



Presentation to the Portfolio Committee on Higher Education Science and Technology

By SANSA Board and Management

12 November 2021

Contents

SANSA Strategic Goals and Programmes

2020/21 Performance Overview

Key 2020/21 Highlights

Earth Observation Data Centre

Financial Overview

Financial Performance Per Programme

2020/21 External Audit Outcome

Employment by Programme

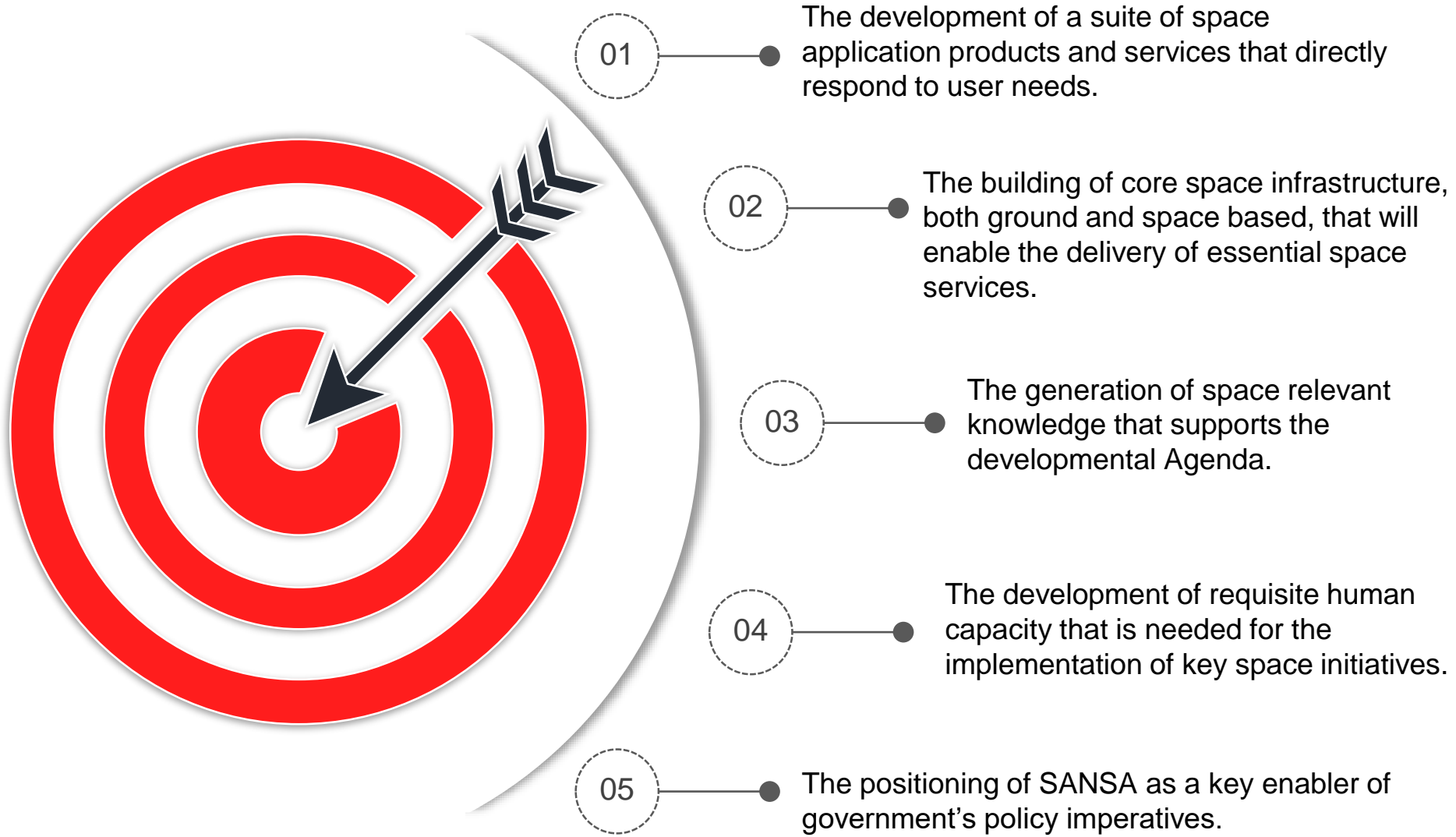
Employee Demographics

Transformation Initiatives

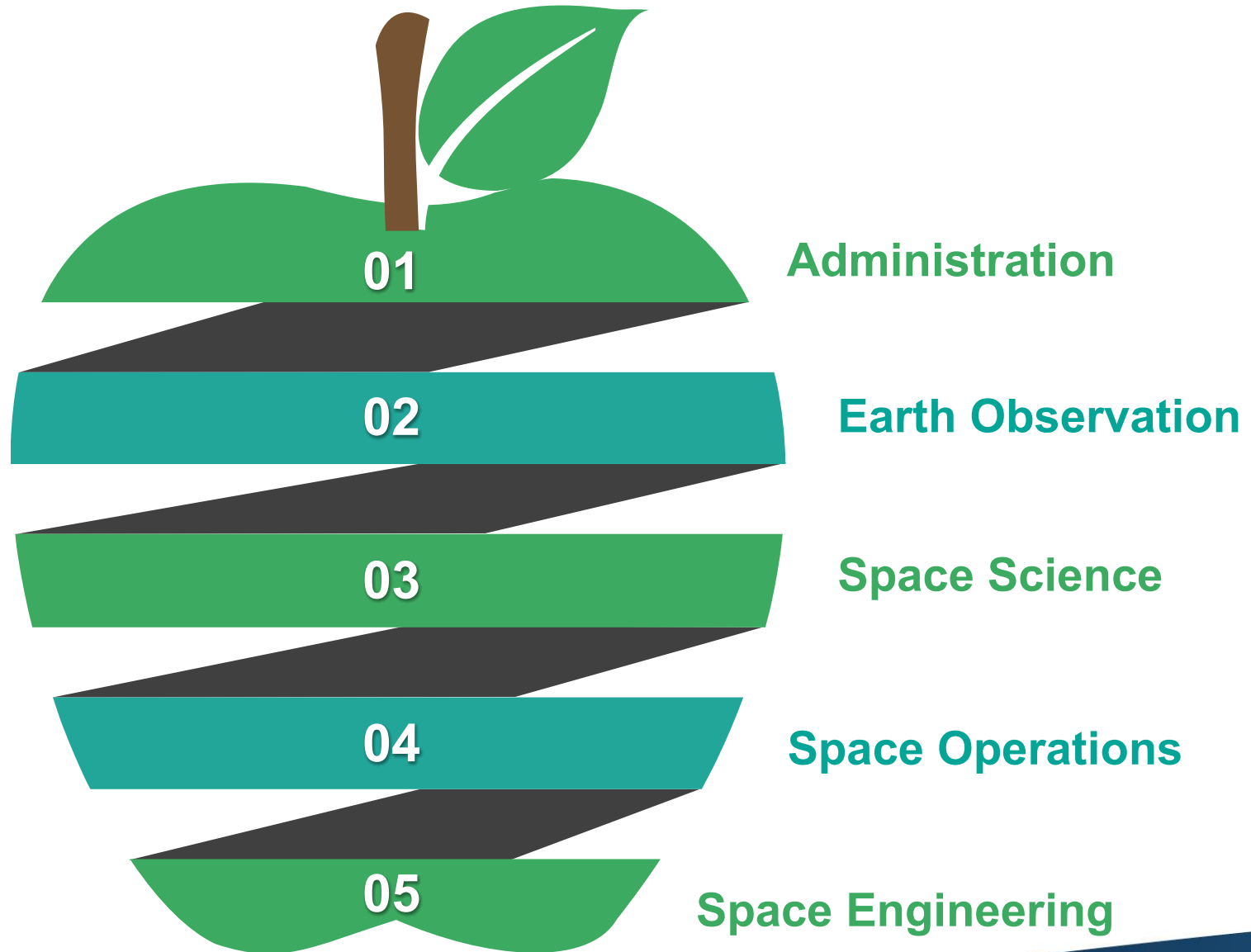
Key Challenges

The Road Ahead

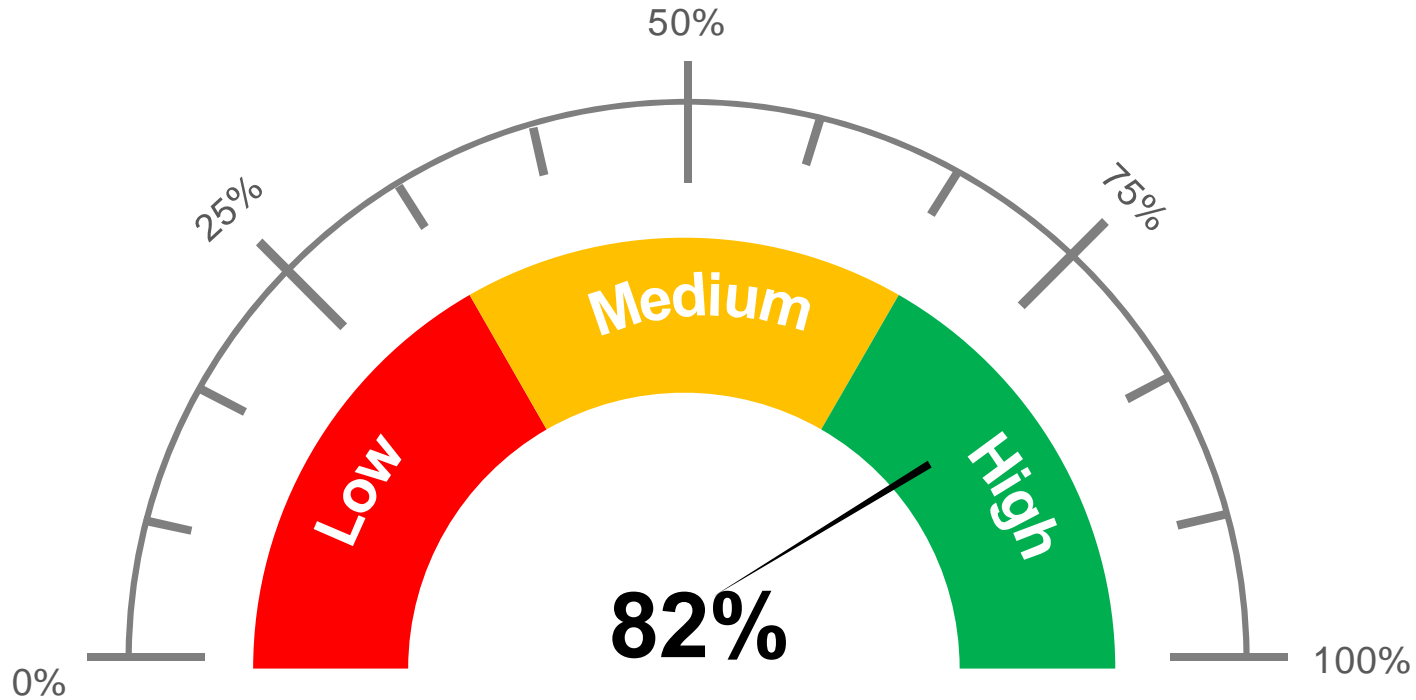
SANSA Strategic Goals



SANSA Programmes



2020/21 Performance Overview



- Planned 2020/21 targets for the year: **17**
 - Annual targets achieved: **14**
 - Annual targets not achieved: **3**

