Report of the Portfolio Committee on Higher Education, Science and Innovation on its Consideration of the 2022/23 Fourth Quarter Financial and Non-Financial Performance of the Department Of Science and Innovation, Dated 14 June 2023

The Portfolio on Higher Education, Science and Innovation, having considered the 2022/23 Fourth Quarter Financial and Non-Financial Performance of the Department of Science and Innovation, reports as follows:

1. Introduction

Section 40(1)(f) of the Public Finance Management Act (PFMA) (No. 1 of 1999) instructs the accounting officer of a department to submit all reports, returns, notices and other information to Parliament. The PFMA also stresses the need for accounting officers to regularly monitor and report on the performance of their departments against the agreed budget for the year.

Section 5(1)(c) of the Money Bills Amendment Procedure and Related Matters Act (Money Bills Act) (No. 9 of 2009) determines that the National Assembly (NA), through its committees, must annually assess the performance of each national department in relation to the expenditure report published by National Treasury in terms of section 32 of the PFMA.

One of the outcomes of the sixth Parliament is to ensure accountable government. Hence, the Committee conducts in-year monitoring and assessment of the expenditure and achievement of performance targets as set out in the Department's 2022/23 Budget and Annual Performance Plan. The quarterly assessments of the Department's expenditure and non-financial performance also assists the Committee in its preparation for the annual submission of the Budgetary Review and Recommendation Report (BRRR) as prescribed by Section 5(2) of the Money Bills Act.

2. Vote 35: Science and Innovation - 2022/23 Budget Allocation

In his weekly newsletter in January 2022, the President stated that science and technology have a key role to play in the country's economic recovery; in attracting greater levels of investment; and in contributing to skills, knowledge and technology transfer to capacitate the country's workforce. The President further stated that investment in science, technology and innovation (STI) to revitalise and modernise existing industries, as well as create new sources of growth and stimulate industrialisation is therefore being prioritised. In the 2022 State of the Nation Address, the President stated that the overriding priorities of 2021 would remain. These are (i) overcoming the coronavirus pandemic, (ii) the massive rollout of infrastructure, (iii) a substantial increase in local production, (iv) an employment stimulus to create jobs and support livelihoods and (v) the rapid expansion of energy generation capacity. In relation to the challenges facing the country, STI is central to finding solutions to most of these and the President enumerated several examples. For instance, the strides made through the Hydrogen South Africa Strategy to position the country within the global hydrogen economy; the development of local capability in vaccine and ventilator production; and the technical expertise developed in agro-processing and renewable energy.

The Department of Science and Innovation (the Department or DSI), seeking to ensure that the National System of Innovation (NSI) expands its positive impact on reducing poverty, inequality and unemployment as envisioned by the 2019 STI White Paper, identified the following six outcome goals for the period 2020-2025:

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

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

Outcome 3: Increase knowledge generation and innovation output.

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

Outcome 5: Knowledge utilisation for inclusive development.

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

The Department's 2022/23 budget allocation increased nominally by R127.7 million from R9 billion in the 2021/22 financial year to *R9.1* billion. This represented, when adjusted for inflation, a real *decrease of 2.95*% (real increase of 17.8% realised in 2021/22). In terms of economic classification,

the apportionment of the Department's 2022/23 budget allocation of R9.1 billion remained the same as in previous years. Hence, the budget allocation comprised Current payments of R577.6 million (6.3% of total allocation and R569.3 million in 2021/22), Transfers and subsidies of R8.6 billion (94.5% of total allocation and R8.4 billion in 2021/22), and Payments for capital assets of R3 million (0.03% of total allocation and unchanged from 2021/22).

The Department's budget funds five programmes, namely:

- Programme 1 Administration
- Programme 2 Technology Innovation
- Programme 3 International Cooperation and Resources
- Programme 4 Research, Development and Support
- Programme 5 Socio-economic Innovation Partnerships

These programmes fulfil the Department's mandate of realising the full potential of STI in social and economic development. The percentage budget allocation to the Programmes remained 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, received 94.7% of the Department's total budget allocation.

