

# ANNUAL PERFORMANCE PLAN



2026  
2027



science, technology  
& innovation

Department:  
Science, Technology and Innovation  
REPUBLIC OF SOUTH AFRICA







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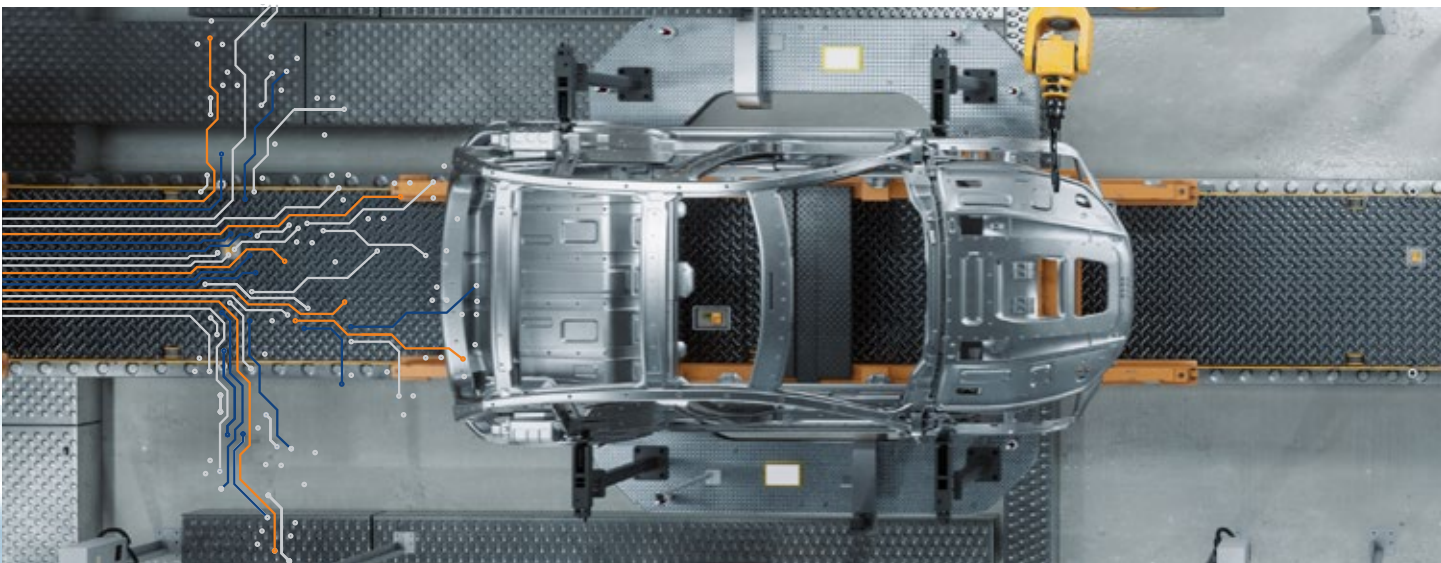
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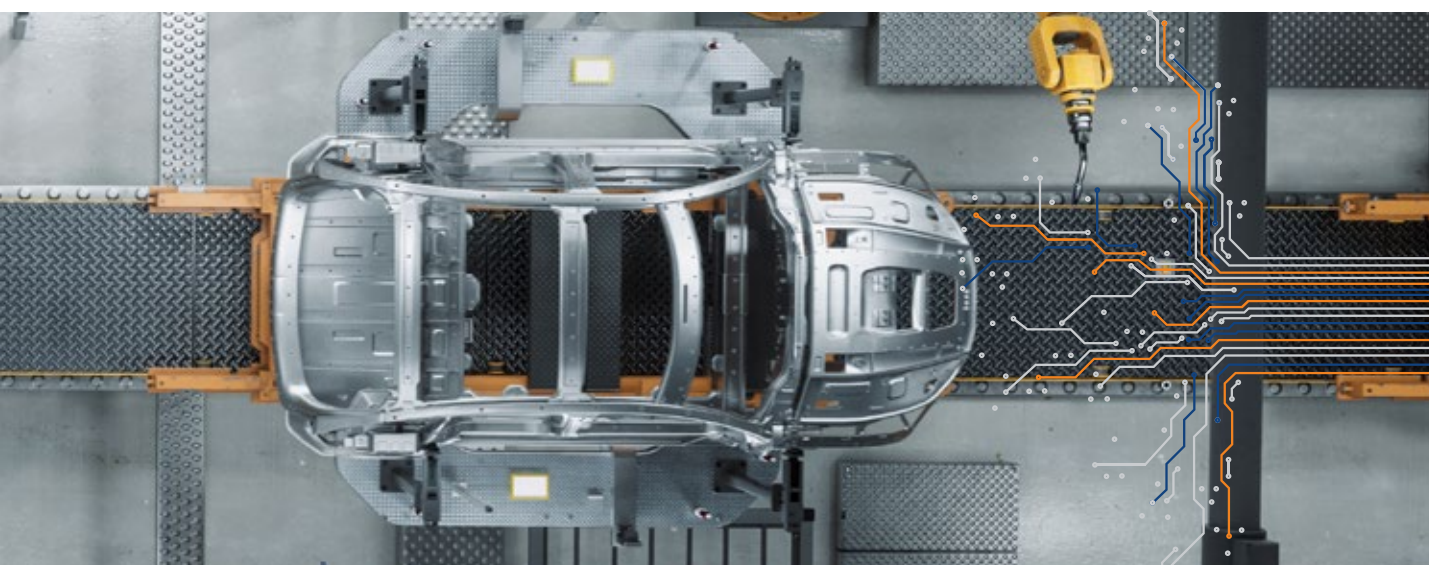
# I. LIST OF ABBREVIATIONS

<b>4IR</b>	Fourth Industrial Revolution
<b>AI</b>	Artificial Intelligence
<b>API</b>	Application programming interface
<b>APP</b>	Annual Performance Plan
<b>B-BBEE</b>	Broad-Based Black Economic Empowerment
<b>bn</b>	Billion
<b>BRICS</b>	Brazil, Russia, India China, and South Africa
<b>COVID-19</b>	Coronavirus disease 2019
<b>CSIR</b>	Council for Scientific and Industrial Research
<b>DDM</b>	District Development Model
<b>DSTI</b>	Department of Science, Technology and Innovation
<b>DTIC</b>	Department of Trade, Industry and Competition
<b>EPO</b>	European Patent Office
<b>GDP</b>	Gross Domestic Product
<b>GEM</b>	Global Entrepreneurship Monitor
<b>GERD</b>	Gross expenditure on Research and Development
<b>HEI</b>	Higher education institution
<b>HIV/AIDS</b>	Human immunodeficiency virus infection and acquired immune deficiency syndrome
<b>ICT</b>	Information and communication technologies
<b>IDC</b>	Industrial Development Corporation
<b>IID</b>	Innovation for Inclusive Development
<b>IK</b>	Indigenous knowledge
<b>IKS</b>	Indigenous knowledge systems
<b>IoT</b>	Internet of Things
<b>IP</b>	Intellectual property
<b>m</b>	Million
<b>Medic</b>	Medical Devices and Diagnostics Innovation Cluster
<b>MTEF</b>	Medium-Term Expenditure Framework
<b>MTSF</b>	Medium-Term Strategic Framework



## I. LIST OF ABBREVIATIONS

<b>NACI</b>	National Advisory Council on Innovation
<b>NDP</b>	National Development Plan
<b>NSI</b>	National System of Innovation
<b>PFMA</b>	Public Finance Management Act
<b>R&amp;D</b>	Research and development
<b>RDI</b>	Research, development and innovation
<b>ROI</b>	Return on investment
<b>SAVCA</b>	Southern African Venture Capital Association
<b>SDG</b>	Sustainable Development Goal
<b>SET</b>	Science, engineering and technology
<b>SFP</b>	Seed Fund Programme
<b>SIIP</b>	Strategic Industrial Bio-innovation Programme
<b>SMME</b>	Small, medium and micro enterprise
<b>SPV</b>	Special Purpose Vehicle
<b>STEM</b>	Science, technology, engineering and mathematics
<b>STI</b>	Science, technology and innovation
<b>TB</b>	Tuberculosis
<b>THRIP</b>	The Technology and Human Resources for Industry Programme
<b>TIA</b>	Technology Innovation Agency
<b>TPP</b>	Technology Platform Programme
<b>TRL</b>	Technology readiness level
<b>TSP</b>	Technology Stations Programme
<b>TVET</b>	Technical and vocational education and training
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>USPTO</b>	United States Patent and Trademark Office
<b>VC</b>	Venture capital
<b>WIL</b>	Workplace-integrated learning





## 2. EXECUTIVE AUTHORITY STATEMENT



*APP 2026/27 of TIA identifies the outputs, output indicators, and targets that the Agency aims to achieve in the 2026/27 financial year.*

**Prof. Bonginkosi Emmanuel Nzimande, MP**

Minister of Science, Technology and Innovation  
Executive Authority of the Technology Innovation Agency

The Annual Performance Plan (APP) 2026/27 of the Technology Innovation Agency (TIA) identifies the outputs, output indicators, and targets that the Agency aims to achieve in the 2026/27 financial year. TIA's APP 2026/27 is informed by the National Development Plan (NDP) 2030, the Medium-Term Development Plan (MTDP) 2025-2030, the Economic Reconstruction and Recovery Plan and the District Development Model (DDM). It also considers relevant National System of Innovation (NSI) policies, specifically the White Paper on Science, Technology and Innovation, the Science, Technology and Innovation Decadal Plan 2020.

The APP 2026/27 considers the Sustainable Development Goals (SDGs) of the United Nations' Agenda 2030 and the African Union's Agenda 2063. The APP 2026/27 is aligned with TIA's Strategic Plan for 2025-2030 in addition to the Agency's mandate, as per the Technology Innovation Agency Act (No 26 of 2008). It will be implemented with the oversight of TIA's Accounting Authority, the Board. Implementation of the APP 2026/267 will be monitored through quarterly and annual performance reporting to TIA's shareholder, the Department of Science, Technology and Innovation (DSTI).

**Prof. Bonginkosi Emmanuel Nzimande, MP**  
Minister of Science, Technology and Innovation  
Executive Authority of the Technology Innovation Agency



### 3. CHAIRPERSON'S FOREWORD



*The Agency's instruments and collaborative platforms are designed to maximise leverage, crowd in partners and deliver measurable developmental impact.*

**Mr Loyiso Tyira**  
Chairperson of the Board  
Technology Innovation Agency

I am pleased to present the APP of the TIA for the 2026/27 financial year. This APP represents the second year of implementation of the Agency's 2025–2030 Strategic Plan and reflects a continued focus on strengthening performance, governance and impact within a constrained fiscal environment.

The APP is aligned to the MTDP, which articulates government's commitment to inclusive economic growth, job creation, poverty reduction and the development of a capable, ethical and developmental state. These priorities frame the strategic intent and performance commitments of all public entities, including TIA.

In direct response to these national priorities, TIA's Strategic Plan is anchored on three strategic outcomes:

- (i) intensified commercialised innovation in support of inclusive economic growth, sustainable development and transformation;
- (ii) an enabled and responsive innovation ecosystem; and
- (iii) a capable, responsible and agile Agency that contributes meaningfully to building a capable state.

These outcomes affirm TIA's central role within the NSI and its contribution to the objectives of the White Paper on Science, Technology and Innovation (STI), which positions STI as critical levers for economic growth, competitiveness and societal well-being. In this context, TIA's mission is to nurture an ecosystem that cultivates innovation, accelerates the development of impactful solutions and facilitates collaboration in pursuit of inclusive and sustainable development.

As a curator within the NSI, TIA will focus on supporting the shareholder by harnessing the full potential of South Africa's innovation ecosystem to advance competitiveness, transformation and inclusivity. Central to this role is the adoption of a quadruple helix, whole-of-society approach to innovation, which brings together government, the private sector, academia and civil society to collectively mobilise resources, capabilities and expertise. Through this approach, TIA will establish collaborative platforms, play a brokerage and coordination role, and help align innovation efforts across the research and technology transfer system, the entrepreneurship ecosystem and the innovation funding landscape. In doing so, the Agency will contribute to unlocking systemic barriers to innovation, strengthening policy coherence and promoting meaningful private sector participation.

In approving this APP, the Board has applied a rigorous oversight lens, informed by the Agency's strategic risk profile. Key risks identified include organisational readiness to implement strategic reforms at scale, funding constraints relative to demand for innovation support, internal capacity limitations, and the risk of

eroding stakeholder confidence should responsiveness and turnaround times not improve.

The Board is satisfied that these risks have been appropriately prioritised and that mitigation actions, which are focused on capability strengthening, process optimisation, stakeholder engagement and governance discipline are embedded in the performance commitments outlined in this APP.

TIA’s value proposition to its shareholder and partners is clear: to bridge the gap between research and commercialisation, enable inclusive participation in innovation across sectors and regions, and catalyse systemic impact through partnerships that unlock funding, capabilities and markets. The Agency’s instruments and collaborative platforms are designed to maximise leverage, crowd in partners and deliver measurable developmental impact.

The 2026/27 financial year represents an important period of consolidation and transition. The Board will continue to exercise active oversight over the implementation of strategic reforms aimed at repositioning the Agency within the NSI, strengthening its catalytic role and reinforcing its contribution to economic growth, industrial development and state capability.

As part of this transition, the Board places strong emphasis on governance, ethics and financial management. While the unqualified audit opinion

received in 2024/25 reflects progress, the Board recognises that sustained improvement is required. Achieving and maintaining sound governance and a strong control environment remains a non-negotiable priority, and management is held accountable for addressing identified weaknesses with the clear objective of attaining a clean audit outcome.

I would like to welcome the new Board members appointed by the Minister of Science, Technology and Innovation in late 2025. Their appointment strengthens governance stability and strategic oversight. The Board further notes that the conclusion of the appointment of a permanent Chief Executive Officer, who will assume duty on 1 April 2026, will be critical in ensuring leadership stability and execution continuity.

On behalf of the Board, I extend my appreciation to management and staff for their continued commitment during a period of organisational change. The Board remains confident that, with disciplined execution and effective oversight, TIA will continue to deliver value to the innovation ecosystem and contribute meaningfully to South Africa’s developmental objectives.



**Mr Loyiso Tyira**  
Chairperson of the Board  
Technology Innovation Agency



## 4. CHIEF EXECUTIVE OFFICER'S OVERVIEW



*The Agency is currently transitioning from strategic design to implementation, as articulated in the ten-year corporate strategy that guides TIA's repositioning within the NSI.*

**Mr Ismail Abdoola**  
Acting Chief Executive Officer  
Technology Innovation Agency

The 2026/27 financial year marks the second year of implementation of TIA's 2025–2030 Strategic Plan and represents a decisive execution phase for the Agency. This APP translates approved strategic intent into prioritised, measurable and achievable annual commitments, with a clear focus on delivery, impact and organisational sustainability.

The Agency is currently transitioning from strategic design to implementation, as articulated in the ten-year corporate strategy that guides TIA's repositioning within the NSI. This transition requires the deliberate recalibration of systems, structures and operating arrangements to ensure that TIA delivers its mandate in a more coherent, efficient and catalytic manner.

The period from 2020/21 to 2024/25 was characterised by sustained fiscal pressure, which constrained the Agency's operating and funding capacity. Despite these constraints, TIA demonstrated resilience and delivery capability, exceeding several key performance targets. Notably, the Agency commercialised 306 technologies against a target of 175 and significantly exceeded targets related to bio-economy technology demonstration and access to science, engineering and technology services. These results underscore both the relevance of the Agency's mandate and the importance of continued operational strengthening.

The current strategic cycle is structured around three implementation phases: Consolidate, Grow and Scale. The 2026/27 financial year concludes the Consolidate phase, which focuses on strengthening core operations, governance, systems and market positioning. During this period, priority has been placed on refining the Agency's business model, operating model and organisational structure to ensure alignment with strategic intent and execution requirements.

The targets and activities contained in this APP have been developed within the context of the Medium-Term Expenditure Framework (MTEF) and prevailing fiscal constraints. Accordingly, the Agency has prioritised interventions that optimise existing instruments, improve internal efficiency and deepen partnerships, rather than expanding commitments beyond available resources. This disciplined approach is intended to ensure that performance commitments remain credible and deliverable.

In support of inclusive economic growth, TIA will intensify its role in facilitating collaborative, multi-stakeholder innovation initiatives that pool resources, capabilities and expertise across government, the private sector, academia and civil society. Emphasis will be placed on high-impact programmes aligned to opportunities arising from the digital economy, the green transition and climate response.

In contributing to a capable state, the Agency will continue to deepen partnerships with state-owned entities, municipalities and government departments to support the development and deployment of innovative solutions to persistent service delivery challenges.

Delivery of the APP will be underpinned by strengthened performance management, monitoring and governance processes. Management will actively track progress against targets, early identification of risks and dependencies, and implement corrective action where required. Effective collaboration with ecosystem partners and continued policy alignment remain critical enablers of success.

The year ahead will be demanding, but it also presents an opportunity to consolidate reforms and demonstrate tangible impact. I would like to acknowledge the dedication and professionalism of TIA's staff, whose commitment remains central to the Agency's ability to deliver on its mandate. Together, we remain focused on advancing innovation that improves competitiveness, drives inclusive growth and enhances the quality of life of all South Africans.



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**Mr Ismail Abdoola**  
Acting Chief Executive Officer  
Technology Innovation Agency



## 5. CHIEF FINANCIAL OFFICER'S OVERVIEW



*Financial governance remains a central pillar of the Agency's operating ethos. Enhanced controls, refined investment processes, improved forecasting capability, and strengthened expenditure reviews continue to underpin responsible financial management.*

Ms Rekha Govender  
Acting Chief Financial Officer

The 2026/27 financial year marks an important phase in TIA's transition toward a strengthened, more agile, and future ready organisation. Building on the momentum generated through the TIA 2.0 Corporate Strategy, the coming year centres on consolidating operational foundations, enhancing financial resilience, and ensuring that our investment decisions yield measurable and sustainable impact within the NSI.

TIA continues to navigate a fiscally constrained environment, requiring disciplined financial stewardship and deliberate prioritisation. The Agency's total budget for 2026/27 remains carefully aligned to strategic priorities, ensuring that essential programmes (including Technology Platforms, Technology Stations, Technology Clusters and innovation enabling services) remain adequately resourced.

While a significant portion of the budget is committed to multiyear obligations, the Agency continues to apply a rigorous zero-based budgeting approach to ensure that every rand is justified and directed towards interventions that maximise public value.

Demand for innovation funding continues to outpace available resources, reflecting both the depth of entrepreneurial activity in the country and the growing requirement for new solutions across sectors. To address this pressure, TIA will intensify efforts to crowd in both public and private capital through co-funding partnerships, strategic collaboration, and blended financing mechanisms. Key initiatives, including the Fund of Funds model and emerging transformation focused investment instruments, will be leveraged to expand developmental reach while strengthening South Africa's innovation finance ecosystem.

A critical focus in 2026/27 is the continued refinement of TIA's funding and revenue model to improve long term sustainability. This includes exploring new financing instruments, strengthening royalty and equity management practices, and enhancing the effectiveness of investment portfolio oversight. These shifts are essential to reducing the Agency's reliance on direct fiscal transfers over the long term while positioning TIA to respond more effectively to sectoral demands and strategic national priorities.

Financial governance remains a central pillar of the Agency’s operating ethos. Enhanced controls, refined investment processes, improved forecasting capability, and strengthened expenditure reviews continue to underpin responsible financial management. Consistent with TIA’s commitment to ensuring that the bulk of available funds support innovation activities, operational efficiencies — supported by digital transformation initiatives and organisational optimisation efforts — will remain a priority.

As TIA deepens implementation of the Consolidate Phase of the TIA 2.0 Corporate Strategy, the Agency is well positioned to deliver improved performance outcomes while strengthening confidence among stakeholders, partners, and beneficiaries. The 2026/27 APP reflects an organisation committed to stewarding public resources responsibly, enabling catalytic innovation, and driving inclusive economic participation through targeted support to innovators, small, medium and micro enterprises (SMMEs), emerging fund managers, and underrepresented groups.

TIA enters the year with a clear financial strategy, a strengthened governance foundation, and a renewed commitment to delivering impact at scale. Through careful management of resources, strategic partnerships, and an unwavering focus on sustainability, the Agency will continue advancing South Africa’s innovation agenda and contributing meaningfully to national development priorities.

*Rekha Govender*

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**Ms Rekha Govender**  
Acting Chief Financial Officer  
Technology Innovation Agency



## 6. OFFICIAL SIGN-OFF

It is hereby certified that this APP was developed by the management of the TIA under the guidance of the TIA Board and the DSTI;

- considers all the relevant policies, legislation and other mandates for which the TIA is responsible; and
- accurately reflects the impact, outcomes and outputs that the TIA will strive to achieve during 2026/27.

*Reshleu Rampershad*

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**Mr Reshleu Rampershad**  
Acting Executive: Commercialisation

*Mr Mohohlo Molatudi*

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**Mr Mohohlo Molatudi**  
Acting Executive: Bio-economy

*Mr Patrick Krappie*

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**Mr Patrick Krappie**  
Executive: Innovation Enabling

*Mr Garth Williams*

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**Mr Garth Williams**  
Head: Strategic Planning and Reporting

*Ms Valentine Malevu*

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**Ms Valentine Malevu**  
Executive: Corporate Services

*Ms Rekha Govender*

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**Ms Rekha Govender**  
Acting Chief Financial Officer

*Mr Ismail Abdoola*

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**Mr Ismail Abdoola**  
Acting Chief Executive Officer

*Mr Loyiso Tyira*

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**Mr Loyiso Tyira**  
Chairperson of the Board

*Prof. Bonginkosi Emmanuel Nzimande*

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**Prof. Bonginkosi Emmanuel Nzimande**  
Minister of Science, Technology and Innovation



# PART A

## MANDATE



## 7. LEGISLATIVE MANDATE

The TIA was established as a schedule 3A public entity under the provisions of the Public Finance Management Act (PFMA) (Act 1 of 1999, as amended by Act 29 of 1999). Its mandate is derived from the provisions of the Technology Innovation Agency Act (26 of 2008),<sup>1</sup> which establishes the TIA as an agency that promotes the development and exploitation, in the public interest, of discoveries, inventions, innovations and improvements. The TIA's objective is to support the state in stimulating and intensifying technological innovation with a view to improving economic growth and the quality of life of all South Africans by developing and exploiting technological innovations. The Agency's strategic programmes are aligned with the national, continental and global imperatives.

The Science and Technology Laws Amendment Act (9 of 2020) came into effect on 1 April 2021. Several amendments were made to the TIA Act (26 of 2008). A key change was that the Agency may perform any function in any territory beyond South Africa's borders. This change empowers the Agency to pursue international partnership opportunities more intentionally to achieve its objectives in fulfilment of its mandate.



<sup>1</sup>As amended by the Science and Technology Laws Amendment Act (No. 7 of 2014) and the Science and Technology Laws Amendment Act (No. 9 of 2020).



# PART B

## STRATEGIC FOCUS





## Vision Statement

To be a dynamic, intelligence-driven national innovation agency that champions transformative high-impact innovations



## Mission Statement

To nurture an ecosystem that cultivates innovation, accelerates the development of groundbreaking solutions and facilitates collaboration towards inclusive and sustainable growth and development



## Values

At the TIA, a set of six core values guides the organisational culture and informs the ways in which the Agency engages all stakeholders, internally and externally. The core values are foundational to the culture and strategic direction of TIA 2.0. They are:

### PEOPLE-CENTRIC:

This value emphasises interpersonal relationships and fostering a supportive, empathetic and psychologically safe work environment. Respect and trust form the foundation, while collaboration and teamwork highlight collective effort. Inclusivity and mentorship suggest a commitment to diversity and growth, and mindfulness and authenticity add depth by prioritising genuine self-aware interactions.

### EXCELLENCE:

This value focuses on efficiency, adaptability and delivering quality outcomes. Professionalism and high levels of performance set a standard of excellence, while agility and flexibility reflect responsiveness to change. Seamless systems and service orientation prioritise smooth user-focused processes that drive the TIA to being a modernised organisation that provides consistent, predictable and quality products and services.

### ANSWERABILITY:

This value centres on ethical behaviour, responsibility and accountability. Integrity and transparency ensure honesty and openness, good governance establishes structured accountability and stewardship reflects a duty to manage resources and relationships responsibly. Answerability indicates the TIA's commitment to being answerable to its beneficiaries, customers, stakeholders, partners and shareholder.

### **PIONEERING:**

This value emphasises progress and intellectual advancement. Innovation drives creative problem-solving and commitment to cutting-edge solutions; continuous learning and improvement foster adaptability and a focus on being a learning organisation; and thought leadership positions the entity as forward-thinking, leading the way in how innovation is enabled and commercialised.

### **RESPONSIVE:**

This value highlights the importance of the TIA's focusing on its customers, stakeholders and partners and the role it plays in the NSI. Customer focus prioritises user needs and quality service; partnerships emphasise the significance of collaboration in respect of delivery, funding and joint programmes. Communication ensures clarity and connection across all interactions and the promotion of the TIA brand both locally and globally as the trusted partner in all matters innovative.

### **SUSTAINABILITY:**

This value sharpens the organisation's focus on delivering solutions that are sustainable in its environmental and societal impact. It means meeting current needs while ensuring longer-term viability by promoting long-term benefits together with short-term gains. Governance showcases the organisation's commitment to compliance, risk management and resilience through practices that respect TIA staff, stakeholders and the communities that the Agency serves.

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The sections that follow in Part B provide the reader with an overview of the TIA's historical role in the innovation ecosystem (also known as the NSI) and its current set of priorities. Following this, the Agency's future role is summarised, centred as it is on a reconfigured and repositioned TIA 2.0 that is an active innovation curator and a respected thought leader in the NSI. Transitioning to a TIA 2.0 that makes more impact in South Africa's economy and society will contribute to bridging the so-called 'innovation chasm' between promising publicly funded intellectual property (IP) and the market. Once the TIA 2.0 Corporate Strategy is approved, the Agency will implement the strategy through a TIA 2.0 Strategic Roadmap, overseen by a TIA 2.0 Project Management Office.

While transitioning to TIA 2.0, the Agency will in parallel deliver on its 2025–2030 Strategic Plan in 2026/27 by focusing on intensified commercialised innovations and enabling and strengthening the innovation ecosystem, supported by its developing into a more capable, scaled-up, agile and sustainable TIA that supports a capable state. An updated situational analysis together with an external and an internal environment analysis sets the scene against which the Agency will deliver against these three outcomes, which are detailed in Part C: Measuring Performance.

## **8. TIA'S ROLE IN THE INNOVATION ECOSYSTEM**

The TIA was established to promote the development and use – in the public interest – of discoveries, inventions, innovations and improvements. Its primary objective is to support the state in stimulating and intensifying technological innovation in order to improve economic growth and the quality of life of all South Africans.

The TIA plays a critical role in supporting the realisation of the government's vision through funding and de-risking technological innovation and supporting the commercialisation of publicly funded IP, thereby bridging the so-called 'innovation chasm'. The Agency also supports the process of knowledge use and the diffusion of existing technologies and grassroots innovators in vulnerable and marginalised communities, in this way contributing to the achievement of the SDGs.