2020/21 Performance Overview ...continued

Achieved 60
of the
targeted 50

M1.2.1 Number of students and interns supported for formalised training

Achieved 7
of the
targeted 6

M2.1.1 Number of products and applications

Achieved 1904.44
of the targeted 1300

M2.2.1 The national research productivity score for space supported R&D

Achieved 99.35% of the targeted 98%

M3.1.1 Successful satellite pass monitoring rate for Earth Observation

Achieved R75.65 million of the targeted R68 million

M3.1.2 Total income generated from space operations activities

Achieved 51% of the targeted 20%

M3.2.1 The total contract expenditure to SMEs for core space projects

Achieved R13.68 million of the targeted R10 million

M3.2.2 The total contract expenditure to the broad space related industry for space projects

2020/21 Performance Overview ...continued

Achieved
42.8% of the
targeted 20%
progress

M4.2.1 A new operational
space weather centre, as
per Business Case

Achieved 13
of the
targeted 9

M5.1.1 Number of active
formal overseas
partnerships

Achieved 15
of the
targeted 9

M5.1.2 Number of active
formal African partnerships

Achieved 20
of the
targeted 12

M5.1.3 Number of active
formal national
partnerships

Targeted **30%**
achieved

M5.2.1 Percentage of
government departments and
public entities that use space
products and services

Achieved :
9 of the
targeted 7

M5.2.2 Number of
awareness and training
interventions to key users
of space products and
services

Targeted **4**
initiatives
achieved

M5.2.3 Number of
initiatives to transform
SANSA into a high
performing Agency

2020/21 Performance Overview ...continued



M1.1.1 Number of youths directly engaged



Target impacted by the delayed re-opening of schools and reductions in available learner contact time



M4.2.2 Development of Digital Earth South Africa



Target was not met due to delays related to data license and software contracts and ARD processing



M4.2.3 An upgraded AIT Facility



No progress made due to unresolved Houwteq facility ownership challenges

Key 2020/21 Highlights



The Agency celebrated a decade of significant space successes towards promoting the development of the space industry



SANSA will host a Program Management Office for Digital Earth Africa - which will include a digital data cube platform to provide essential space products and services to the African continent



SANSA was afforded an opportunity to host a virtual edition of the 16th International Space Operations conference (Spaceops2020)



During 2020/21 SANSA researchers produced 44 peer reviewed publications in high impact journals

Key 2020/21 Highlights



SANSA supported 45 postgraduate students in key space science disciplines (76% Africans and 47% females)



SANSA finalised the appointment of Dr Martin Snow, the SARChi Research Chair in Space Weather



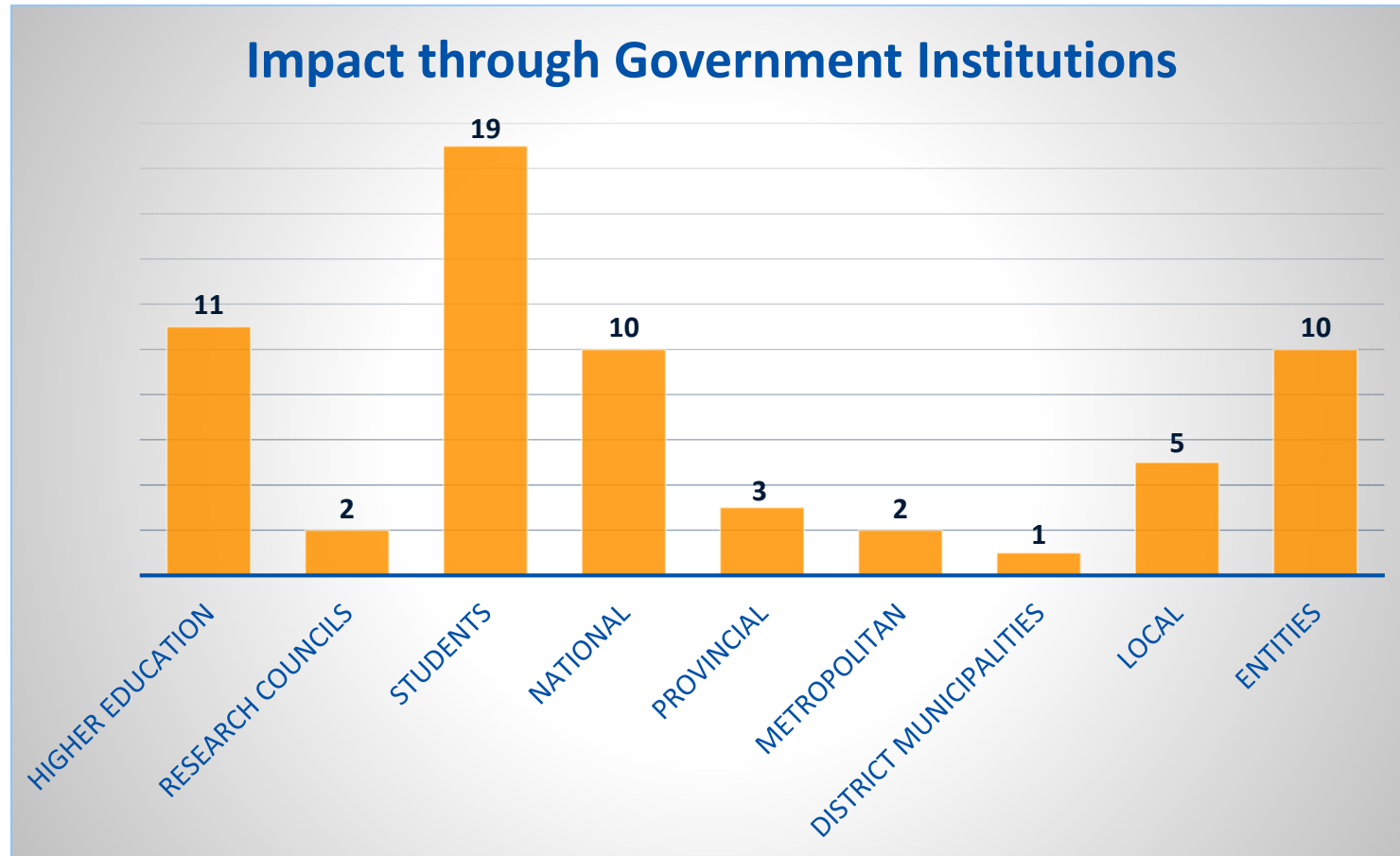
Kept active key partnerships locally, in Africa and internationally, and strengthening of the BRICS relationship



