



DSI SECOND  
QUARTER  
PERFORMANCE  
AND FINANCIAL  
REPORT (JULY TO  
SEPTEMBER 2020)

DG: Dr Phil Mjwara  
Date: 17 November 2020  
Occasion: Portfolio  
Committee

M Making < sure ( it's   
 possible )



science & innovation

Department:  
Science and Innovation  
REPUBLIC OF SOUTH AFRICA



# Presentation Outline

- ❑ **Purpose**
- ❑ **Alignment of the DST work to national priorities**
- ❑ **DSI's Strategic Outcomes Goals**
- ❑ **Highlights of the Quarter**
- ❑ **Performance overview**
- ❑ **Conclusion**

# Purpose

- ❑ **To present the DSI's second quarter performance report for the 2020/21 financial year.**

# Alignment of the DST work to national priorities

**The Department contributes to and reports on the following MTSF outcomes:**



**Outcome 4: Decent employment through inclusive economic growth.**



**Outcome 5: A skilled and capable workforce to support an inclusive growth path.**



**Outcome 6: An efficient, competitive and responsive economic infrastructure network.**



**Outcome 7: Vibrant, equitable and sustainable rural communities and food security for all.**



**Outcome 10: Environmental assets and natural resources that are well protected and continually enhanced.**



# DSI's six strategic outcomes goals

A transformed, inclusive, responsive and coherent NSI.

Human capabilities and skills for the economy and for development.

Increased knowledge generation and innovation outputs.

Knowledge utilisation for economic development.

Knowledge utilisation for inclusive development.

Innovation in support of a capable and developmental state



# A transformed, inclusive, responsive and coherent NSI

## Development of the Science, Technology and Innovation Decadal Plan

- The National Research Foundation (NRF) Amendment Act No. 19 of 2018 was signed into law by the President. The Act has expanded the mandate of the NRF beyond supporting research through human resource development and provision of research infrastructure, to include science engagement. The new Act also empowers the Minister to determine: (a) national policies for research and funding to be implemented by the NRF, (b) national research facilities, and (c) declare research institutions eligible for the NRF support.

# Human capabilities and skills for the economy and for development (2)

## Bursaries awarded through NRF and DST programmes

- ❑ During the reporting period, the DSI made substantial investments through instruments aimed at boosting human capital development (HCD) in priority areas.
  - ✓ DSI- funded 3 764 Honours of which 3 340 are black, 2 365 women and no people with disability were funded.
  - ✓ Also, 3 455 Master's students were funded of which 2 824 are black, 2 163 are women and no people with disability were funded.
  - ✓ 2 466 PhDs as a contribution to the NDP target of 100 PhDs/ million population by 2030 were funded and 1 982 of these funded PhDs are black people and 1 396 are women with no people with disability funded.

## Interns supported

- ✓ A total of 513 graduates and students were placed in DST-funded work preparation programmes in SETI institutions and 484 of these interns are black people and 343 are women with no people with disability funded.



# Increased knowledge generation and innovation outputs (1)

- ❑ On 7 April 2020, Intel announced that it was pledging an additional \$50 million globally in a Pandemic Response Technology Initiative to combat the coronavirus through accelerating access to technology at the point of patient care, speeding scientific research and ensuring access to online learning for students.
  - ✓ The continued reality in managing the pandemic and the post COVID-19 recovery, show that accelerating access to digital infrastructure can help combat the pandemic, enable new technology and scientific discovery that better prepares SA for future crises, and support the rebuilding of the South African economy in the short- and long-term.
  
- ❑ In light of this, Intel Corporation South Africa in collaboration with Dell Technologies, intends to support the upgrade of the CSIR's High Performance Computing platform to the value of more than 10 Million ZAR, to establish a dedicated COVID response platform.

# Increased knowledge generation and innovation outputs (2)

- ❑ To ensure technology transfer for socio-economic impact as envisaged in the IPR Act, the DSI through NIPMO made investments toward the identification of the potential intellectual property (IP) and the protection of the developed IP .
- ❑ **The following are some of the tangible results – (potential patents filling):**

# Increased knowledge generation and innovation outputs (3)

## North West University:

### □ During the Covid-19 lockdown:

- ✓ A digital Covid screening and data storage tool for a special needs school in North-West was developed by Professor Leenta Grobler and Dr Henri Marais. This product was awarded a UNECA innovation award and was confirmed as national finalist for South Africa by the World Summit Awards 2020 in the Covid Screening category. They were also nominated by the North-West department of Education for a CPSI (Centre for Public Service Innovation ) Award.
- ✓ A team of engineers led by Prof Grobler developed a remote monitoring system, which will enable experienced nurses and clinicians to remotely monitor a large fleet of ventilators, of different makes and models, on a single centralised monitoring screen.
- ✓ In addition, a collaborative programme was launched by the MerSETA for two sets of university teams to develop a home grown ventilator as well as curricula for training of engineering students in this field.
- ✓ **International patents are in the process of being filed from this work.**

# Increased knowledge generation and innovation outputs (4)

## University of Western Cape

- ❑ The South African National Bioinformatics Institute (SANBI) at the University of the Western Cape (UWC) has been chosen as one of the three regional reference laboratories in the World Health Organization (WHO's) network.
  - ✓ These laboratories provides sequencing, data analysis and are supported by an additional nine laboratories for technical support services to the countries where they are located as well as to neighbouring countries and countries in their sub-regions.
- ❑ SANBI together with two other centres act as reference labs to respond to pandemics such as COVID-19.
  - ✓ The other centres are the Kwazulu-Natal Innovation and Sequencing Platform and The African Center of Excellence for Genomics of Infectious Diseases (ACEGID) in Nigeria.
- ❑ WHO Regional Director for Africa commended this work and indicated that through this initiative, the country is not able only to track the evolution of the pandemic but also assess the possible mutation of the virus which is crucial to mounting an effective response.

# Knowledge utilisation for economic development

(1)

❑ In the fostering of knowledge utilisation for economic development outcomes, the DSI understood that there is a need to stimulate new R&D-led industrial development and provide necessary support to SMMEs/Co-ops who have secured new opportunities with stimulus packages to be competitive.

For examples:

- ✓ Through the DSI/CSIR investment, the mining equipment and technology readiness atlas is in the process of being developed (a central portal for SA manufacturers of mining equipment and technologies).
- ✓ Manufacturing – DST continued investment into the Collaborative Additive Manufacturing Programme (CPAM) which helped during COVID (making injection molds for CPAP valves; printing medical implants {discs in spine}) has been noted.
- ✓ This include investment into a series of advanced metals which is relevant to local manufacturing; increase component life and more efficient manufacturing processes (via Advanced Metals Initiative {AMI}).

# Knowledge utilisation for economic development

(2)

- ✓ To increase the level of local manufacturing (-via the Technology Localisation Programme) the DSI provide technological support to firms in the maritime, nuclear and power generation domains.
- ❑ Agricultural sector- innovation support in agro-processing and value chain yielded 2 potential IP products in citrus research during the reporting period.
- ❑ The Agricultural Bioeconomy Innovation Partnership Programme (ABIPP) initiatives:
- ❑ The Department through innovation in support of the agriparks programme (including the maize nixtamalisation programme) and the soybean food and nutrition programmes, continued to support (smallholders, black farmers, communities, women and young people) in technology dissemination programmes.

# Innovation in support of a capable and developmental state

- ❑ In support of a capable and developmental state, the Department strengthened its innovation for service delivery portfolio in order to continue providing appropriate innovative technology solutions to improve decision-making local governments. For examples:

## **District Development Model initiatives**

- ❑ The envisaged model will contribute to:
  - ✓ STI strengthen capacity at local municipality level, thereby contributing to local economic development.
  - ✓ Data observatory: engaging lead departments for an observatory to enable real-time access to DDM information (This is critical for evidence-informed decision-making).
  - ✓ Deployment of the Municipal Innovation Maturity Index: assess readiness and strengthen innovation maturity to improve service delivery.
  - ✓ Harness solutions developed from DSI entities for the DDM.
  - ✓ DSI DDM project information submitted to COGTA for planning purposes.