The TIA also provides science, engineering and technology (SET) and enterprise development support to SMMEs and co-operatives, particularly to those that are black-owned, black women-owned, youth-owned or located in underserved provinces. From a regional and international perspective, the TIA plays a key facilitation role through its collaboration with research and innovation institutions across the continent and beyond through joint technology development programmes and more.

The TIA seeks to pursue the following priorities through STI-focused interventions:

### Commercialised Innovations

The TIA seeks to accelerate the rate at which investments are commercialised in the high-technology sectors that will help to build South Africa's economic competitiveness and in this way support economic growth.

The TIA stimulates bio-entrepreneurship through interventions which include providing access to expertise and high-end infrastructure. The Agency actively promotes transformation and inclusion, focusing particularly on the historically disadvantaged and marginalised (women, youths and persons with disabilities) as a response to communities in distress.

The TIA supports energy security and the just energy transition agenda through active engagement in eMobility and hydrogen opportunities. It also seeks to drive transformation initiatives and support investees in underserved provinces, and in so doing spread the benefits of innovation more widely and direct developmental efforts to previously disadvantaged and underserved parts of the country.

### Enabling innovation

The TIA seeks to provide skills for the economy through SET and enterprise support to SMMEs and co-operatives. The Agency aims to support governments initiative of alleviating the triple challenges of poverty, inequality, and unemployment by providing SET and enterprise development support to SMMEs. The Agency also fosters a broader innovation enabling environment, including expanding its spatial footprint through technology and innovation support centres and Technology Stations.

## Building a capable TIA supporting a capable state

The TIA seeks to establish a capable, ethical and developmental organisation by reconfiguring its strategy and operations towards more efficiency and greater impact. The Agency seeks to support the government's drive to improve service delivery to citizens through investments in technologies such as ICT-based solutions for education, health and other social services.

## 9. LOOKING TO THE FUTURE – TRANSITIONING TO A TIA 2.0 AGENCY

The DSTI champions the NSI through innovation policy, strategy development and funding aimed at consolidating South Africa's innovation efforts in line with national goals. Despite the growth in innovation and the ecosystem, the DSTI has identified ongoing challenges of fragmentation, duplication, lack of co-ordination and insufficient linkages across the innovation value chain.

These challenges contribute to an overarching systemic challenge that South Africa continues to experience as a critical innovation-to-commercialisation gap: the innovation chasm. The country undertakes research through universities and science councils, yet there is insufficient translation of the resultant new knowledge into commercial products and services, manufacturing capacity and employment opportunities, which hampers economic transformation objectives.

The repositioning of the TIA must therefore respond to this overarching challenge by:

- closing the innovation chasm through curated processes along the innovation value chain;
- strengthening linkages among government, academia, industry and society, including SMMEs, start-ups, social enterprises and NGOs;
- adopting a quadruple helix model of innovation that acknowledges all sources of innovation (academia, government, industry and civil society);
- ensuring a dedicated focus on inclusivity and sustainability;
- optimising funding for innovation, leveraging crowdfunding and partnerships, particularly from the venture capital sector;
- contributing to a culture of innovation; and
- positioning innovation as a critical and central component of South Africa's economic recovery.

In short, the TIA needs to become an active innovation curator and a thought leader in the NSI, as recommended in the report of the Ministerial Review of the TIA.

## TIA's curatorship role

Curatorship at TIA refers to the Agency's ability to selectively organise, support and navigate a pipeline of innovations across the Innovation Chasm. It is an active implementation-level interventionist role at the implementation level, ensuring that the disparate parts of the innovation ecosystem are linked for a specific project's success. Given this context, the TIA's conception of curatorship encompasses both an Innovation Curator and a Curator in the NSI role. Given the context above, the TIA's conception of curation across the innovation value chain embraces both an Innovation Curator and a Curator in the NSI role.

- As an Innovation Curator, the TIA plays a strategic enabling role to identify, connect and nurture ideas, actors and resources to foster impactful innovation. This role is primarily a catalytic one, focused on bridging the gap between research and commercialisation through technical and financial support.

- As a Curator in the NSI, the Agency takes on an operational orchestrating and catalytic role, acting as a thought leader, convener, knowledge broker and integrator within a diverse and distributed innovation ecosystem. In this capacity, TIA's coordination is limited to the integration of technology development and innovation support interventions, in strict accordance with the TIA Act.

In this dual role, the TIA will build continuity and integration between its historical innovation-de-risking and innovation-enabling roles and capabilities and that of the broader NSI.

It is important to understand that in this definition of its Innovation Curator role, it specifically recognises the other important role players in NSI such as the National Research Foundation (NRF), the Council for Scientific and Industrial Research (CSIR), the Industrial Development Corporation (IDC), the Small Enterprise Development and Finance Agency (SEDFA) and the Sector Education Training Authorities (SETAs), to name a few. TIA respects their respective mandates and the Agency will focus its contribution on the later stages of technology and market readiness where a catalytic intervention is required to bridge the innovation chasm.

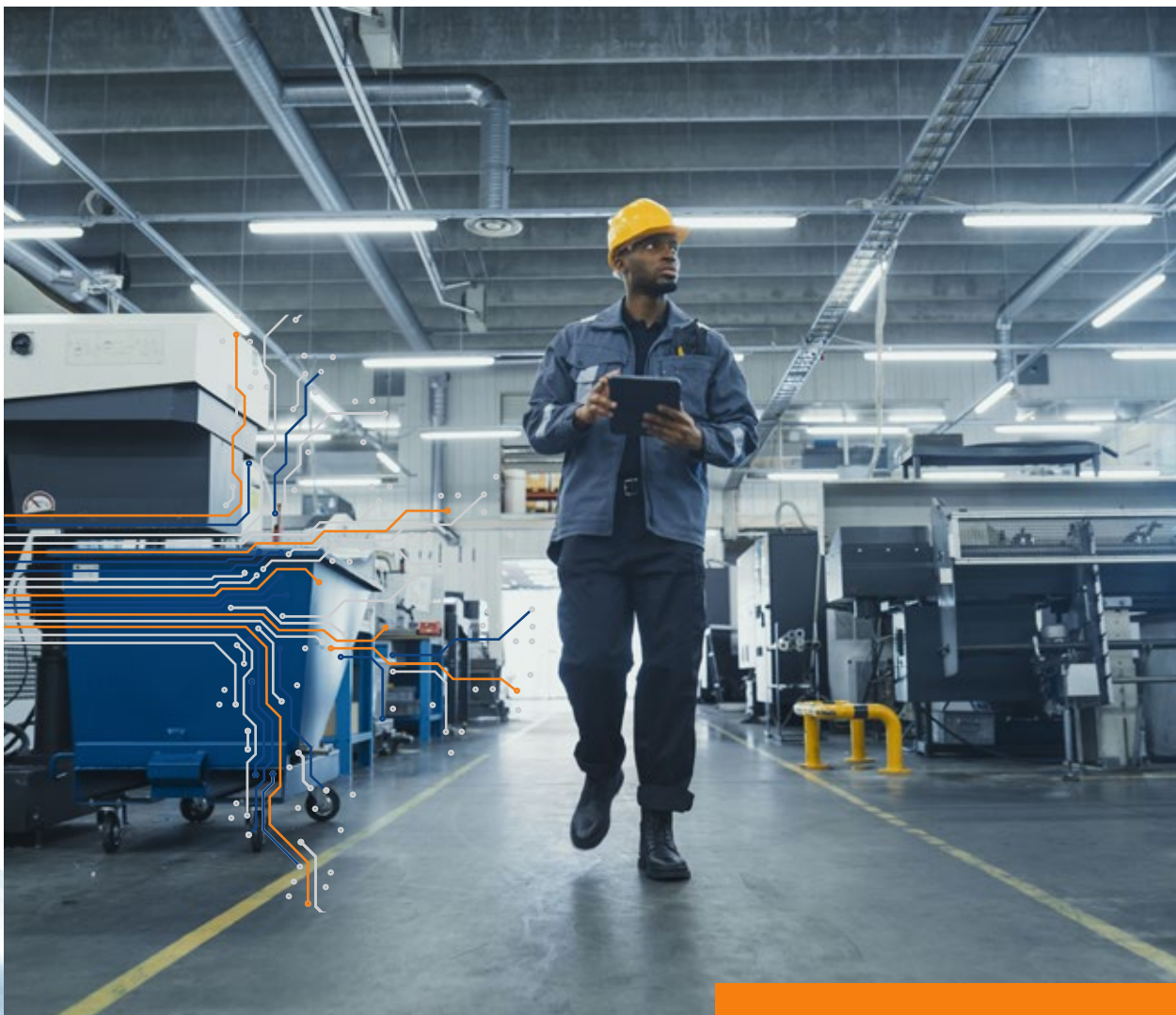
The TIA's Innovation Curator role focuses on co-ordination, promoting cohesion (rather than fragmentation) and harmonisation (rather than duplication). The TIA 2.0 Corporate Strategy accepts the DSTI's view that 'persistent fragmentation' requires the TIA as a national agency to drive cohesion and harmonisation. In particular, the collaboration and partnership will find expression in the context of programmes or project collaboration using various curation instruments such as thematic networks, sector collaboration forums and joint research initiatives.

It should also be noted that the TIA does not seek to duplicate existing efforts, nor does it seek to take over existing well-run collaborative initiatives. Rather, the Agency seeks to redress fragmentation and co-ordination failures and identify opportunities where collaborative joined-up efforts or interventions would make a systemic and meaningful impact.

It is also important to specify what TIA's curatorship role is not:

- **TIA's curatorship is not a public policy-making role.** Policy-making and STI agenda-setting remains the exclusive mandate of the DSTI. TIA's role is limited to policy implementation and providing evidence-based implementation insights to the DSTI to inform future policy development.
- **TIA's curatorship is not a governance or regulatory role over the NSI.** TIA does not have oversight of other NSI entities. Its role is catalytic and collaborative, working through partnerships and voluntary alignment to enhance the efficiency of the innovation pipeline and the effectiveness of the innovation ecosystem.
- **TIA's curatorship does not replace or duplicate the roles of other NSI actors.** TIA's focus remains on the Innovation Chasm and the transition from prototype to market, complementing the basic research and human capital development mandates of science councils and universities.

In summary, in performing its dual curatorship role, TIA operates strictly within the confines of the TIA Act of 2008. The Agency's curatorship is an operational and catalytic function, rather than a system-level governance or policy-making role. TIA's activities are focused on the implementation level of the innovation value chain, serving as an enabler and bridge-builder between R&D and commercial success, while respecting the distinct mandates of the DSTI and other NSI partner entities.



## TIA 2.0 Business Model

The ten-year TIA 2.0 Corporate Strategy aims to reimagine the TIA as South Africa’s national innovation agency. The TIA currently adopts a direct funding approach that is structured around the three key roles of connector, funder and facilitator. The TIA 2.0 business model aims to introduce significant changes and developments in the ecosystem and to respond favourably to the deepening socio-economic challenges of low growth, poverty, inequality and unemployment. The model gives direction on the way the Agency will create, deliver and capture mutual value in exchanges with its shareholder, partners, key stakeholders and customers or clients.

The business model proposes three pillars of financial support: Curator in the NSI, Fund-of-Funds and Innovation Curator, as depicted below.

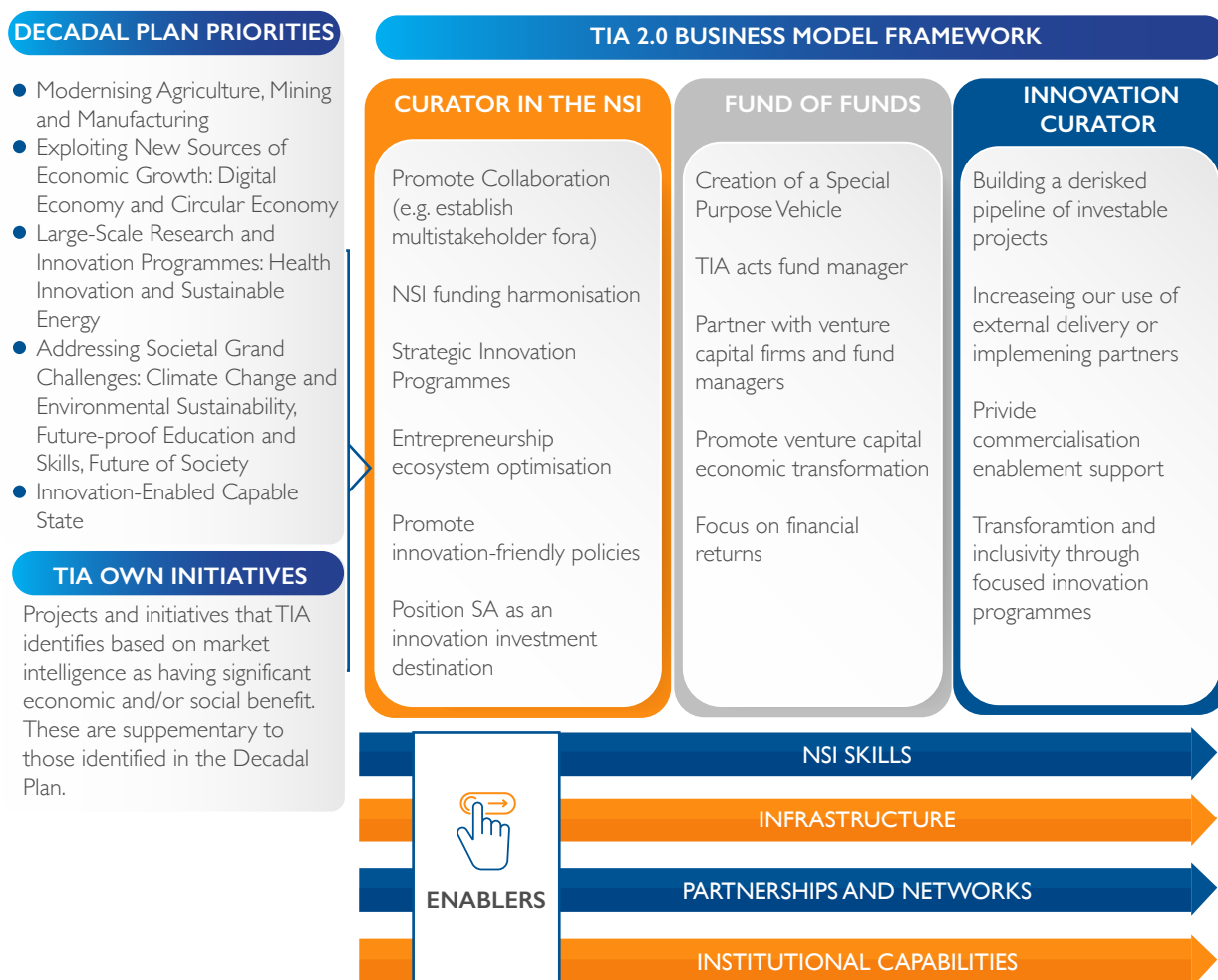


Figure 1: TIA 2.0 business model

TIA will seek to become a more influential and active player in South Africa’s innovation ecosystem through fostering collaboration and partnerships. Strategic Innovation Programmes (SIPs) will form a large component of the Agency’s efforts. These instruments are an approach by which the TIA intends to effect significant and seismic changes and shifts in the economy by investing in large-scale multi-year and multi-stakeholder collaborative innovation programmes that are sufficiently catalytic to change existing industries and build new ones around South Africa’s research and development (R&D) capabilities and competencies. The Agency’s business model promotes the formation of multi-stakeholder Sector Thematic Networks that will bring together partners in the NSI from the research community, industry, the entrepreneurship ecosystem, the government and international partners to conceptualise and motivate the establishment of an SIP with a view to pursuing innovation programmes in specific areas of technology domains.

The Fund-of-Funds pillar involves establishing a Special Purpose Vehicle (SPV) that is intended to crowd in private- and public-sector participation to achieve the key objectives of the TIA mandate, particularly support for commercialising projects. The use of an SPV model ensures that returns generated from the fund are ring-fenced to support the furtherance of the TIA mandate; it also ensures that the focus of the fund will not affect the funding of high-risk projects due to competition for limited funding. However, the returns from the SPV will help to supplement funding towards the de-risking mandate of the entity. This implementation of a Fund-of-Funds financial support pillar represents an important shift in the Agency's financial support approach at a relatively small scale.

Fund of Funds are an essential tool for meaningful systemic interventions in venture capital funding, as they allow scaled leveraging between funding partners, and open up access to different instruments that can be blended to derisk funding for both funders and startups. The Fund of Funds pillar therefore provides scalability for TIA and opens up opportunities for partnerships that would otherwise be out of reach for TIA. Further, the Fund of Funds pillar allows TIA to bridge the funding gap for the enabling and catalytic stages in the venture capital funding value chain between Pre-Seed and Series A funding.

Through Fund of Funds pillar, TIA's unlocks the capital markets by:

- Providing capital required by early-stage fund managers,
- Helping fund managers achieve required sustainable fund sizes,
- Enabling the growth of the ecosystem by funding nascent or emerging fund managers,
- Derisks funding for co-investors or limited partners through responsive funding instruments, and
- Provide a platform for established, experienced, proven, empowered and empowering fund managers to diversify into Fund of Fund Models.

TIA utilises two models to execute its Fund of Funds mandate, namely a Direct Funding into Individual Fund Managers FoF Model and a Pooled Funds Through Intermediaries FoF Model.

The Fund of Funds model is being implemented through multiple channels, products and partnerships. The following channels are in active use in the TIA Fund of Funds:

- **Pooled Fund of Funds** – This is a partnership between TIA and other institutional fund managers. Envisaged relationships include other Development Finance Institutions (DFIs), Pension Funds, and other partners. The funds raised are ceded to an Intermediary Fund Manager, who will then on-fund to respective Fund Managers, charging a fee to TIA and co-investors, and paying a fee to Fund Managers,
- **Intermediary Fund of Funds** – TIA identifies mature Fund Managers, with capability to expand their offerings to include Fund of Funds models and to become intermediaries. The intermediaries further tailor funding products to support investee Fund Managers and support the value creation and sustainability of the fund managers through business support. TIA's investments in established fund managers strengthens the ecosystem, drives transformation and present a dynamic risk-return profile for TIA,
- **Emerging Fund Managers** – Through the TIA Direct Fund of Funds model, TIA enables the growth of the ecosystem by funding nascent Fund Management operations, leveraging the experience of key individuals and teams in these funds.

Under each of these models, TIA aims to achieve impact, and inflation-adjusted capital preservation and upside, which informs TIA's long term financial sustainability.

The move toward a Fund-of-Funds model is a key pillar of the TIA 2.0 transition, designed to leverage private venture capital and institutional funding. In the 2026/27 'Consolidate Phase,' TIA has established a Fund of Funds Office to implement the programme. This office will serve as the dedicated operational hub for managing relationships with third-party fund managers, overseeing the deployment of the recycling fund mechanism and ensuring alignment between private capital flows and national impact priorities.

The Innovation Curator pillar builds on the TIA's existing direct funding activities and will continue to play an important role in the Agency's business model in future as it is closely aligned with its core value proposition of being the only national entity in the innovation ecosystem that is willing and mandated to support early-stage high-risk opportunities. The key challenges to be faced in strengthening the Direct Funding pillar are organisational capabilities relating to efficiency, capacity for due diligence, deal structuring, and commercialisation. The Agency will also make increasing use of implementation intermediaries, particularly those pertaining to project portfolios which have become too large and unwieldy for the Agency to manage effectively. Under this pillar there will also be an increased focus on transformation, particularly the recently launched programmes focused on women, youths and persons with disabilities.

In addition, an enabling environment for innovation is a critical success factor for an effective and efficient NSI in South Africa. The TIA business model and operating model will be structured around six strategic enablers: culture, skills, infrastructure, business support services, partnerships and networks, and innovation governance.

The TIA will continue to provide mentoring, business support services and advisory services as part of its role as an enabler of commercialisation. These are designed to help innovators and entrepreneurs to overcome challenges, accelerate their growth and bring their innovations successfully to market.

These non-financial support elements are important de-risking tools. The Agency will play a more effective role as an Innovation Curator that promotes, creates and supports an enabling environment for the seamless progression of ideas from various industry role players and stakeholders to market.

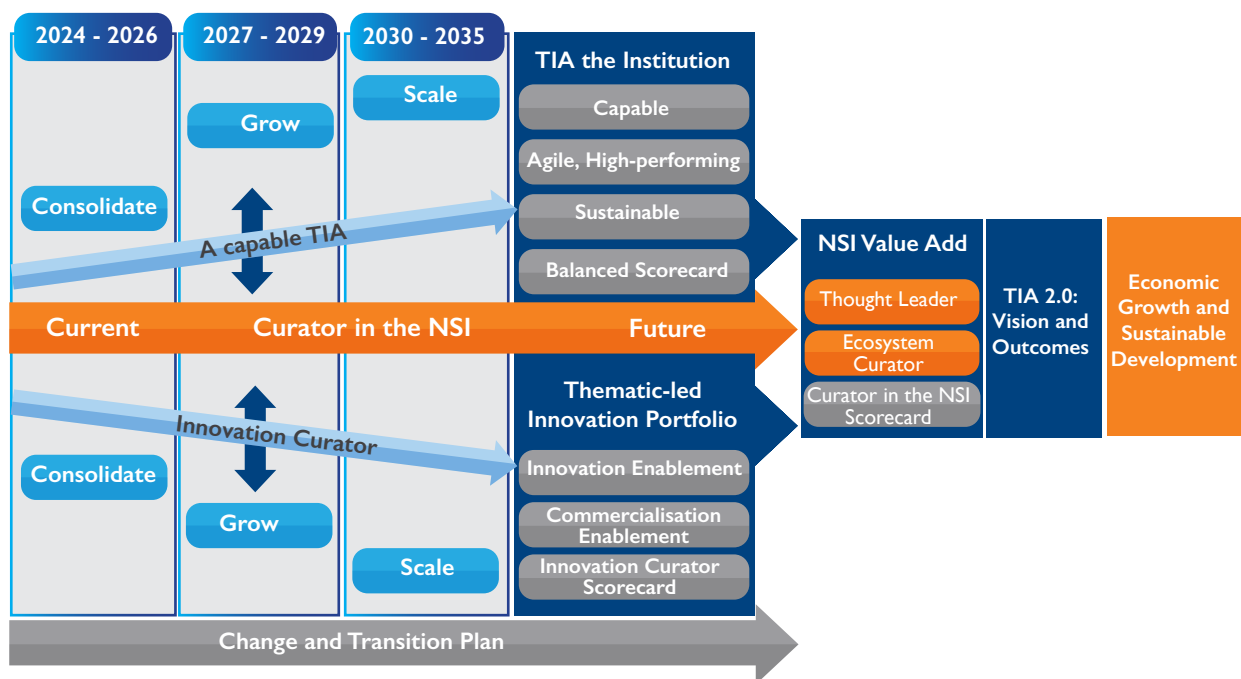
Overall, the Agency's curatorship role underscores its dedication to creating a robust and resilient innovation ecosystem. Through strategic foresight, selective engagement and a steadfast commitment to long-term development, the Agency will ensure that South Africa remains a leader in technological innovation and economic growth.

## Implementing the TIA 2.0 Corporate Strategy – a Strategic Roadmap

The TIA 2.0 Strategic Roadmap details the way in which the Agency will journey from its current state into its future state. It outlines the strategic pathways that it will follow to achieve its vision, mission and outcomes, serving as an overarching actionable framework to guide the organisation toward its long-term aspirations. The strategic intent and direction of the TIA 2.0 Corporate Strategy find expression in three strategic pathways:

1. Innovation curator building thematic-led portfolios of innovation to support high-impact innovation (from ideation to commercialisation)
2. Curator in the NSI enabling and strengthening the innovation ecosystem
3. Deepen the capability, agility and sustainability of the TIA.

Implementation of the Corporate Strategy is arranged into three phases of execution, namely Consolidate, Grow and Scale, as depicted below:



**Figure 2: Graphical depiction of the TIA 2.0 Strategic Roadmap**

These strategic pathways have been broken down further into a series of strategic focus areas that collectively cover the strategic intent of TIA 2.0.

**Table 1: Strategic Pathways and associated strategic focus areas**

STRATEGIC PATHWAY	STRATEGIC FOCUS AREAS
Innovation curator; building and supporting thematic-led portfolios for high impact	<ul style="list-style-type: none"> <li>Drive a programmatic approach that incrementally streamlines, clusters and aligns the Agency's innovation portfolio into thematic Decadal Plan-aligned Thematic Impact Areas.</li> <li>Deploy support systems, environments and capabilities that help individuals, teams and organisations to generate and develop innovative ideas, technologies and solutions at the STI policy implementation level.</li> <li>Build a pipeline and portfolio of innovation ideas that have been rigorously assessed, developed and supported.</li> <li>Enable innovation commercialisation through processes, support mechanisms and policies that help to turn innovative ideas, prototypes or research outputs into market-ready products, services or ventures that generate value (economic, social or both).</li> </ul>
Curator in the NSI, enabling and strengthening the innovation ecosystem	<ul style="list-style-type: none"> <li>Foster collaboration, network formation and partnerships, including the launch of collaborative innovation programmes designed to catalyse joint implementation.</li> <li>Mobilise for increased funding through local and international partnerships and improve funding efficiencies to support the translation of research to market.</li> <li>Enhance the efficient functioning and capability of the research and technology entrepreneurship ecosystems.</li> <li>Position the Agency to provide evidence-based implementation-level insights to inform public STI policy, ensuring that NSI practice is grounded in operational reality.</li> </ul>
Deepen the capability, agility and sustainability of the TIA	<ul style="list-style-type: none"> <li>Strengthen leadership capacity, skills and systems of TIA to deliver on its legislated the innovation mandate.</li> <li>Enhance the agency's ability to anticipate, respond to and lead through change in a dynamic innovation ecosystem.</li> <li>Ensure long-term financial, operational and reputational sustainability.</li> </ul>

## Consolidate phase

The Consolidate phase of the TIA 2.0 Corporate Strategy refers to a period (2024/25–2026/27) during which the Agency will focus on strengthening its existing operations and market position rather than seeking aggressive expansion or diversification. The focus will entail strengthening existing operations, optimising internal processes, improving efficiency, reducing costs and enhancing overall stability to build a solid foundation. The main activities envisaged of this phase are depicted below:



**Figure 3: Main activities of the Consolidate phase of the TIA 2.0 Corporate Strategy**

Most of the key TIA 2.0 deliverables have now been approved by the TIA Board. These include the TIA 2.0 2025-2035 Corporate Strategy, a new business model and operating model and a macro-organisational design. The main deliverables still to be approved TIA are the abridged TIA 2.0 Corporate Strategy for public distribution, finalisation of the TIA 2.0 Strategic Roadmap and undertaking a transition and hand-over process. TIA is also still to submit the TIA 2.0 2025-2035 Corporate Strategy to the DSTI for final approval. Work is already underway to take the project forward beyond the work that TIA's strategy development service provider is currently concluding for TIA. This centres on establishing and capacitating a TIA 2.0 Project Management Office (PMO) and executing a work study and business process mapping and optimisation project.

## **TIA 2.0 Project Management Office Work Study and Business Process Optimisation**

The TIA is currently transitioning from the initial design and alignment phase of its TIA 2.0 Corporate Strategy to a critical sustained implementation and embedding phase. Once the Corporate Strategy is approved, the TIA 2.0 Strategic Roadmap will constitute the binding execution plan for this decade-long transformation. To ensure continuity and impetus across this multi-year transformation, the Agency will establish a permanent internal Project Management Office (PMO).