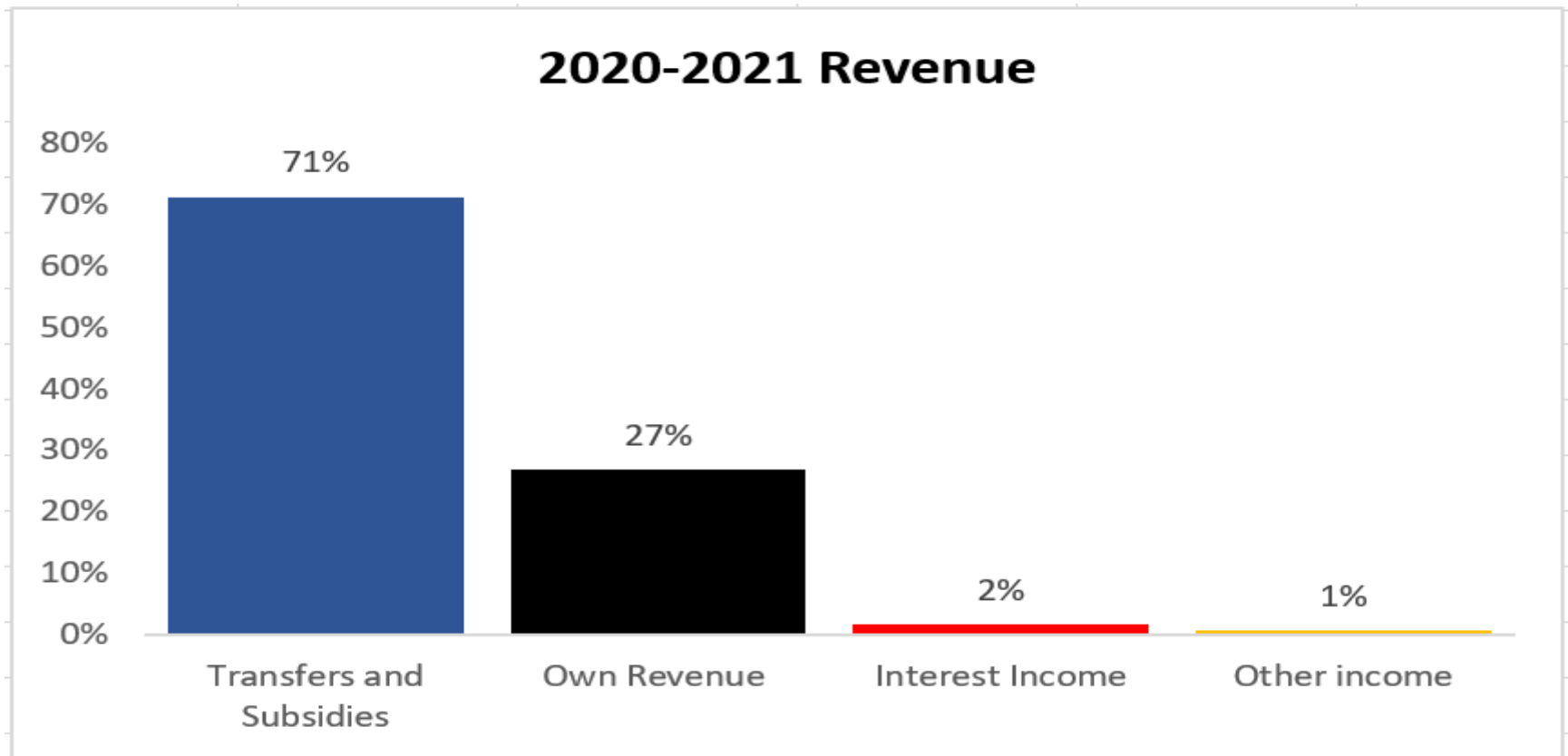
Dr Blade Nzimande, turned the soil for the new 24/7 Regional Space Weather Centre at a ground-breaking ceremony on 9 March 2021

Earth Observation Data Centre

Several beneficiaries were serviced through the Earth Observation Data Centre (EODC) capabilities to enable research and development and towards a capable state. This was done through the use and distribution of satellite data and products as summarised below:



Financial Overview



Total Revenue: R282.5m

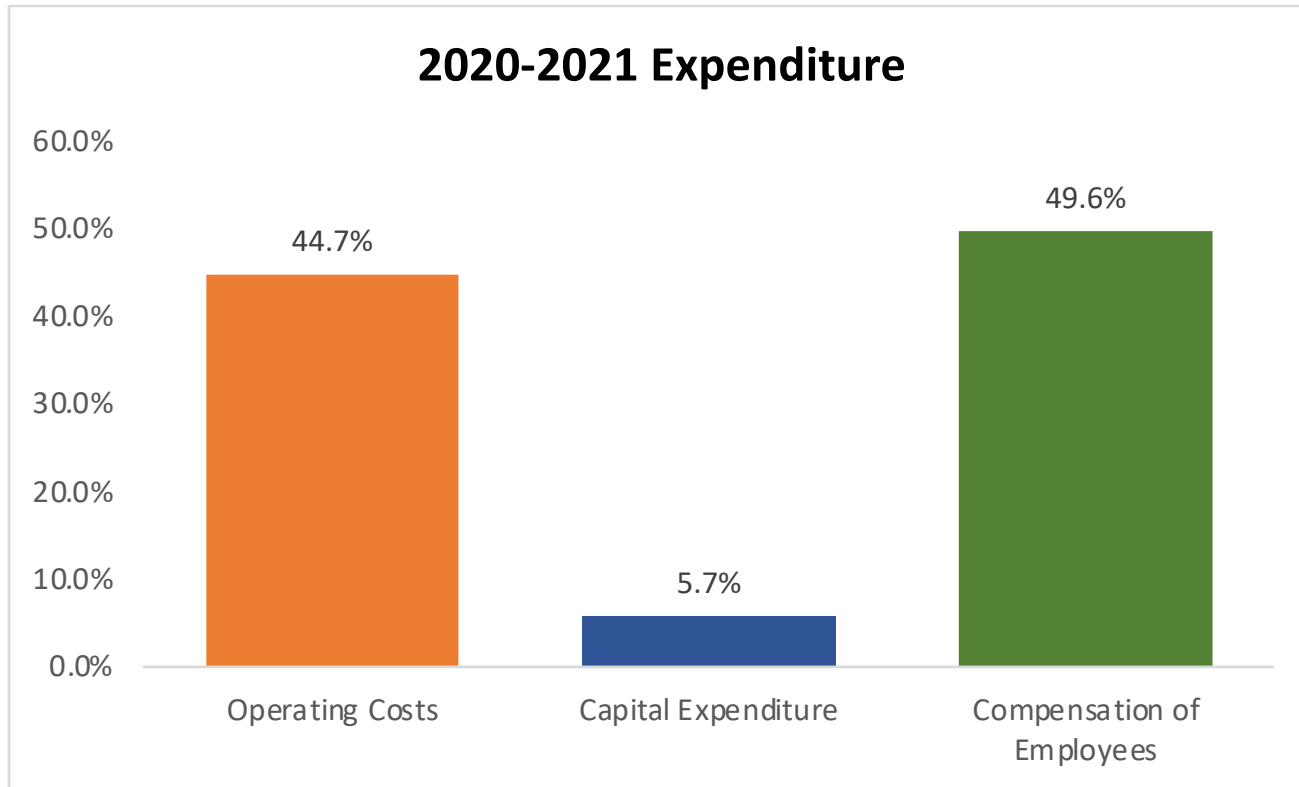
Revenue from Non-Exchange Transactions:

- Transfers and Subsidies Received : R200.7m

Revenue from Exchange Transactions:

- Interest Income : R4.4m
- Own Revenue: R75.6m
- Other Income: R1.7m

Financial Overview....continued

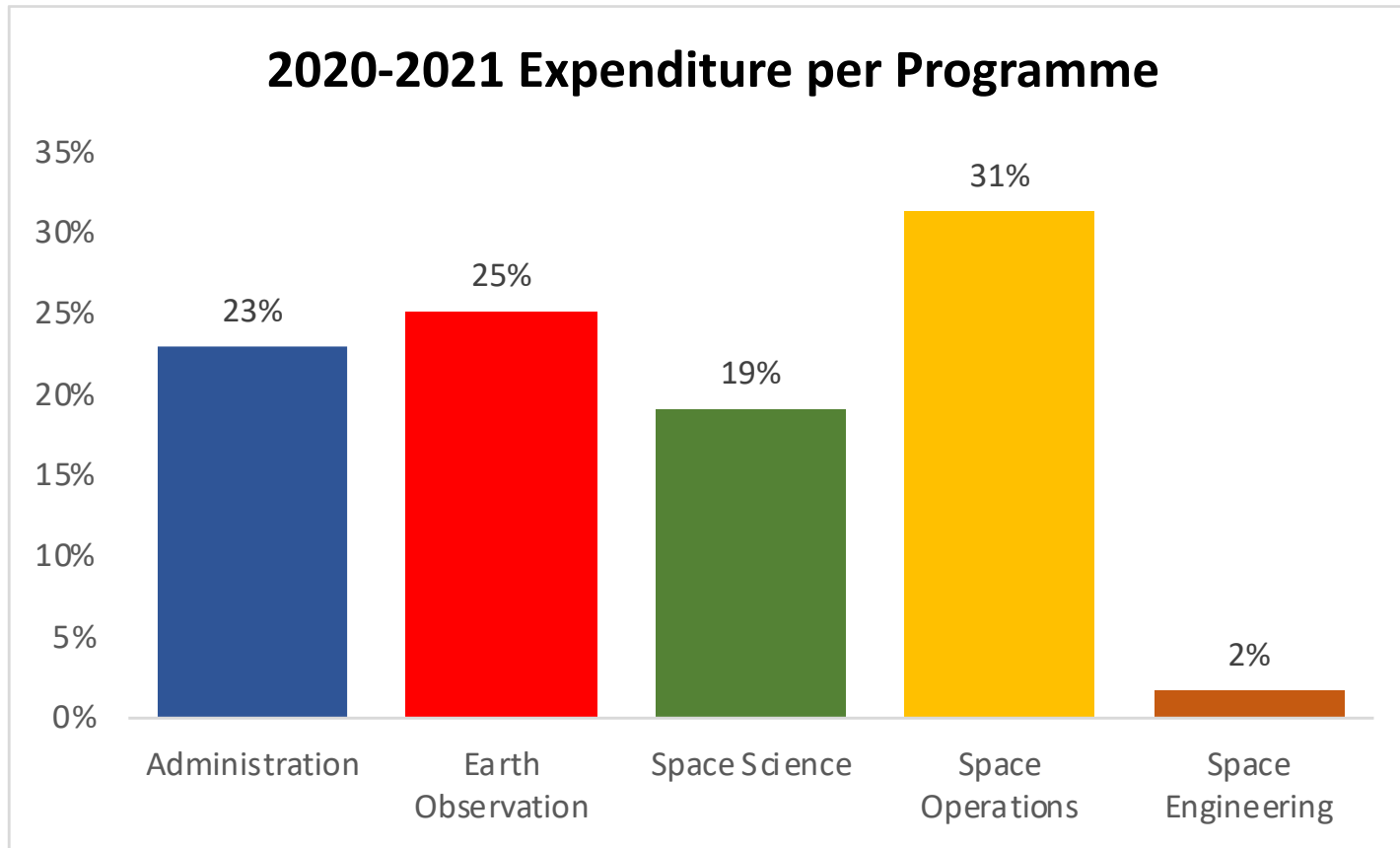


Total Expenditure: R263.1m

- **Operating Costs: R117.5m**
- **Capital Expenditure: R15.1m**
- **Compensation of Employees: R130.5m**

During the midterm budget adjustment an additional R123,8 million was brought forward from surplus commitments. Capital expenditure was, however, negatively affected by restrictions and backlogs related to the COVID-19 pandemic.

Financial Performance Per Programme

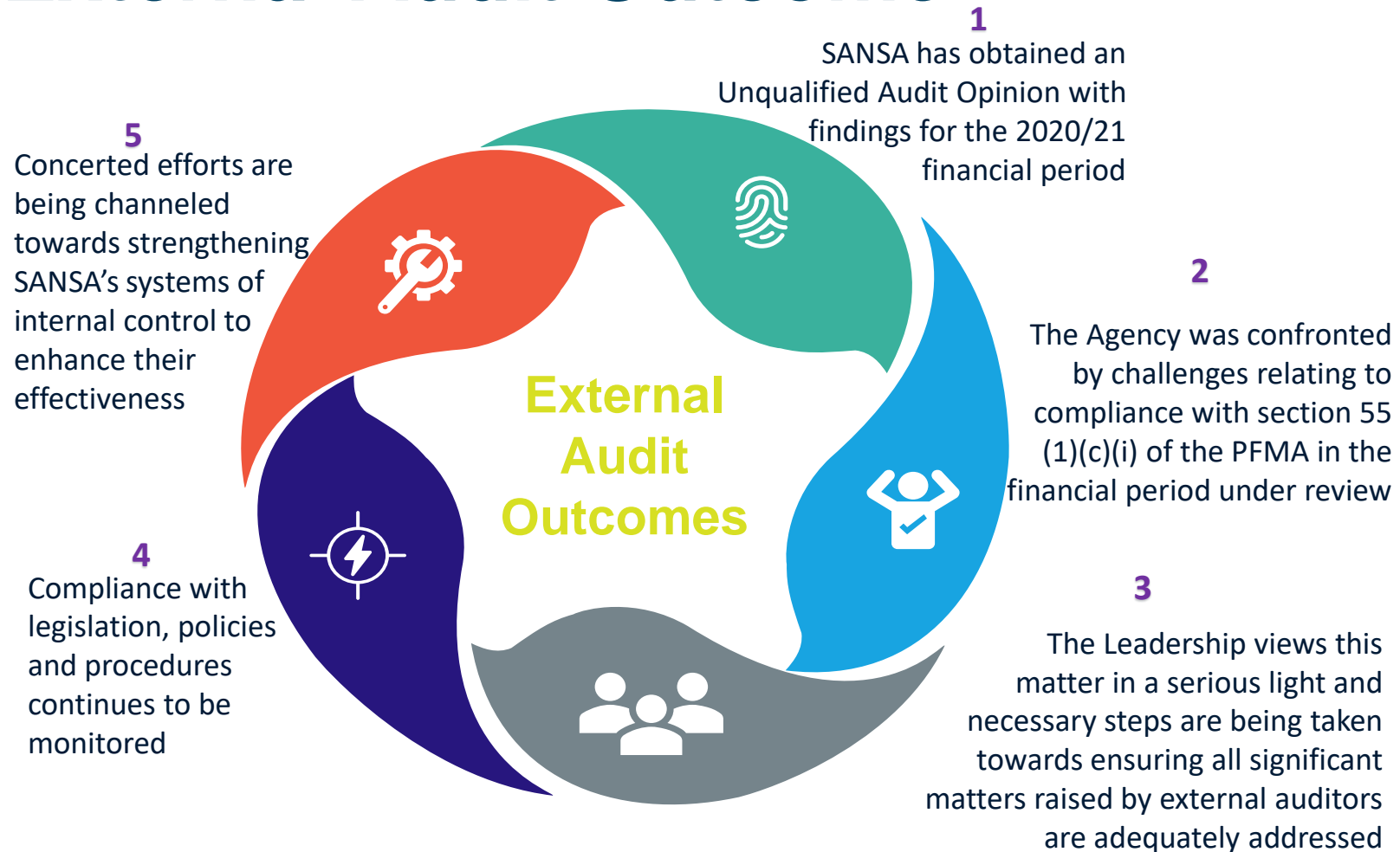


Total Expenditure: R263.1m

- Programme 1 Administration** Expenditure: R60.3m (23%)
- Programme 2 Earth Observation** Expenditure: R66.1m (25%)
- Programme 3 Space Science** Expenditure: R50.2m (19%)
- Programme 4 Space Operations** Expenditure: R82.1m (31%)
- Programme 5 Space Engineering** Expenditure: R4.25m (2%)

Key contributor to the 2020/21 expenditure patterns: unspent ring-fenced grants. Spending to accelerate in 2021/22.