3. Summary of Performance - 2022/23 1st, 2nd and 3rd Quarters

At the end of Quarter 1, the Department had spent R1.1 billion (12%) of the available budget of R9.1 billion. Overall, the lower than planned expenditure was mainly attributed to Programme 2: Technology Innovation (R58 million variance from planned expenditure), Programme 4: Research, Development and Support (R796 million variance from planned expenditure) and Programme 5: Socio-economic Innovation Partnerships (R173 million variance from planned expenditure). The variance in expenditure was due to the slow processing of transfer payments and delays in project payments caused by administrative delays and the late submission of progress reports by the Department's entities, respectively. In relation to non-financial performance, the Department had 28 performance targets for the quarter and achieved 22 (79%) of these targets and did not achieve six (21%) targets. Programme 1: Administration (one target) and Programme 5: Socio-economic Innovation Partnerships (seven targets) achieved all performance targets for the quarter.

At the end of Quarter 2, the Department had spent R4.6 billion (50%) of the available budget of R9.1 billion. Overall, the lower than planned expenditure was again mainly attributed to Programme 2: Technology Innovation (R296.5 million variance from planned expenditure), Programme 4: Research, Development and Support (R380.6 million variance from planned expenditure) and Programme 5: Socio-economic Innovation Partnerships (R342.3 million variance from planned expenditure). The variance in expenditure was due to the slow processing of transfer payments and delays in project payments caused by administrative delays and the late submission of progress reports by the Department's entities and certain service providers, respectively. In relation to non-financial performance, the Department had 33 performance targets for the quarter and achieved 26 (79%) of these targets and did not achieve seven (21%) targets. The Department also reported that by the end of Quarter 2, 79% of the Medium-Term Strategic Framework (MTSF) targets had been achieved.

At the end of Quarter 3, the Department had spent R7 billion (77%) of the available budget of R9.1 billion, overspending by R684.4 million due to payments made later than planned following administrative and project report delays. The Department had a headcount of 388 posts against 435 funded posts, resulting in 47 vacancies, which was a decrease from the 53 vacancies, reported during Quarter 2. In relation to non-financial performance, the Department had 34 performance targets for the quarter and achieved 23 (68%) and did not achieve 11 (32%) of these targets.

With the tabling of the Medium-Term Budget Policy Statement (MTBPS) in October 2022, the Department's budget allocation remained unchanged at R9.1 billion; however, several shifts and virements totalling R150.5 million and R243.6 million respectively, were effected.

4. 2022/23 4th Quarter (January to March) Financial and Non-financial Performance

¹ National Treasury - 2022/23 4th Quarter Expenditure Report to the Standing Committee on Appropriations

At the end of Quarter 4, the Department had spent R9.12 billion (99.7%) of the available budget of R9.15 billion, underspending by R24.4 million (Table 1). The underspending was mainly on transfers and subsidies within Programme 1: Administration and Programme 2: Technology Innovation and due to delays in the payment of service providers who had submitted their invoices late.

Spending on compensation of employees was R340.5 million against the available budget of R357.7 million. This translated to underspending of R17.2 million (4.8%) that was due to the slow pace of appointing the required critical skills in various programmes. Moreover, the remaining compensation of employees' budget is currently insufficient to accommodate all the required posts as per the current skills needed across various programmes. The Department had a year-end headcount of 393 posts against 435 funded posts, resulting in 42 vacancies.

The Department had 50 performance targets for the quarter and achieved 37 (74%) and did not achieve 13 (26%) of these targets.