The TIA 2.0 PMO will serve as the central management structure that executes the Strategic Roadmap through standardised governance, execution and monitoring; harmonises diverse strategic focus areas and cross-cutting enablers; and aligns all initiatives with the Agency's overarching vision, mission and shareholder expectations. By providing rigorous oversight, streamlined processes, proactive risk and dependency management, and realizing systematic benefits, the PMO will drive the momentum, foster cross-departmental collaboration, optimise resource allocation and embed a culture of accountability and continuous learning, all in support of implementing the Strategic Roadmap.

The primary objective of the PMO will therefore be to oversee the implementation of the TIA 2.0 Corporate Strategy by executing the TIA 2.0 Strategic Roadmap, ensuring the execution of all strategic initiatives and the continuous alignment of projects and workstreams with strategic priorities and shareholder expectations.

To support TIA's transformation and to reposition the Agency a work study and business process mapping and optimisation project was initiated to analyse and evaluate TIA's current operations, work methods, processes, human resource capabilities, systems and technologies. The objectives of the project are to improve efficiency, optimise workflows and enhance effectiveness through digitalisation. The project will be concluded by the end of 2026/27.



## Institutional approach to the Decadal Plan

In the upcoming year, the TIA will accelerate the implementation of the Decadal Plan priorities by implementing a Thematic Impact Areas approach. The TIA 2.0 process involved a reconfiguration of the Agency's business model; this process sought to ensure that the Decadal Plan is institutionalised and the Agency's operations are centred on these priorities. This approach highlights the ways in which the priorities of the Decadal Plan have been grouped to achieve specific objectives. These priorities have been selected based on a detailed analysis of the Decadal Plan, and investment decisions will be made against the backdrop of an analysis of the strengths and weaknesses of the Agency's investment portfolio. This thematic approach will also ensure that a meaningful impact will be achieved when responding to the MTDP priorities.

These decadal priorities are also a representation of the key sectors that the Agency seeks to make an impact in. The Agency plans to forge strategies that will determine the key interventions that are made in each sector, taking into consideration STI and national government priorities and policy. The TIA's approach to the Decadal Plan will also be premised on the implementation of SIPs. These SIPs represent an approach by which the Agency will effect significant changes by investing in large-scale multi-year and multi-stakeholder collaborative innovation programmes that are sufficiently catalytic to transform existing and build new industries centred on South Africa's unique R&D capabilities and competencies.

This approach represents a significant shift in the way the Agency undertakes its work. It will drive true internal collaboration in the TIA in addition to fostering collaboration with partners and stakeholders in the innovation ecosystem. The adoption of the Thematic Impact Areas will inform decisions about initiating new or existing projects, initiatives or programmes, or even scaling up projects, initiatives or programmes.

The five Thematic Impact Areas are as follows, with more details provided in Part C below.

- Advanced manufacturing and industrial modernisation.
- Agricultural innovation and food security.
- Health innovation and wellbeing.
- Energy sustainability and environmental innovation.
- Digital economy and inclusive innovation.

The TIA's non-financial support enablers focus on the following:

### *Enabling the innovation ecosystem*

- Promote innovation and innovation management skills, commercialisation and entrepreneurship skills.
- Maintain and expand access to high-end science, technology and engineering support for researchers, entrepreneurs and innovators.
- Provide business support services to ensure that innovators and entrepreneurs receive support to create start-ups and take their technologies to market.
- Build on the TIA's base of existing local and international partnerships to leverage resources, promote collaboration and create positive framework conditions that enable innovators and entrepreneurs to thrive.
- Leverage on the existing strong network of innovation actors, ecosystem builders and other role players to promote a culture of learning, entrepreneurship and innovation.

### *Commercialisation enablement*

The TIA will continue to provide mentoring, business support services and advisory services as part of its commercialisation enablement role. These are designed to help innovators and entrepreneurs overcome challenges, accelerate their growth and bring their innovations successfully to market.



## 10. UPDATED SITUATIONAL ANALYSIS

In developing the 2026/27 APP, the TIA Board and management undertook a review of the external and internal environments to assess the factors that are likely to influence the organisation's ability to deliver on its strategy during this period.

This is the second APP of the five-year planning cycle. This period is marked by a change in direction and the implementation of the new TIA 2.0 strategy. The TIA 2.0 process was catalysed by the Ministerial Supplementary Review, the report of which was published in 2022. This latest review recommended substantial changes in the way the Agency operates. In response to this review, the Agency has embarked on the TIA 2.0 roadmap which is encapsulated in the TIA 2.0 Corporate Strategy. The upcoming financial year will further accelerate the implementation of the Consolidate phase of the TIA 2.0 strategic roadmap in preparation for moving towards the Grow phase. The Consolidate phase has focused on the optimisation of internal processes, improving organisational efficiency and enhancing the overall stability of the Agency. The Grow phase will focus on expanded programming, enhanced implementation of various strategies and projects and greater reach of targeted beneficiaries.

Cost-containment measures and budget cuts continue to have a negative effect on the impact that the Agency seeks to achieve in the NSI. These cost-containment measures have continued into the 2025/26 financial year and are likely to continue into 2026/27 until a significant economic turnaround occurs. The budget cuts are due to a deteriorating fiscal situation; economic growth has been suppressed and this led to the budget cuts. This process was initiated during the previous strategic period.

Despite the current challenging situation, the TIA remains optimistic and focused on achieving its strategy and set targets for 2026/27. These funding constraints presented the organisation with an opportunity to find solutions. Establishing collaborations and the pulling of resources from entities sharing similar objectives is a key focus highlighted in the Agency's 10-year corporate strategy and 2025–2030 strategic plan. In strengthening this focus, the Agency seeks to establish a Fund-of-Funds financial pillar which will establish a special purpose vehicle aimed at crowding in private- and public-sector participation and funding.

As recommended in the Ministerial Review and aligned with the approved TIA business case, the Agency will engage the Executive Authority and relevant stakeholders on the rescheduling of TIA as a Schedule 3B public entity in terms of the PFMA. In the interim, and in support of the strategic repositioning envisaged under the TIA 2.0 Strategy, TIA will pursue targeted engagements with National Treasury to obtain appropriate PFMA exemptions where permissible. These interim measures are intended to enable greater operational agility, partnership formation, and commercial responsiveness required to deliver on TIA's evolving mandate, while maintaining sound governance and accountability.



An analysis of the TIA’s strengths, opportunities, aspirations and results is presented in Table 2.

**Table 2: TIA strengths, weaknesses, opportunities and threats, and results analysis**

STRENGTHS	<ul style="list-style-type: none"> <li>• The uniqueness and extent of the TIA’s mandate positions it as a relevant institutional intervention in the NSI</li> <li>• Solid foundation with unique innovation funding instruments such as the Seed Fund Programme, Technology Stations Programme (TSP) and Technology Platforms Programme</li> <li>• Track record of funding innovations</li> <li>• Active connector and funder in the NSI</li> <li>• Deep expertise in SET capabilities</li> <li>• Innovation funding partnership and private sector leveraging instruments such as the Industry Matching Fund and the Innovation Fund</li> <li>• Uniqueness of the TIA’s mandate to de-risk high-potential technologies</li> <li>• Highly skilled employees</li> <li>• Good baselines for sound strategic partnerships such as the current BRICS innovation and bilateral and multilateral partnerships</li> </ul>
OPPORTUNITIES	<ul style="list-style-type: none"> <li>• Opportunity to be an Innovation partner through blended funding and non-financial instruments</li> <li>• Integration of the TIA in industry networks such as Business Chambers, Industry Associations, and sectoral development initiatives</li> <li>• New Industry infrastructure developments</li> <li>• Regional Innovation Networks to leverage African Continental Free Trade Area</li> <li>• Strengthen and leverage provincial industry, business and innovation networks and partnerships through colocation in Tech Stations and Platforms</li> <li>• Strengthen, upscale and leverage international funding and non-financial resources through bilateral and multilateral partnerships</li> <li>• Co-ordinate public-sector innovation efforts</li> <li>• Use innovation to improve delivery of services by government</li> <li>• Inform public STI policy for a favourable policy and regulatory environment</li> <li>• Play convener role</li> <li>• Growing interest from industry to fund and support innovation</li> <li>• Local government development strategies looking at investing in innovation</li> <li>• Only entity in risk funding space</li> <li>• Opportunity to emulate the success of partnerships in Bio-economy across the TIA</li> <li>• Scaling up and implementation of programmes that promote transformation including</li> <li>• Supporting service delivery through locally developed innovations</li> <li>• Deepening collaboration with the growing venture capital sector and other institutional investors</li> <li>• Existence of a strong network of partners with deep expertise for increased execution of the TIA mandate</li> <li>• Prospects for use, adoption and deployment of technologies for digital transformation to drive societal change</li> <li>• Possibilities offered by the green, sustainable solutions in response to climate change</li> <li>• Reposition the TIA as a capable and responsive institution geared for higher impact</li> </ul>

## WEAKNESSES

- Silos in the way of working (internal fragmentation)
- Weak positioning with stakeholders
- Lack of cross-functional teams
- Under-capacitated structure
- Poor brand positioning with stakeholders
- Inadequate funding to respond to increased demand and dynamism of ecosystem
- Leadership continuity challenges due to extended acting appointments
- Board has operated at the minimum membership level for an extended period, limiting its ability to function optimally
- Sub-optimal TIA presence (regional offices) outside Gauteng, Western Cape and KwaZulu-Natal
- Limited of resources to acquire requisite skills
- Limited automation and digitalisation of business processes




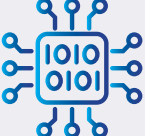


## THREATS

- Mandate creep leading to resources being spread thin
- The TIA challenged by many organisations taking up its mandate
- Global trade wars (tariffs)
- Rapid dynamic ecosystem requiring agility and flexibility
- Start-ups facing global threats and competition
- Underfunding as a result of fiscal constraints
- Poor knowledge management and loss of organisational knowledge
- Competition for skills resulting from a rapidly expanding ecosystem
- Poor appreciation of the potential for innovation to resolve social, economic and environmental issues across government



An analysis of the external environment in which the TIA operates is presented in Table 3.

**Table 3: PESTEL analysis**

Dimension	Opportunity/risk
<b>Political</b> 	<ul style="list-style-type: none"> <li>Relationship with the shareholder</li> <li>Coalition government – contested priorities</li> <li>Potential to overcome the co-ordination or fragmentation challenges of the NSI through greater co-operation with other government departments and the private sector and by implementing collaborative initiatives</li> <li>Potential for closer co-operation with the departments in the Economic Sectors, Investment, Employment and Infrastructure Development Cluster, especially the DHET</li> <li>Poor appreciation of the potential for innovation to resolve social, economic and environmental issues across government</li> <li>The GNU has some market-friendly signalling, but there is a risk of continued policy incoherence.</li> </ul>
<b>Economic</b> 	<ul style="list-style-type: none"> <li>Stagnant GDP growth</li> <li>Budget shrinking but demand for funding from clients increasing affects the way we can serve our mandate as the TIA</li> <li>Food price inflation increasing at a higher rate than general inflation</li> <li>Increase in fuel prices = increase the cost of doing business for the TIA</li> <li>De-dollarisation</li> <li>Hike in interest rates</li> <li>Global trade wars (tariffs) and uncertainty regarding South Africa’s inclusion in the Africa Growth and Opportunities Act</li> </ul>
<b>Social</b> 	<ul style="list-style-type: none"> <li>Increasing poverty</li> <li>Poor-quality education</li> <li>High crime rate</li> <li>Widening inequality</li> <li>Growing population</li> <li>Increased disease burden</li> <li>High unemployment, especially among black people, youths and women</li> <li>Likelihood of civil unrest, particularly at universities, during the annual #FeesMustFall campaign</li> <li>Poor service delivery, particularly at the local municipal level</li> <li>Imperative to harness innovation to promote transformation and inclusion</li> </ul>
<b>Technological</b> 	<ul style="list-style-type: none"> <li>Increased digitalisation of the economy</li> <li>Declining expenditure on experimental development</li> <li>Declining gross expenditure on R&amp;D (GERD) and business expenditure on R&amp;D in real (inflation-adjusted) and nominal terms</li> <li>Declining inventiveness as reflected by patents</li> <li>Low proportion of local inventors compared with other nations</li> <li>Rapid technological change and associated disruption of the economy and society</li> <li>South Africa’s research enterprise is well balanced, with pockets of world-class science and technology capabilities (e.g., health)</li> <li>The NSI’s response to the COVID-19 pandemic demonstrated the importance of a strong, co-ordinated and well-resourced STI system</li> <li>Rapid uptake and integration of artificial intelligence (AI) in daily life, making peoples’ daily lives easier, but with the dangers of fake news/content and biased/false information being spread</li> </ul>
<b>Environmental</b> 	<ul style="list-style-type: none"> <li>Climate change: what we support must promote environmental sustainability in the green economy</li> <li>Sustainability: using the right energy from renewable resources</li> <li>Accelerating and irreversible climate change</li> <li>Increasing environmental degradation</li> <li>Potential to leverage South Africa’s rich diversity</li> <li>Rise in climate change denialism globally</li> </ul>
<b>Legal</b> 	<ul style="list-style-type: none"> <li>TIA Act still relevant</li> <li>Opportunities to create regulations that shape compliance and encourage performance</li> <li>Compliance with relevant legislative prescripts, including enabling legislation</li> <li>Potential for the state to adopt stronger capital controls and increased taxation, potentially rendering the economy less competitive and hindering growth</li> </ul>

# II. EXTERNAL ENVIRONMENT ANALYSIS

## II.1 Global issues

An analysis of global issues<sup>2</sup> reveals the following.

### 1. Inequality

Present or perceived substantive disparities in the distribution of assets, wealth or income within or between countries, resulting in material differences in related economic outcomes, continues to persist. This includes but is not limited to growing or persistent poverty and economic polarisation. Inequality threatens long-term social and economic development, harms poverty reduction and destroys people's sense of fulfilment and self-worth.

Reducing both within- and between-country inequality requires equitable resource distribution, investing in education and skills development, implementing social-protection measures, combating discrimination, supporting marginalised groups and fostering international co-operation for fair trade and financial systems.

### 2. Deepening geopolitical and geo-economic tensions

The current geopolitical climate, following Russia's invasion of Ukraine and with wars raging in the Middle East and in Sudan, presents a material crisis. Proxy wars, civil wars, coups and terrorism have been identified as the top risks for 2025. Geopolitical tensions are also associated with the rising risk of geo-economic confrontation (sanctions, tariffs, investment screening), which is also driven by inequality, societal polarisation and other factors.

Unilateralism is increasingly taking hold in national security considerations, highlighting the worsening humanitarian impacts of the ongoing conflicts. Some global and regional powers are deploying economic levers to reshape economic interactions between nations, restricting goods, knowledge, services or technology with the intention of building self-sufficiency, constraining geopolitical rivals and/or consolidating spheres of influence. These levers include, but are not limited to, currency measures, investment controls, sanctions, state aid and subsidies, and trade controls.

### 3. Clean water and sanitation

Despite great progress having been made, billions of people still lack access to safe drinking water, sanitation and hygiene. Achieving universal coverage by 2030 will require a substantial increase in current global rates of progress: sixfold for drinking water, fivefold for sanitation and threefold for hygiene.

Between 2015 and 2022, the proportion of the world's population with access to safely managed drinking water services increased from 69% to 73%; safely managed sanitation services increased from 49% to 57%; and basic hygiene services increased from 67% to 75%. This progress signifies an additional 687 million, 911 million and 637 million people gaining access to these essential services, respectively.

However, in 2022, 2.2 billion people still lacked safely managed drinking water, including 703 million without a basic water service; 3.5 billion people lacked safely managed sanitation, including 1.5 billion without basic sanitation services; and 2 billion lacked a basic handwashing facility with soap and water at home, including 653 million with no handwashing facility at all. Sub-Saharan Africa is furthest behind. During this period, while the rural population saw improvements in access, the urban population's access remained largely unchanged or decreased.

<sup>2</sup>Source: United Nations, World Economic Forum.

## 4. Poverty reduction and the Sustainable Development Goals

Extreme poverty, currently defined as living on less than \$2.15 per person per day in 2017 purchasing power parity, has experienced a significant decline in recent decades. However, COVID-19 reversed this positive trend. Even before the pandemic, the pace of poverty reduction was slowing, with extreme poverty falling from 10.8% in 2015 to 8.4% in 2019. The average annual reduction rate was 0.54 percentage points between 2015 and 2019, less than half the 1.28 percentage-point rate observed between 2000 and 2014.

In 2020, the number of people living in extreme poverty rose to 724 million, surpassing the pre-pandemic projection by 90 million and reversing approximately three years of progress in poverty reduction. Recovery from the pandemic has been slow and uneven, with extreme poverty dropping from 9.3% in 2020 to 8.8% in 2021. About 41% of low-income countries experienced a higher poverty rate in 2021 compared to the previous year versus only 13% of upper-middle-income countries. The conflict in Ukraine has disrupted global trade, leading to increased living costs that are disproportionately affecting the poor. Furthermore, climate change poses substantial threats to poverty reduction. By the end of 2022, forecasting suggests that 8.4% of the world's population, or as many as 670 million people, could still be living in extreme poverty.

## 5. Pollution

In 2024, six of the nine 'planetary boundaries' for environmental health were crossed, with a seventh boundary being in jeopardy. These boundaries contribute to the stability of the world's life support system, including economies and societies. Unsustainable patterns of production and consumption are driving climate change, pollution and biodiversity loss, referred to by the United Nations Framework Convention on Climate Change (UNFCCC) as the Triple Planetary Crisis. Pollution is the world's largest environmental risk factor for disease and premature deaths. The effects of pollution are unequal: 92% of pollution-related deaths and the greatest burden of related economic losses occurring in low- and middle-income countries.

Pollution poses greater risks in specific geographies and disproportionately affects vulnerable groups of the population that are exposed to higher levels of pollution. Marginalised communities, urban areas and industrial zones bear the large brunt of its impact due to their proximity to pollutants.

## 6. Climate change

Climate change affects every country on every continent. It is caused by human activities and threatens the future of our planet. With rising greenhouse gas emissions, climate change is occurring at rates much faster than anticipated and its effects are clearly felt world-wide. The impacts include changing weather patterns, a rising sea level and more extreme weather events. Extreme weather events are anticipated to become even more of a concern than they already are, from shifting weather patterns that threaten food production to rising sea levels that increase the risk of catastrophic flooding, the impacts of climate change are global in scope and unprecedented in their scale. The Earth's average land temperature has warmed nearly 1 °C in the past 50 years as a result of human activity; global greenhouse gas emissions have ballooned by nearly 80% since 1970, and atmospheric concentrations of the major greenhouse gases are at their highest level in 800,000 years.

## 7. Misinformation and disinformation

The advent of new technologies and the increase in user-generated content platforms is leading to a corresponding rise in the volume of online content. The flows of misinformation and disinformation from those creating it are becoming more challenging to detect and remove in an increasingly fragmented media landscape. Differentiating between AI- and human-generated false or misleading content – in the form of video images, voice or text – can be difficult. GenAI lowers the barriers to content production and distribution, and some of that content is inaccurate. Threat actors, state agencies in some countries, activist groups and individuals who may or may not have criminal intentions can automate and expand disinformation campaigns, greatly increasing their reach and impact. Misinformation and disinformation can also be the result of AI-hallucinated content or human error, and these too are likely to increase amid the growing volume of content.

## 8. Affordable and clean energy

The world continues to advance towards sustainable energy targets – but not fast enough. At the current pace, about 660 million people will still lack access to electricity and close to 2 billion people will still rely on polluting fuels and technologies for cooking by 2030.

Renewable sources power nearly 30% of energy consumption in the electricity sector, but challenges remain in the heating and transport sectors. Developing countries experience a 9.6% annual growth in renewable energy installation, but, despite enormous needs, international financial flows for clean energy continue to decline. To ensure access to energy for all by 2030, we must accelerate electrification, increase investments in renewable energy, improve energy efficiency and develop enabling policies and regulatory frameworks.

## 9. Cybersecurity

Cybersecurity vulnerabilities are on the increase due to the rapid digitalisation of societies and industries. The risk of cyberattacks is accordingly greater than ever before, with malware and ransomware attacks rising dramatically. Cyber espionage and warfare are also increasing. The use of cyber weapons and tools by state and non-state actors to gain control over a digital presence causes operational disruption and/or compromises or damages an entity's technological and information networks and infrastructure. Cyber warfare includes defensive and offensive cyber operations that trigger or occur during armed conflict and cyberattacks that steal classified sensitive data or intellectual property in order to gain an advantage.

## 11.2 Emerging technology and innovation challenges facing developing countries

Frontier technologies, particularly AI, are reshaping the functioning of economies and societies. According to the United Nations Conference on Trade and Development (UNCTAD), the rapid and widespread diffusion of frontier technologies is often outpacing the ability of many governments to respond. Frontier technologies combine digitalisation and connectivity, potentially combining and multiplying their impacts to boost productivity and improve livelihoods. These technologies include AI, the Internet of Things (IoT), Big Data, blockchain, 5G, 3D printing (also known as “additive manufacturing”), robotics, drones, gene editing, nanotechnology and solar photovoltaic and green hydrogen.

UNCTAD contends that the use of AI has the potential to accelerate progress towards achieving the SDGs, but if unevenly distributed and not guided by ethical oversight and transparency, its diffusion can exacerbate existing inequalities. UNCTAD has created a readiness index for countries to assess their national capabilities to use, adopt and adapt frontier technologies equitably. As in previous years, the index rankings are dominated by developed countries in Europe and North America.

Developing countries generally rank lower, but Singapore stands out in fifth position and performs well across all the index's dimensions. The BRICS countries have fairly good rankings, notably China, at 21; the Russian Federation, at 33; India, at 36; Brazil, at 38; and South Africa, at 52.1 South Africa's readiness index (and sub-index rankings) compared to those of selected countries is presented in Table 4.

**Table 4: Selected countries' readiness to use, adopt and adapt frontier technologies equitably**

Country name	Total ranking		ICT ranking		Skills ranking		R&D ranking		Industry ranking		Finance ranking	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
USA	1	1	11	4	18	17	2	2	16	17	2	2
Sweden	2	2	6	17	2	2	16	15	11	7	18	14
Germany	7	8	24	26	17	18	5	5	12	12	40	34
China	35	21	117	101	92	64	1	1	8	6	4	3
Russian Federation	43	33	32	41	32	29	13	17	54	72	69	63
Brazil	40	38	50	38	55	59	18	18	51	50	57	41
India	46	36	95	99	109	113	4	3	22	10	75	70
<b>South Africa</b>	<b>56</b>	<b>52</b>	<b>71</b>	<b>76</b>	<b>77</b>	<b>71</b>	<b>36</b>	<b>41</b>	<b>67</b>	<b>55</b>	<b>25</b>	<b>27</b>
Mexico	61	54	70	73	73	75	45	34	31	37	96	98
Mauritius	73	74	96	84	57	70	82	82	74	83	34	45
Egypt	83	85	91	115	66	92	47	45	90	89	119	109
Kenya	117	113	120	129	135	130	83	86	93	71	107	101
Nigeria	119	106	119	126	108	101	68	54	157	158	153	149

Number of countries: 170; Source: UNCTAD Technology and Innovation Report 2024 and 2025

South Africa ranks the lowest in its ability to use, adopt and adapt frontier technologies in the BRICS grouping of countries, but is ranked the highest of the sub-Saharan African countries in the 2023 and 2024 periods. The country scores high in its finance and R&D ranking relative to its overall ranking, but low in information and communication technologies (ICT) skills and industry rankings. Furthermore, South Africa went up four places in 2024 compared to its performance in the 2023 world rankings.

Frontier technologies are advancing rapidly, with a market size projected to grow sixfold by<sup>3</sup> 2033, to \$16.4 trillion. China and the United States of America dominate knowledge generation in frontier technologies, with around one-third of peer-reviewed articles and two-thirds of patents originating in those countries. Similarly, there is a significant AI-related division between developed and developing countries. This could widen existing inequalities and hinder efforts by developing countries to catch up.

The digital nature of these frontier technologies is mirrored by Gartner in its annual emerging technologies hype cycle analysis. Gartner identifies technologies which are anticipated to affect business and society over the next two to 10 years, but particularly those that will support digital business transformation. In the 2025 hype cycle analysis, emerging technologies on the so-called 'peak of inflated expectations' include Sovereign AI, AI agents, AI Ready Data and AI engineering.

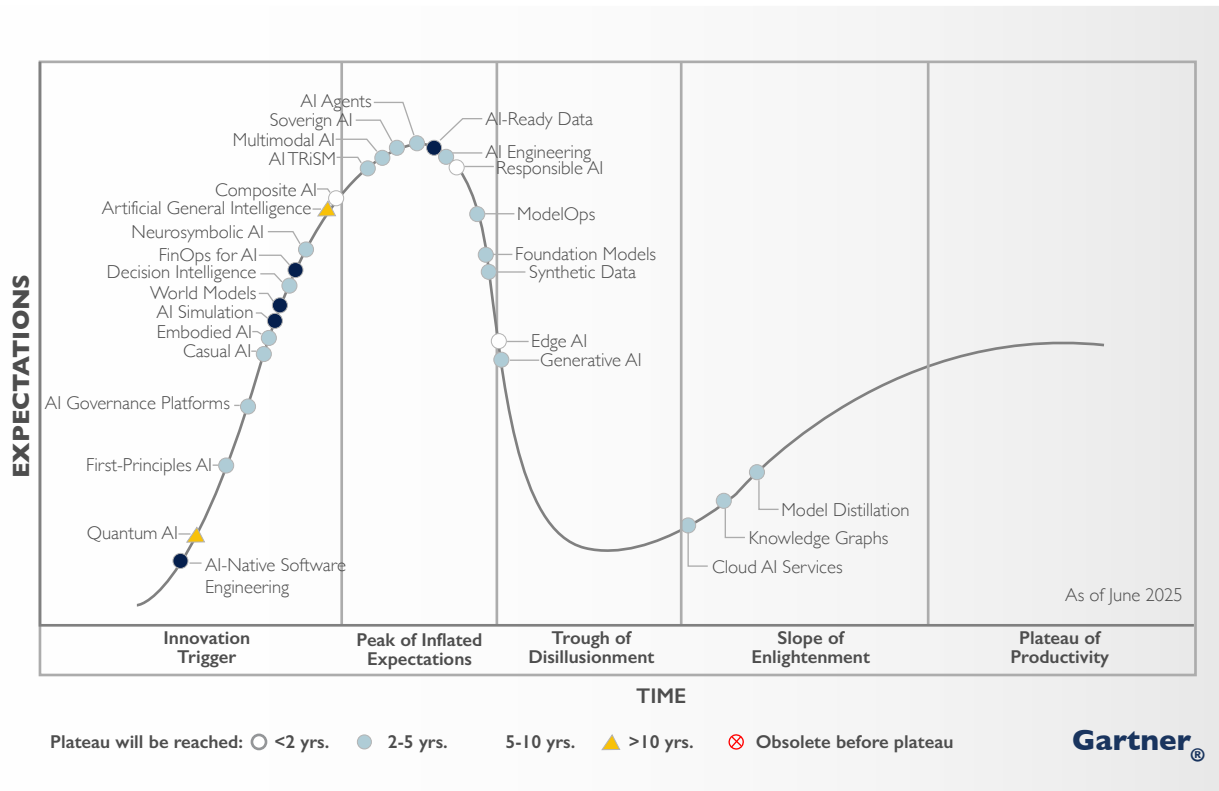
In 2025, Gartner did identify technologies that were edging towards the 'trough of disillusionment'; unlike in the previous year, this identifies emerging technologies which were once over-hyped but which have not lived up to expectations.