# Demonstration: Municipal Innovation Maturity Index (MIMI)

**MIMI - a framework** that assesses the smart city maturity levels of municipalities.

It also assesses the individual capabilities of municipal officials to innovate for purposes of service delivery

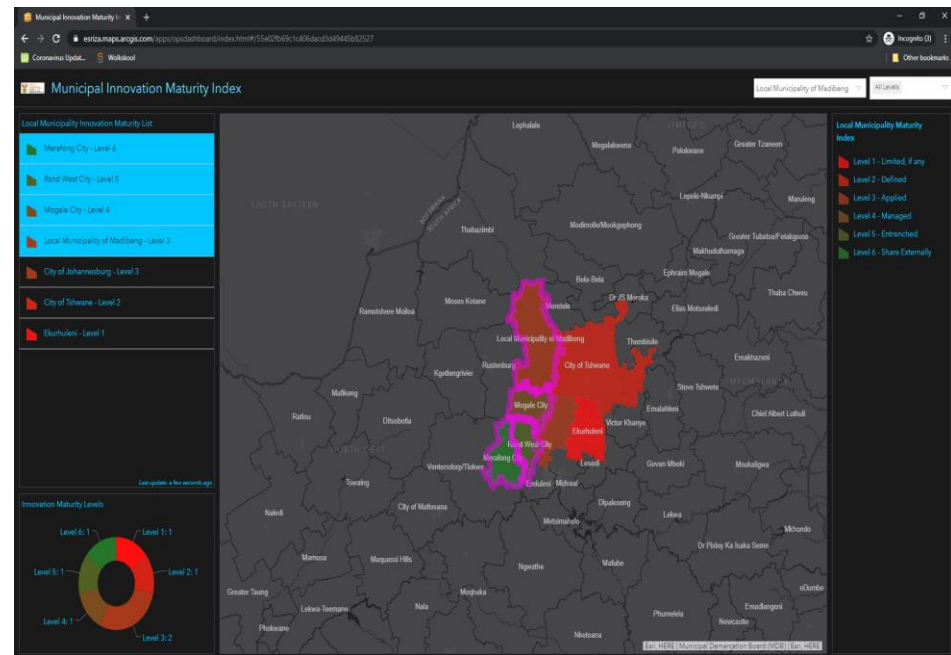
It applies a 5 level objective criteria for assessing the maturity of the innovation ecosystems of municipalities.

## Municipal Innovation Maturity Levels



Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Limited, if any	Defined	Applied	Managed	Entrenched	Share learnings
Limited, if any, awareness or evidence of innovation on the part of individual officials or the organisation.	Innovation is defined. Officials understand innovation principles and innovation strategies are in place, but there is little, if any, evidence of innovation implementation.	Innovation is applied. There is evidence of implementation in certain departments of the municipality. Innovation is repeatable, but irregular.	Innovation is managed. Innovation occurs on an on-going basis and processes in relation to this are managed well in the municipality.	Innovation principles and practices are entrenched throughout the municipality. Officials seek to optimise and evaluate solutions, and improve on these continuously for internal benefit.	Innovation is open and outward looking. New knowledge is applied creatively, based on evidence, in different contexts and shared with others outside of the organisation.

Two of the **top ten poorest** local municipalities in South Africa are found in the O.R. Tambo District. These Municipalities are adopting innovation and technology to improve their operations



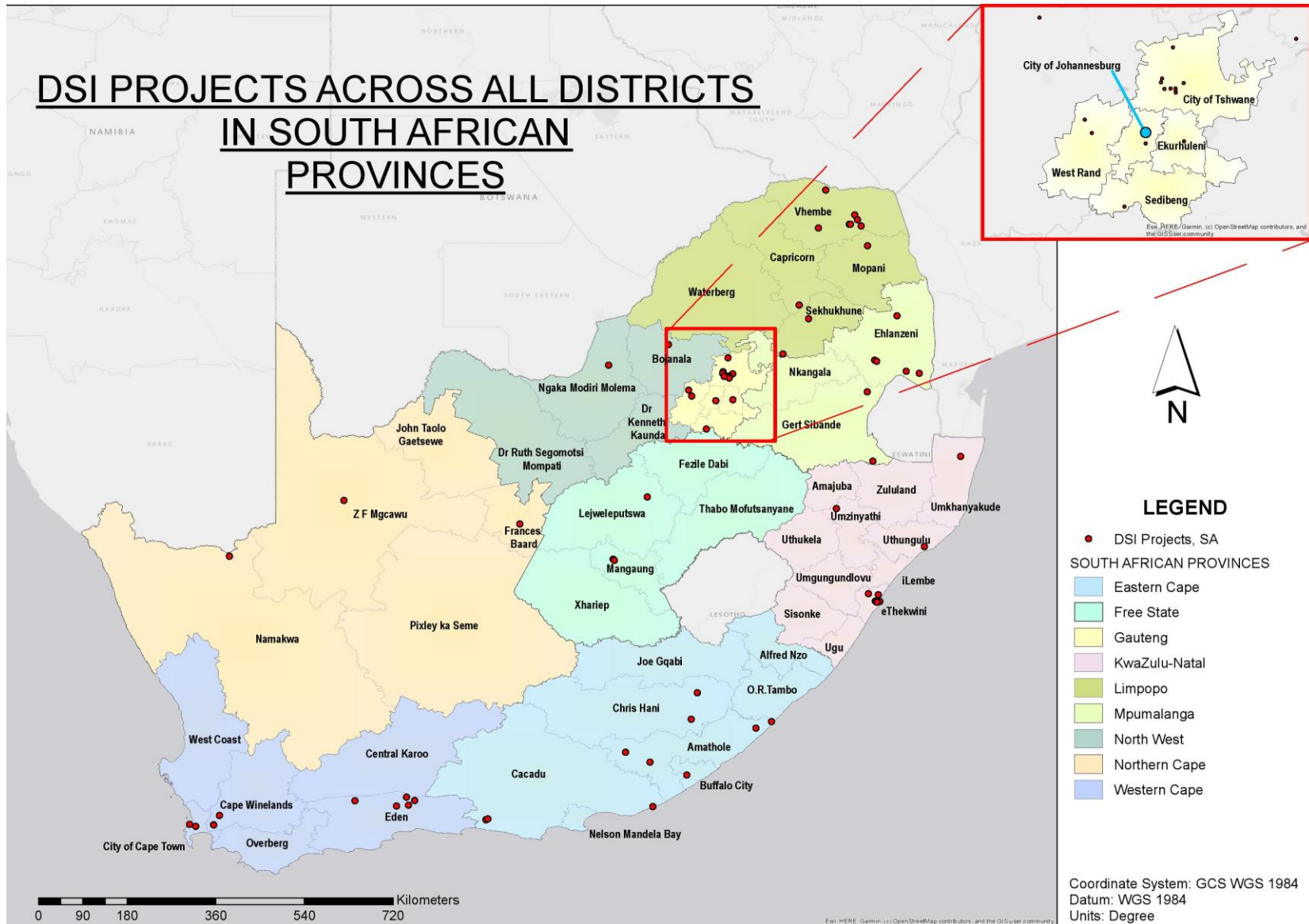
## Summary of progress

- First pilot was for 6 district municipalities, with most municipalities at innovation maturity level 2;
- Current piloting of the digital version of the MIMI tool covers 24 municipalities;
- Target is to reach 60% coverage of Municipalities by March 2021.;
- The MIMI assessment is helping municipalities develop their innovation plans and to invest on smart city projects.



# DSI DDM projects

## DSI PROJECTS ACROSS ALL DISTRICTS IN SOUTH AFRICAN PROVINCES





# International Cooperation Relations (1)

- ❑ Mid-term review meetings took place with international partners, namely Canada, India, Jamaica, China, Lesotho, Mauritius Netherlands, Russia and Switzerland with the purpose to review progress of the work done and to apply intervention measures to take activities forwards.
- ❑ DIRCO and the US Embassy successfully led the meetings of the SA-US political meeting to evaluate impediments to the partnership and the SA-USA Annual-Bilateral Forum, which were held physical and virtually in September 2020.
- ❑ The LEAP-RE project proposal was accepted by the European Commission (EC) as a long-term joint research and innovation partnership on renewable energy between African and European partners, under the leadership of the DSI.

# International Cooperation Relations (2)

- ❑ The Department continued engaging with the international communities to promote South Africa as a preferred partner for science and innovation through Joint Committee Meetings with Canada, India, Jamaica, China, Lesotho, Mauritius Netherlands, Russia and Switzerland.
- ❑ The Women in Innovation, Science, Technology, Engineering and Mathematics (WISTEM) portal a partnership between DSI and the Department of Women, Youth and Persons with Disabilities (DWYPD) was showcased during the African Women's Day celebration as part of the African Women in Entrepreneurship Program.
- ❑ The Department was nominated to serve in the UNESCO Open Science Advisory Committee and it is represented by the National Research Foundation in the IIASA Governing Council.

# International Cooperation Relations (3)

- The Department through SA institutions successfully contributed in the initiation of South African students enrolling in the Egypt's Africa App Launchpad online training programme with the aim to build the capacity of African youth and foster sustainable African start-ups in Game and App development.

The image features a blue header at the top with white technical diagrams, including chemical structures and mathematical symbols. Below the header, a photograph shows several solar panels tilted in a field of green grass under a blue sky with white clouds. A semi-transparent grey banner with rounded corners is overlaid on the middle of the image, containing the text 'PERFROMANCE INFORMATION OVERVIEW' in white, bold, uppercase letters.

