, increase the competitiveness of the economy, and improve the livelihoods of South Africa's citizens.

The Department, building on the successes of the previous period and to ensure that the NSI expands its positive impact on reducing poverty, inequality and unemployment as envisioned by the 2019 White Paper, identified the following six outcomes for the period 2020-2025:

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

Outcome 1 seeks to improve the contribution of the NSI to achieving the goals of the NDP. The key driver of these contributions will be the Decadal Plan, which will define the critical missions that South Africa will pursue during the period 2020-2030. The four outcome indicators against which performance will be measured are:

- i) Percentage increase in the number of formalised partnerships between different category actors of the NSI that advance Decadal Plan priorities;
- ii) Number of STI missions introduced and adopted by Cabinet that crowd in resources and capabilities across the NSI;
- iii) Percentage increase in the investment support by government that advances gross expenditure on research and development (GERD) towards 1.1% of GDP (revised down from former target of 1,5%); and
- iv) Number of approved strategies that give effect to the agreed dimensions of transformation to be effected in the NSI.

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

Outcome 2 seeks to further address the lack of transformation within the NSI. Hence, the Department will continue as well as expand the transformation agenda in all its science focus areas. The Department's agenda targets four levels of transformation; namely, spatial, institutional, demographic and transdisciplinary transformation. 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;

- ii) Number of artisans and technicians absorbed into the economy in sectors where DSI has active programmes;
- iii) Percentage increase of women and black researchers in South Africa's Research workforce;
- iv) Percentage increase of PhD-qualified teaching and research staff; and
- v) Improved knowledge about science among the general public.

Outcome 3: Increase knowledge generation and innovation output

Outcome 3 seeks to increase South Africa's research productivity, currently 0.88% of global share, to 1% of global output. The three outcome indicators against which performance will be measured are:

- i) Increase South Africa's share of global publication outputs;
- ii) Percentage increase in prototypes, technology demonstrators, pilot plants that advance industrialisation through innovation; and
- iii) Percentage increase in patent and design applications filed from publicly financed research and development (R&D).

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

Outcome 4 seeks to drive economic development through various initiatives associated with the sectoral masterplans and revitalised industrial strategy. The four outcome indicators against which performance will be measured are:

- i) Rand value of research, development and innovation (RDI) investment attracted to support RDI needs identified through the sectoral masterplans process;
- ii) Percentage increase in Small, Medium and Micros Enterprises (SMMEs) or Co-operatives whose performance has improved or who have secured new opportunities through support provided by the Department and its entities;
- iii) Percentage increase in the commercialisation of granted IP rights from publicly-funded R&D; and
- iv) Number of new R&D-led industrial development opportunities initiated by the Department.

Outcome 5: Knowledge utilisation for inclusive development

Outcome 5 seeks to advance the vision of an inclusive and responsive NSI that provides equitable access to the country's knowledge infrastructure, and supports the broader concept of innovation. The two outcome indicators against which performance will be measured are:

- i) Grassroots innovations whose commercialisation has been facilitated by the support / access of the multi-tiered support package provided by the Department and its entities; and
- ii) Publicly-funded IP made available (accessible) in support of grassroots innovators.

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

Deploying national STI interventions is a challenge because the Department does not have a concurrent function within provincial and local government. However, the Department contributes to the development of an innovation ecosystem and a capable and developmental state via its Regional Innovation Support programmes. Outcome 6 seeks to increase the spatial footprint of innovation support so that innovation will enable localised socio-economic development. The four outcome indicators against which performance will be measured are:

- i) Increase in the number of use cases of decision support systems;
- ii) Number of demonstrators that have successfully introduced a new way of delivering a service;
- iii) Number of districts / metros supported with technology-based applications as part of the District Development Model for Service Delivery Improvement; and
- iv) Evidence informed integration of innovation in service delivery.

3. 2020/21 Budget Allocation to Vote 35: Science and Innovation

The Department's original 2020/21 budget allocation increased from R8.1 billion in the 2019/20 financial year to R8.8 billion. This represented, when adjusted for inflation, a real increase of 3.1%; and was the first real increase in the Department's budget allocation since the 2015/16 financial year.

The 2020/21 Special Adjustment Budget revised the Department's 2020/21 budget allocation from R8.8 billion to R7.36 billion. The second adjustments budget, needed for the requirements of the State, further revised the Department's budget down by R83.6 million to **R7.28 billion** (table 1). Hence, the Department's 2020/21 budget decreased by R1.52 billion in total.