<sup>3</sup>UNCTAD Technology and Innovation Report 2025.

The hype cycle has changed visibly since 2024: the 2024 hype cycle shows that at the peak of inflated expectations are Responsible AI, AI engineering and Edge AI. In 2025, technologies that continued to occupy the peak of inflated expectations include AI engineering. According to Gartner, AI engineering enables organisations to establish and grow a high-value portfolio of AI solutions consistently and securely; it is the foundational discipline for enterprise delivery of AI and GenAI solutions at scale.

AI agents which are currently at the peak of expectations are autonomous or semi-autonomous software entities that use AI techniques to perceive, make decisions, take actions and achieve goals in their digital or physical environments. Using AI practices and techniques such as large language models (LLMs), organisations are creating and deploying AI agents to achieve complex tasks. The prediction in relation to AI agents is that they will follow the classic curve. After the current wave of enthusiasm and investment, they will inevitably slide into the Trough of Disillusionment within the next 2–3 years.

Figure 4: Gartner’s hype cycle for emerging technologies in 2025 presents these emerging technologies in 2025. During that year, the technologies edging towards the trough of disillusionment included Edge AI and Generative AI. These are technologies that are performing below expectation.



**Figure 4: Gartner’s hype cycle for emerging technologies in 2025**

## 11.3 South African research and innovation landscape

The TIA's mandate compels it to exploit knowledge resources that are generated in the research, development and innovation (RDI) system. It is therefore important that this system is productive and generates research outputs in fields that are directly relevant to South Africa's socio-economic development objectives. The assessment of this system is important as this enables mitigation mechanisms to be put in place in areas of poor performance. The RDI system is an important input and feeder to the TIA's pipeline of investible projects. This section outlines the status of South Africa's RDI systems: scientific and technological system, innovativeness and R&D expenditure.

### Scientific and technological system

South Africa's public university sector saw a 12%<sup>4</sup> increase in enrolments (0.95 million to 1 million) and a 41% increase in graduates (165,986 to 233,257) between 2012 and 2021. The throughput rate improved from 17.4% to 21.8%. However, the SET fields remained below the 30% target, while humanities exceeded the 40% target.

The Technology Station Programme invested R670m between 2017/18 and 2021/22, but funding was cut from R123m in 2017/18 to R114m in 2021/22. The TSP was established to enable universities of technology to provide technology development services to small and medium enterprises (SMEs). The Technology Stations provide innovative SET solutions to complex engineering challenges in the relevant industrial sectors aimed at supporting the government's socio-economic priorities. There are 16 Technology Stations based at 11 higher education institutions in South Africa.

South Africa slipped to 64th place in the 2024 IMD World Digital Competitiveness ranking from 48th in 2019, indicating low digital competitiveness, which measures the capacity and readiness of 67 economies to adopt and explore digital technologies as a key driver of economic transformation in business, government and broader society.

South Africa's Inclusive Internet Index (III) score has also shown a steady increase, rising from 63rd in 2018 to 74th in 2022, indicating progress in making the internet more accessible and affordable for its citizens. However, there is still room for improvement, particularly in harnessing data for the public good, as reflected in South Africa's lower Global Data Barometer (GDB) score of 30 in 2021, which trails behind that of other BRICS countries such as Brazil (40), India (47) and China (40).

This means that the rate of use of scientific output for socio-economic benefit is not at the desired level. This is particularly true in the case of commercialising the outputs of publicly funded R&D but it also extends to incremental innovation and the harnessing of existing knowledge and technologies to enable inclusive growth and development. An example of this is South Africa's patenting activity, which has declined significantly over the past few years. The number of domestic patents granted decreased from 694 in 2019 to 513 in 2022, while patent applications abroad dropped from 1,457 in 2020 to 968 in 2022.

### Innovativeness

According to the 2025 Global Innovation Index (GII), in innovativeness South Africa ranks 12th among the 33 upper-middle-income group economies and ranks 2nd among the 32 economies in sub-Saharan Africa. Globally, South Africa ranks 61st among 139 economies. Five input pillars capture elements of the national economy that enable innovative activities. These inputs are encapsulated in interventions that are made in institutions, human capital and research, infrastructure, market sophistication and business sophistication. Innovation outputs are the results of innovative activities in the economy and include two output pillars: knowledge and technology outputs, and creative outputs.

<sup>4</sup>STI Indicators Report 2024.

South Africa performs better in innovation outputs than in innovation inputs: it produces more innovation outputs relative to its level of innovation investments. In 2025, the country ranked 68th out of 139 countries in innovation inputs. As for innovation outputs, South Africa ranks 60th. This position is higher than that of 2024.

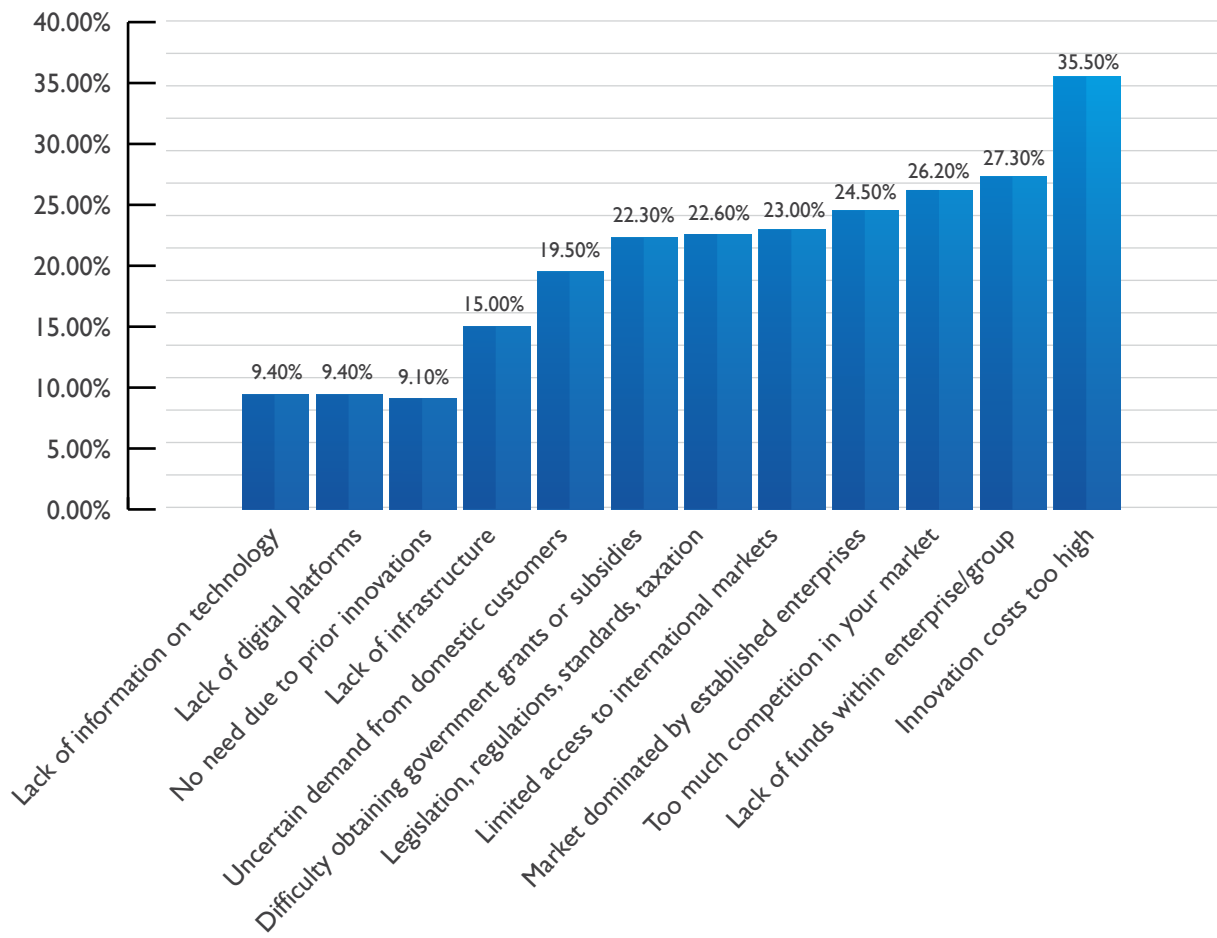
South Africa's share of global patents (a proxy indicator of inventiveness) in emerging technologies remains low at around 0.03% in 2022, with biotechnology having the highest share at 0.01%. Biotechnology dominates patent applications in manufacturing-related emerging technologies, with a share of 67.86% in 2022, followed by nanotechnology at 25% and the IoT at 8.70% between 2013 and 2022. These are the three high-growth technologies which have been identified in government documents that are the key building blocks of the government's push towards the Fourth Industrial Revolution (4IR).

Despite South Africa's abundant land resources, about 13% of which is suitable for farming, the agricultural sector has faced a plethora of challenges in recent decades, affecting its influence on the economy and broader society. During 2019–2021, approximately 67.1% of all agribusinesses were engaged in innovative activities.

These activities were centred on a range of activities, including scientific, technological, organisational, financial and commercial initiatives, all aimed at introducing new innovations to the market: 66.5% of the businesses introduced innovations new to their respective firms, while 34.7% of the businesses introduced product innovations that were new to the South African market. Businesses that introduced innovations new to the world represented the smallest proportion, at 6.4%.

Another proxy indicator for measuring inventiveness are trademarks. These are marks or brand assets that are capable of registration in terms of trademark legislation and are used to register goods or services. South Africa experienced a significant 46.8% increase in trademark filings between 2017 and 2018, according to a 2020 World Intellectual Property Organization (WIPO) study. More recently, South African trademark filings have shown upward trends, with total trademark filings placing the country 48th globally with 25,299 filings. South Africa's global ranking in the filing of trademarks stood at 59th in 2022. In Africa, South Africa ranks third for trademark filings and first in southern Africa. Trademark applications can be filed in different countries at different times. Trademarks are therefore often filed not by an institution but rather by the commercialisation partner, and only once commercial readiness is reached.





**Figure 5: Key barriers to innovation faced by innovators in the business landscape**

Source: NACI STI Indicators Report 2024

Figure 5: Key barriers to innovation faced by innovators in the business landscape shows data from the business innovation survey 2019–2021 of the barriers innovators face in the business landscape. Innovators consistently cited high barriers imposed by innovation costs being too high, market competition and dominance by established enterprises ranging from 35.5% to 26.2%. In contrast, barriers such as a lack of information on technology, a lack of digital platforms and no need due to prior innovations were perceived as lower (ranging from 9.4% to 9.1%). These findings show the challenges and relatively low concerns among innovators across various innovation areas between 2019 and 2021. Identifying and overcoming these barriers will help businesses to navigate the complexities of the innovation landscape and boost their competitiveness.

## Research and development expenditure

General expenditure on research and development (GERD) grew by 3.1% year-on-year in 2023/24, from R28.250bn in 2022/23 to R28.621bn in 2023/24.<sup>5</sup> GERD as a percentage of gross domestic product (GDP) was 0.62% in 2023/24, up by 0.1 percentage points from 2022/23. Applied research continued to account for most R&D expenditure (49.5%), totalling R21.484bn in 2023/24. The smallest portion of R&D expenditure was allocated to experimental development, at R9.408bn.

<sup>5</sup> South African National Survey of Research and Experimental Development 2023/24.

South Africa had an R&D spend of R39bn in 2017, up from R22bn in 2011, but it then dropped primarily due to a decrease in business sector R&D expenditure. Despite a decrease in business sector R&D expenditure between 2017/18 and 2020/21, an annual increase of 26.4% was recorded in 2021/22. However, the business sector's share in GERD remains well below that of most of the decade (44.3% in 2012/13 and 35% in 2021/22). On the African continent, Kenya exhibits a greater R&D intensity at 0.98% compared to South Africa at 0.62%.

About 6.8% of innovation-active enterprises applied for R&D tax incentives, with 5.3% accessing the incentives. The objective of this incentive is to promote innovation (new products, processes and services) and competitiveness that lead to employment, technology spillovers and economic growth. The economic rationale for the incentive is that encouraging firms to spend more on R&D helps to counteract the effect of several market failures that could undermine private incentives to invest in R&D.

The continuing decline in experimental development as a proportion of total research expenditure is of concern to the TIA specifically. Table 5 shows that the proportional expenditure on experimental development declined precipitously from 29% in 2013/14 to 21.7% in 2023/24. This was from a high of approximately 46% in 2006/07. Experimental development entails the systematic process of using existing and new knowledge to produce new or improved products or processes and it accounts for the bulk of GERD in leading countries. Given that experimental development enables product and process innovation that is crucial to economic growth, enterprise creation and employment, the TIA maintains that South Africa needs to invest more in it. From 2013/14 up to 2015/16 expenditure on experimental development was higher than expenditure on basic research, but since then expenditure on experimental development has lagged behind both basic and applied research methods.

**Table 5: Proportional expenditure by type of research in South Africa (2013/14–2023/24)**

Year	Basic research (%)	Applied research (%)	Experimental development (%)
2013/14	23.8	47.3	28.9
2014/15	24.3	48.8	26.9
2015/16	25.4	47.5	27.1
2016/17	26.7	47.8	25.5
2017/18	26.4	53.3	20.3
2018/19	28.2	52.5	19.3
2019/20	32.0	46.6	21.4
2020/21	29.4	47.2	23.4
2021/22	29.2	48.1	22.7
2022/23	28.2	50.0	21.9
2023/24	28.8	49.5	21.7

Source: South African National Survey of Research and Experimental Development Statistical Report 2023/24

According to UNCTAD, science, technology, engineering and mathematics (STEM) are central to effective innovation, but are unevenly distributed across countries; and the availability, accessibility and affordability of quality education in science, technology and mathematics at the primary, secondary and tertiary levels are essential and therefore should be promoted, prioritised and co-ordinated in order to create a social environment that is conducive to the promotion of STI.

**Table 6: Proportional R&D expenditure by research field 2014/15–2023/24**

Main research field	2014/15 (%)	2015/16 (%)	2016/17 (%)	2017/18 (%)	2018/19 (%)	2019/20 (%)	2020/21 (%)	2021/22 (%)	2022/23 (%)	2023/24 (%)
Natural sciences, technology, engineering	80.7	79.1	76.4	74.0	75.0	80.0	77.2	78.8	80.8	81.4
Mathematical sciences	2.2	2.0	2.0	2.3	2.5	2.8	2.4	2.3	2.2	2.5
Physical sciences	2.0	2.4	2.5	2.8	2.5	2.8	2.7	2.2	2.4	2.3
Chemical sciences	4.4	4.6	4.9	4.3	4.6	4.2	3.4	3.2	3.6	3.2
Earth sciences	2.4	2.0	2.2	2.0	2.2	3.0	3.2	3.0	3.1	3.4
Information, computer and communication technologies	10.0	12.0	12.6	10.3	9.9	10.3	10.9	13.1	12.2	11.1
Applied sciences and technologies	5.3	4.7	4.4	4.2	4.2	4.0	4.1	4.0	3.6	3.8
Engineering sciences	18.7	16.8	12.9	13.1	12.9	13.4	12.9	11.7	12.3	13.3
Biological sciences	4.8	4.5	4.0	4.0	4.3	4.9	4.6	4.4	4.3	5.4
Agricultural sciences	9.1	8.0	7.7	7.7	8.3	9.0	7.9	7.7	8.0	8.3
Medical and health sciences	18.6	19.8	19.2	19.5	21.2	21.5	22.1	22.8	24.4	24.4
Environmental science	1.8	1.2	2.8	2.9	1.2	1.7	1.3	1.8	2.0	1.7
Material sciences	1.3	0.9	0.8	0.5	0.5	1.6	1.0	1.9	2.3	1.7
Marine sciences	0.3	0.3	0.4	0.4	0.7	0.7	0.9	0.6	0.4	0.4

Source: South African National Survey of Research and Experimental Development Statistical Report 2023/24

## 11.4 South African entrepreneurship and start-up ecosystem

The Global Entrepreneurship Monitor (GEM) collects data to enable multidimensional analysis of the status of entrepreneurship in national economies across the world in a composite indicator dubbed the National Entrepreneurship Context Index (NECI). Three African countries participated in GEM in 2024/25, and Egypt was ranked as the best-performing country on the continent. The quality of South Africa’s overall entrepreneurial environment is poor, but it improved slightly in 2024. The measure on the NECI had improved from 4.1 in 2022, but fell to 3.6 in 2023; in 2024 the score stood at 3.9. A total of 39 out of 56 economies (70%) have an entrepreneurial environment that is viewed by national experts as insufficient.

South Africa’s entrepreneurship landscape continues to be less than optimal. A poor entrepreneurial environment does not bode well for the creation of new businesses, which has a negative effect on innovation. South Africa’s entrepreneurship landscape is out of step with its developmental goals and there is a great need for co-ordination and coherence to be established across all levels of government to improve conditions on the ground.

At the end of 2024 the South African venture capital (VC) asset class had R13.3bn invested in 1,325 active deals, an increase of 24% from 2023. There was an increased presence of women-led and a sustained presence of black-led funds, signalling that transformation initiatives are yielding results. 2024 saw the highest number of individual deals reported since the first South African Venture Capital Association (SAVCA) VC survey in 2010, amounting to 222 individual rounds.<sup>6</sup> Venture capital is defined as financing that investors provide in the start-up and early growth phases to enterprises that are believed to have a high potential for growth in the long term. The ICT sector is 65.9% by value in 2024, down from its peak of 67.3% in 2023. This sector is the most dominant in investment activity: it is three times the size of Health, which is the second most dominant sector. Health is the only other sector besides ICT to show continuing growth.

According to the tech start-ups funding report, 2024 was a year of damaging decline for the South African start-up ecosystem from a funding perspective, which fell to fourth place on the continent for both number of ventures backed and total investment secured.<sup>7</sup> Some 25 South African start-ups raised funding over the course of 2024, representing a mere 12.5% of the total. This was down 58.3% of 60 start-ups in 2023, which had in turn been down 23.1% from 78 in 2022. The number of funded start-ups in South Africa has been declining at a quickening pace since 2021.

Fintech has proven by far the most popular sector for investors in South African and African tech start-ups in 2024, yet it saw a second successive year of decline and a decline at a greater rate.

Nigeria, Egypt, Kenya and South Africa are dubbed as Africa's big four tech destinations because they receive the largest tech investment share compared to all other African countries. These countries raised significantly less funding than in 2023, although they retained their overall share of funding, as capital remained focused on markets perceived as being less risky during the global capital shortage. The share of funding heading into these four countries had leapt to 90.4% in 2023 as the economic headwinds started to blow, compared to an 80.8% share in 2022, and it fell only marginally in 2024, to 88.8%.

The incubators and accelerators that provide support to tech start-ups are mainly located Cape Town and Johannesburg. The private sector supports start-ups and SMMEs in numerous ways. For example, South Africa's largest corporates and the Public Investment Corporation are shareholders in the SA SME Fund, a private-sector-led initiative that aims to stimulate the economy and create jobs. Likewise, universities provide various forms of support, some through their Offices of Technology Transfer.

Government support for start-ups and SMMEs is provided by the following organisations:

- Department of Small Business Development: Small Enterprise Development Agency, Black Business Supplier Development Programme, Youth Challenge Fund, Township and Rural Entrepreneurship Programme, and Small Enterprise.
- TIA: Seed Fund, Technology Development Fund, Commercialisation Support Fund.
- Department of Trade, Industry and Competition: Support Programme for Industrial Innovation, Technology and Human Resources for Industry Programme.
- Industrial Development Corporation (IDC): Funds entrepreneurs with industrial development.
- National Treasury: Jobs Fund.
- Various provincial initiatives: Gauteng Provincial Government (The Innovation Hub, Gauteng Enterprise Propeller) and Western Cape Provincial Government (Design Innovation Seed Fund).



<sup>6</sup>Southern African Venture Capital Association 2025 Venture Capital Industry Survey.

<sup>7</sup>The African Tech Start-Ups Funding Report 2024.

## 11.5 Local and international policy environment

The NDP 2030 is a long-term vision for the country. It provides the programme and the means by which South Africa can achieve economic transformation through development, with the aim of eliminating poverty and reducing inequality by 2030. The NDP states that the country's competitiveness will be determined by the nature and extent of the vibrant national systems of innovation that will be in place, together with innovation and learning permeating business and society.

The Development Indicators 2024 Report is the latest publication to provide an update in relation to tracking progress against the NDP. According to the 2024 Development Indicators Report, none of the high-level NDP targets for reducing unemployment, poverty and inequality are currently on track to meet the 2030 goals. Achieving these targets will depend on sustained higher economic growth and on creating massive employment opportunities in line with the target of 11 million additional jobs. Some 13 indicators (15%) are on track to meet their NDP 2030 targets, while 31 (36%) show promising progress and 41 (48%) are unlikely to meet their targets by 2030, as they are either stagnant, regressing or lack clear quantitative benchmarks for measurement.

A key NDP goal is to increase employment to 24 million by 2030. The number of employed stagnated or declined in the wake of global economic challenges, structural issues and slow economic growth, with notable setbacks occurring during the global financial crisis and the COVID-19 pandemic. However, between 2023 and 2024, the job market has shown some significant positive trends between 2023 and 2024, with the total number of employed rising significantly from 16.5 million to 16.9 million, representing an increase of approximately 354 000 jobs. Formal sector employment, excluding agriculture, expanded from 11.4 million to 11.5 million, whereas informal sector employment increased from 3 million to 3.2 million during the same period.

Another NDP goal closely linked to the NSI is to achieve R&D expenditure of 1.1% by 2024/25 and 1.5% by 2030/31 (MTDP 2024–2029). Despite some progress having been made in increasing overall spending, South Africa's investment in R&D remains low compared to global standards. While total R&D expenditure did increase significantly, reaching R40.918bn in 2022/23 compared to R38.186bn in the previous year, the proportion of investment relative to the size of the economy remains stagnant. This is demonstrated by the fact that gross expenditure on R&D as a percentage of GDP remained unchanged at 0.61%.

Several challenges were identified in relation to the period following the adoption of the NDP: strong political will and the leadership to rally society and social partners to implement the NDP were absent. This lack of inspiration and implementation has left the country well short of its 2030 vision and targets. Consequently, the National Planning Commission started a campaign called a 'A call to Action' that sought to mobilise all the social partners to help the government get back on track to achieving vision 2030. This call to action was in response to the NDP review findings. The commission identified four implementation programmes that could help the country to get back onto the path to Vision 2030. These include implementation programmes for:

- national infrastructure;
- sectoral growth;
- a just energy transition; and
- national state capability-building.

As means of trying to accelerate lagging performance against targets, the MTDP identifies strategic opportunities to increase progress by building on strengths and responding to critical challenges through targeted interventions. The government aims to implement an integrated economic growth strategy anchored in accelerated structural reforms in order to foster private-sector investment, innovation, productivity and international competitiveness.

The Economic Reconstruction and Recovery Plan of October 2020 aims to restore South Africa's economy by stimulating equitable and inclusive growth following the impact of the COVID-19 pandemic. The objectives of the plan are to create jobs through infrastructure investment and mass employment programmes, re-industrialise the economy with a focus on small businesses, speed up economic reforms to unlock investment and growth, fight crime and corruption, and improve the state's capability.

The DDM aims to improve service delivery through better planning across the three spheres of government at the national, provincial and local levels and by enabling partnerships at the district level between communities, private industry and labour. The overall objective is to improve development and service delivery at the municipal, district and metropolitan levels. To advance the objectives of the DDM, the TIA will build on its portfolio of innovations to be deployed in relevant districts. To scale up the impact, the Agency has established the Small Business Research and Innovation (SBRI) Programme, which is designed to promote the development and deployment of innovations that improve service delivery in partnership with the relevant district and local municipalities.

The African Union's Agenda 2063 is a long-term people-centred strategic framework for the socio-economic transformation of Africa. Agenda 2063 calls for the sources of growth to be diversified to enhance Africa's economic performance and, in the long term, to raise large sections of the continent's population out of poverty. The strategic framework also fosters social transformation, economic industrialisation and entrepreneurship.

The United Nations SDGs aim to

- end poverty and hunger globally;
- combat inequality;
- build peaceful, just and inclusive societies;
- protect human rights;
- promote gender equality and the empowerment of women and girls, and
- ensure the protection of the planet and its natural resources.

The objective is to create conditions for sustainable and inclusive economic growth, shared prosperity and decent work for all.

## 11.6 South African Science Technology and Innovation policy environment

STI plays a pivotal role in contributing to equitable and inclusive economic growth and development, decent work, sustainable livelihoods, environmental protection and service delivery.

The White Paper on Science, Technology and Innovation of 2019 lays out the policy direction for the government to ensure that STI enjoys an increasing role in a more prosperous and inclusive society. It envisages STI increasing inclusive economic growth, promoting social development with an emphasis on transformation and supporting environmental sustainability. It also emphasises the need to improve policy coherence and more effective budget and programme co-ordination in response to persistent STI policy fragmentation across government institutions and with the private sector, publicly funded research organisations and civil society. The White Paper also emphasises the need to broaden the monitoring and evaluation systems, to create a more enabling environment for innovation, to develop local innovation ecosystems, to increase investment support to technology-based SMMEs and to provide support to grassroots and social innovation, among other objectives.

The DSTI's cabinet-approved Decadal Plan is the implementation plan that ensues from the White Paper on STI and gives effect to the vision expressed in the White Paper for STI's 'enabling inclusive and sustainable South African development in a changing world'. In particular, innovation holds great potential for economic growth, employment creation, the improvement of livelihoods and enhancing government performance and service delivery. The interventions of the Decadal Plan seek to position STI, and innovation specifically, as central to sustainable socio-economic growth and development aimed at redressing poverty, inequality and unemployment and at the same time ensuring environmental protection.

## 11.7 Alignment of TIA programmes to national and STI policy priorities

The TIA's programmes and initiatives respond to national STI policy priorities. These policy priorities provide a framework according to which the Agency contributes to national targets, in line with its mandate. The Agency is tasked with responsibility for ensuring that it supports and contributes to fulfilling the government's objectives. Table 7 highlights the alignment of TIA programmes and initiatives with national STI priorities.