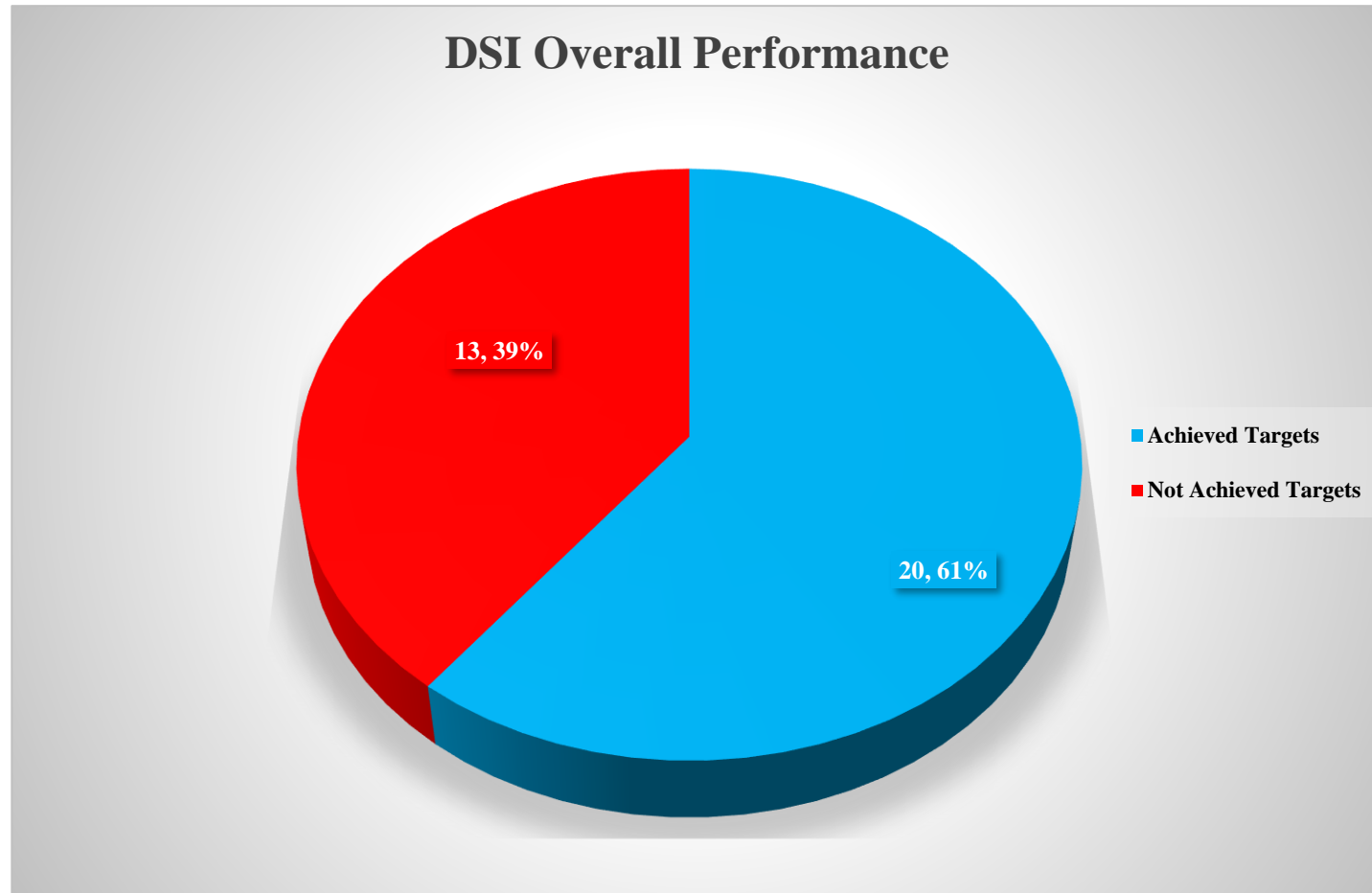
# PERFROMANCE INFORMATION OVERVIEW

# DSI Second Quarter Performance

- ❑ Figure 1 below illustrates the performance of the Department of Science and Innovation (DSI) from July to September 2020.
- ❑ During the period under review, the total number of planned output targets was (n= 33).
- ❑ The Department achieved 61% (20) of the planned output targets and 39% (13) of the planned output targets were not achieved.