Table 1: Vote 35: Science and Innovation - 2022/23 Budget and Expenditure summary

		Main	Adjusted	Available	Year End Actual	Expenditure as % of Available	Undersnending	% Underspending/	COVID-19	Disaster
Rmil	lion	Appropriation	Budget		expenditure	Budget			Spending	
Prog	ramme								.,	.,
1	Administration	335.1	352.1	352.1	336.1	95.5%	16.0	4.5%	0.0	0.0
2	Technology Innovation	1 784.1	1 907.0	1 907.0	1 890.6	99.1%	16.5	0.9%	0.0	0.0
3	International Cooperation and Resources	149.9	149.4	149.4	161.3	108.0%	-11.9	-8.0%	0.5	0.0
4	Research, Development and Support	5 105.0	4 979.2	4 979.2	4 981.2	100.0%	-2.1	0.0%	0.0	0.0
5	Socioeconomic Innovation Partnerships	1 759.2	1757.6	1 757.6	1 751.7	99.7%	5.9	0.3%	0.0	0.0
Tota	ľ	9 133.3	9 145.3	9 145.3	9 120.9	99.7%	24.4	0.3%	0.5	0.0
Econ	omic Classification						0.0			
Curr	ent payments	577.6	579.9	579.2	559.7	96.6%	19.5	3.4%	0.0	
Com	pensation of Employees	363.7	357.7	357.7	340.5	95.2%	17.2	4.8%	0.0	0.0
Good	ds and services	213.9	222.2	221.5	219.2	98.9%	2.3	1.1%	0.0	0.0
Intere	est and Rent on Land	0.0	0.0	0.0	0.0	0.0%	0.0		0.0	0.0
Transfers and subsidies		8 552.7	8 554.1	8 554.8	8 550.0	99.9%	4.8	0.1%	0.5	
Payments for capital assets		3.0	11.3	11.3	11.2	99.0%	0.1	1.0%	0.0	0.0
Payn	nents for Financial Assets	0.0	0.0	0.0	0.0	173.5%	0.0	-73.5%	0.0	0.0
Tota		9 133.3	9 145.3	9 145.3	9 120.9	99.7%	24.4	0.3%	0.5	0.0

Source: National Treasury - 2022/23 4th Quarter Expenditure Report to the Standing Committee on Appropriations

Programme 1: Administration

Actual expenditure amounted to R336.1 million (95.5%) of the available budget of R352.1 million. The R16 million underspending was mainly due to delays in the payment of service providers who had submitted their invoices late. These invoices included computer services from the State Information Technology Agency and advertised tenders for the World Science Forum 2022.

Programme 1 achieved three (75%) of its four targets for the quarter. The following target was not achieved:

Target	Actual Output	Reason for variance	Action taken
94% of all approved positions filled by 31 March 2023	51% (of 85 posts) of all approved positions filled	Delayed recruitment and selection processes due to the unavailability of selection committee members	Develop vacancy management plans setting out specific timelines to fast track the filling of prioritised positions

Programme 2: Technology Innovation

Actual expenditure amounted to R1.89 billion (99.1%) of the available budget of R1.91 billion. The R16.5 million underspending was mainly on transfers and subsidies and due to late payments for the Strategic Industrial Bio-Innovation project at the Technology Innovation Agency (TIA) and the Business Acceleration Intervention project at the University of Limpopo.

² Department of Science and Innovation - 2022/23 4th Quarter Performance Report

Programme 2 achieved 11 (79%) of its 14 targets for the quarter. The following three targets were not achieved:

Target	Actual Output	Reason for variance	Action taken
Manufacturing of 3 or more CubeSats for MDASat constellation initiated by 31 March 2023	No manufacturing of CubeSats for MDASat constellation was initiated	Delays were caused by several reasons, such as the sudden resignation of staff, and a need for additional funding	The funding requirements for MDASat were included in the Space Infrastructure Hub funding request to National Treasury
15 UoT and TVET graduates offered experiential learning opportunities in the energy sector by 31 March 2023	12 UoT and TVET graduates were offered experiential learning opportunities in the energy sector	This is a brand-new indicator, thus there was no baseline to measure a target	None
13 SMMEs contracted and/or assisted with business development and commercialisation	4 SMMEs were contracted and/or assisted with business development and commercialisation	The information on the SMMEs that the Innovation Fund supported was not available for this report	The information will be included in the 2022/23 Annual Report

Programme 3: International Cooperation and Resources

Actual expenditure amounted to R161.3 million (108%) of the available budget of R149.4 million. The R11.9 million overspending was mainly on transfers and subsidies and due to higher project costs than what was initially estimated. These costs included payments for the International Cooperation Support Instruments project at the Water Research Commission and to the National Research Foundation (NRF) for student funding.