Table 1: Vote 35: Science and Innovation - Revised 2020/21 allocations

Programme	2020/21								
	R thousand	Appropriation	Adjustments appropriation	Second adjustments appropriation				Total second adjustments appropriation	Adjusted appropriation
Roll-overs				Unforeseeable/unavoidable ¹	Virements and shifts	Declared unspent funds	Other adjustments		
Administration	360 303	(41 982)	-	-	(4 716)	-	(9 498)	(14 214)	304 107
Technology Innovation	1 504 480	(129 542)	-	-	10 397	-	(7 014)	3 383	1 378 321
International Cooperation and Resources	156 440	(35 293)	-	-	(1 372)	-	(2 973)	(4 345)	116 802
Research, Development and Support	4 882 470	(1 070 616)	-	-	32 935	-	(99 541)	(66 606)	3 745 248
Socioeconomic Innovation Partnerships	1 893 700	(158 067)	-	44 999	(37 244)	-	(9 579)	(1 824)	1 733 809
Total	8 797 393	(1 435 500)	-	44 999	-	-	(128 605)	(83 606)	7 278 287
Economic classification									
Current payments	632 471	(93 442)	-	-	(12 055)	-	(20 000)	(32 055)	506 974
Compensation of employees	421 993	(40 000)	-	-	-	-	(20 000)	(20 000)	361 993
Goods and services	210 478	(53 442)	-	-	(12 055)	-	-	(12 055)	144 981
Transfers and subsidies	8 162 158	(1 342 058)	-	44 999	11 415	-	(108 605)	(52 191)	6 767 909
Departmental agencies and accounts	6 179 895	(1 034 659)	-	44 999	45 898	-	(104 301)	(13 404)	5 131 832
Public corporations and private enterprises	1 593 265	(297 842)	-	-	(34 483)	-	(4 304)	(38 787)	1 256 636
Non-profit institutions	388 998	(9 557)	-	-	-	-	-	-	379 441
Payments for capital assets	2 764	-	-	-	640	-	-	640	3 404
Machinery and equipment	2 764	-	-	-	640	-	-	640	3 404
Total	8 797 393	(1 435 500)	-	44 999	-	-	(128 605)	(83 606)	7 278 287

¹ Unforeseeable and unavoidable expenditure in terms of section 6(1)(a) of the Appropriation Act (2020).

Source: National Treasury, 2020 Adjusted Estimates of National Expenditure, Vote 35: Science and Innovation

3.1. 2020/21 Third Quarter (October to December 2020) Performance

At the end of the third quarter, the Department spent R5.8 billion or 79.5% of the available budget of R7.3 billion. The Department had planned to spend R6.6 billion by the end of the third quarter. Spending on compensation of employees was R241.7 million against a projected adjusted appropriation of R362 million. This translated to underspending of R11.4 million or 3.1%. The Department had a year-end headcount of 387 posts against a total of 470 funded posts, resulting in 83 vacancies.

The Department achieved 20 (59%) and did not achieve 14 (41%) of the planned 34 quarterly performance targets.

Programme 1: Administration: Actual expenditure amounted to R180.5 million or 60.3% of the programme's available budget of R299.4 million. The underspending was attributed to slow spending due to the COVID-19 pandemic limiting employees to work from home.

Programme 1 achieved one and did not achieve two of its three performance targets for Quarter 3. The targets that were not achieved were:

- The submission by the CSIR of the first draft of its 2021/22 Shareholder's Compact.
- Stakeholder consultations on the Decadal Plan were delayed due to COVID-19; hence, it was not ready to be submitted to Cabinet.

Programme 2: Technology Innovation: Actual expenditure amounted to R1.1 billion or 80.9% of the programme's available budget of R1.4 billion. Expenditure variances resulted from slow spending by implementing agencies in Emerging Research Areas and Technology Transfer Offices, as well as delays in contract finalisation for the Innovation Fund.

Programme 2 achieved five and did not achieve two of its seven performance targets for Quarter 3. The targets that were not achieved were:

- The infrastructure tender (Space Weather Centre) was not awarded.
- The World Intellectual Property Organisation's Summer School did not take place due to COVID-19.

Programme 3: International Cooperation and Resources: Actual expenditure amounted to R71.7 million or 63.7% of the programme's available budget of R112.4 million.