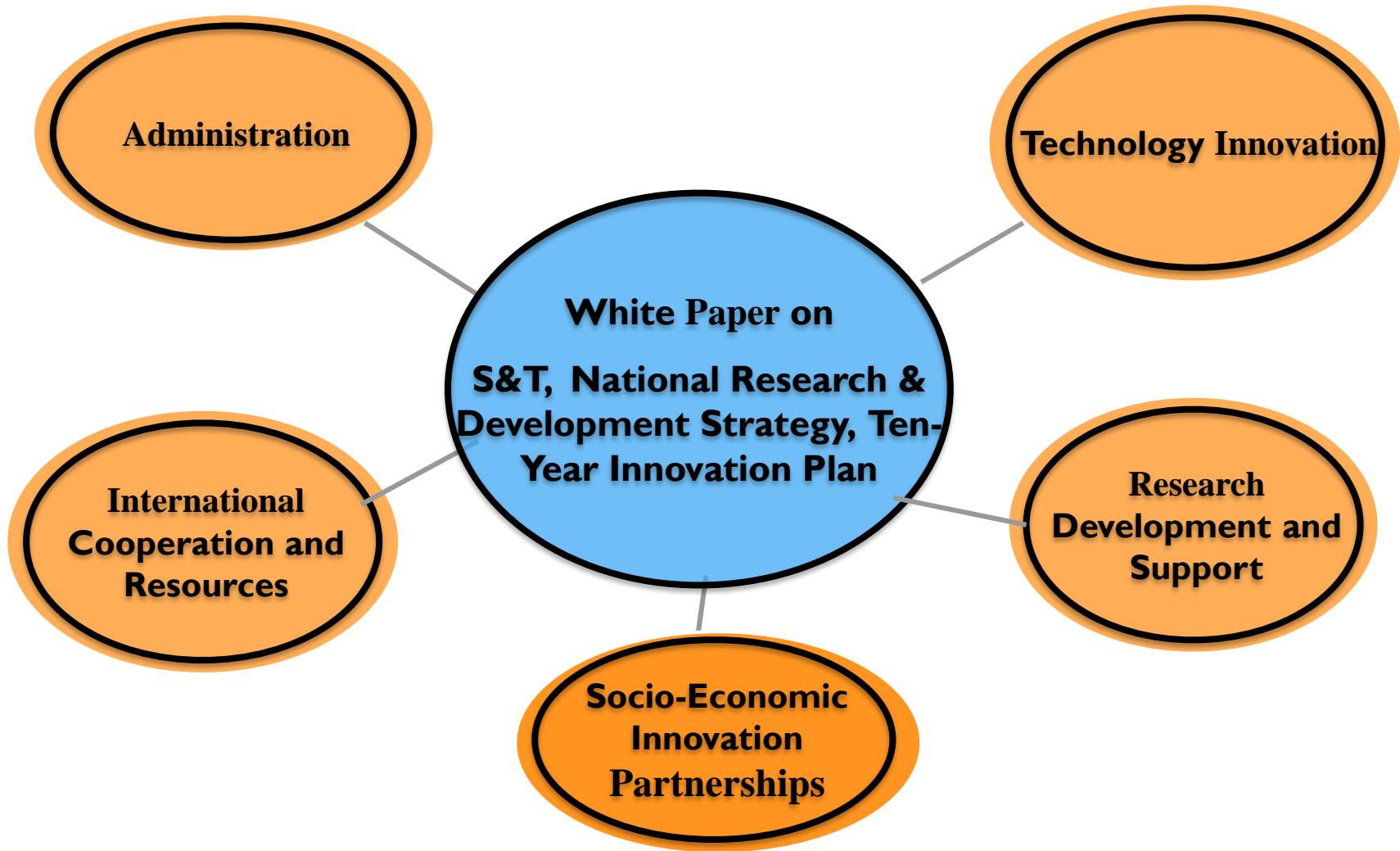
# DSI Second Quarter Performance

**Figure 1: DSI's overall final second quarter performance overview: (Total number of planned output targets, n= 33)**





# DSI's Programmes



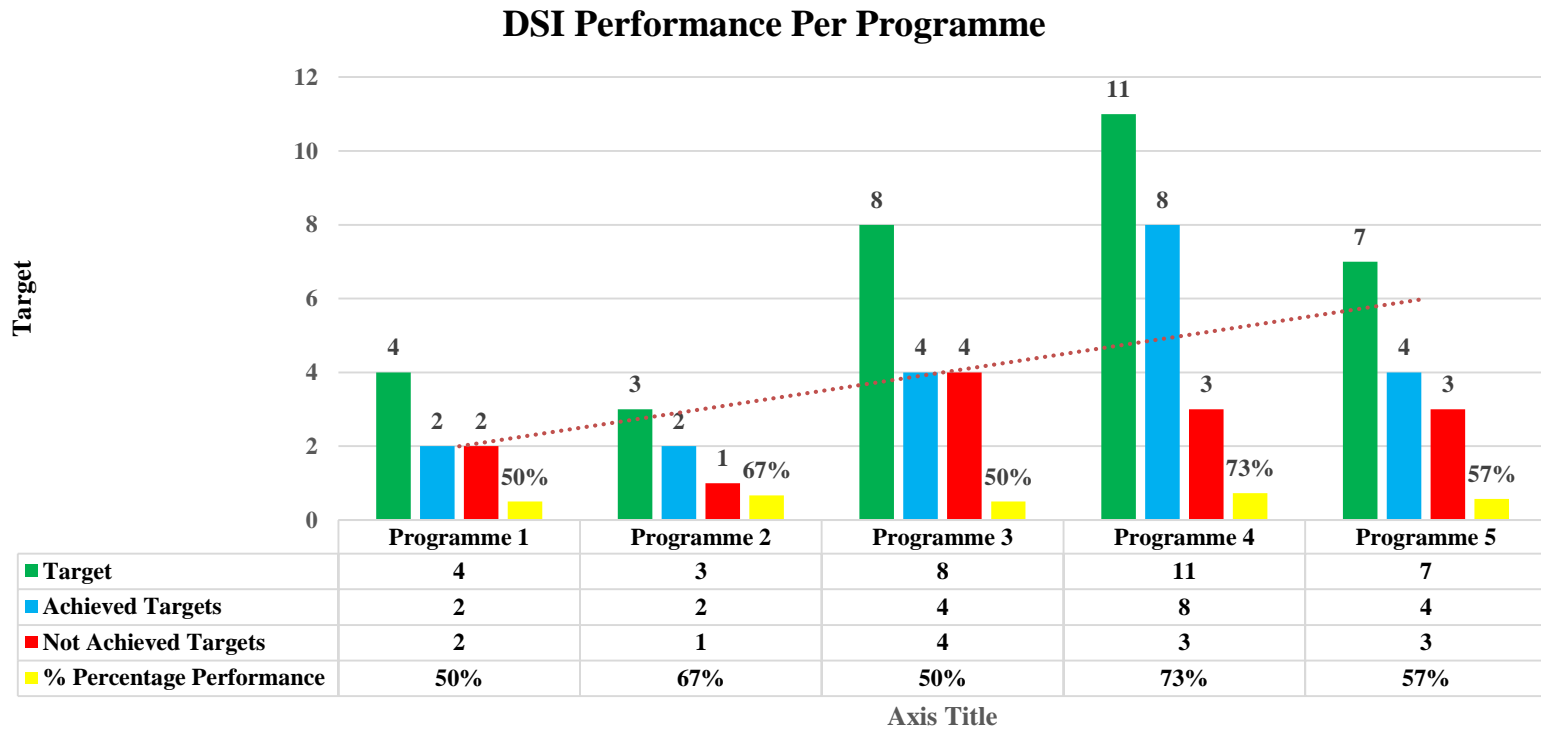
# DSI's Performance per Programme

□ Figure 2 below illustrates the performance of the Department per Programme in the second quarter.

- ✓ **Programme 1** achieved 50% of its targets and 50% of the planned targets were not achieved.
- ✓ **Programme 2** achieved 67% of its targets and 33% of the planned targets were not achieved.
- ✓ **Programme 3** achieved 50% of its targets and 50% of the planned targets were not achieved.
- ✓ **Programme 4** achieved 73% of its targets and 27% of the planned targets were not achieved.
- ✓ **Programme 5** achieved 57% of its targets and 43% of the planned targets were not achieved.

# Overall DSI's Performance per Programme

**Figure 2: The DSI performance per Programme**



■ Target 
 ■ Achieved Targets 
 ■ Not Achieved Targets 
 ■ % Percentage Performance 
 ⋯ Linear (Achieved Targets)



# Programme 1

## Purpose of the Programme (1)

### □ Programme 1: Administration

To conduct the overall management and administration of the Department.



AUDITOR - GENERAL  
SOUTH AFRICA

*Auditing to build public confidence*

# Programme 1 Performance

## Quarter 2 Achievement - Administration

Annual Target	Quarter 2 Target	Quarter 2 Progress	Status
Unqualified audit opinion with no financial matters in the audit report from the Auditor- General by 30 September 2020	Unqualified audit opinion with no financial matters in the	Unqualified audit opinion with no financial matters in the	<b>Achieved</b>
Six platforms (print, broadcast, online, media liaison, stakeholder engagement and social media) to profile the DSI and its entities by 31 March 2021	Six platforms (print, broadcast, online, media liaison, stakeholder engagement and social media) to profile the DSI and its entities	Six platforms (print, broadcast, online, media liaison, stakeholder engagement and social media) to profile the DSI and its entities	<b>Achieved</b>

# Programme 2

## Purpose of the Programme (2)

### □ Programme 2: Technology Innovation

To enable research and development in strategic and emerging focus areas to promote the realization of commercial products, processes and services from R&D outputs; through the implementation of enabling policy instruments.



# Programme 2 Performance

## Quarter 2 achievements – Technology Innovation

Annual Target	Quarter 2 Target	Quarter 2 Progress	Status
8 strategic and technical engagements with SANSA and TIA to alignment to national priorities by 31 March 2021	2 strategic and technical engagements with SANSA and	2 strategic and technical engagements with SANSA and	Achieved
225 trainees upskilled in intellectual property management and technology transfer skills by 31 March 2021	50 trainees upskilled in intellectual property management and technology	346 trainees upskilled in intellectual property management and technology	Achieved



# Programme 3

## Purpose of the Programme (3)

### ▣ Programme 3: International Cooperation and Resources

This Programme aims to strategically develop, promote and manage international relationships, opportunities and S&T agreements that strengthen the NSI and enable an exchange of knowledge, capacity and resources between South Africa and its regional and international partners.



**Minister Dr Blade Nzimande at the STS Forum TICAD7 Africa-Japan Workshop**

# Programme 3 Performance

## Quarter 2 achievements - Programme 3: International Cooperation and Resources

Annual Target	Quarter 2 Target	Quarter 2 Progress	Status
43 dedicated international resource-leveraging engagements undertaken by 31 March 2021	6 international resource-leveraging Engagements	14 international resource leveraging engagements	<b>Achieved</b>
326 new South African students participating in international training programmes as part of cooperation initiatives facilitated by DSI by 31 March 2021	50 South African students participating in international training programmes	90 South African students participating in international training programmes	<b>Achieved</b>
34 international policy dialogues and technical exchanges the policy intents of the White Paper on STI by 31 March 2021	4 international policy dialogues and technical exchanges to support the policy intents of the White Paper on STI	14 international policy dialogues and technical exchanges to support the policy intents of the White Paper on STI	<b>Achieved</b>

# Programme 3 Performance

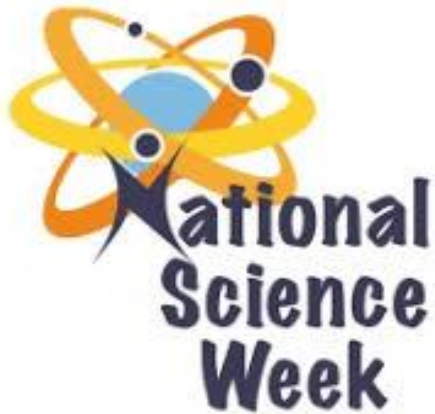
## Quarter 2 achievements - Programme 3: International Cooperation and Resources

Annual Target	Quarter 2 Target	Quarter 2 Progress	Status
6 STI plans of action implemented with bilateral African partners	1 STI plan of action implemented with bilateral African partners	1 STI plan of action implemented with bilateral African partners	<b>Achieved</b>

## Purpose of the Programme (4)

### □ Programme 4: Research Development and Support

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



# Programme 4 Performance

## Quarter 2 achievements - Programme 4: Research Development and Support

Annual Target	Quarter 2 Target	Quarter 2 Progress	Status
No fewer than 3 100 PhD students awarded an annual bursary as reflected in the reports from the NRF and other relevant entities by 31 March 2021	No fewer than 1 500 PhD students awarded an annual bursary as reflected in the reports from the NRF and other relevant entities	2 466 PhD students awarded bursaries annually as reflected in the NRF and relevant entities.	<b>Achieved</b>
No fewer than 9 300 pipeline postgraduate students awarded an annual bursary as reflected in the reports from the NRF and other relevant entities by 31 March 2021	No fewer than 5 000 pipeline postgraduate students awarded an annual bursary as reflected in the reports from the NRF and other relevant entities	7 219 pipeline postgraduate students awarded bursaries annually as reflected in the NRF and relevant entities.	<b>Achieved</b>
25 annual research infrastructure grants awarded by 31 March 2021	Call for proposals on awarding of research infrastructure grants issued	NEP call for proposal on awarding infrastructure was issued	<b>Achieved</b>