Programme 3 achieved six (67%) of its nine targets for the quarter. The following three targets were not achieved:

Target	Actual Output	Reason for variance	Action taken
16 international resource-leveraging engagements	15 international resource-leveraging engagements	Due to delays in responses from some international partners on planned engagements, some activities could not be achieved during the quarter	The shortfall during this quarter will be supplemented by over achievement during previous quarters
16 capacity-building initiatives for international cooperation specifically targeting historically disadvantaged institutions and individuals	10 capacity-building initiatives for international cooperation	Limited global movement and insufficient IT infrastructure affected efforts	Alternative engagement instruments will be pursued to increase capacity building opportunities for HDIs
12 STI initiatives supporting Agenda 2063	6 STI initiatives supporting Agenda 2063	Due to delays in responses from some international partners on planned engagements, some activities could not be achieved during the quarter	The shortfall during this quarter will be supplemented by over achievement during previous quarters

Programme 4: Research, Development and Support

Actual expenditure amounted to R4.981 billion (100%) per cent of the programme's available budget of R4.979 billion. The marginal overspending of R1.8 million was mainly on transfers and subsidies and due to higher project costs than what was initially estimated by implementing agencies and entities. These costs included payments for the National Public Goods Assets at the Agricultural Research Council and for the Joint Institute for Nuclear Research and European Organisation for Nuclear Research at the NRF.

Programme 4 achieved 12 (86%) of its 14 targets for the quarter. The following two targets were not achieved:

Target	Actual Output	Reason for variance	Action taken
25 annual research infrastructure grants awarded by 31 March 2023	21 annual research infrastructure grants were awarded	Funding for two RDI projects were forfeited due to non-expenditure and funding for six of the projects was deferred to the 2023/24 financial year	Projects not funded in the 2022/23 financial year will be funded in the 2023/24 financial year
4 MeerKAT extension antennas installed and commissioned by 31 March 2023	MeerKAT extension antennas installed and commissioned	The production of the MeerKAT extension dishes is the responsibility of the Max Planck Institute. The Institute reported major delays in the dish production process due to financial and logistical challenges	The challenges at the Max Planck Institute were resolved and the process of dish production is proceeding

Programme 5: Socio-Economic Innovation Partnership

Actual expenditure amounted to R1.752 billion (99.7%) of the available budget of R1.758 billion. The R5.9 million underspending was mainly on transfers and subsidies and due to pending payments for the Innovation for Inclusive Development projects.

The Programme achieved five (56%) of its nine targets for the quarter. The following four targets were not achieved:

Target	Output	Reason for variance	Action taken
Additional 280 high-	Additional 78 high-level	Green economy: 86	Green economy: The
level research students	research students (of	students were	implementing
(of which 30 at PhD	which 30 at PhD level)	declared but only 78	agencies have been
level) funded or co-	funded or co-funded in	met the requirements	notified of the non-
funded in designated	designated niche areas	of the technical	compliance.
niche areas by 31		indicator descriptor.	Industrial: results will
March 2023		Industrial: entities will	be reported in the
		submit their Q4	2022/23 Annual
		reports by 15th April	Report
An annual total of 50	19 industrially relevant	National Treasury has	A letter was sent to
industrially relevant	knowledge or innovation	not released funds	National Treasury in
knowledge or innovation	products were added to	since 2021 for the	March 2022 asking for
products added to the	the industrial	GBS: Green Economy	clarity as to why no
industrial development	development IP portfolio	for Development	funding was released,
IP portfolio between 1		project. Funding due	no response was
April 2022 and 31		to industry	received to this letter.
March 2023		associations under the	DSI did not have
		SIF programme had a similar issue with	surplus funds to direct to this initiative
		National Treasury,	to tins initiative
		which meant that	
		implementors were	
		I implementors were	