Programme 3 achieved five and did not achieve four of its nine performance targets for Quarter 3. The four targets that were not achieved were all due to COVID-19 and included:

- Having 13 of 21 international resource leveraging engagements.
- Having two of eight capacity-building initiatives for international cooperation.
- Having three of six STI initiatives supporting the SADC Regional Indicative Strategic Development Plan.
- Implementing one of two STI plans of action with bilateral African partners.

Programme 4: Research Development and Support: Actual expenditure amounted to R3.2 billion or 84% of the programme's available budget of R3.8 billion. Expenditure variances resulted from slow spending by implementing agencies in Cyberinfrastructure and the South African Research Infrastructure Roadmap. In addition, payments to Strategic Science Platforms were delayed due to contract finalisations and late submission of financial reports.

Programme 4 achieved five and did not achieve two of its seven performance targets for Quarter 3. The targets that were not achieved were:

- 480 of 650 students and graduates were placed in DSI-funded work preparation programmes in SETI institutions.
- Consultations on the Regulations for the Indigenous Knowledge Act could not take place due to the delay in finalising the Regulations by the Department's Policy and Advocacy Directorate and the Legal Services Unit.

Programme 5: Socioeconomic Innovation Partnerships: Actual expenditure amounted to R1.2 billion or 73% of the programme's available budget of R1.7 billion. Expenditure variances resulted from slow spending by implementing agencies in Resource Based Industries; contract delays in the Advanced Manufacturing Technology Strategy, and spending delays due to new management at the Mandela Mining Precinct.

Programme 5 achieved four and did not achieve four of its eight performance for Quarter 3. The targets that were not achieved were:

- No statistical report (one planned) was approved by EXCO for publication and/or submitted to Cabinet and/or disseminated to policy audience.
- Not providing preapproval decisions within 90 days on 80% of applications received for the Research and Development Tax Incentive. Five (19%) out of 26 applications were provided with a decision within 90 days.
- Two formal technical and strategic executive bilaterals were held with the HSRC and CSIR. However, formal signed minutes are required as evidence. The minutes were in draft form.
- None of the 1 400 Presidential Youth Employment Initiative (PYEI) beneficiaries were contracted because the funding was less than requested. Hence, the scope and design of the initiative had to be changed and savings were redirected to cover the shortfall.

The Department indicated that a performance recovery plan had been formulated to ensure that a minimum of 80% of performance targets would be achieved by the end of the 2020/21 financial year.

COVID-19 Spending:

During the third quarter, the Department spent R128.2 million on COVID-19 related initiatives. Expenditure was mainly under consumable supplies, for example: sanitisers, sanitiser dispensers, masks, etc. With the move to level three of the COVID-19 lockdown and majority of the officials working from home, the Department anticipated that it would spend less on COVID-19 activities going into the fourth quarter.

4. Committee Observations:

The Committee made the following observations in relation to the financial and non-financial performance for the 2020/21 Third Quarter:

- 4.1.** A key issue raised by Members was around the collective efforts by government departments to address the social ills of society and whether enough was being done in working together towards common solutions and recommendations.
- 4.2.** Members asked about representivity with regard to training programmes and to what extent intersectionality was taken in account.
- 4.3.** Members raised their concerns about the DSI's reduced budget especially at a time where the investment in research and development (R&D) should be greater.
- 4.4.** Members raised their concerns around the finalisation of the Decadal Plan and wanted the DSI to elaborate on the challenges they experience with stakeholder consultations.
- 4.5.** Members requested detailed explanations around programme targets that were not achieved, as well as the virements that were effected as a result of slow spending activities.

5. Recommendations

The Portfolio Committee on Higher Education, Science and Technology, having considered the financial and non-financial performance of the Department of Science and Innovation for the 2020/21 Third Quarter, recommends that:

- 5.1.** The Department, its entities and all other government departments put more effort in collective and collaborative activities on cross-cutting matters, especially when it comes to issues relating to addressing the social ills in society.
- 5.2.** The Department present the final Decadal Plan to the Committee in the following term.
- 5.3.** The Department present the Framework on Representivity concurrently with the Decadal Plan.
- 5.4.** The Department present its policy brief *The role of innovation in post COVID-19 economic recovery* to the Committee in the following term. The Committee resolved to arrange a joint meeting with relevant portfolio committees for this briefing.
- 5.5.** The Department provide the Committee with a written response relating to its performance recovery plan.
- 5.6.** The Department brief the Committee in the following term on South Africa's pharmaceutical capability and readiness.

Report to be considered