# Programme 4 Performance

## Quarter 2 achievements - Programme 4: Research Development and Support

Annual Target	Quarter 2 Target	Quarter 2 Progress	Status
5 800 Gbps total available broadband capacity provided by SANReN by 31 March 2021	New links and upgrade plan finalised	SANReN Connectivity Plan finalised	<b>Achieved</b>
No fewer than 3 950 researchers awarded research grants through NRF-managed programmes as reflected by the NRF project reports by 31 March 2021	No fewer than 2 000 researchers awarded research grants through NRF-managed programmes	2 322 researchers awarded research grants through NRF-managed programmes as reflected in the NRF project reports	<b>Achieved</b>
64 S-Band science mode receivers installed on MeerKAT by 31 March 2021	Progress report on implementation of installation plan approved by SKA SA Project Director	The Installation progress is according to schedule. 16 receivers installed so far as per the progress report	<b>Achieved</b>

# Programme 4 Performance

## Quarter 2 achievements - Programme 4: Research Development and Support

Annual Target	Quarter 2 Target	Quarter 2 Progress	Status
System design review of the MeerKAT extension approved by 31 March 2021	Progress report on system design review (SDR) of MeerKAT extension approved by SRAO Director on the MeerKAT extension	The System Design Review (SDR) approval is on schedule	<b>Achieved</b>
Sample and technical report frameworks for the first South African relationship with science survey approved by Exco by 31 March 2021	Draft sample and technical report frameworks for the first South African relationship with science survey produced	The draft framework of indicators to inform the survey questions and data sources completed and impact themes on which to base technical report format described. Stakeholder consultation on the framework held on 3 and 10 September 2020	<b>Achieved</b>

# Programme 5

## Purpose of the Programme (5)

### □ Programme 5: Socio-Economic Innovation Partnerships

This Programme enhances the growth and development priorities of government through targeted S&T-based innovation interventions and the development of strategic partnerships with other government departments, industry, research institutions and communities.





# Programme 5 Performance

## Quarter 2 achievements - Programme 5: Socio-Economic Innovation Partnership

Annual Target	Quarter 2 Target	Quarter 2 Progress	Status
At least 4 knowledge products on innovation for inclusive development published by 31 March 2021	At least 2 knowledge products on innovation for inclusive development published	At least 2 knowledge products on innovation for inclusive development published	<b>Achieved</b>
10 decision-support systems maintained and improved by 31 March 2021	Annual work plan approved for at least 8 decision-support	Annual work plan approved for at least 8 decision-support	<b>Achieved</b>
At least 4 learning (seminars/ policy round tables) hosted by 31 March 2021	At least 2 learning interventions hosted	At least 2 learning interventions hosted	<b>Achieved</b>

**Knowledge products** refer to case studies, policy briefs, technology briefs and research reports.

**Decision support** interventions help people think about choices they face; they describe where and why choice exists; they provide information about options, including, where reasonable, the option of taking no action.

# Programme 5 Performance

## Quarter 2 achievements - Programme 5: Socio-Economic Innovation Partnership

Annual Target	Quarter 2 Target	Quarter 2 Progress	Status
At least 14 innovation-support interventions funded or co-funded that strengthen provincial or rural innovation systems by 31 March 2021 (cumulative target)	Annual workplan approved for at least 10 innovation-support	Annual workplan approved for at least 20 innovation-support	<b>Achieved</b>

# Underperformance

A photograph of several solar panels mounted on a grassy field under a blue sky with white clouds. The panels are tilted and appear to be part of a solar farm. The grass in the foreground is vibrant green and slightly out of focus.

**TARGETS WHICH WERE NOT  
ACHIEVED**

# Classification of reasons for variances due to non / under achievement

- ❑ **Process delays** – refers to factors which are outside the control of the DSI and therefore achievement of such targets is mainly dependent on outside circumstances.
- ❑ **Ineffectiveness of implementers** – refers to non-achievement due to deficiencies during the implementation phase.
- ❑ **Target formulation deficiencies** – refers to targets which were not achieved because of variables which were not foreseen during the target formulation phase.

# DSI's Underperformance Overview

## Quarter 2 targets which were not achieved

Quarter 2 Target	Quarter 2 Progress	Reasons for non-achievement	Status	Variance Classification
Consultation with NSI stakeholders	Presentation to a Ministerial Workshop (18 September 2020) to receive approval for the Decadal Plan logical framework, structure and proposed societal grand challenges and missions. Consultation with other stakeholders will follow from this	Delays in completion of the NRDS/TYIP Review and the HESTILL Review (the latter due to an expanded mandate) - both indispensable inputs to the Decadal Plan	<b>Not Achieved</b>	<b>Process delays</b>
Roll-out of branding and marketing initiatives (thematic bill boards and social media) across Provinces and Metropolitan Municipalities	Engaged with programmes and finalised the strategy for campaigns A submission on the status of the plans for the roll-out of the brand campaign has been presented to Exco. Specifications for goods and services were advertised, quotes were received and is now evaluated for appointment of service providers	The consultations with entities and programmes within the department took longer than anticipated, however, input was used to refine the brand campaign	<b>Not Achieved</b>	<b>Process delays</b>

# DSI's Underperformance Overview

## Quarter 2 targets which were not achieved

Quarter 2 Target	Quarter 2 Progress	Reasons for non-achievement	Status	Variance Classification
Research chair appointed	The target to appoint a Research Chair was not achieved	The process in progress. The 2 candidates were shortlisted; however, they have been unable to travel to South Africa for interviews due to COVID-19 travel restriction	<b>Not Achieved</b>	<b>Process delays</b>
6 capacity-building initiatives for international cooperation	5 capacity-building initiatives for international cooperation	Although there was an increase in virtual activities and training, HDI's often experienced challenges connecting.	<b>Not Achieved</b>	<b>Ineffectiveness of implementers</b>
1 STI initiative supporting Agenda 2063	0 STI initiative supporting Agenda 2063	Due to the COVID 19 crisis the progress in this indicator has been delayed	<b>Not Achieved</b>	<b>Process delays</b>

# DSI's Underperformance Overview

## Quarter 2 targets which were not achieved

Quarter 2 Target	Quarter 2 Progress	Reasons for non-achievement	Status	Variance Classification
4 STI initiatives supporting the SADC RISDP	0 STI initiatives supporting the SADC RISDP	Due to the COVID 19 crisis the progress in this indicator has been delayed	<b>Not Achieved</b>	<b>Process delays</b>
3 engagement with a global science leader	0 engagements with a global science leader	Due to the COVID 19 crisis the progress in this indicator has been delayed	<b>Not Achieved</b>	<b>Ineffectiveness of implementers</b>
550 graduates and students placed in DSI-funded work preparation programmes in SETI Institutions	513 graduates and students placed in DSI-funded work preparation programmes in SETI institutions (442 NRF Internship Programme; 217 NYS)	A report was not received from the NRF by 21 October 2020	<b>Not Achieved</b>	<b>Ineffectiveness of implementers</b>

# DSI's Underperformance Overview

## Quarter 2 targets which were not achieved

Quarter 2 Target	Quarter 2 Progress	Reasons for non-achievement	Status	Variance Classification
Consultation on the Regulations for IK Act with communities	The Legal Unit is currently reviewing the IK Act, No 6 of 2019, regulations. As progress, the LSU have submitted an implementation plan which was presented to the Portfolio Committee on Higher Education, Training, Science and Innovation on the 26 August 2020. Furthermore, the progress on the regulations was presented to EXCO on 16 August 2020 for noting	Due to the Covid 19 lockdown minimal contact with the Legal Services Unit to work on the regulations has been achieved	<b>Not Achieved</b>	<b>Process delays</b>
3 bilateral engagement report	Two meetings were held in this quarter (SACNASP and NRF) to ensure alignment to national priorities. The ASSAf meeting was postponed	The ASSAf Q2 meeting was postponed to December 2020	<b>Not Achieved</b>	<b>Process delays</b>



# DSI's Underperformance Overview

## Quarter 2 targets which were not achieved

Quarter 2 Target	Quarter 2 Progress	Reasons for non-achievement	Status	Variance Classification
At least 11 industrially relevant knowledge or innovation products added to the industrial development IP portfolio	At least 6 industrially relevant knowledge or innovation products added to the industrial development IP portfolio	Covid and impact on HEIs industry might reduce the actual achievement	<b>Not Achieved</b>	<b>Ineffectiveness of implementers</b>
Preapproval decisions provided within 90 days on 80% of applications received between 1 April 2020 and 30 June 2020	3 (about 9%) out of 35 applications were provided with a decision within 90 day	Capacity is particularly stretched now due to s11D policy review, in particular development of Discussion Document, and work on new online system.	<b>Not Achieved</b>	<b>Process delays</b>

# DSI's Underperformance Overview

## Quarter 2 targets which were not achieved

Quarter 2 Target	Quarter 2 Progress	Reasons for non-achievement	Status	Variance Classification
2 Bilateral engagement reports	1 Bilateral engagement reports	Due to Covid-19 lockdown and the focus on how best the NSI can support the Covid-19 response, only one technical bilateral with CSIR was held, However, several technical meetings were facilitated with both CSIR and HSRC with respect to specific areas. This included behavioural and social science support (HSRC) and situational analysis and production of breathing devices (CSIR). These meetings qualify as technical bilateral engagements but as they were not minutes, they were not counted as a formal technical engagement in terms of the indicator definition	<b>Not Achieved</b>	<b>Process delays</b>

The background features a blue-toned collage of financial data. On the left, a black calculator is partially visible. A blue pen lies diagonally across the center. The background is filled with various financial charts, including line graphs and a pie chart. A magnifying glass is positioned over a table of numerical data. A central grey banner with a white border contains the text 'FINANCIAL REPORTING'.