Target	Output	Reason for variance	Action taken
		not paid and therefore could not declare any outputs	
Annual workplans for 27 innovation support interventions that strengthen provincial or rural innovation systems between 1 April 2022 and 31 March 2023	Annual workplans for 25 innovation support interventions that strengthen provincial or rural innovation systems	The Sector and Local Innovation Directorate did not meet the annual target. As a result of due diligence investigations of non-performing interventions, support for interventions in the North West and Gauteng provinces was terminated	RISP interventions are selected through an annual call for proposals. There is a Call for Proposals currently open, which will contribute to 2023/24 performance for the new indicator (this one will not continue)
Preapproval decisions provided within 90 days on 80% of projects received between 26 August 2022 and 22 November 2022	Preapproval decisions provided within 90 days on 0% (0 out of the 14) of projects received between 26 August 2022 and 22 November 2022	Delays were experienced due to the December holiday and quorum issues in January, resulting in almost two months with no committee meetings	Regular meetings, increased knowledge of online system use, additional monitoring and reporting on processing of approval batches

Selected performance highlights for Quarter 4 included:

- The Agriculture Bioeconomy Innovation Partnership Programme (ABIPP) is geared toward funding the pipeline of skills needed to drive productiveness and competitiveness in the agricultural sector as well as transformation in terms of skills development. In the 2022/23 financial year, the ABIPP programme supported 18 black Masters and PhD students and one black Honours student. In addition, 16 jobs were supported through the ABIPP partnership programme in the form of interns, technicians and post-doctoral fellows.
- The National Intellectual Property Management Office (NIPMO) successfully implemented the Technology and Innovation Centre (TISC) workshop in February 2023 with the theme "Patent, Trademark and Design Search Tools in South Africa". The TISC aims to stimulate innovation and economic growth in South Africa by facilitating access to technological information and by strengthening capacity to effectively exploit the information found in technology databases, thereby assisting with intellectual property management and technology transfer. This quarter, 55 trainees attended the workshop and a further 76 registered for intellectual property distance learning courses. In total, 131 trainees were upskilled in intellectual property management and technology transfer in Quarter 4.
- The Department funds the space programme at the University of KwaZulu-Natal's (UKZN) Aerospace Research Institute (ASRI), the former Aerospace Systems Research Group (ASReG), Phoenix Space Propulsion Programme. During 13–17 March 2023, ASRI successfully tested two hybrid rockets, the Phoenix-1C and Phoenix-1D at the Denel Overberg Test Range (OTR) in the Western Cape. Phoenix-1C, a low-altitude rocket, carried experimental payloads for the Durban University of Technology, the Cape Peninsula University of Technology and the South African National Space Agency. Phoenix-1D, a higher-altitude rocket was launched out over the Indian Ocean and tracked by radar from OTR. UKZN is currently the only South African university pursuing an applied rocket-propulsion programme, producing graduates with skills in advanced manufacturing, aerospace systems design and computational analysis.