External Audit Outcome



The Agency is well-aware of the issues that impacted on the 2020/21 external audit opinion, and these are being tackled head-on to ensure an improved audit outcome for the 2021/22 FY!!!

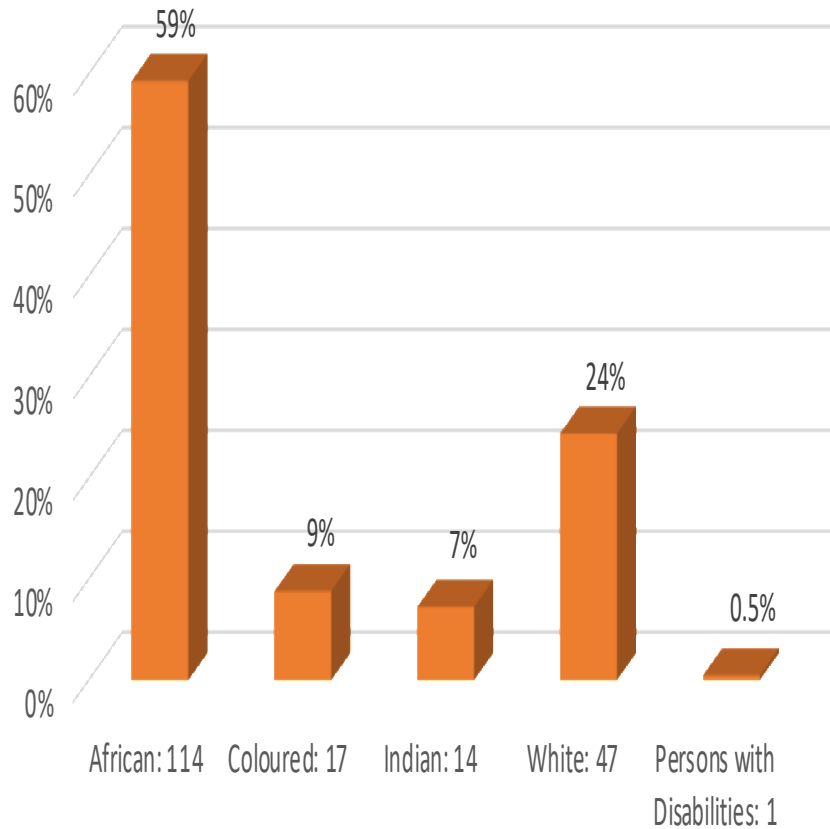
Employment by Programme

Programme	2019/ 20 No. of Employees	2020/21 Approved Posts	2020/21 No. of Employees	2020/21 Vacancies	% of vacancies
Programme 1: Administration	36	52	43	14	27%
Programme 2: Earth Observation	22	46	22	24	52%
Programme 3: Space Science	58	78	66	12	15%
Programme 4: Space Operations	58	58	57	1	2%
Programme 3: Space Engineering	5	41	5	36	88%
Total	179	275	193	87	32%

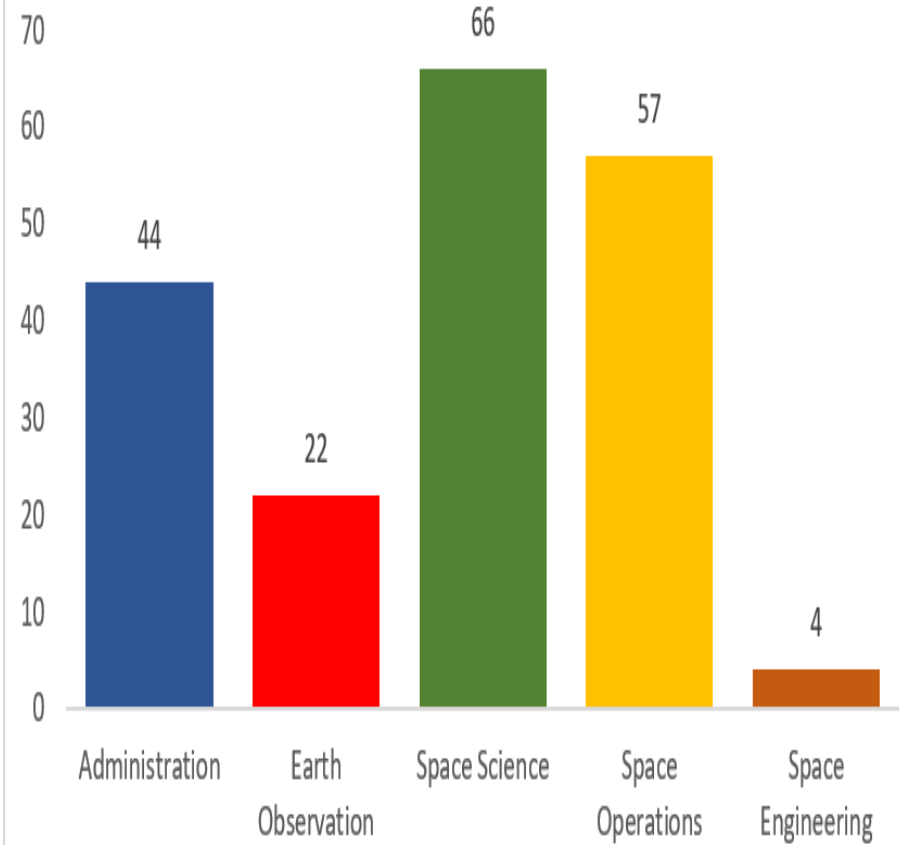
Growth in the number of approved posts is mainly attributable to structural changes in preparation for the SIH and related projects. There were 30 appointments made during the financial year while the Agency had 17 terminations from different occupational levels (including retirement, resignation, and end of contracts).