# FINANCIAL REPORTING

66.76	1826.61
66.74	1051.43
57.66	459.42
51.63	457.51
49.82	506.78
43.7	1810.34
43.7	7083.45
42	5958.84
42	1313.11
25	1236.60
	15930.5
	6979.12
	156.66
	1477.73
	2224.66
	Σ 11.00
	18615.00
	1901.48
	2108.22
	891.45
	3.06
	02

ce Rate  
5.87%  
Site Avg 75.87%  
its  
7.2%  
5.30%

# 2020/21 Special Adjustment Budget

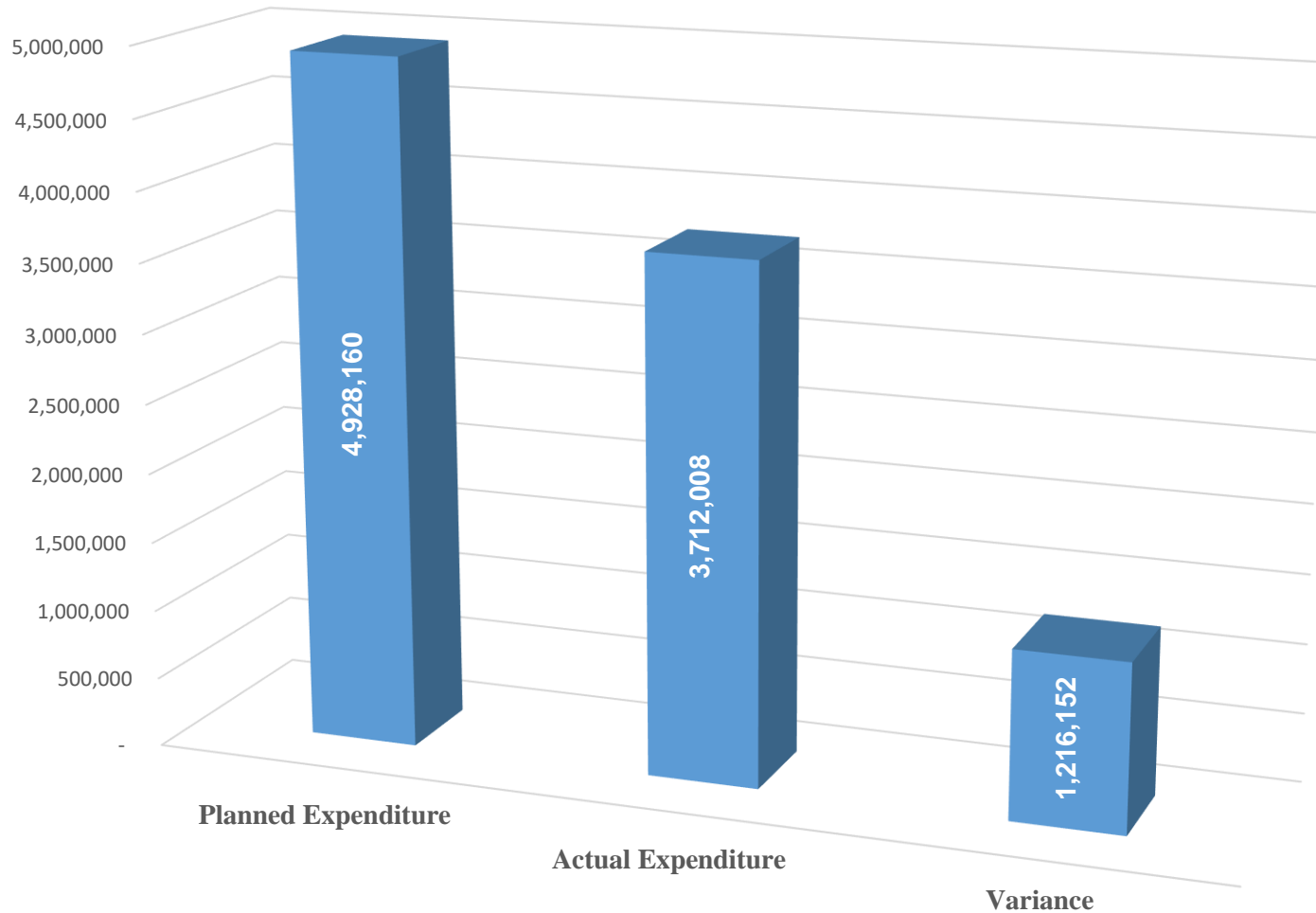
Economic classification	Adjusted Budget R'000
Compensation of employees	381 993
Goods and services	139 981
Transfers and subsidies	6 836 711
Payments for capital assets	3 404
<b>Total</b>	<b>7 362 088</b>

# OVERALL FINANCIAL PERFORMANCE

- The Department planned to spend R4,928 billion by the end of quarter 2.
- The actual spending for the period amounted to R3,712 billion (50,4%) of the total adjusted budget of R7,362 billion).
- This translates to a material variance of R1,216 billion or 24,7% of planned expenditure.
- Various measures are being put in place to address the material variance; these include:
  - Revision of projections during the Adjusted Estimates of National Expenditure period (AENE); and
  - Fast track administrative processes.