- In March 2023, the Department participated in the United Nations Commission on the Status of Women. A grade 12 Mathematics and Science leaner from Kwa-Zulu Natal was supported by the Department to participate in a side event on the margins of the United Nations Commission on the Status of Women. The learner shared her experiences and how Nka'Thuto EduPropeller a non-governmental organisation (NGO) dedicated to attracting young people to science and funded by the DSI supported her and other fellow learners to come up with STI solutions to address gender-based violence.
- The Water and Energy for Food (WE4F) Southern and Central Africa Regional Innovation Hub hosted an innovator community platform to encourage participant exchange and foster knowledge sharing among innovators. WE4F prioritises the empowerment of women innovators and historically disadvantaged institutions and individuals.
- The DSI funded South African Quantum Technology Initiative (SA QuTI) is making an impact on the specific target areas of quantum sensing and imaging (more sensitive measurements), quantum communications (security in data transfer) and quantum computing (faster computation). The SA QuTI has established five quantum nodes at UKZN, University of Zululand, University of the Witwatersrand, Stellenbosch University and Cape Peninsula University of Technology. There are 51 students and post-docs at the various nodes, supported by 12 staff members. The core expertise and infrastructure at the centres includes quantum entanglement, cold atoms, trapped ions, on-chip devices, a state-of-the-art High Resolution Transmission Electron Microscope, machine learning/AI and quantum computing access and expertise. The SA QuTI members published 62 papers in 2022/23. These include several in high-profile Nature and Science family journals, with some making the front cover of the journal and international news.
- 2 359 PhD students were awarded bursaries, surpassing the cumulative annual target of 2 200. Of these, 1 759 (74.6%) were black, 1 224 (51.9%) were women; 41 (1.7%) were persons with disabilities, 1 007 (42.7%) were black women; 2 091 (88.6%) were South Africans; and 2 124 (90.8%) were youth.
- 4 673 pipeline (2 112 BTech/honours and 2 561 master's) students were awarded bursaries. Of these, 4 264 (91.2%) were black, 2 947 (63.1%) were women; 64 (1.4%) were persons with disabilities, 2 718 (58.2%) were black women; 4 670 (99.9%) were South Africans; and 4 641 (99.3%) were youth.
- The Royal Astronomical Society (RAS) awarded its 2023 Group Achievement Award to the MeerKAT team on 13 January 2023. In its citation, the RAS recognised the MeerKAT team "for a series of spectacular observations in radio astronomy, the highlight being the images of the Galactic Centre region and the spectacular radio bubbles." In addition, the MeerKAT team has supported the development of science and technology in Africa and stress-tested technology for the Square Kilometre Array (SKA). Since its inauguration in 2018, the 64-dish array has been used to investigate a variety of questions in modern astrophysics such as how galaxies form and evolve across cosmic history. To date, 180 papers have been published using the MeerKAT telescope.
- The Department's EXCO approved the Astro-tourism strategy and implementation plan. The strategy is a joint project between the DSI and the Department of Tourism and aims to position South Africa to become a world class Astro-tourism destination that will yield sustainable benefit-sharing opportunities by maximising appropriate investments, improving marketing efforts, and enhancing visitor experience in South Africa. The strategy will also be used to educate the public about the importance of preserving our dark skies and radio silence as this is a geographic advantage that needs to be protected for Astro-tourism to thrive. The Strategy is premised on the following three important pillars:
 - Human Capacity Development and Transformation to foster appropriate skills in the entire value chain and to drive and enhance transformation.
 - o Infrastructure Development to enhance destination competitiveness through optimal use of new and existing infrastructure, equipment, and resources.

- o Inclusive Tourism Growth and Partnerships to strengthen competitiveness through strategic collaboration efforts and destination development whilst promoting inclusivity in the sector.
- The Minister of Finance announced that the R&D Tax Incentive will be extended for a period of 10 years, i.e., until 31 December 2033, as a government tax policy instrument that supports early-phase research and development. Apart from extending the incentive, refinements will be made to the R&D Tax Incentive and will include a six-month grace period for projects to commence before the application is submitted, to allow new and smaller applicants to gather information and potentially benefit from the incentive. In addition, the definition of R&D will be amended to make it simpler to understand and administer, resulting in an easier application process for the incentive. Amendments will also allow the Commissioner of SARS to disclose certain information to the Minister of Higher Education, Science and Innovation to improve monitoring and evaluations.
- The successful Ministerial launch of the 3-Dimensional (3D) Construction Printing Technology by the Department and the National Department of Human Settlements on 27 January 2023, signalled a new era where technology-based models to accelerate the delivery of government-subsidised houses could create new norms, standards and routines for the sustainable human settlement sector; while creating economic participation opportunities for small, medium and micro enterprises (SMMEs) in the supplier value-chain; operations and maintenance; localisation of components and materials. The piloting of housing units has been earmarked for the demonstration through 3D printing technology in partnership with provincial departments of human settlements with the support and participation of private sector partners.

5. Committee Observations

- **5.1.** Requested clarity around the data that reflected the Department's annual procurement expenditure on SMMEs, and black-, women- and youth-owned companies.
- **5.2.** Enquired whether surrounding communities had the necessary skills and capacity to get involved in spin off opportunities emanating from the SKA project. Furthermore, the Committee wished to know how successful linkages can be developed between the informal sector and projects that involve or require high-level technical skills.
- **5.3.** Enquired whether National Treasury had released the funds for the GBS: Green Economy for Development project, which sought to add knowledge or innovation products to the industrial development intellectual property portfolio. The project had not met its targets because the funds were not released.
- **5.4.** Welcomed the extension of the R&D Tax Incentive and asked about the amendments that will be made to the Incentive, as well as whether the Department had any backlogs in providing applicants with the necessary pre-approval decisions.
- **5.5.** Enquired to what extent there was collaboration with the Department of Basic Education (DBE) to encourage learners to pursue science, technology, engineering and mathematics (STEM) subjects.
- **5.6.** Enquired about the timeframes and implementation plans for the Astro-tourism Strategy.
- **5.7.** Raised concerns about the areas of underperformance, as well as targets that were not met.
- **5.8.** Enquired whether the Department was involved in finding solutions for the current energy and water crises.

6. Responses to issues raised by the Committee

6.1. On the human resources matter pertaining to vacancies, the Department explained the factors influencing the vacancy rate and committed to improve planning around this. They also explained that they require highly specialised skills and do not always attain the correct alignment with the skills required.

- **6.2.** They clarified that the percentage of procurement expenditure in relation to womenowned companies reflected aggregated data rather than duplication, as this was also categorised under youth-owned, black-, and white- companies.
- **6.3.** The Department explained their various programmes in the energy innovation sector and assured the Committee that these programmes are reviewed and that the progress of postgraduates supported under these programmes are continuously tracked.
- On the target for the placement of artisans and technicians that was not met, they explained that the implementing agency that they were working with was not able to meet the target. Going forward and to avoid missing the target of integrated learning for artisans and technicians they would be working closer with the energy sector education and training authority (SETA) to accommodate the students on the database.
- **6.5.** The Department explained their work in energy and aerospace through the Innovation Fund and by funding SMMEs.
- **6.6.** The Department explained the collaboration initiatives with its entities such as the Human Sciences Research Council, especially when it came to the SKA project and its potential benefits for education and local economic development.
- 6.7. They cited examples of their on-going work with the DBE; the development of a strategic framework with the Department of Higher Education and Training (DHET) on science fairs and Olympiads; their contributions to the training of teachers; the Research Chairs Programme which assists with informing evidence-based policy/programmes to support STEM education; as well as serving on a DBE-led interdepartmental forum on early childhood development that focuses on exposing young children to science.
- **6.8.** On the Astro-tourism Strategy, they explained the partnership they have with other departments and stated that the Strategy is now finalised for presentation to Cabinet.
- **6.9.** The Department affirmed the extension of the R&D Tax Incentive and stated that the National Treasury is responsible for leading the process of amending the Incentive.

7. Recommendations

- **7.1.** Noting their challenges regarding retaining and attracting high- level skills across its portfolio, the Committee requested the details of the Department's initiatives to address the demand for scarce skills and their collaboration with other departments and stakeholders in this regard.
- **7.2.** The Committee called on the Department to collaborate with other departments and entities to find synergies rather than duplicate work done in relation to research and innovation programmes with potential overlap.
- **7.3.** The Committee encouraged the Department to explore mechanisms or special programmes geared toward increasing the participation of persons living with disabilities.

Report to be considered.