Employee Demographics

2020-21 Employee Demographics



2020-2021 Employees per Programme



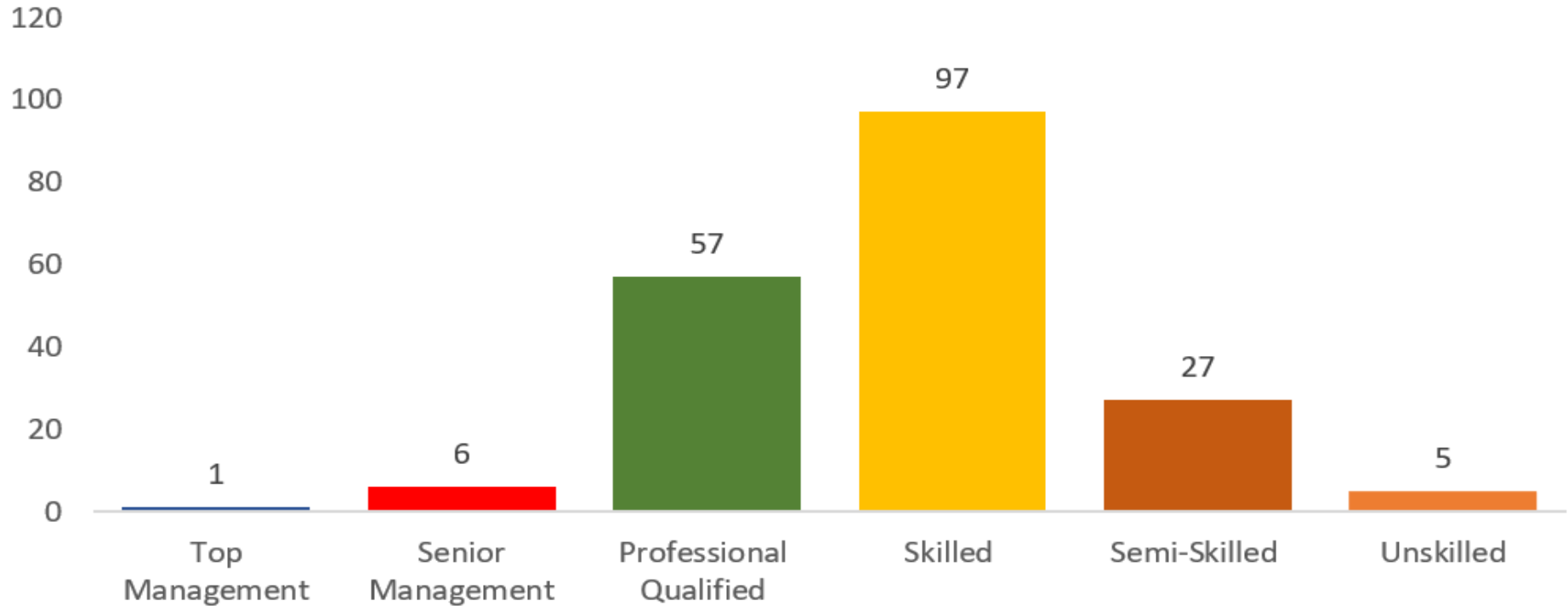
Total Employees: 193
100%

Males: 109
56.5%

Females: 84
43.5%

Employee Demographics...continued

2020-2021 Employees per Level



Level	Male	Percentage vs Total	Female	Percentage vs Total	Total
Top Management	1	100%	-	-	1
Senior Management	3	50%	3	50%	6
Professional Qualified	35	61%	22	39%	57
Skilled	54	56%	43	44%	97
Semi-Skilled	13	48%	14	52%	27
Unskilled	2	40%	3	60%	5

Transformation Initiatives

- SANSA is currently finalising a Skills Development Strategy and is seeking to engage with DHET
- SANSA is also working on an Industry Development Framework and an African Engagement Strategy
- SANSA will be constructing a new student accommodation wing to accommodate and supervise more students on site
- Our Research Chair and experts will be directly involved in the supervision of postgraduate students, in partnership with UWC
- SANSA has an EE Plan and a BBBEE Strategy to inform its transformation initiatives
- SANSA is actively involved in the DSI STI Transformation Committee
- We are partnering with the UK National Space Centre to implement school outreach programs
- We would like to pilot broadband access to a few schools

Key Challenges

- The Space Infrastructure Hub was declared as SIP 22 project during the 2020/21 financial year thus confirming its recognition as a national priority, and we are currently concluding on the Bankable Feasibility Study. However, our ability to borrow is still a requirement and will require approval from the Minister of Finance.
- EO-Sat1 completion is still unresolved and the non-cooperation by Denel is proving a challenge.
- Support to the broader space industry is constrained by the limited resource pool and underfunding remains a concern for SANSA when considered against the Agency's mandate.
- AIT facility upgrades were delayed due to unresolved Houwteq ownership issue (core space project spending affected in 2020/21 FY). This is also becoming a cause for concern given developments around the facility.

The Road Ahead



NEW SPACE WEATHER CENTRE



Thank You!!!



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA