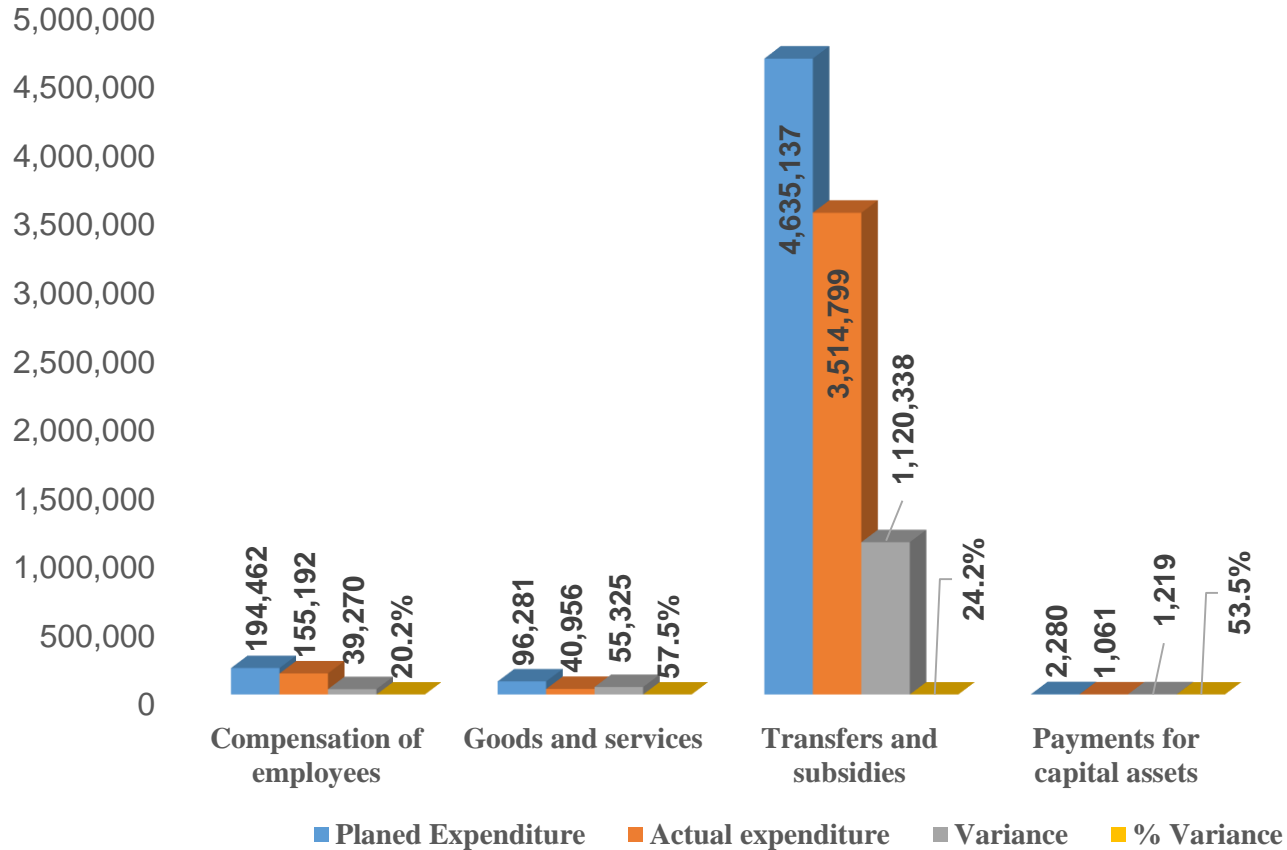
# OVERALL FINANCIAL PERFORMANCE

## Planned vs Actual Expenditure



# FINANCIAL PERFORMANCE PER CLASSIFICATION

Planned vs actual expenditure



# REASONS FOR VARIANCES AND PROPOSED REMEDIES

Expenditure Category	Reason for material variance	Proposed remedies
<b>Compensation of employees</b>	<ul style="list-style-type: none"><li>▪ Nationwide lockdown delayed the filling of prioritised positions.</li><li>▪ Changes within Ministry contributed to the variance since the process of moving the DM and his private office from DHET to DSI has not been finalised.</li><li>▪ The budget cuts effected on the compensation of employees budget will affect the filling of positions for the current financial year. The DSI can only fill critical positions that are affordable for the 2021 MTEF period</li></ul>	<ul style="list-style-type: none"><li>▪ Three phases of prioritised positions have been approved by EXCO and the department is accelerating the process of filling vacancies. 12 posts have been advertised with a closing date of 26 August 2020 and others will be advertised later in the financial year.</li></ul>



# REASONS FOR VARIANCES AND PROPOSED REMEDIES

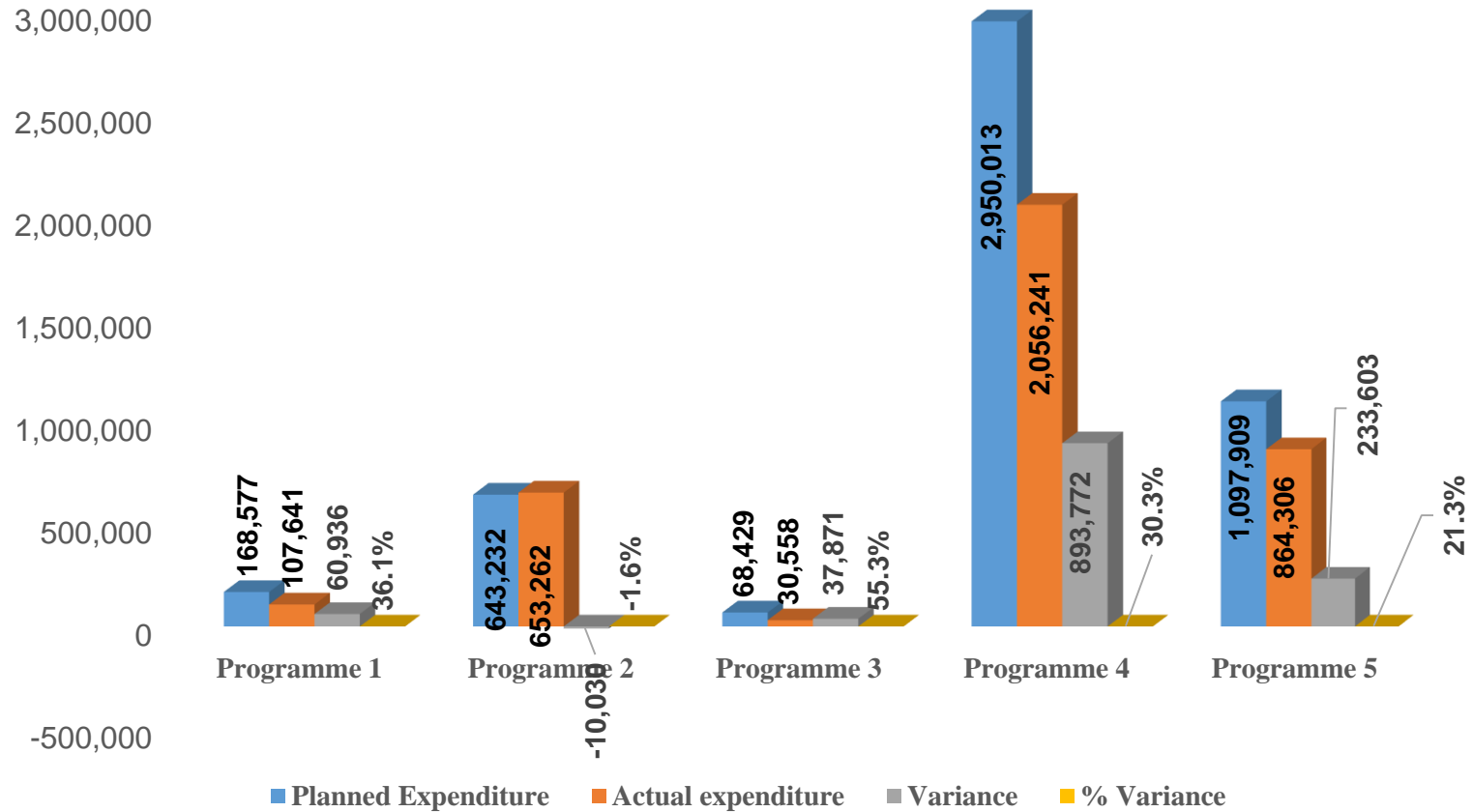
Expenditure Category	Reason for material variance	Proposed remedies
<b>Goods and services</b>	<p>Most services under this item were not rendered as planned, including the Budget Vote, which were held virtually, and three public participation programmes, which were cancelled. Expenditure incurred was mainly for communication (data and airtime), operating leases, property payments, and consumable supplies related to COVID-19 (sanitisers, sanitiser dispensers, masks, etc.).</p> <p>The DSI has commitments of R27.7 million under the item and there is no anticipated underspending under the item by 31 March 2021.</p>	<p>R53.4 million was cut from the budget, however, revisions on the projected expenditure were only made between August 2020 and March 2021.</p>

# REASONS FOR VARIANCES AND PROPOSED REMEDIES

Expenditure Category	Reason for material variance	Proposed remedies
<p><b>Transfers and subsidies</b></p>	<p>The variance is due to the following:</p> <p>Late submission of financial reports and business plans by implementing agencies</p> <p>Temporary closures of the building due to COVID-19 cases.</p> <p>Closure of some of the institutions due to lockdown which affected submission of necessary documents required for effecting transfers.</p>	<p>Fast track administrative processes.</p> <p>Effect virements from slow spending activities to activities having shortfalls</p>

# FINANCIAL PERFORMANCE PER PROGRAMME

Planned vs actual expenditure



# DETAILS OF VARIANCES ON TRANSFERS AND SUBSIDIES FOR PROGRAMMES' 2,4 AND 5

## Programme 2: Technology Innovation

Item	Planned expenditure R'000	Actual expenditure R'000	Variance	% Variance
Biofuels	1,650	1,650	-	-
Bio-economy Strategy	20,614	20,600	14	0.1%
Health Innovation	51,583	51,864	-281	(0.5%)
HIV and Aids Prevention and Treatment Technologies	29,205	29,205	-	-
Hydrogen Strategy - Current	11,735	-	11,735	100%
Hydrogen Strategy - Capital	23,966	25,701	(1,735)	(7.2%)

# DETAILS OF VARIANCES ON TRANSFERS AND SUBSIDIES FOR PROGRAMMES' 2,4 AND 5

## Programme 2: Technology Innovation cont.

Item	Planned expenditure R'000	Actual Expenditure R'000	Variance R'000	% Variance
Indigenous Knowledge Systems	5,391	13,955	(8,564)	(158.9%)
Social Impact Bond	-	33,422	(33,422)	-
Space Science	31,441	30,000	1,441	4.6%
South African National Space Agency	121,392	121,392	-	-
Technology Innovation Agency	303,906	303,906	-	-
Technology Transfer Offices Support	6,000	1,693	4,307	71.8%
<b>Total</b>	<b>606,883</b>	<b>633,388</b>	<b>(26,505)</b>	<b>(4.4%)</b>

# REASONS FOR VARIANCES

- **Hydrogen Strategy current:** Audited financial reports for the Council for Scientific and Industrial Research (CSIR) and Council for Mineral Technology (Mintek) were submitted late, and a contract between the Department and the South African National Energy Development Institute (SANEDI) took longer to finalise.
- **Technology Transfer Offices Support:** The variance is due to slow spending by offices of technology transfer especially on operational costs (training, travel and subsistence).

# DETAILS OF VARIANCES ON TRANSFERS AND SUBSIDIES FOR PROGRAMMES' 2,4 AND 5, CONT

## Programme 4: Research Development and Support

Item	Planned expenditure R'000	Actual expenditure R'000	Variance	% Variance
Academy of Science of South Africa	13,949	13,949	-	-
Astronomy	34,364	4,985	29,379	85.5%
Basic Science Development and Support	29,850	29,850	-	-
Human Resource Development	813,229	759,329	53,900	6.6%
National Research Foundation	483,048	483,048	-	-
Science Awareness	33,498	3,498	30,000	89.6%

# DETAILS OF VARIANCES ON TRANSFERS AND SUBSIDIES FOR PROGRAMMES 2,4 AND 5

## Programme 4: Research Development and Support cont.

Item	Planned expenditure R'000	Actual expenditure R'000	Variance	% Variance
South African Research Chairs Initiative	462,688	462,688	-	-
Strategic Science Platforms	113,968	2,920	111,048	97.4%
Research and Development Infrastructure	514,786	274,017	240,769	46.8%
Square Kilometre Array	422,100	-	422,100	100%
<b>Total</b>	<b>2,921,480</b>	<b>2,034,284</b>	<b>887,196</b>	<b>30.4%</b>



# REASONS FOR VARIANCES

- **Astronomy:** The variance is due to delays in concluding the strategic science mission contract which includes astronomy's activities.
- **Strategic Science Platforms:** The variance is due to delays in concluding the strategic science mission contract.
- **Square Kilometre Array:** The funds have not been transferred because the South African Radio Astronomy Observatory had to adjust its cash flow owing to the National Treasury budget cuts and the slow expenditure resulting from the COVID-19 pandemic.

# DETAILS OF EXPENDITURE ON TRANSFERS AND SUBSIDIES FOR PROGRAMMES' 2,4 AND 5, CONT

## Programme 5: Socio-Economic Innovation Partnerships

Item	Planned expenditure R'000	Actual expenditure R'000	Variance	% Variance
Advanced Manufacturing Technology Strategy	44,115	-	44,115	100%
Council for Science and Industrial Research	498,824	498,824	-	-
Environmental Innovation	29,914	15,745	14,169	47.4%
Human Science Research Council	292,126	292,126	-	-
Information Communication Technology	36,220	-	36,220	100%
Innovation for Inclusive Development	3,500	-	3,500	100%

# DETAILS OF EXPENDITURE ON TRANSFERS AND SUBSIDIES FOR PROGRAMMES' 2,4 AND 5, *CONT*

## Programme 5: Socio-Economic Innovation Partnerships

Item	Planned expenditure R'000	Actual expenditure R'000	Variance	% Variance
Local Manufacturing Capacity	40,000	-	40,000	100%
Local Systems of Innovation	27,784	7,267	20,517	73.8%
Mining Research and Development	30,000	-	30,000	100%
Research Information Management System	6,232	-	6,232	100%
Resource Based Industries	47,271	-	47,271	100%
Science and Technology Indicators	11,252	-	11,252	100%
<b>Total</b>	<b>1,067,238</b>	<b>813,962</b>	<b>253,276</b>	<b>23.7%</b>

# REASONS FOR VARIANCES

- **Advanced Manufacturing Technology Strategy:** Payment for the ENVIREE project was not made pending the latest reports from the Council for Geoscience. Payment for the 4D Hybrid project was not processed as the Department has not yet received the annual progress report, which is required to transfer the next tranche.
- **Information Communication Technology:** The Data Science for Impact Decision and Enablement (DSIDE) will not be paid due to the cancellation of the programme in 2020/21, funds will be reallocated within the ICT projects. The Office of the Digital Advantage (ODA) and the Blockchain programme were delayed due to the slow spending by the Programme.
- **Mining R&D:** The change in managers at the Mandela mining precinct, and the review of management processes, has resulted in a delay.

# BUDGET AND EXPENDITURE FOR COVID19

Item	Budget R'000	Expenditure R'000	Available budget R'000	Comments
Transfers and subsidies	341, 611	76,161	265,450	The money was paid through Strategic Health Innovation Partnerships (SHIP) for different initiatives focusing on diagnostics, prevention and treatment, sequencing/surveillance.
Goods and services	2, 159	1,152	1,007	The money was spent on decontamination of the DSI building, personal protective equipment, foot pedals and digital communication services to share information through social media platforms during the lockdown.
<b>Total</b>	<b>343, 770</b>	<b>77,313</b>	<b>266,457</b>	

# SPENDING ON PROCUREMENT

The Total procurement expenditure on goods and services from 1 July 2020 to 30 September 2020 amounted to R7 891 342.

The procurement expenditure on SMMEs, Black, Women and Youth Owned Companies is depicted below as follows:

<b>TOTAL PROCUREMENT EXPENDITURE</b>	<b>TOTAL EXPENDITURE ON SMME COMPANIES</b>	<b>TOTAL EXPENDITURE ON BLACK COMPANIES</b>	<b>TOTAL EXPENDITURE ON WOMAN OWNED COMPANIES</b>	<b>TOTAL EXPENDITURE ON YOUTH OWNED COMPANIES</b>
<b>R7 891 342</b>	<b>R3 520 402</b>	<b>R4 304 507</b>	<b>R2 154 937</b>	<b>R432 309</b>
<b>%EXPENDITURE ON SMME COMPANIES</b>	<b>% EXPENDITURE ON BLACK OWNED COMPANIES</b>	<b>% EXPENDITURE ON WOMEN OWNED COMPANIES</b>	<b>% EXPENDITURE ON YOUTH OWNED COMPANIES</b>	
<b>44,60%</b>	<b>54,50%</b>	<b>27,30%</b>	<b>5,50%</b>	

# SPENDING ON COVID-19 PROCUREMENT

The total COVID-19 procurement expenditure on goods and services from 1 July 2020 to 30 September 2020 amounted to **R2 247 225**.

The procurement expenditure on SMMEs, Black, Women and Youth Owned Companies is depicted below as follows:

TOTAL PROCUREMENT EXPENDITURE	TOTAL EXPENDITURE ON SMME COMPANIES	TOTAL EXPENDITURE ON BLACK COMPANIES	TOTAL EXPENDITURE ON WOMAN OWNED COMPANIES	TOTAL EXPENDITURE ON YOUTH OWNED COMPANIES
<b>R2 247 225</b>	<b>R294 465</b>	<b>R2 247 225</b>	<b>R19 164</b>	<b>R223 965</b>

%EXPENDITURE ON SMME COMPANIES	% EXPENDITURE ON BLACK OWNED COMPANIES	% EXPENDITURE ON WOMEN OWNED COMPANIES	% EXPENDITURE ON YOUTH OWNED COMPANIES
<b>13,10%</b>	<b>100,00%</b>	<b>0,90%</b>	<b>10,00%</b>

# REASONS FOR 40% ON WOMEN VARIANCES

- **Spend on Women:** The expenditure for women was below the 40% requirement as a result of the following:
  - Laptops that were purchased for officials as a result of COVID-19 "working from home requirements. These items were procured through the SITA contract;
  - The other items were as expenditure for existing contracts which were concluded before the 40% spend on women and there were sourced through open bidding process either by the DSI or the National Treasury (e.g. photocopies, office accommodation, audio-visual equipment, software licenses, waste bins, employment agencies, etc);
  - Some items were procured through the NT and Small Business Development COVID-19 list for PPEs, which at there were few women owned companies on the list (e.g. footpedals).



# AVERAGE PAYMENT DAYS OF INVOICES PER MONTH FOR 2019/20 AND 2020/21 FINANCIAL YEARS

Month	Average payment days	
	2020/21	2019/20
April	12	11
May	8	9
June	12	9
July	11	8
August	10	8
September	9	7
<b>Total average number of days</b>	<b>10</b>	<b>7</b>

# PERCENTAGE OF INVOICES PAID WITHIN 30 DAYS PER MONTH FOR 2019/20 AND 20/21 FINANCIAL YEARS

Month	Average payment days		Comments
	2020/21	2019/20	
April	100%	100%	
May	100%	100%	
June	100%	100%	
July	100%	100%	
August	92.57%	100%	The department could not process all invoices due to the closure of the building and self-isolation of finance staff as a result of COVID 19 cases.
September	94.97%	100%	Few invoices could not be processed because the service provider's tax matters were not in order and this was only pick-up during the processing of invoices.
<b>Average percentage</b>	<b>97.92%</b>	<b>100%</b>	



**Dankie  
Enkosi  
Ha khensa  
Re a leboga  
Ro livhuwa  
Siyabonga  
Siyathokoza  
Thank you**