**Table 7: Alignment of TIA programmes and initiatives to national STI priorities**

Policy priorities	TIA interventions
<b>NDP 2030</b>	
Improve South Africa's global competitiveness	To ensure globally competitive innovations or technologies The TIA has set a medium-term target which ensures that investments are made in these kinds of innovation.
The research and innovation system needs to contribute to transformation	The TIA disaggregates its key targets to ensure that the historically disadvantaged, women, youths and persons living with disabilities are prioritised in the organisation's key programmes.
<b>MTDP 2024-2029</b>	
<b>MTDP Priority 1: Inclusive growth and job creation</b>	
Increased employment and work opportunities	<p>The TIA supports SMMEs and co-operatives. This support is through both financial and non-financial means. Non-financial support includes SET support and skills training. Technology and innovation support infrastructure is critical to providing this support. SMMEs have been identified as important to job creation globally and their support ensures that they remain sustainable, having the ability to create jobs.</p> <p>The TIA's focus on innovation curation and the acceleration of commercialisation is critical to economic growth and job creation. Technologies and products launched and diffused in the market have the potential to create new ventures and jobs and bring much-needed revenue into the economy.</p>
Improved energy security and a just energy transition	The TIA has an energy programme that focuses on eRenewables, eMobility, battery storage, carbon capture and utilisation technologies and just energy transition (JET). JET-related activities support the move towards a lower-carbon greener future while enabling the creation of new job opportunities for those displaced by the replacement of coal with these cleaner technologies.
Economic transformation and equitable inclusion of women, youths and persons with disabilities for a just society	The TIA disaggregates its key targets to ensure that the historically disadvantaged, women, youths and persons living with disabilities are prioritised in the organisation's key programmes.
Increased trade and investment	The TIA will launch the South Africa Innovation Week (SAIW) as an annual premier networking platform and start-up event that brings together all key stakeholders under one 'apex event'. This event will also showcase South Africa's capabilities to the global community, using an aggregated approach which positions the country as a preferred destination for investments in innovation. The event is envisaged to serve as a magnet for international investors to seek investable innovation opportunities in South Africa.
Start-ups supported financially and non-financially	The TIA is building black and women fund managers to accelerate start-up and spinout formation. It will also facilitate access to corporate networks and enterprise development programmes, thereby expanding the pipeline of investment-ready start-ups and spinouts managed by these fund managers.

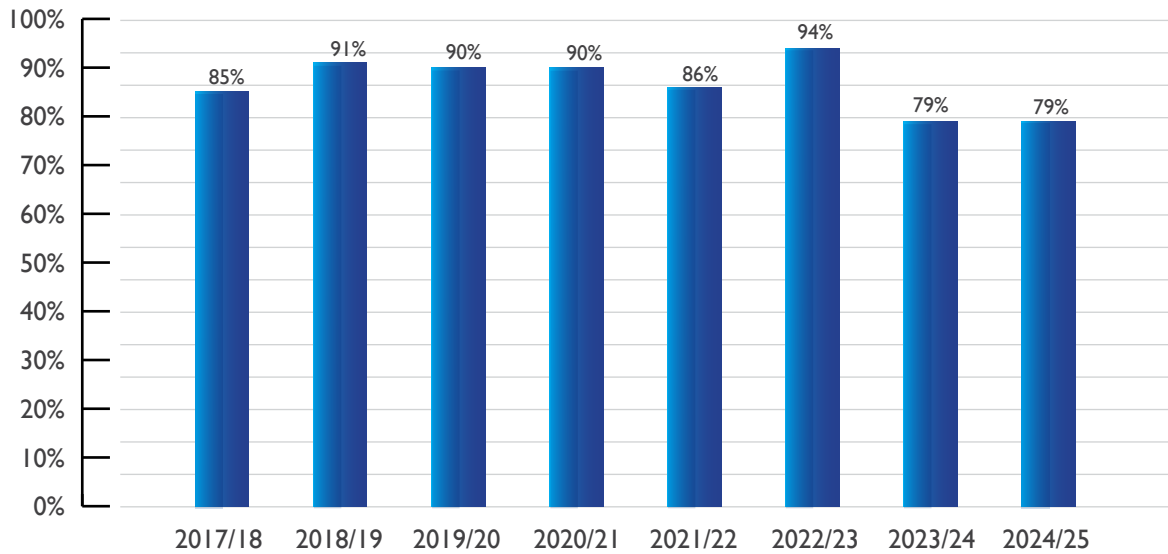
Policy priorities	TIA interventions
<b>MTDP Priority 2: Reduce poverty and tackle the high cost of living</b>	
Improved access to affordable and quality healthcare	The TIA's health programme intends to support efforts to resolve South Africa's quadruple burden of disease by stimulating and supporting the development, registration, local manufacture and commercialisation of products and services that meet the healthcare needs of the country. The Agency strives to promote measures that will lead to the diagnosis, prevention and treatment of priority diseases and improve equitable access to these measures by leveraging innovative solutions such as digital health, medical devices, application programming interface (API) and drug development and genomic medicine.
<b>MTDP Priority 3: A capable ethical and developmental state</b>	
Improved service delivery in the local government sphere	The TIA has embarked upon a programme focused on diffusing and launching Innovations or technologies based on partnerships with public-sector stakeholders (government departments, municipalities, government agencies, etc.) to improve service delivery.
Improved governance and performance of public entities	The TIA has embarked upon the TIA 2.0 project, which is aimed at reconfiguring key functions and structures of the Agency to ensure its effectiveness and efficiency in fulfilling its mandate.
An ethical, capable and professional public service	The TIA has embarked upon the TIA 2.0 project, which is aimed at reconfiguring key functions and structures of the institution to ensure its effectiveness and efficiency in fulfilling its mandate. The key areas that have been reconfigured include that the Agency has developed a new business model, operating model and organisational structure.
Digital transformation across the state	As part of the TIA 2.0 process, the TIA has an ICT programme which focuses on funding innovations or technologies that support digital transformation initiatives.
Mainstreaming of gender, empowerment of youths and persons living with disabilities	Across all the TIA programmes, women, youths and persons living with disabilities are prioritised. Targets have been set to ensure that programmes reach out to these members of society.
<b>White Paper on Science Technology and Innovation 2019</b>	
Hosted DSTI initiatives	TIA hosts the Innovation Fund, Technology Stations Programme, Agricultural Bio-Innovation Partnership Programme, Strategic Industrial Bio-Innovation Programme, Africa programme and Innovation for Inclusive Development Programme, incorporating the Grassroots Innovation Programme. These hosted programmes are DSTI initiatives that are a critical part of achieving the TIA mandate. While at the same time supporting the achievement of the policy intents of the 2019 White Paper and the associated Decadal Plan on STI.
Enhance policy coherence and programme co-ordination in the NSI	The TIA 2.0 process and the repositioning of the TIA as a curator in the NSI is aimed at enhancing STI policy implementation coherence and programme co-ordination in the NSI
Brand South Africa as an innovative country	The SAIW has been established by the TIA to draw in investment and key stakeholders with the intention of branding SA as a key innovation destination.
Adopt a whole-of-society approach to innovation	The TIA has adopted the quadruple helix mode of innovation with the aim of improving interactions between the government, civil society, industry and higher education institutions. The Agency aims to expand the innovation discourse to civil society. The quadruple helix supports the linkage between knowledge creation and innovation output and enhances regional and national competitiveness.
Use public procurement as a vehicle to advance innovation	The TIA implements the SBRI Programme. This programme is aimed at ensuring that government departments and public-funded organisations participate in procuring locally developed technologies.
Increase support for and collaboration with the business sector	The TSP provides support to SMMEs, thereby fostering collaboration with the business sector. Skills training initiatives are also implemented to ensure that SMMEs are effectively equipped to run their businesses. The TIA also has collaborative projects in place together with the private sector; these are aimed at developing and/or commercialising technology. These joint collaborations may involve publicly funded research organisations (inclusive of publicly funded higher education institutions and science councils) and industry.

Policy priorities	TIA interventions
Support commercialisation of publicly funded IP	The de-risking and translation of publicly funded IP into commercialised products and services is the TIA's core mandate. It has several funding instruments, some of which focus on early stage or proof of concept de-risking. The main early stage or proof of concept instrument is the pre-seed and Seed Fund. To ensure that publicly funded IP is de-risked and ultimately commercialised, the TIA has a medium-term target set in this regard.
Increase the spatial footprint of innovation in South Africa	The Innovation for Inclusive Development (IID) portfolio in the TIA represents one of the key interventions in the Agency's portfolio of instruments for driving inclusivity through transformation and the expansion of its spatial footprint. To increase the footprint of innovation, the Agency has embarked upon a programme to ensure that a certain portion of investment funds are allocated to underserved provinces (Eastern Cape, Northern Cape, North West, Limpopo and Free State). Historically, Gauteng, the Western Cape and KwaZulu-Natal have had the highest innovation activity and support.
Support innovation for social and grassroots innovation	The TIA implements the Grassroots Innovation Programme, which focuses on funding and supporting innovative solutions that have a market need or the potential to address challenges in communities.
Exploit new sources of growth	The TIA is investing in new sources of growth, including AI and renewable energy sources.
Innovate to revitalise existing sectors	The TIA has programmes that fund innovations in existing sectors, including mining, manufacturing and energy. The aim is to ensure that these sectors remain competitive and sustainable and continue to employ huge sections of society.
Strengthen skills in the economy	TIA has an Enterprise Development and Innovation Skills programme which focuses on promoting innovation and innovation management skills, commercialisation, and entrepreneurship skills, all of which are intended to strengthen the nascent start-up culture in South Africa with a strong cohort of technology entrepreneurs from the research and entrepreneurship communities. In the upcoming term the TIA will partner with SETAs, many of whom have embraced innovation and innovation skills as an important area of strategic focus in the coming years. In addition, the TIA will look to access funding from the National Skills Fund, given its focus on improving the post-school education and training system, with a focus on capacity-building, investing in skills infrastructure, research and innovation.
Increase levels of funding	The TIA is repositioning itself as a curator in the innovation ecosystem. As part of this function, the pooling of resources from various stakeholders in the NSI will be accelerated to increase the funding of initiatives. Partnerships and collaborations will be the key way by which funding levels are increased.
Develop funding priorities	The TIA has institutionalised the implementation of the Decadal Plan. Decadal Plan priorities will be a key focus of implementation. A portfolio management committee has been established by the TIA to ensure that the funding of Decadal Plan priorities is accelerated.
Improve funding efficiencies	The TIA seeks to facilitate collaborations and partnerships in the system to bring together entities with similar objectives. The pooling of resources to avoid the duplication of effort will be implemented in order to establish coherence and cohesion.

## 12. INTERNAL ENVIRONMENT ANALYSIS

### 12.1 Organisational performance

In 2024/25 the TIA recorded a year-end output performance achievement of 79%, representing a total of 15 targets achieved out of 19 output indicator targets for the year. This performance has been achieved in an environment marked by constrained fiscal and budget cuts. The Agency achieved a performance of 79% for the second consecutive year. Regarding achieving annual performance targets relating to the Agency's core mandate, it met or exceeded 12 of its 13 performance targets, with the target for technologies licensed or assigned not being met.



**Figure 6: TIA’s historical performance against its output indicator targets, 2017/18–2024/25**

The TIA met both its transformation-related and its inclusion-related targets and one of its four administration-related targets. The Agency did not meet two of its investment decision turnaround time targets or its target for good financial governance. Moreover, it significantly over-achieved against the annual targets for technologies diffused for inclusive development (42% over-achievement), products launched (27%), revenue from commercialised innovations (107%), bio-based technologies developed (62%), SET and enterprise support provided to SMMEs and co-operatives (22%), high-level human capital development (99%), innovation products (23%) and leveraged funds (67%).

The TIA’s 2020–2025 Strategic Plan has sought to improve the quality of life for all South Africans through innovation. To position the activities of the TIA within the framework of the Medium-Term Strategic Framework (MTSF), the NDP and other DSTI priorities, the Agency’s 2020–2025 Strategic Plan and its 2024/25 APP were structured around three outcomes which sought to direct the initiatives of the Agency during this period. Through these three outcomes, the TIA has responded primarily to Priority 2 (economic transformation and job creation) of the government’s 2019–2024 MTSF, but also to Priority 3 (education, skills and health). As shown in Table 8, over-achievement has been registered for two outcome targets which include Commercialised Innovations and delivering on the bio-economy strategy. Under-achievement has been registered against one organisational outcome as contained in the TIA’s 2020–2025 Strategic Plan: on SMMEs supported through Technology Stations.



**Table 8: TIA's cumulative outcome performance for the period 2020/21–2024/25**

Outcome	Outcome indicator	Baseline	2020/21	2021/22	2022/23	2023/24	2024/25	Cumulative
Commercialised innovations	Technologies commercialised	77	26 (target: 9)	49 (target: 31)	61 (target: 40)	80 (target: 45)	90 (target: 50)	306 (target: 175)
Delivering on the Bio-economy Strategy	Demonstrated bio-based technologies	–	37 (target: 9)	36 (target: 12)	37 (target: 15)	50 (target: 18)	60 (target: 21)	220 (target: 75)
	Bio-based entrepreneurs & orgs accessing SET services	–	165 (target: 105)	45 (target: 110)	67 (target: 120)	197 (target: 130)	140 (target: 135)	614 (target: 600)
SMMEs supported through Technology Stations	SMMEs accessing SET services	10,530	1,990 (target: 2,390)	3,167 (target: 3,150)	2,671 (target: 3,250)	3,114 (target: 3,400)	2,907 (target: 3,560)	13,849 (target: 15,750)

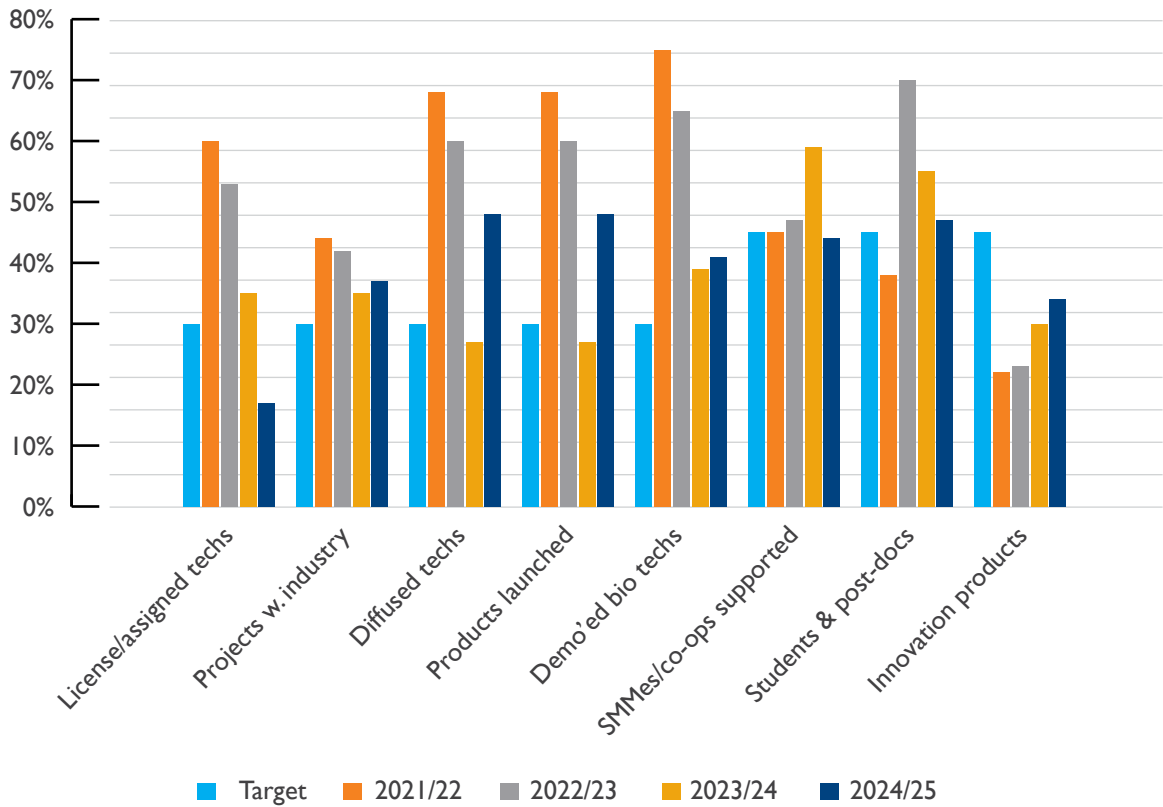
## 12.2 Transformation

The TIA supports transformation broadly and inclusive innovation specifically. In line with national imperatives to resolve the triple challenges of poverty, inequality and unemployment, the Agency tracks the number of women, youths and persons with disabilities (or businesses owned by these groupings) it supports. And in line with the Agency's mandate to support publicly funded IP and underserved provinces, it also tracks the value of the support it provides to publicly funded research organisations and beneficiaries in underserved provinces.

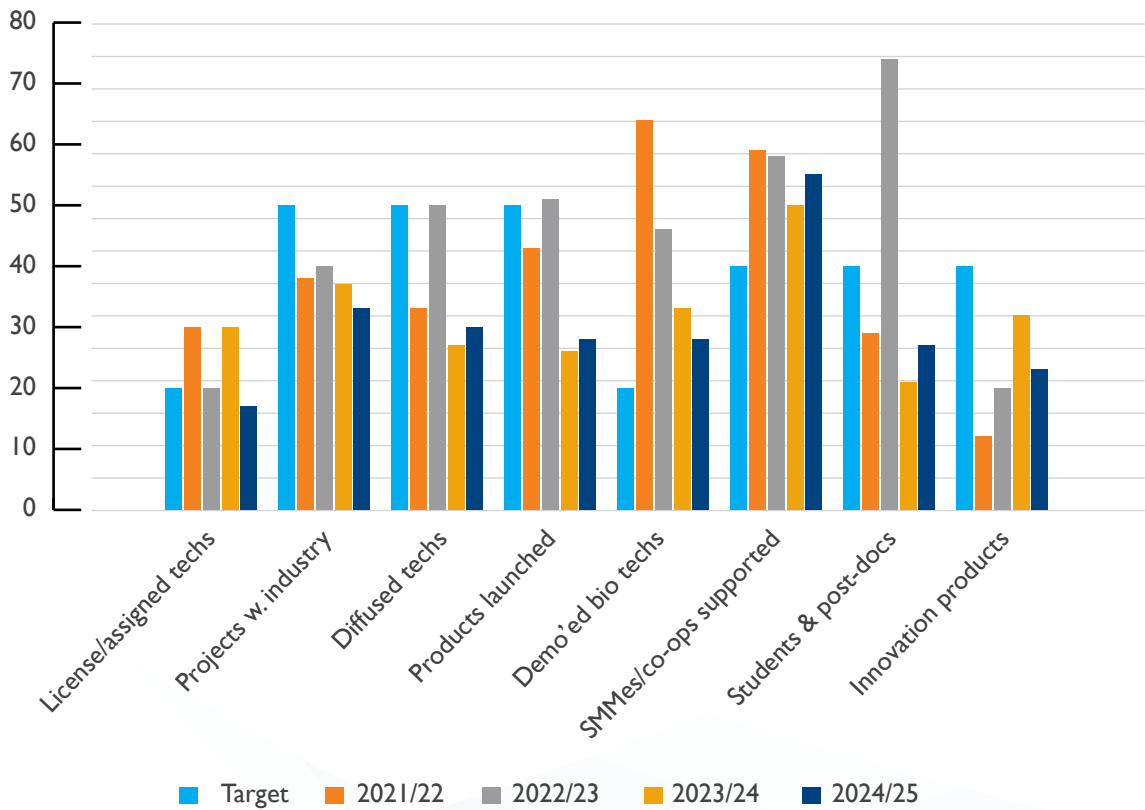
### Support to women, youths and persons with disabilities

At the output performance level, sub-targets are set for women, youths and persons with disabilities. The TIA remains committed to transformation and inclusive innovation. The Agency seeks to invest in a developmental manner to support women, youths and persons with disabilities. Its performance against its output sub-targets for the proportion of women, youths and persons with disabilities for the period 2020/21 to 2024/25 are shown in Tables 7, 8 and 9.

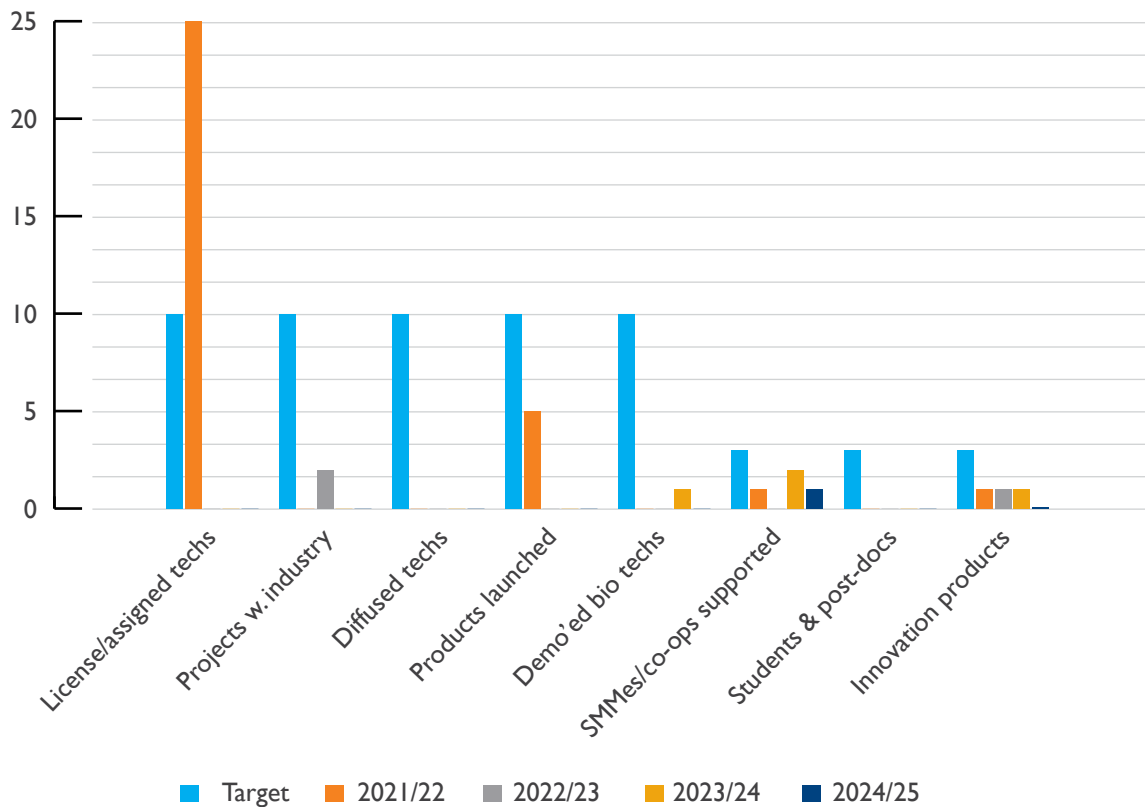




**Figure 7: TIA's performance against output sub-targets for women in 2021/22-2024/25**



**Figure 8: TIA's performance against output sub-targets for youths in 2021/22-2024/25**



**Figure 9: TIA’s performance against output sub-targets for persons with disabilities in 2021/22–2024/25**

The TIA’s performance against its outcome and output sub-targets for women or women-owned businesses was generally met or exceeded during the period under review, except for some instances. The Agency’s performance against its outcome and output sub-targets for youths or youth-owned businesses was met in approximately 50% of instances during the same period. Unfortunately, the Agency’s performance against its persons with disabilities sub-targets mostly fell short of the mark. Anecdotal evidence suggests that this may be due to beneficiaries who do indeed have a disability preferring not to self-identify with the persons with disabilities category, particularly in relation to SMMes supported through the TSP.

In future, the TIA expects to perform better against its sub-targets for women, youths and persons with disabilities now that it has launched a Youth Technology Innovation Programme, a Women Technology Innovation Programme and a Disability Technology Innovation Programme. In March 2025, the Women Technology and Innovation Programme was introduced, accompanied by a call for proposals focused on technologies focused on the challenges faced by women.

## 12.3 Operating environment

### Internal environment

In response to internal and external forces of change, the organisation has realised the need for cultural transformation, which is a collective long-term commitment to building an environment that supports all its employees in adapting as the organisation evolves towards TIA 2.0. The process has included reviewing the current values as they relate to the organisational culture and reviewing and updating our operational policies and processes in order to drive the desired operational efficiencies and organisational behaviours. The development of the TIA 2.0 Corporate Strategy, conducted through holistic staff engagement sessions, involved considerable reflection on the organisation's control environment, operational efficiencies, business processes and digital maturity. The outcomes of these reflections will be carried forward as critical action plans in the new financial year to ensure greater alignment. The organisational values were reviewed through a holistic engagement process that included both the TIA Board members and the employees. The values reviewed will be incorporated into the Corporate Strategy when it is approved.

### Digitalisation and optimisation of the TIA's business processes

In the wake of the implementation of a new Corporate Strategy, the operationalisation of the TIA 2.0 operating model must ensure that business process redesign is embarked on. This process will ensure that its operations are aligned with its strategic goals, improve efficiency and enable agility within the operating model. Furthermore, the organisation will deliver value through defined work methods for standardisation in support of the strategy and the business model.

To achieve the results aspired to, the process requires a thorough assessment of the current business processes, structure and performance gaps. This initiative should consider the business risks, controls, efficiency, customer experience, automation and continuous improvements. The outcomes of the process must ensure that a fit-for-purpose process design is adopted and embedded across the business with the requisite capabilities and capacity for the attainment of the strategy.

The IT digital maturity assessment deliverables will align with the automation requirements highlighted during the business process redesign for operational efficiency.

## 12.4 Financial overview

The 2026/27 financial year provides the TIA with an opportunity to strengthen its role in enabling a high-impact, inclusive and sustainable NSI. With an allocation of R458.8m for the period, the Agency will focus on optimising the deployment of available resources while advancing initiatives that broaden access to innovation funding and enhance long-term financial sustainability.

The TIA's current year commitment book amounts to R118m, leaving approximately R340m to support planned investment activities and operational requirements. After accounting for its obligations to key programmes – Technology Platforms (R41.7m), the Technology Station Programme (R53m), Technology Clusters (R19m) and operational expenditure (R189.0m) – the Agency will have R38m available for new project disbursements. This requires a deliberate focus on investment prioritisation, strengthened due diligence processes and targeted resource allocation to maximise developmental impact within the limited fiscal space.

To expand the pool of early-stage innovation financing, the TIA will advance the implementation of strategic funding initiatives initiated in previous years. This includes leveraging the R100m committed to the High Impact Seed Fund of Funds and scaling the programme supporting First and Emerging Black and Women-Owned Fund Managers, for which R80m was secured. These initiatives form a core part of the Agency's efforts to deepen transformation, increase participation in the venture ecosystem and stimulate the growth of high-potential technology-based enterprises.

Pipeline development remains a priority for 2026/27. Projects at advanced stages of due diligence, representing approximately R294.7m in potential investment opportunities, will be progressed to maintain a robust flow of initiatives aligned to national priorities and the TIA 2.0 Corporate Strategy.

The Agency will also intensify efforts to crowd in funding through strategic partnerships, both locally and internationally, to mitigate budget constraints and expand the reach of its support instruments.

As part of the Consolidate phase of the TIA 2.0 Corporate Strategy, the TIA will advance the review of its funding and revenue model. This will include evaluating the introduction and scaling of equity-based instruments to enhance their capital-raising capacity and reduce reliance on grant-based mechanisms. These reforms are expected to strengthen organisational sustainability, improve responsiveness to emerging innovation trends and enable the Agency to operate with greater financial agility.

Overall, the 2026/27 financial year will emphasise efficient resource utilisation, the strategic leveraging of partnerships and the strengthening of funding pathways that accelerate industrialisation, competitiveness and transformation. Through disciplined stewardship and innovative financing approaches, the TIA is well positioned to continue delivering value to the NSI and advancing South Africa's innovation agenda.





# **PART C**

## **MEASURING PERFORMANCE**

The TIA’s 2025–2030 Strategic Plan seeks to reposition the Agency within the NSI and it rests on three pillars, which are the basis of the Agency’s three outcomes over the five-year period. They are:

- Outcome 1: Intensified Commercialised Innovations in support of inclusive economic growth, sustainable development and transformation.
- Outcome 2: Enabling and strengthening the innovation ecosystem.
- Outcome 3: A more capable, scaled-up, agile and sustainable TIA supporting a capable state.

These outcomes will be pursued by the TIA in the context of its TIA 2.0 approach that seeks to embed the Decadal Plan priorities into several Thematic Impact Areas, as reflected in Table 9.

**Table 9: TIA Decadal Thematic Impact Areas**

Thematic impact area	Objectives	Focus area
Advanced manufacturing and industrial modernisation	<ul style="list-style-type: none"> <li>• Modernise the manufacturing sector to enhance competitiveness and create jobs.</li> <li>• Leverage South Africa’s mineral wealth for value-added processing and advanced manufacturing.</li> </ul>	<ul style="list-style-type: none"> <li>• Industry 4.0 technologies in manufacturing.</li> <li>• Value-added minerals processing and beneficiation.</li> <li>• Advanced manufacturing and skills development.</li> </ul>
Agricultural innovation and food security	<ul style="list-style-type: none"> <li>• Enhance agricultural productivity and sustainability to ensure food security.</li> <li>• Modernise agriculture through technology to create jobs and support rural development.</li> </ul>	<ul style="list-style-type: none"> <li>• Agri-tech solutions.</li> <li>• Sustainable farming practices.</li> <li>• Agro-processing value chain development.</li> </ul>
Health innovation and wellbeing	<ul style="list-style-type: none"> <li>• Improve healthcare delivery and outcomes through innovative technologies.</li> <li>• Resolve public health challenges such as HIV/AIDS, tuberculosis (TB) and non-communicable diseases.</li> </ul>	<ul style="list-style-type: none"> <li>• Telemedicine platforms and health Information systems for digital health.</li> <li>• Affordable medical devices and diagnostic technologies.</li> <li>• Health research and innovation.</li> </ul>
Energy sustainability and environmental innovation	<ul style="list-style-type: none"> <li>• Ensure reliable and sustainable energy access to support economic growth.</li> <li>• Promote environmental sustainability through innovative practices and technologies.</li> </ul>	<ul style="list-style-type: none"> <li>• Renewable energy technologies.</li> <li>• Innovation for energy efficiency.</li> <li>• Environmental technologies in waste, water and pollution.</li> </ul>
Digital economy and inclusive innovation	<ul style="list-style-type: none"> <li>• Drive economic growth and inclusivity through digital technologies.</li> <li>• Ensure that innovation benefits all segments of society, particularly marginalised communities.</li> </ul>	<ul style="list-style-type: none"> <li>• Artificial intelligence.</li> <li>• Transformative digital solutions.</li> <li>• Innovation for inclusive development.</li> </ul>

The TIA is organised around a number of functional areas that possess expertise in technical, financial, commercial, innovation and commercialisation management. These cover a range of sector-focused areas which will serve as the basis for delivery against the 2026/27 APP. A high-level description of each of these together with the planned actions for 2026/27 is presented hereafter.

## i. Advanced manufacturing

The TIA will focus its efforts on aligning its portfolio with the approved DSTI roadmaps, with a specific emphasis on smart factories, automation, smart materials, advanced robotics and electronics and additive manufacturing, photonics and aerostructures. The focus will continue to be on high-tech applications such as additive manufacturing, robotics, AI, the IoT, photonics and industrial biotechnology, in our transition to Industry 4.0 (I4.0). The focus will be on improving manufacturing competitiveness, especially for SMMEs, through technology adoption and diffusion via low-cost digitisation and digitalisation technology solutions that are easily transferable and scalable across manufacturing sub-sectors.

To support the TIA's programmatic and thematic cluster development approach, we will use platforms such as SA Autoweek, the Rapid Product Development Association of South Africa (RAPDASA) conference, the Coega Development Corporation (CDC) and the Nelson Mandela Bay Business Chamber, the Maritime Business Chamber and the South African International Maritime Institute (SAIMI), to name only a few, not just to expand the Agency's impact, but also to drive the Agency's **Curator in the NSI** agenda. The unit will engage with such stakeholders to establish regional innovation hubs to enable the Agency to have a meaningful impact on SME and skills development in the regions, targeting projects that support economic growth, job creation and geographic distribution with a focus on previously disadvantaged individuals, youths and the disabled.

We will explore opportunities where we can connect innovators with industry not only to support commercialisation, but also to provide solutions to current problems or shortcomings experienced by industry, especially where there is a risk of de-industrialisation. The unit will seek to develop collaborative programmes with science councils, government and academic institutions and development agencies. Currently the unit is engaging with partners such as RAPDASA, Collaborative Programme in Additive Manufacturing (CPAM) and the Council for Scientific and Industrial Research (CSIR) to support its programmatic and thematic cluster development approach.

The unit will seek to engage with merSETA and other SETAs on cluster development, especially in underserved regions and regions with high manufacturing potential and high unemployment. These partnerships can involve both the co-funding and the co-design of clusters related to our thematic impact areas.

## ii. Energy

The TIA's focus areas in this sector are renewables, emobility, battery storage, carbon capture and utilisation technologies and just energy transition (JET), which is about moving towards a lower-carbon, greener future while enabling the creation of new job opportunities for those displaced by the replacement of coal with these cleaner technologies. A Climate Change Programme that focuses on climate mitigation and climate adaptation will be implemented.

To build a pipeline of future transformative technologies, new funding will be directed towards areas of strategic national importance. To this end, the unit will use a mixture of instruments, including direct funding and collaborative programmes, with priorities strictly aligned with the various energy thematic areas and inclusive innovation thematic impact areas. The core focus areas for new investment are: hydrogen, with a focus on commercialising technologies produced by the R1.4bn HySA Programme; eMobility via the uYilo Programme; nuclear via the Nuclear Virtual University Programme, which is a collaboration with the University of Johannesburg, the South African Nuclear Energy Corporation (NECSA), Eskom and the Engineering Councils of South Africa. The unit will also look at the carbon registry initiative, while a substantial focus will be on programmes or individual projects that will still be supported, with a focus on energy security and sustainability.

## iii. Natural resources

The natural resources strategic focus areas are water-resource management, waste management, the circular economy, climate resilience and the mining value chain. Here, the TIA will focus on ensuring water security by using advanced technologies to improve efficiencies in a sustainable manner.

To build a pipeline of future transformative technologies, new funding will be directed at areas of strategic national importance, especially water security, climate change mitigation and adaptation, and mining. The TIA will use a mixture of instruments, including direct funding and collaborative programmes, with priorities strictly aligned with the TIA's various thematic impact areas, particularly advanced manufacturing and industrial modernisation, and digital economy and inclusive innovation.

The core focus areas for new investments are: water digitisation, water leaks and wastewater programmes. The Circular Economy Programme will be established to deal with many concerns in the waste economy. The Flourspar Programme will redress the beneficiation concerns. While a substantial focus will be on programmes, individual projects will still be supported with a focus on water security and sustainability, circular economy waste-reduction projects, digitisation and beneficiation in mining.

#### iv. Information communication technology

The TIA will prioritise active support for technically mature projects (TRL 7 and higher) that are struggling to achieve market access. The core strategy is to shorten time-to-market by initiating targeted commercialisation interventions. This includes a focus on rapidly maturing the Business Readiness Levels (BRLs) and Manufacturing Readiness Levels (MRLs) to ensure that projects have viable business models and scalable production capabilities. Critical to this effort will be deploying mentorship and market linkages, connecting projects with industry experts and market-entry consultants in order to close commercial gaps. Furthermore, the unit will assist the portfolio proactively in order to secure follow-on funding through the Agency's ecosystem, leveraging both internal and external capital to scale technologies and increase overall success rates.

To build a pipeline of future transformative technologies, new funding will be directed at areas of strategic national importance. The TIA will use a mixture of instruments, including direct funding and collaborative programmes, with priorities strictly aligned with the digital transformation and inclusive innovation thematic impact areas. The three core focus areas for new investment are: AI, with a focus on solutions that drive

productivity and solve local challenges; transformative digital innovations, which entails investing in disruptive technologies such as the IoT and Blockchain; and innovation for inclusive development, which will prioritise projects that bridge the digital divide and enhance access to essential services such as healthcare, education and finance.

To establish sustained large-scale national capacity, the TIA will research, scope and seek approval for at least one major new innovation initiative (a formal cluster or a programme) in the current planning cycle. The two current priority areas being scoped are an AI Compute and Application Cluster, centred on developing an ecosystem around high-performance computing for the development of AI models, and an initiative focused on broadband connectivity and infrastructure innovation to enable widespread cost-effective access to digital services. The unit will deliver a final proposal for the chosen initiative, complete with the governance structure and the expected economic impact, for approval.

The digital economy is fundamentally reshaping the global economic landscape. Its transformative power derives from digital technologies' ability to alter core industrial drivers, including transaction costs, information generation and sharing, production processes, distribution channels, and risk management strategies. Numerous industries, from financial services, traditional media, and logistics, are experiencing disruption from digital newcomers who offer significantly improved efficiencies and reduced costs. This accelerated digital transformation is now extending its reach into virtually every sector, including retail, agriculture, mining, manufacturing, tourism, food, transport, health, education, and more.

In South Africa, however, this digital transformation is developing unevenly. While sectors like the fintech market and digital banking have expanded rapidly, approaching near saturation, others such as health, agriculture, and mining are yet to experience a similar level of transformation. The rapid emergence of technologies like generative AI may have further exacerbated the slow digital uptake by SMMEs and widened the existing digital divide.

This uneven development has, consequently, hindered the digital economy's potential to significantly contribute to inclusive growth and broader economic transformation within the country. Therefore, novel innovations are essential to unlock the immense potential of digital economic development, both to create widespread economic opportunities and to ensure these opportunities are accessible in a truly inclusive manner.

In response to this TIA, within the Digital Transformation and Inclusive Innovation Thematic Impact Area, will address key Scientific, Technological, and Innovation priorities outlined in the Decadal Plan. Our goal is to drive economic growth and inclusivity through digital technologies, ensuring that innovation benefits all societal segments, especially marginalized communities.

To achieve this, TIA will integrate its existing portfolios: ICT, Inclusive Innovation Development (IID), Enterprise Development and Innovation Skills, and Seed Fund. For the upcoming five-year strategic period, our focus areas will be AI, Transformative Digital Innovations, and Innovation for Inclusive Development.

Given the envisaged impact and pervasiveness of AI, TIA will develop a concept for an AI Strategic Innovation Programme based on the quadruple helix model. This will outline, amongst others, how we'll strategically invest in and support groundbreaking AI innovations and guide AI policy development for widespread societal impact.

The two current priority areas being scoped are an AI Compute and Application Cluster, centred on developing an ecosystem around high-performance computing for AI models development and infrastructure.

## Bio-economy

The Bio-economy grouping of functions comprises four strategic focus areas, namely, agriculture, health, industrial biotechnology and indigenous knowledge systems (IKS). These will make contributions to Outcome 1.

South Africa's rich biodiversity and abundant natural resources offer a significant opportunity to contribute to stimulating economic growth and development. The country's diverse array of feedstocks, including sugarcane, forestry and agricultural waste, holds considerable potential for the production of a wide range of bio-based products, including biofuels, biochemicals and biomaterials. This transition to a bio-economy aligns with the country's commitment to supporting industrial modernisation through advanced manufacturing because it offers an innovative approach to industrial production that promotes environmental sustainability.

## v. Agriculture

The South African agriculture sector contributes approximately 2.6% to GDP and plays a crucial role in employment, accounting for about 5% of the workforce. However, it faces several challenges, including climate change and drought, rising input costs and biosecurity challenges stemming from outbreaks of disease. Despite these challenges, significant opportunities exist to create economic opportunities and enhance community livelihoods. To deal with these matters, the TIA is committed to promoting innovation in the agricultural sector in order to strengthen its role in providing food security, improving nutrition and enhancing resilience to the impacts of climate change. This will entail developing and deploying technologies, including indigenous knowledge (IK)-based technologies, that support the intensification of agricultural production, boost value addition and agro-processing and improve the distribution of agricultural products. The Agency will provide both financial and non-financial support for developing and commercialising impactful technologies, products and services that contribute to a competitive, inclusive and sustainably growing agricultural sector.

During 2024/25, the TIA has undertaken to develop an ethno-veterinary medicine investment portfolio in order to support the advancement of the application of the IK-based technologies in improving animal health. To this end, the Agency is committed to supporting the development and mainstream commercialisation of IK-based innovations that are aimed at treating various animal health conditions and developing innovative animal feed solutions that offer enhanced capabilities and opportunities for animal production.

## vi. Health

The TIA intends to support efforts to resolve South Africa's quadruple burden of disease by stimulating and supporting the development, registration, local manufacture and commercialisation of products and services that meet the healthcare needs of the country. The Agency strives to promote measures that will lead to the diagnosis, prevention and treatment of priority diseases and improve equitable access to these measures by leveraging innovative solutions such as digital health, medical devices, API and drug development, and genomic medicine.

The TIA will leverage South Africa's biomanufacturing capabilities to facilitate the development of products that respond positively to the country's healthcare challenges. In addition, the Agency will foster collaboration with diverse stakeholders to pool resources aimed at innovation and the ongoing evolution of a responsive regulatory environment. This approach aims to accelerate the adoption of technologies that drive meaningful impacts.

## vii. Indigenous Knowledge Systems

The IKS strategic focus area intends to advance technology development and the commercialisation of innovations rooted in IK. This mandate is strategically implemented across four key thematic areas: African traditional medicine, cosmeceuticals, health infusions and nutraceuticals. The TIA aims to enhance the lives of ordinary people residing in South Africa's rural areas and also those of other custodians of IK. By developing and commercialising technological innovations derived from ancient IK, this initiative ensures that benefits are shared with these communities, most of whom are situated in rural areas.

The TIA aims to harness South Africa's rich biodiversity and IK in order to promote the mainstream adoption of African traditional medicines. This initiative will also focus on the development of cosmeceuticals and health-enhancing products that contribute to the overall well-being of society at large.

By developing and commercialising IK-rooted health innovation response systems, the TIA aims to advance its investment efforts by strengthening its support of product optimisation and by conducting clinical trials in the five key priority areas that are identified in the Decadal Plan on STI, namely, HIV/AIDS, diabetes, cancer, tuberculosis and emerging and re-emerging conditions such as COVID-19. In addition, the Agency intends to support the development of IK-based cosmeceuticals with scientifically proven claims for the treatment of a variety of skin conditions.

## viii. Industrial Biotechnology

The TIA's Industrial Biotechnology strategic focus area aims to advance the development and commercialisation of technologies that enable the transition to a green economy and promote long-term environmental sustainability. Key areas of intervention include supporting the development of biomanufacturing capacity and capabilities, establishing partnerships to accelerate the diffusion of green technologies and supporting SMME development to stimulate sustainable employment opportunities. These strategic interventions contribute to South Africa's broader industrialisation strategy and policy.

During 2026/27, the TIA will implement strategic initiatives aimed at advancing South Africa's industrial bio-economy and supporting the thematic impact areas of the Decadal Plan. Key priorities include the establishment of a Wastewater Biorefinery Cluster to drive technology innovation and enhance competitiveness in the wastewater and sanitation sector, in addition to the establishment of Phase 2 of the Forest Bioeconomy Innovation Cluster (FBIC). The FBIC supports implementation of South Africa's Forestry Master Plan by promoting innovation to unlock greater value from forestry resources and value chains. It also contributes to SMME development, rural economic growth and environmental sustainability by fostering strategic partnerships and promoting the commercialisation and diffusion of relevant technologies.

The TIA will continue to support the implementation of key initiatives under the Strategic Industrial Bio-innovation Programme (SIIP), a DSTI programme hosted and implemented by TIA which aims to develop advanced bioprocessing and biomanufacturing technologies that drive industrial modernisation and enable the local production of bulk and specialty biochemicals. Flagship interventions include the Industrial Biocatalysis Hub and the Biomanufacturing Enterprise Development Initiative.

To contribute to the revitalisation of the declining sugar sector, the TIA will continue to support strategic initiatives at the Sugar Milling Research Institute (SMRI) that are aligned with the Sugar Value Chain Master Plan 2030. The Master Plan outlines mitigating strategies that will transform the industry and promote the development of a diversified, sustainable and globally competitive sugar sector. The SMRI is an umbrella organisation that provides technical support to the country's sugar milling industry with a focus on improving efficiency, innovation and sustainability in sugar processing; it is a key partner in the implementation of the Master Plan through research, technology development and industry collaboration.

## ix. Technology Platforms Programme

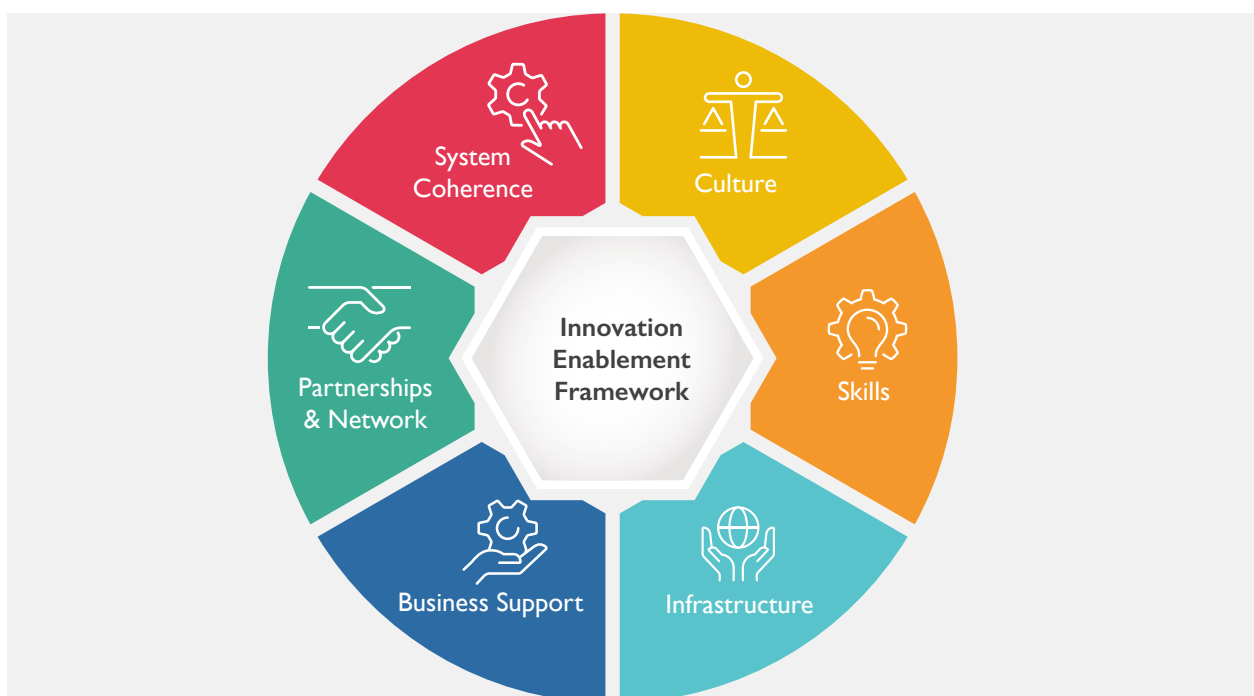
The TIA's Technology Platform Programme (TPP) is designed to provide funding and support to enhance access for stakeholders across various value chains to essential infrastructure and related technologies. The TPP will also enable technology development and innovation as part of implementing the Bio-economy Strategy. The Agency is implementing this programme in order (1) to intervene systematically to remedy technology gaps in priority sectors that hinder the development and commercialisation of innovations; (2) to build the critical mass of local expertise with a view to promoting the development of technologies that have commercial potential; and (3) to foster collaboration among industry partners for pre-competitive technology development.

The TIA has the following initiatives planned for 2026/27:

- Provide support to 14 Technology Platforms which will work towards demonstrating bio-based products, produce knowledge-based innovations, launch products into the market, form industry-academia collaborations, produce publications on innovation topics, leverage funds, support SMMEs and co-operatives and conduct capacity-development programmes.
- Establish a Biofoundry Platform. The platform will offer a core set of solutions, including full protein sequencing to benchtop microbial bioprocess development, small-scale process development, the design of bio-manufacturing strategies, bioactivity testing and three options for equipment rental. The platform will bring together state-of-the-art equipment and skilled resources to support South Africa's bio-economy and offer cutting-edge services which will facilitate the development of bio-based technologies and knowledge-based products.
- Launch the National Bio-entrepreneurship Programme. Phase I of the programme will take place in 2025/26, beginning with a national landscape analysis of bio-entrepreneurship support, which will result in the design of the programme. The programme will then be implemented in 2026/27.
- In 2026/27 the TIA will continue to work with the OneBio Innovation Centre and SEDFA to design a programme that supports SMMEs with IP management strategies, preparing and conducting clinical trials, navigating regulatory approvals, and fundraising.
- Secure funding from the DSTI for Phase 2 of the Nanotechnology Platforms Programme. These platforms will undertake activities to produce nanomaterials which will have applications in wound healing, diagnostics, therapeutics, water treatment and electricity generation.
- Become a more strategic partner for the 110k Genome Project hosted by the SAMRC. TIA's technology platforms, the Centre for Proteomic and Genomic Research as well as the National Metabolomics Platform, are uniquely positioned to be part of the programme based on their infrastructure and expertise capabilities.

## Innovation Enablement

The TIA's Innovation Enablement function undertakes the development of innovators hand in hand with technology development. It is responsible for delivering interventions aligned to Chapter 6 of the Decadal Plan, which places emphasis on 'creating an innovation enabling environment' as depicted below. It contributes mainly to delivering on Outcome 3, specifically the provision of funding, skills and SET support to researchers, innovators, technology entrepreneurs and SMMEs. At the heart of the Innovation Enablement Programme is the imperative to drive transformation and inclusivity, in this way expanding the Agency's geographic footprint so as to increase access to innovators and entrepreneurs through Innovation Centres and Entrepreneurship Support Centres.



**Figure 10: Elements of creating an Innovation Enablement environment**

The programme is made up of four sub-programmes, namely, Seed Fund, Technology Stations, Innovation for Inclusive Development, and Strategic Partnerships and Stakeholder Relations.

### x. Seed Fund

The TIA established the Seed Fund Programme (SFP) in 2013/14 to respond to the need in the NSI informed by several empirical studies which indicate that a considerable number of technologies stagnate at the 'proof of concept' and 'market assessment' stages and they end up not meeting the requirements for commercialisation and further funding. The SFP aims to help innovators, researchers and SMMEs overcome early-stage challenges and access funding for prototype development and market validation. The programme uses a partnership model to deploy the funds, made up of 33 active Implementing Partners consisting of 23 HEIs, four science councils and one National Research Facility, two regional agencies and three technology incubators, mostly affiliated to the Small Enterprise Development and Finance Agency (SEDFA).

## xi. Technology Stations Programme

The TIA implements the TSP, jointly funded by the DSTI and the TIA, through a national network of 15 centres across the country. These provide technology transfer support to entrepreneurs and SMMES through SET services for research, product development and commercialisation and, to a lesser extent, entrepreneurship development. These stations are in themselves Centres of Excellence in various fields of specialisation and have built deep expertise with good infrastructure in place to perform R&D and produce prototypes, products and demonstrators.

**Table 10: Network of Technology Stations**

Technology station	Hosting institution	Location
Agri-food Technology Station	Cape Peninsula University of Technology	Bellville, Western Cape
Limpopo Agro - food Technology Station	University of Limpopo	Mankweng, Polokwane
Downstream Chemicals Technology Station	Nelson Mandela metropolitan University	Summerstrand, Port Elizabeth
Technology Station in Chemicals	Tshwane University of Technology	Ga-Rankuwa, Gauteng
Technology Station in Chemicals	Mangosuthu University of Technology	Durban, KwaZulu-Natal
Process, Energy, and Environmental Technology Station	University of Johannesburg	Doomfontein, Gauteng
Technology Station in Clothing and Textiles	Cape Peninsula University	Bellville, Western Cape
Technology Station in Electronics	Tshwane University of Technology	Pretoria, Gauteng
Automotive Components Technology Station	Nelson Mandela Metropolitan University	Port Elizabeth, Eastern Cape
Technology Station in Materials Processing Technologies	Vaal University of Technology	Sebokeng, Gauteng
Technology Station in Reinforced Material and Plastic	Durban University of Technology	Durban, KwaZulu-Natal
Product Development Technology Station	Central University of Technology	Bloemfontein
Metal Casting Technology Station	University of Johannesburg	Doomfontein, Johannesburg
Institute for Advanced Tooling	Walter Sisulu University	East London
Institute for Advanced Tooling	Tshwane University of Technology	Soshanguve

## xii. Innovation for Inclusive Development

The IID portfolio in the TIA represents one of the key interventions in the Agency's portfolio of instruments for driving inclusivity through transformation and the expansion of its spatial footprint. The portfolio is largely made up of DSTI-contracted sub-programmes such as the Grassroots Innovation Programme, Living Labs, the Technology Acquisition and Deployment Fund and a number of specialised Sustainable Human Settlements initiatives which target rural and peri-urban communities. In this, the Agency has also established five MTEF-funded stand-alone and bespoke transformation programmes for women, youths and persons with disabilities and the Centres for Innovation and Entrepreneurship (CIEs).

The TIA has also established and launched the SBRI Programme as part of the Agency's response to resolving service delivery challenges through innovation – a key priority of the MTDP. This instrument adds to the Agency's efforts aimed at implementing the objectives of the DDM, where the Agency will pursue these through targeted calls to resolve specific service delivery challenges identified by municipalities.

### xiii. Strategic partnerships and business development

The Strategic Partnerships and Stakeholder Relations Unit plays a critical role in establishing the TIA as trusted partner in the NSI, orchestrating high-impact collaborations and ensuring the alignment of public, private, academic and development actors. Functioning as the ecosystem integrator, the Agency leverages strategic partnerships to attract co-funding, promote the pooling of resources and facilitate market access.

Building and strengthening partnerships with the private sector represents an important strategic thrust for the unit in delivering against the ambitions of the TIA 2.0 Corporate Strategy. Through this, the TIA aims to respond to industry competitiveness challenges, leverage co-funding and promote linkages with the research community. In addition, the TIA seeks to leverage corporate supply chains so as to accelerate the commercialisation of promising innovative solutions and leverage sector-specific intelligence, knowledge and expertise.

The unit also actively advances the TIA's internationalisation agenda by establishing, managing and leveraging opportunities for joint RDI collaborative projects with bilateral partners, mobilising international funding and investment, facilitating market access and global value chain integration and creating opportunities for capacity-building knowledge in the NSI. The Agency will therefore build on its existing portfolio of partnerships with countries in the Global North such as Switzerland, Ireland and the United Kingdom and build on its relations with countries in the Global South and the BRICS member countries. Finally, an important initiative in driving the African agenda is the establishment and launch of the Innovation Agencies in Africa Network, an initiative funded by the Canadian government and consisting of nine African members countries and intended to lead the process of implementing the Science, Technology and Innovation Strategy for Africa (STISA) 2034.



## 13. INTENSIFIED COMMERCIALISED INNOVATIONS

### 13.1 Outcome I: Intensified commercialised innovations in support of inclusive economic growth, sustainable development and transformation

#### Impact statement

The TIA aims to commercialise innovations that are economically sustainable in a way that they have a positive impact on the lives of all South Africans.

#### Outcome statement

The TIA intends to direct a greater proportion of its resources at the translation and commercialisation of IP emanating from publicly funded organisations such as universities and science councils. The purpose of doing so is to improve the lives of South Africans and to contribute to economic growth and development. The Agency's progress towards achieving Outcome I during the 2025–2030 strategic period will be tracked by reporting on the number of technologies commercialised annually.

The design and prioritisation of Outcome I are directly informed by the National Treasury Spending Review (2021/22), which identified that while the Agency's rationale remains "critical," the conversion of local R&D into commercial products remains "suboptimal". In response, TIA has begun shifting its programme design from reactive funding to active pipeline management. This informs performance commitments by focusing resources on de-risking technologies and attracting private sector follow-on funding, a prerequisite for achieving MTDP Priority I (Inclusive Growth and Job Creation).

Transformation is integrated as a core performance requirement through mandated allocation mechanisms. In doing so, inclusivity is operationalised by embedding demographic requirements (HDI, Women, Youth and PWD) into the investment process as part of the planned Transformation Strategy. This ensures that inclusivity constraints are addressed at the point of funding disbursement, as reflected in the specific performance targets in Section 13.2.

The APP focuses on output-level targets, a necessary pathway to the outcomes and impacts defined in the 2025-2030 Strategic Plan. The contribution pathway logic model depicted below demonstrates how the planned 2026/27 outputs facilitate the achievement of the Strategic Plan's pre-set Outcome I and outcome targets with respect to intensifying commercialised innovations.

**Table 11: Contribution pathway logic model for Outcome 1**

Component	Content / Strategic Mapping
Strategic Context	<b>National Priority:</b> High unemployment and the “Innovation Chasm” drive the focus on de-risking technological innovations and industry-linked projects.
Activities	Technology de-risking, funding disbursement, technical support and post-investment management.
Outputs	Number of projects involving industry being executed Number of successfully diffused technologies Number of products launched Number of successfully demonstrated bio-based technologies Number of IP- and knowledge-based prototypes developed Allocation of funds to underserved provinces Allocation of funds to designated groups
Outcome	<i>Intensified commercialised innovations in support of inclusive economic growth, sustainable development and transformation.</i>  <i>Intensified Commercialisation:</i> Achieving the 5-year target of 600 innovations commercialised, with 360 (60%) by designated groups.
Impact	<i>Improving the quality of life of all South Africans through innovation.</i>  <i>Inclusive Economic Growth:</i> Direct contribution to labour-absorption and industrialisation in high-impact sectors.

## 13.2 Planned outputs and output targets

With the aim of achieving socio-economic stimulation, growth and development, the TIA has developed seven outputs to achieve the desired outcome of intensified commercialised innovations in support of inclusive economic growth, sustainable development and transformation. This outcome responds to MTDP Priority 1 Inclusive growth and job creation and MTDP 2 Reduce poverty and tackle the high cost of living. This outcome focuses on ensuring that the Agency facilitates collaborations that fund the most promising innovations for commercialisation. The focus on innovation curation and the acceleration of commercialisation is critical to economic growth and job creation. Technologies and products launched and diffused in the market have the potential to create new ventures and jobs and bring much-needed revenue into the economy.

The TIA is focused on ensuring that the previously disadvantaged are included in the innovation discourse. Transformation-oriented programmes and interventions are being implemented to ensure inclusive growth and development. The Grassroots Innovation Programme (GIP) is a key programme that focuses on supporting initiatives of the previously disadvantaged, women, youths and persons living with disabilities. The key performance measures centred on commercialised innovations have targets attached to them to ensure that a percentage of the funds is allocated to investment in innovations or technologies developed by the previously disadvantaged, women, youths and persons living with disabilities. Support of the previously disadvantaged, women, youths and persons living with disabilities is also aimed at eradicating poverty among those who historically had limited access to economic opportunities. The development and diffusion of new technologies support the establishment of new ventures that create jobs and reduce poverty.

The TIA seeks to implement a quadruple helix approach to innovation by establishing linkages through collaborative projects, initiatives or programmes between publicly funded research organisations, the government, civil society and industry. The Agency also aims to increase the conversion rate of IP from publicly funded research organisations by exploiting the resources of the private sector and promoting the Agency’s competitiveness. Selling publicly funded IP that is associated with technologies that have been de-risked by the Agency and fostering joint collaborations between publicly funded research organisations and industry are two pathways through which to raise the conversion rate of such publicly funded IP. The Agency will support the demonstration of innovations by key sectors of the economy aligned to the Decadal Plan, including bio-based technologies and products or services in the areas of agriculture, health, industrial biotechnology, IKS and other bio-based domains.

The diffusion of existing technologies to community structures, SMMEs, co-operatives and other business formations for inclusive socio-economic development constitutes the TIA’s second output. The third output is having start-ups or SMMEs launch products into the market – this being an important measure of the success of commercialising innovations fully. All of this will be achieved by prioritising underserved provinces, youths, women and persons living with disabilities as means of ensuring that the most vulnerable members of society are given access to opportunities.

The TIA’s output targets in support of commercialising innovations are presented in Table 12 and 13.

**Table 12: Outcome 1 outputs, performance indicators and targets**

Output	Output indicator	Audited actual performance			Estimated performance	MTEF period targets		
		2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
1.1 Joint collaborations between publicly funded research organisations, government, civil society and industry	Number of projects involving industry being executed	48	75	59	58	65	75	80
1.2 Technologies diffused for inclusive development	Number of successfully diffused technologies	18	22	34	28	40	54	60
1.3 Products launched	Number of products launched	43	58	56	48	60	70	80
1.4 Bio-based technologies developed	Number of successfully demonstrated bio-based technologies	37	54	60	40	45	50	55
1.5 De-risking of public-funded IP	Number of IP- and knowledge-based innovation products developed	197	217	272	250	255	265	270
1.6 Support for underserved provinces	Allocation of funds to underserved provinces	66% of investment funds allocated	50% of investment funds allocated	81% of available investment funds allocated	At least 30% of available investment funds allocated	At least 30% of available investment funds allocated	At least 30% of available investment funds allocated	At least 30% of available investment funds allocated
1.7 Support for designated groups	Allocation of funds to designated groups	47% of available investment funds allocated	79% of available investment funds allocated	54% of available investment funds allocated	At least 50% of available investment funds allocated	At least 53% of available investment funds allocated	At least 57% of available investment funds allocated	At least 60% of available investment funds allocated

**Table 13: Outcome 1 output indicators and annual and quarterly targets**

Output indicators	Annual target	Q1	Q2	Q3	Q4
1.1 Number of projects involving industry being executed	65	10	15	20	20
1.2 Number of successfully diffused technologies	40	4	6	15	15
1.3 Number of products launched	60	10	10	15	25
1.4 Number of successfully demonstrated bio-based technologies	45	5	10	15	15
1.5 Number of IP- and knowledge-based prototypes developed	255	50	50	75	80
1.6 Allocation of funds to underserved provinces	At least 30% of available investment funds allocated	No target	No target	No target	At least 30% of available investment funds allocated
1.7 Allocation of funds to designated groups	At least 53% of available investment funds allocated	No target	No target	No target	At least 53% of available investment funds allocated

The systematic mapping framework below explicitly demonstrates the contribution pathways and integration mechanisms for the above outputs to the national priorities of transformation, inclusive growth and job creation.

**Table 14: National priority contribution pathways and integration mechanisms for Outcome 1**

Output Indicator	Contribution Pathway to Inclusive Growth & Job Creation	Integration Mechanism for Transformation
1.1 Industry Projects	<b>Job Creation:</b> Partnerships ensure market-readiness, increasing the survival rate of labor-absorptive SMMEs.	Priority given to industry partners with high B-BBEE ratings or transformation commitments.
1.3 Product Launches	<b>Economic Growth:</b> Direct entry of new products into the market drives revenue and potential workforce expansion.	60% target for launches by designated groups as per Strategic Plan alignment.
1.6 Underserved Provinces	<b>Spatial Transformation:</b> Addresses regional economic disparities by funding projects in non-metropolitan areas.	Implementation via the DDM and provincial roadshows.
1.7 Designated Groups	<b>Economic Inclusion:</b> Directly changes the ownership and participation profile of the innovation economy.	Mandatory HDI/Youth/Women/PWD requirements in the investment process as part of the planned Transformation Strategy.

### 13.3 Explanation of planned performance

While the APP tracks outputs like prototypes developed and products launched, these are lead indicators for the Strategic Plan's Outcome of intensified commercialisation. De-risking technology at the prototype stage (Indicator 1.5) is the primary activity that addresses the Innovation Chasm. By building a de-risked project pipeline, TIA enables the private sector to provide the follow-on capital necessary for sustainable job creation.

Transformation and inclusion is operationalised through an integrated Investment Value Chain. Funding applications will be assessed based on contribution towards meeting the output target for designated groups (output indicator 1.7) together with the planned Transformation Strategy. Spatial inclusivity is further integrated deliberate investments in underserved provinces, thereby reaching rural innovators and bridging the gap between geographic location and access to the NSI.

Through its relevant business units and focus areas which are structured around Commercialisation, Bio-economy and Innovation Enablement, the TIA will pursue the various key performance indicators (KPIs) intended to enhance commercialisation, as outlined below.

#### Promoting collaboration with industry

The TIA aims to increase the participation of the private sector and industry in STI. In doing so, it aims to contribute to an increase in business expenditure on R&D to support the government's efforts to grow the gross expenditure on R&D, thereby contributing to achieving the national target of 1.5%. The main objectives will centre on promoting co-funding approaches between the Agency and the private-sector companies, joint R&D collaborative activities between the private sector and academia, and linkages between SMMEs and large corporates.

To promote stronger *collaboration between the TIA and the corporate sector* and to catalyse greater private-sector participation and investment in innovation through the Industry Matching Fund, several key strategies will be adopted. First, the Agency will co-design bespoke innovation calls with industry partners in order to ensure that funding priorities directly reflect current industry challenges and market needs. This approach is more likely to increase industry buy-in and encourage corporates to match the Agency's funding or to provide in-kind resources, such as access to facilities, mentorship or technical expertise.

The TIA will also establish sector-focused innovation forums or advisory panels comprising both industry leaders and Agency representatives in order to promote continuous dialogue, which will allow for mutually beneficial projects to be identified and for research outputs to be aligned more rapidly with commercial opportunities. The Agency could also incentivise corporate participation by offering recognition programmes that highlight companies' contributions to innovation and impact and facilitate introductions to those promising start-ups and SMMEs that emerge from its portfolio.

Moreover, the TIA will develop structured pathways for corporates to access and license publicly funded intellectual property, streamlining the process and reducing the risk to private-sector adopters. Joint capacity-building workshops, technology demonstration days and open innovation challenges could also foster relationships, build trust and showcase the value of collaboration. Finally, leveraging the Industry Matching Fund to support pilot projects, co-investment schemes and shared infrastructure initiatives would deliver tangible returns on investment for corporates, ultimately driving increased private-sector spending and its sustained engagement in the innovation ecosystem.

To foster collaboration between industry and academia, the TIA will implement several strategic initiatives. One effective approach would be to establish joint R&D programmes that align academic expertise with industry needs, in turn encouraging the co-creation of innovative solutions and accelerating the translation of research into market-ready products. By facilitating collaborative funding calls, the Agency will be able to incentivise industry partners to invest in promising academic projects, thereby sharing both risk and resources.

In addition, the TIA will create structured pathways for technology transfer such as licensing agreements and collaborative incubator programmes which enable SMMEs and corporates to access university-developed IP. Regular networking events, innovation challenges and mentorship programmes involving both sectors would strengthen relationships even more, paving the way for knowledge exchange and the identification of commercialisation opportunities. Integrating experienced fund managers and venture builders into these partnerships will most likely also expedite market entry and enhance access to follow-on funding. These efforts, combined with capacity-building initiatives and entrepreneurship training, will help to cultivate a robust innovation ecosystem that benefits both academia and industry.

## Technologies diffused

To promote and support the diffusion of technologies from its sector-focused investments effectively, the TIA will create leverage through its rich portfolio of invested projects and deploy various strategic approaches. In this regard, the Agency will develop targeted technology diffusion models that are tailored to the unique needs of each sector, such as the green economy, energy innovation, agri-tech, health-tech, smart manufacturing and ICT. A few of the initiatives that the Agency has planned for the year ahead include a dedicated Technology Diffusion Programme on Low Chill Apples, working in partnership with the ARC and the provincial governments of Mpumalanga and KwaZulu-Natal, and an Additive Manufacturing SME development programme. These models will include skills training programmes that foster local manufacturing capabilities and support the deployment of technologies in community-driven initiatives such as microgrids and co-operative waste-to-value projects. By working closely with stakeholders in underserved, rural and township economies, the Agency will ensure that innovations are accessible and relevant to end-users, in this way stimulating inclusive growth.

In addition, the TIA will establish partnerships with industry, academia and local government to create demonstration sites and pilot projects that showcase the practical applications and benefits of new technologies. Regular workshops, technology fairs and knowledge-sharing events will also facilitate the exchange of best practices and encourage their wider adoption.

Integrating mentorship and entrepreneurship training for SMMEs and smallholder farmers will also help to build local capacity and drive the uptake of new solutions. Streamlined pathways for accessing publicly funded IP, along with incentives for corporate and community adoption, will also reduce barriers to technology uptake and accelerate market entry. In pursuing these objectives, the Agency will collaborate with many stakeholders in the NSI, including the SETAs, who are critical in supporting the skills development that would be required for the exploitation of diffused technologies for maximum impact.

The benefits of these strategic approaches are substantial. They will help to bridge the gap between research and real-world application, enabling TIA-funded technologies to reach actual users and value chains. This will not only boost productivity and competitiveness, particularly among SMMEs operating in various sectors, but will also support job creation, economic development and the growth of local industries. Furthermore, these efforts will contribute to the Agency's inclusive innovation agenda by ensuring that technological advancements benefit a broader cross-section of society, especially in areas that have been underserved historically. Ultimately, a robust technology diffusion strategy will position the TIA as a catalyst for national development and technological progress.

## Products launched

To facilitate and promote the launch of new products from its current investment portfolio of innovations across various sectors, the TIA will implement several strategic initiatives. These will include targeted support for entrepreneurs and SMMEs by connecting them with additional funders; integrating the entrepreneurs and SMMEs into corporate supply chains; and offering direct assistance with establishing and scaling up their businesses. This will include accelerating the commercialisation of promising projects with Minimum Viable Products (MVP) through dedicated funds such as the Seed Fund, Technology Development and Commercialisation Fund and the Technology Acquisition and Deployment Fund, while also leveraging programmes such as the UNIDO Cleantech and the IID to nurture grassroots and advanced innovations.

Furthermore, the TIA will deploy its Technology Stations capabilities to help entrepreneurs and SMMEs refine their products and ensure alignment with the specific requirements of corporate clients, thereby increasing their chances of securing supply chain contracts. By orchestrating joint capacity-building workshops, technology demonstration days and open innovation challenges, the TIA will be able to create opportunities for visibility, networking and the validation of new products. These efforts will be complemented by structured pathways for corporates to access and license publicly funded intellectual property, which will serve to reduce the barriers to adoption and encourage private-sector investment in innovative solutions. Such a comprehensive approach will ensure that TIA-funded technologies are not only launched but also positioned for sustained commercial success and impact across diverse sectors.

## De-risking publicly funded IP

To accelerate the commercialisation of research output from universities and science councils, the TIA will adopt a multi-pronged strategy that strengthens both the pipeline of late-stage and de-risked technologies and the capacity of Offices Technology Transfer (OTT) to pursue commercialisation activities effectively.

Firstly, the TIA will intensify the implementation of the newly remodelled Seed Fund Programme that supports both the pre-seed and seed stages. This programme focuses on building a viable pipeline of technologies ready for market and to provide enabling activities such as access to industry experts, mentorship, spinout formation support, market access assistance and the development of robust commercialisation strategies. These efforts help to bridge the gap between research and market needs, ensuring that promising innovations are identified early and nurtured through the commercialisation process. The remodelled Seed Fund Programme was implemented as a pilot in the 2025/26 financial year, following a review of the programme and consultations with the Agency's implementing partners, and therefore it represents a new approach to the package of support that the organisation has developed to provide better support to implementing partners.

Second, the TIA will nurture strategic relationships between research institutions and the SMME sector. This includes promoting the visibility and accessibility of publicly funded IP to SMMEs, facilitating licensing arrangements and supporting the establishment of technology-based spin-offs and start-ups. By acting as a broker and a connector, the Agency is able to stimulate a greater uptake of research outputs and foster a more dynamic innovation ecosystem.

Third, targeted capacity-building initiatives for OTTs are essential. The Seed Fund Programme Evaluation Report commissioned by TIA 2025 and the Technology Transfer Survey conducted in 2022 have both reaffirmed the relevance and strategic role of the Seed Fund in enabling the building of a strong pipeline of investable opportunities from the research system. However, they point to both residual gaps in capacity and imbalances in outputs. The TIA will collaborate closely with the National Intellectual Property Management Office (NIPMO) and universities' OTT to respond to capacity challenges. This collaboration will include joint training programmes, knowledge and best practice exchange platforms, resource sharing and the development of standardised best practices for IP management and commercialisation. In addition, the NRF represents an important partner in filling funding gaps, especially in experimental development, and providing OTTs with access to a broader range of expertise and support mechanisms.

Finally, the TIA will introduce measures and instruments that foster deeper collaboration between industry and the research community. Aligning research outputs with industry needs through regular engagement, feedback mechanisms and co-development projects will ensure that technologies are market relevant and have a higher likelihood of successful commercialisation. These initiatives will be complemented by ongoing support for Living Labs and CIEs and targeted investment in underserved regions to ensure inclusive growth and transformation.

## Dedicated funding to promote transformation and inclusive growth

The TIA's Corporate Strategy places an important strategic emphasis on promoting transformation and inclusive economic development as an underpinning imperative to realise inclusive growth through innovation. For the Financial Year 2026/27, the Agency will deliberately allocate a portion of the available investment budget to realising these objectives.

First, it will allocate 30% of its available budget to the six underserved provinces of Northern Cape, Limpopo, Free State, Eastern Cape, North West and Mpumalanga. This it will do with a view to strengthening the innovation ecosystem in these provinces which, for structural reasons, do not enjoy a major share of the participation in the innovation discourse. Through this approach, the TIA will identify strategic investment opportunities to exploit key sectors that hold the potential to strengthen the economic performance of the regions and launch specific thematic regional innovation programmes.

The organisation will also expand and increase its investments in Living Labs and CIEs, as these have proved to be sound models for igniting innovation among youths and other communities that remain on the margins of innovative activity. In addition to Living Labs and CIEs, the TIA will also develop and invest in new models for community engagement such as Community Innovation Hubs, Mobile Innovation Units and 4IR Centres.

To increase support for designated groups – for example, youths, women and persons with disabilities – the TIA will build on its bespoke and standalone transformation programmes, approved by the Board and launched in 2024, through a variety of calls for proposals. Building on the Youth Programme, an additional set of Implementing Partners in the underserved provinces will be solicited and onboarded to expand the Agency's reach to more marginalised communities.

The same modality will be adopted with respect to increasing the participation of women in innovation through the Ward Based Intervention Programme (WRIP) and Innovations for Persons with Disabilities. All of these initiatives will be pursued through strategic partnerships with the corporate sector, the SETAs and other government departments that have identified these transformation and inclusivity objectives as important priorities in their plans. These strategic partnerships will be critical to scaling up the execution of the programmes, enhancing their impact while also providing the requisite complementary funding to augment the cost of doing business through the implementing partner model.



## 13.4 Resource considerations

**Table 15: Intensified Commercialised Innovations: expenditure estimates**

	2026/27 (R'000)	2027/28 (R'000)	2028/29 (R'000)
<b>Income</b>	<b>355,478</b>	<b>464,872</b>	<b>578,386</b>
MTEF ring-fenced	195,170	256,258	267,762
MTEF baseline	125,307	170,114	223,162
Other income (specific contracts, interest and royalties)	35,000	38,500	87,462
<b>Operational expenditure</b>	<b>104,895</b>	<b>101,518</b>	<b>105,681</b>
Support and infrastructure costs	20,299	21,922	19,873
Human resources	84,596	79,596	85,808
<b>Investment expenditure</b>	<b>250,584</b>	<b>363,354</b>	<b>472,706</b>
MTEF allocation	215,584	324,854	381,495
Specific contracts	35,000	38,500	91,211

## 14. ENABLING AND STRENGTHENING THE INNOVATION ECOSYSTEM

### 14.1 Outcome 2: Enabling and strengthening the innovation ecosystem

#### Impact statement

The TIA aims to create a conducive innovation ecosystem that stimulates and supports innovation.

#### Outcome statement

The TIA is responsible for the development and implementation of instruments that create an enabling environment for innovation through a whole-of-society approach which supports a coherent and inclusive NSI. The Agency seeks to strengthen its role as a curator of innovation pathways within the NSI, focusing on the operational integration of support instruments for SMMEs, innovators and entrepreneurs.

The Quadruple Helix Model approach to innovation will be implemented to bolster this role. This model recognises four major factors in the innovation system: science, policy, industry and society. The TIA seeks to develop an innovation compact, strengthening traditional HEI and science council relationships, along with measures to build partnerships across the economy and support previously neglected innovators. To track the Agency's progress towards achieving Outcome 2 during the 2025–2030 strategic period, the Agency will report on the number of SMMEs receiving SET support that are sustainable.

The strategic prioritisation of Outcome 2 addresses the structural barriers within the NSI that stifle early-stage entrepreneurship. Informed by the White Paper on STI and the Decadal Plan on STI, TIA recognises that innovation cannot flourish without a supportive “commons” of technical infrastructure and coordination – the innovation ecosystem. Consequently, programme choices for 2026/27 are directed toward continuing to expand TIA’s footprint across the country to lower the cost of innovation. This context shifts the Agency’s performance commitments from merely funding projects and programmes to providing foundational SET and related services and creating a flourishing environment for SMMEs and co-operatives to scale.

Transformation in the ecosystem is operationalised by lowering the barriers to entry for marginalized innovators. Implementation is achieved through targeted technical outreach to grassroots innovators and the establishment of support centres in underserved regions. To ensure inclusivity is measured and integrated, TIA has embedded spatial targets and demographic disaggregation into the core service-delivery model, ensuring that the enabling environment extends to township and rural economies where co-operatives play a vital role.

The APP focuses on output-level targets, a necessary pathway to the outcomes and impacts defined in the 2025-2030 Strategic Plan. The contribution pathway logic model depicted below demonstrates how the planned 2026/27 outputs facilitate the achievement of the Strategic Plan’s pre-set Outcome 2 and outcome targets with respect to creating an enabling environment.

**Table 16: Contribution pathway logic model for Outcome 2**

<b>Component</b>	<b>Context &amp; Strategic Mapping</b>
<b>Strategic Context</b>	<b>Barriers to Entry:</b> High cost of technical infrastructure and lack of support for SMMEs/co-ops in the innovation ecosystem.
<b>Activities</b>	Provision of SET support, establishing support centres, forming Sector Thematic Networks, establishing Strategic Innovation Partnerships, implementing the SBRI, brokering partnerships.
<b>Outputs (APP Targets)</b>	Total rand value leveraged Number of strategic innovation programmes developed Number of govt departments & SOEs participating in locally developed tech initiative Number of partnerships established Host annual SA Innovation Week Publications on innovation topics Number of new tech and innovation support centres in targeted regions Number of SMMEs and co-operatives receiving SET and enterprise development support Number of grassroots innovators supported Number of beneficiaries accessing support from partnerships (SETAs, private sector, govt) Number of black or women fund managers established Number of start-ups and spinouts supported through fund managers
<b>Outcome</b>	<i>Enabling and strengthening the innovation ecosystem</i>  <i>Enabled Innovation Ecosystem:</i> Measured by the increased health and vibrancy of the NSI (ecosystem collaborations, funding harmonisation, tech entrepreneurship ecosystem, venture capital funds, funds leveraged).
<b>Impact</b>	<i>Improving the quality of life of all South Africans through innovation</i>  <b>Inclusive Growth:</b> A transformed economy where innovation flourishes across all sectors and demographics.

## 14.2 Planned outputs and output targets

To strengthen and create an enabling innovation ecosystem, the TIA has developed eleven outputs with the purpose strengthening and creating a conducive innovation eco-system, three of which are outlined below. This outcome responds to MTDP priority 1: Inclusive growth and job creation. The enabling and strengthening of the innovation ecosystem is aimed at supporting SMMEs and co-operatives amongst other things. This support is through financial and non-financial means. Non-financial support includes SET support, innovation and technology entrepreneurship skills training and the facilitation of partnerships with entities sharing similar objectives. Technology and innovation support infrastructure is critical in providing this support. SMMEs have been identified as important for job creation globally and there as evidence in this regard.

The establishment of new start-ups and spinouts through the use of fund managers also contributes to job creation. The fund managers that TIA establishes will be the previously disadvantaged and women in support of inclusive growth. The support of SMMEs and co-operatives has targets allocated to the previously disadvantaged, women, youth and persons living with disabilities this is to ensure inclusive growth. Inclusive growth champions that all sections of society including the most vulnerable are given access to economic opportunities.

First, the TIA will establish new technology and innovation support centres with the purpose of providing SET support to businesses and individuals in targeted regions. Second, the Agency will support the provision of SET and lend enterprise development support to SMMEs and co-operatives for the purposes of developing innovative products or services, which will improve their revenue, growth and competitiveness.

Third, the TIA will track the funds received from third parties for investment initiatives for the purposes of funding technology development, technology commercialisation and related support activities. This measure will demonstrate the Agency's relevance in the NSI by leveraging its own funding along with co-funding from industry, development finance institutions and organisations in the public sector.

The TIA will also increase the impact of the existing Technology Platforms across the country which offer high-end bio-based SET support to the biotech community. In addition, it will exploit emerging opportunities in strategic industries to establish new Technology Platforms. The Agency will also support several Technology Innovation Clusters in implementing collaborative innovation projects and activities in support of targeted bio-based industries.

In strengthening its curatorship role, the TIA will establish thematic networks that will yield Strategic Innovation Programmes aligned to the Decadal Plan priorities. These Strategic Innovation Programmes will be a collaborative effort between the Agency and stakeholders in the innovation ecosystem. These partnerships will be based on the sharing of similar objectives. The Agency is seeking to implement the SBRI Programme, an instrument that will be deployed to promote the use of locally developed technologies to overcome service delivery challenges. Funds will therefore be leveraged in support of this programme.



The Agency will create strategic partnership platforms that will enable beneficiaries including SMMEs and entrepreneurs to access skills through capacity building and technology innovation support. Lastly the Agency will measure the number of new start-ups and spinouts that are created as a result of support received from the fund of funds instrument.

The TIA's output targets in support of delivering on enabling and strengthening the innovation ecosystem are presented in Table 17 and 18.

**Table 17: Outcome 2 outputs, performance indicators and targets**

Outputs	Output indicators	Audited actual performance			Estimated performance			
		2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
2.1 Leveraged funds	Total rand value leveraged	R600.9m	R686.85m	R518.5m	R320m	R325m	R340m	R400m
2.2 Collaborations in support of a strengthened NSI	Number of strategic innovation programmes developed	New indicator	New indicator	New indicator	1	2	2	3
2.3 Initiatives to promote public expenditure on innovation	Number of government departments & public entities participating in SBRI	New indicator	New indicator	New indicator	5	8	10	12
2.4 Initiatives to harmonise & streamline innovation funding and processes from DFIs	Number of partnerships established	New indicator	New indicator	New indicator	2	3	3	4
2.5 Promoting SA as an innovation investment destination	Host annual SA Innovation Week	New indicator	New indicator	New indicator	1	1	1	1
2.6 Thought leadership publications on the SA innovation ecosystem	Publications on Innovation topics	New indicator	New indicator	New indicator	3	4	4	5
2.7 New centres established and supported	Number of new technology and innovation support centres providing SET support in targeted regions	8	9	9	2	4	6	6
2.8 SET and enterprise development support provided to SMMEs and co-operatives	Number of SMMEs and co-operatives receiving SET and enterprise development support	2,903	3,537	3,775	3,600	4,000	5,000	5,200
2.9 Support to grassroots innovators	Number of grassroots innovators supported	New indicator	New indicator	New indicator	100	150	200	220

Outputs	Output indicators	Audited actual performance			Estimated performance			
		2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
2.10 Partnership for skills and innovation management	Number of beneficiaries accessing support from partnerships established with SETAs, private sector, government and civil society	New indicator	New indicator	New indicator	2,000	2,200	2,500	2,700
2.11 New fund managers established	Number of black or women fund managers established	New indicator	New indicator	New indicator	2	3	4	5
2.12 Number of start-ups and spinouts from fund-of-funds	Number of start-ups and spinouts supported through fund managers	New indicator	New indicator	New indicator	5	6	8	10

**Table 18: Outcome 2 output indicators and annual and quarterly targets**

Output indicators	Annual target	Q1	Q2	Q3	Q4
2.1 Total rand value leveraged	R325m	R55m	R80m	R90m	R100m
2.2 Number of strategic innovation programmes developed	2	–	–	–	2
2.3 Number of government departments & public entities participating in SBRI	8	–	–	4	4
2.4 Number of partnerships established	3	–	–	1	2
2.5 Host annual SA Innovation Week	1	–	–	–	1
2.6 Publications on innovation topics	4	–	–	1	3
2.7 Number of new technology and innovation support centres providing SET support in targeted regions	4	–	2	–	2
2.8 Number of SMMEs and co-operatives receiving SET and enterprise development support	4,000	–	1,000	1,000	2,000
2.9 Number of grassroots innovators supported	150	–	–	50	100
2.10 Number of beneficiaries accessing support from partnerships established with SETAs, private sector, government and civil society	2,200	–	200	1,000	1,000
2.11 Number of black or women fund managers established	3	–	–	1	2
2.12 Number of start-ups and spinouts supported through fund managers	6	–	–	3	3

The systematic mapping framework below explicitly demonstrates the contribution pathways and integration mechanisms for the above outputs to the national priorities of transformation, inclusive growth and job creation pertaining to Outcome 2: Enabling and strengthening the innovation ecosystem.

**Table 19: National priority contribution pathways and integration mechanisms for Outcome 2**

<b>Output Indicator</b>	<b>Contribution Pathway to Inclusive Growth &amp; Job Creation</b>	<b>Integration Mechanism for Transformation</b>
2.1 Total rand value leveraged	Increases the capital density within the NSI, allowing SMMEs and co-operatives to scale beyond the limitations of the fiscus.	Prioritisation of co-investment partnerships with funds that have explicit HDI, Women, and Youth mandates.
2.2 Number of strategic innovation programmes developed	Focuses ecosystem resources on high-impact, labour-absorptive sectors identified in the MTDP.	Mandatory HDI/Youth/Women/PWD requirements in the strategic innovation programmes developed as part of the planned Transformation Strategy
2.3 Govt departments & SOEs participating in locally developed tech initiatives	Creates a predictable "First Customer" market through the SBRI, providing the revenue stability SMMEs need to sustain and grow their workforce.	Targeting government entities to procure specifically from HDI-led start-ups and community-based co-operatives.
2.4 Number of partnerships established	Facilitates technology and knowledge diffusion by connecting SMMEs to the infrastructure and expertise of HEIs and large industry players.	Selection of partners (e.g., SETAs, Industry Associations) based on their ability to reach previously neglected regions and demographics.
2.5 Host annual SA Innovation Week	Provides a market-access platform and networking opportunities that reduce the cost of entry for small and grassroots innovators.	Dedicated showcase segments and pitching dens exclusively for township-based and rural entrepreneurs.
2.6 Publications on innovation topics	Provides the evidence-based advocacy required to remove policy bottlenecks that stifle SMME growth and economic participation.	Research focus includes analysing the impact of innovation on marginalised groups to inform inclusive policy-shaping.
2.7 New tech and innovation support centres in targeted regions	Spatial Transformation: Provides localised infrastructure and SET services in rural districts where technical support is traditionally absent.	Centres are strategically located in priority districts under the DDM to address geographic inequality.
2.8 SMMEs and co-operatives receiving SET and enterprise development support	Directly de-risks the technical operations of small businesses, increasing their long-term sustainability and capacity for labour absorption.	Mandatory demographic tracking (B-BBEE level, gender, age) for all beneficiaries to ensure equitable resource distribution.
2.9 Number of grassroots innovators supported	Formalises community-led innovation, turning local solutions into sustainable livelihoods and self-employment opportunities.	Implementation via the IID portfolio, focusing on the "Bottom of the Pyramid."
2.10 Beneficiaries accessing support from partnerships	Leverages third-party resources (private sector and SETAs) to scale technical training and business support services for SMMEs.	Partnerships are structured to prioritise youth and women for technical apprenticeships and entrepreneurship training.
2.11 Black or women fund managers established	Transforms the gatekeepers of innovation capital, ensuring that investment decisions are made through a lens of demographic inclusivity.	Direct intervention to address the funding gap for black-owned tech companies by building a transformed financial sector.
2.12 Start-ups and spinouts supported through fund managers	Creates new, high-value economic units that serve as the primary engines for high-skill job creation in sectors including the digital and green economies.	Fund managers are required to implement mentorship models specifically tailored to first-generation entrepreneurs from designated groups.

## 14.3 Explanation of planned performance

Outcome 2 represents TIA's efforts to give effect to its new Business Model that places emphasis on promoting collaboration within the NSI, pooling of resources and strengthening of the innovation and entrepreneurship ecosystem.

Outcome 2 functions as the foundational layer for economic participation. By providing SET support to 4,000 SMMEs and co-operatives (output indicator 2.8), TIA builds the technical baseline of the economy. This support is not an end in itself but the strategic prerequisite for sustainable job creation. Creating an environment where 150 grassroots innovators (Indicator 2.9) can flourish ensures that the NSI contributes to broad-based economic growth, reaching beyond traditional urban high-tech sectors to include township and rural value chains.

Driving transformation in the ecosystem is driven by spatial and demographic inclusivity. TIA operationalises this by establishing support centres in targeted regions (output indicator 2.7) to bridge the gap between geographic location and access to infrastructure. Furthermore, the establishment of black or women fund managers (indicator 2.11) is a direct intervention to transform the gatekeepers of innovation capital. This ensures that as the ecosystem flourishes, the ownership and participation profile of the innovation economy becomes more reflective of South African society.

An important aspect of this outcome is the ambitious target of raising R1.5bn within the strategic planning period, where R325m remains a target for the Financial Year. This is in response to the constrained fiscal environment, implying the need for the TIA to strengthen its efforts in deepening its partnerships with various stakeholders to leverage existing resources to bolster the execution of its mandate.

As a start, it is important to acknowledge that the TIA has established a diverse set of instruments, programmes and interventions, inclusive of, amongst others, Seed Fund, Grassroots Innovation Programme, Innovation Centres, Technology Stations, Technology Platforms and a set of eight Technology Innovation Clusters.

All of these represent critical interventions in the NSI and national capabilities that are designed to strengthen the ecosystem, promote participation of different segments of society in innovation, and therefore constitute important interventions through which other partners from government, the private sector and the international community can leverage off, in pursuing and executing their mandates.

With all of these investments, the focus for the Financial Year will be more around scaling up these capabilities, and deploying them with greater intensity, to increase the innovation momentum in the country. In this regard, a number of initiatives will be implemented in pursuing the various Performance Indicators.

### Leveraged funding

To effectively leverage funding from third parties for technology development, commercialisation and ecosystem enablement the TIA will adopt a multi-faceted approach. First, it will prioritise the establishment of strategic partnerships with both public- and private-sector entities. This will include government departments, state-owned enterprises, industry leaders and international organisations to pool financial and technical resources toward common innovation objectives.

TIA will also implement co-investment models where funding risks and returns are shared with external partners, thereby encouraging greater private-sector involvement in technology projects. By designing innovation programmes that directly address industry-specific challenges, the TIA can attract sector-focused investments and demonstrate clear value propositions to potential funders.

In addition, the TIA will actively engage with the SETAs to align innovation initiatives with workforce development goals, enabling access to skills development funds. Participating in international networks and consortia can also unlock grants and investment from global innovation funds, particularly for initiatives that align with national or regional priorities.

The TIA will explore and implement innovative funding mechanisms such as challenge funds, public-private partnerships and outcome-based financing

models. These approaches can incentivise third-party investment by linking funding to the achievement of clearly defined milestones in technology commercialisation and capacity-building outcomes.

In so doing, the TIA will establish a dedicated PMO that will host and manage innovation programmes on behalf of other stakeholders in the NSI. This will position the TIA as a trusted custodian for collaborative projects but will also open up avenues for administrative and programme management fees, bolstering the Agency's financial sustainability. By demonstrating strong governance, robust monitoring and measurable impact, the TIA can build long-term confidence among funders and partners, ensuring a sustained flow of resources to support the growth and resilience of South Africa's innovation ecosystem.

## Strategic Innovation Programmes

An SIP refers to a co-ordinated set of initiatives designed to respond to key national or sectoral challenges by fostering the development, commercialisation and deployment of innovative solutions. Such programmes will be framed around thematic priorities and aligned to the Decadal Plan and industry needs. They will be designed around a quadruple helix model and will involve collaboration with a range of stakeholders, including government departments, private-sector entities, academia and civil society. The aim is to leverage resources, expertise and funding to accelerate the uptake of new technologies. This will drive systemic change, ultimately contributing to economic growth, improved service delivery, enhanced competitiveness and the establishment of new industries.

For the TIA, SIPs are not only vehicles for mobilising third-party investment and facilitating technology transfer, but also mechanisms for demonstrating measurable impact, building stakeholder confidence and ensuring the long-term sustainability of innovation initiatives. The key priority focus areas for the year are to develop and establish SIPs for water and sanitation, which confronts one of South Africa's most urgent challenges: to enhance water security, to improve service delivery and to foster greater resilience in the water sector, at the same time aligning with the broader goals of economic growth and societal well-being. Other SIPs planned for the year include: the blue economy innovation and acceleration programme, an EC automotive cluster, a manufacturing cluster,

the Hydrogen Innovation Programme, the Climate Change Programme, the Space Innovation Initiative Phase 2, goat meat commercialisation and casava value-chain initiatives. Then there is the Maritime Industry Programme in collaboration with Transnet, SAIMI, the Maritime Business Chamber; the Cannabis and Hemp-focused Innovation Programme; the Indigenous Plants-based Cosmeceuticals Innovation Cluster and ICT-related emerging technologies such as AI, Blockchain, FinTech and 5G.

## Partners for the Small Business Research & Innovation Programme

The TIA launched the SBRI Programme in 2024 with the aim of promoting the development, commercialisation and deployment of locally developed technologies to respond to the country's service delivery challenges and improve operational efficiency challenges in government. Modelled on and benchmarked against international best practices from other countries that have successfully implemented a similar programme, it aims to pursue specific Strategic Intents of the White Paper. These relate to leveraging public expenditure to promote the procurement of locally developed technologies and, in particular, a key priority of the MTDP relating to 'A Capable State'.

A critical success factor in implementing this programme successfully is to grow the number of government departments at national and provincial levels, along with key SOEs, as partners in the implementation of the SBRI. These efforts will include identifying and partnering with government departments, leveraging procurement expenditure that will be used to invest in the development, commercialisation and deployment of service delivery solutions. In this, the South African Local Government Association (SALGA) and the Department of Cooperative Governance and Traditional Affairs (COGTA) will serve as co-partners in pursuing this objective.

The TIA will proactively engage key government stakeholders at the national, provincial and local levels to ensure the programme's alignment with policy objectives and service delivery priorities. This will be achieved through structured dialogue platforms, joint workshops and regular consultation sessions aimed at identifying shared challenges and co-developing innovation agendas.

The TIA will also leverage existing procurement frameworks to facilitate the adoption of locally developed technologies; in doing so it will work closely with SOEs to design pilot projects and proof-of-concept initiatives that respond to specific operational and service delivery challenges. Establishing clear mechanisms for co-investment and risk-sharing will be crucial to securing buy-in and commitment from these entities.

The TIA will formalise these partnerships by entering into memoranda of understanding or partnership agreements that outline the roles, responsibilities and expected outcomes. These agreements will include provisions for joint funding, technology transfer and the scaling up of successful innovations across multiple departments and SOEs. Where appropriate, the Agency will draw on the technical expertise of the various sector departments to participate in assessments of applications in order to ensure that funded projects are fully aligned with service delivery objectives.

Finally, the TIA will co-ordinate with the SETAs to enhance the technical capabilities and skills required to implement and commercialise innovative solutions. By fostering an environment of collaboration, shared learning and mutual benefit, the Agency will be able to accelerate technology adoption and drive systemic improvements in service delivery.

## Local Partnerships established

The TIA will build on its efforts to develop partnerships with development finance institutions (DFIs), such as IDC, DBSA and NEF. This will serve to build on the efforts already achieved with the Small Enterprise Development and Finance Agency (SEDFA), where efforts are underway to promote the alignment of funding instruments and processes to promote the seamless migration of innovation projects through the funding value chain from early stage to commercialisation and industrialisation. These efforts will be pursued while acknowledging that the various development finance institutions have their specific mandates and have complementary funding instruments and support services that can create better and more improved value propositions for innovators. This project is fundamentally about streamlining interventions in support of innovation in the NSI and responds to a specific Strategic Intent of the White Paper that calls for 'Promoting Funding Efficiencies'.

For this purpose, the TIA will initiate structured dialogue and working groups with these entities to map existing funding instruments, identify overlaps and gaps and develop a shared framework for supporting innovation from early stage through to commercialisation and industrialisation. By establishing joint funding programmes and co-investment platforms, the Agency will seek to promote the alignment of objectives and to streamline funding processes. This will involve harmonising the application requirements, evaluation criteria and reporting standards, thereby reducing the administrative burden for innovators and enabling a more efficient migration of projects through the funding value chain. Regular review sessions and transparent communication between participating DFIs will ensure that the complementary mandates and instruments of each institution are leveraged to their fullest potential.

Furthermore, the TIA will champion the development of a unified digital portal for innovation funding where innovators can access information, apply for support and track progress across multiple funding agencies. This collaborative approach will not only foster greater synergy in the NSI, but also enhance the value proposition for innovators and ensure that public resources are deployed effectively to drive systemic improvements in service delivery and technology adoption.

## International partnerships for a strengthened NSI

International partnerships are an important strategic cross-cutting enabler for TIA in achieving and realising the objectives set out in both Outcome 1 and Outcome 2. By leveraging global partnerships, TIA extends the reach of its mandate through three primary value-drivers:

- 1. Risk-Sharing:** Co-funding models with international agencies reduce the fiscal burden on the South African state.
- 2. Technology Influx:** Facilitating inbound technology transfer to modernise local industries.
- 3. Global Market Integration:** Providing local SMMEs with the "soft-landing" platforms required to compete in international value chains.

TIA has a dedicated International Partnerships function whose role is to identify and facilitate collaboration with international partners in Africa, the Global South and the North, including multilateral organisations. Under this Programme, the TIA will pursue initiatives structured around five Pillars:

1. Leveraging international funding and investments
2. Promoting bilateral collaborative RDI and technology transfer
3. Market access and international networking
4. Capacity-building and knowledge exchanges for the NSI
5. Positioning South Africa's as destination for innovation opportunities

### ***Innovation Agencies for Africa Network***

For the year ahead, TIA will build on its existing portfolio of partnerships within Africa by strengthening the newly established Innovation Agencies in Africa Network in pursuit of the African Union's Science, Technology and Innovation Strategy for Africa 2034. Key initiatives will include deepening engagement among member agencies, expanding joint project opportunities and supporting capacity development across the continent. TIA will continue to promote a strong agenda towards the establishment of the Pan-African Innovation Fund within the context of the Innovation Agencies in Africa Network and foster knowledge exchange to support countries aiming to establish robust innovation agencies. This will complement the efforts of research institutions that are part of the Science Granting Councils Initiative, fostering a more integrated and dynamic NSI.

Beyond the members of the Network, TIA will also strengthen its existing relationship with Egypt through the bilateral partnership with the Academy for Scientific Research and Technology by continued support of the joint innovation and technology development projects to transition into joint commercial ventures and build on the initial efforts with Mauritius to promote joint technology development and commercialisation initiatives.

### ***Promoting South-South Collaboration***

As an important member of the BRICS countries, South Africa has an opportunity to leverage complementary capabilities among partner countries in the South, especially in response to emerging and challenging geopolitics. In this regard, TIA has already commenced strategic relationships with Russia, notably with the Foundation for Assistance to Small Innovative Enterprises, a Russian innovation agency, through a joint call for proposals in various sectors. Both partners will each fund qualifying projects that address specific challenges in four sectors. With the call now closed, the primary focus in 2026/27 will be to finalise the approval processes, secure funding and initiate the selected projects.

In addition to its work with the Foundation for Assistance to Small Innovative Enterprises, TIA has signed a memorandum of understanding with the Skolkovo Innovation Centre to facilitate knowledge exchange on the establishment of technology parks, promote market access for startups between the countries, and build partnerships through a bespoke bilateral Soft Landing Programme.

Furthermore, TIA has signed a Letter of Intent with the Biotechnology Industry Research Assistance Council in India to co-fund and support technologies between the two countries, with an initial focus on the biotech sector, particularly agriculture. This bilateral agreement also aims to promote collaboration between the two ecosystems, including knowledge exchange and the establishment of a soft landing programme for technology entrepreneurs and SMEs.

With regard to China, TIA will build on relationships established with various Chinese institutions to expand initiatives undertaken by the Minister in the context of the Belt and Road Initiative. This includes supporting the establishment of technology parks, promoting knowledge exchange, fostering research and development partnerships and facilitating technology transfer initiatives between universities.

TIA has also commenced work with Cuba to implement a strategic initiative with Biopharma Cuba through issuing a call for funding proposals for innovation and inbound and outbound technology transfer between the countries, following up on the memorandum of understanding signed between TIA and Biopharma Cuba.

## Europe

Over the last few years, TIA has built a portfolio of partnerships with a few countries in Europe. These include Innovate UK, a TIA equivalent entity, the Royal Academy of Engineering and Enterprise Ireland where TIA partners with the Irish Embassy and other local partners to implement the annual Irish Tech Challenge and the University of Basel through the Swiss Tropical and Public Health Institute that serves as the Leading House to promote collaboration across the whole Swiss ecosystem.

Eureka represents a strategic opportunity and platform for South Africa to scale up and elevate its integration with the European community of Innovation Agencies. While South Africa has been a member of Eureka for several years, it has not fully exploited the platform and hence efforts in 2026/27 will be dedicated to establish concrete programmes with selected consortia of countries that demonstrate shared interests with South Africa on appropriate thematic areas. For this purpose, TIA will allocate dedicated funding to ensure that there are concrete programmes initiated in the coming year.

## SA Innovation Week – convening the Quadruple Helix

The TIA Strategic Plan 2025–2030 identifies the launch of the SAIW as an annual premier networking platform and start-up event that brings together all the key stakeholders in one ‘apex event’. This will be a concentrated national moment that pulls together the fragmented energy, talent and capital of the innovation ecosystem into one shared showcase, networking and dialogue platform.

This event will also showcase South Africa’s capabilities to the global community, using an aggregated approach that positions the country’s value proposition holistically, positioning it as a preferred destination for investments in innovation and serving as a magnet for international investors to seek investable innovation opportunities in South Africa. Through this, the TIA will build on its track record of showcasing successful innovations through various events both locally and internationally, such as the Bio Convention (US), the SA Innovation Summit, Africa Arena and other sector-specific events and conferences.

SAIW will bring together the four core pillars or helices of academia, government, industry and community, while international partners will cut across all the pillars to amplify reach and collaboration. It will be convened as a seven-day event that draws on all the stakeholders, with each enjoying a specific value proposition sustained over the duration of the event for maximum participation.

The event will be structured to pursue and realise four specific objectives:

- a) Showcase South Africa’s innovation capabilities across the NSI.
- b) Connect innovators with funders, corporates, policymakers and communities.
- c) Catalyse investments, partnerships and policy reforms.
- d) Build skills, visibility and momentum for inclusive innovation.

## Publications

To strengthen its role in the South African innovation ecosystem, the TIA plans to produce a diverse range of thought leadership publications covering critical innovation topics. These will include:

- a) Policy Briefs providing analyses of and recommendations on national innovation policy, funding models and the integration of locally developed technologies into public-sector service delivery.
- b) Sectoral Innovation Reports that offer in-depth insights into key sectors such as agriculture, energy, communications and digital technologies, highlighting the trends, challenges and opportunities for innovation-driven growth.
- c) Case Studies and Best Practice Guides showcasing instances of the successful implementation and commercialisation of innovative solutions, including lessons learnt from TIA programmes such as SBRI and partnerships with SETAs, DFIs and the private sector.
- d) Annual Innovation Ecosystem Reviews summarising the progress, challenges and future directions for NSI, with contributions from government, industry, academia and civil society.
- e) Successful Innovation Spotlights that profile innovation champions, start-ups or spinouts and SMMEs supported by the TIA, sharing their journeys and the societal impacts of their solutions.

By curating such publications, the TIA will facilitate knowledge-sharing, inform policy and practice and inspire collaboration across the ecosystem, ultimately driving systemic improvements in innovation and service delivery nationwide.

## SET support/Innovation Centres

In order to increase its portfolio of investments in Innovation Centres while expanding its reach to underrepresented communities, the TIA will prioritise inclusive strategies that actively target rural areas, townships and historically marginalised groups. This will involve collaborating with local governments, community-based organisations and educational institutions so as to identify the specific needs, barriers and opportunities unique to these communities. By tailoring funding criteria and support mechanisms, the Agency will ensure that resources are accessible and

relevant, thereby fostering equitable participation in the innovation ecosystem.

Moreover, the TIA will build on its portfolio of investments in the establishment of Innovation Centres to increase and expand the current pool of existing Innovation Centres from 31 to 40 in the current year. This will be pursued through a combination of investments in additional Living Labs, CIEs and an expanded Technology Stations model, in partnership with TVET colleges. All of these will be based on funding partnerships with the corporate sector and government departments such as DSBD and DCDT. The Agency will also partner with the SETAs to establish Centres for Occupational Excellence that target specific competency areas. This will also include the establishment of digital hubs to align the country's skills agenda with the imperatives of the 4IR.

Owing to the significant interest demonstrated by key partners of the TIA's consultative process in increasing its Innovation Centre model throughout the country, the Agency will consider diversifying the types of Innovation Centre that will serve to drive the growth of this portfolio. These include, among others:

- a) **Community Innovation Hubs:** Centres designed to serve as accessible spaces for ideation, prototyping and skills development that will be equipped with digital resources and provided with mentorship programmes tailored to local challenges.
- b) **Sector-specific Living Labs:** Facilities that encourage co-creation and experimentation in sectors such as agriculture, healthcare, renewable energy or education, and which will respond directly to pressing needs in underrepresented regions.
- c) **Centres for Social Innovation:** Spaces dedicated to nurturing solutions that tackle social issues, promote entrepreneurship and drive community upliftment.
- d) **Mobile Innovation Units:** Deployable labs or workshops that bring technology and training to remote or underserved areas, ensuring broad-based access to innovation infrastructure.
- e) **Digital Skills and 4IR Readiness Centres:** Hubs focused on enhancing digital literacy and preparing the workforce for the 4IR, particularly among youths and women in marginalised communities.

By diversifying the types of innovation centre and embedding them in the fabric of underrepresented communities, the TIA will be able to drive inclusive growth, unlock local talent and accelerate the development of contextually relevant solutions across South Africa.

## SMMEs and co-operatives receiving SET and economic development support

To provide technical support and enterprise development support to 4,000 SMMEs and co-operatives, the TIA will leverage its TSP alongside other scientific infrastructure such as the Technology Platforms, all these are spread across various parts of the country. This will include scaling up the capacity and geographic reach of technology stations, ensuring that they are accessible to SMMEs and co-operatives in both urban and rural communities. These stations offer specialised services such as product development, process optimisation, prototyping, testing and quality assurance that are tailored to the unique needs of participating enterprises.

The TIA will also implement targeted outreach initiatives to identify SMMEs and co-operatives that can benefit most from these services, prioritising those from underrepresented and marginalised communities. By partnering with TVET colleges, universities, SETAs and industry bodies, the Agency will facilitate technical workshops, mentorship sessions and business development support programmes.

These interventions will be complemented by facilitating access to digital hubs and Centres for Innovation and Entrepreneurship that will provide holistic enterprise development support that enhances both technological capability and business acumen.

Regular monitoring and feedback mechanisms will be established to track progress, measure impact and refine support strategies continuously. By embedding technology stations and scientific infrastructure within collaborative networks, the TIA will ensure that 4,000 SMMEs and co-operatives receive the technical assistance and enterprise development support necessary to sustain their growth and competitiveness in the innovation ecosystem.

In addition to offering technical and enterprise development support, facilitating market access for SMMEs and co-operatives is vital to their growth and sustainability. The TIA will establish dedicated Market Access Platforms, envisaged to be situated within its Commercialisation Enablement Framework, that connect local enterprises with buyers, distributors and partners both within South Africa and internationally. Working with the dtic and SEDFA, the TIA will launch two key initiatives to accelerate commercialisation and international market access. These are:

- A Venture Builder Programme that will include business development support to start-ups (pre-revenue) and IP harvesting from science councils and universities in order to develop into commercial ventures.
- An Export Readiness Programme, that is, an international trade facilitation support programme targeted at technology-based start-ups.

The TIA will establish a programme to enable enterprises to navigate international regulations, packaging standards and logistics, while also providing guidance on securing the necessary certifications. The Agency will also collaborate with trade missions, embassies and chambers of commerce to create pathways for international partnerships and business development opportunities. Offering access to market intelligence, translation services and cross-border e-commerce solutions would also empower SMMEs and co-operatives to compete and thrive in global markets.

Finally, leveraging digital marketing campaigns and social media outreach has the ability to raise the visibility of local products and services, attracting interest from international buyers and investors. By integrating these market access interventions with existing technical support programmes, the TIA will ensure that SMMEs and co-operatives are well positioned to expand beyond local markets and achieve sustainable international growth.

## Grassroots innovators

To increase its pipeline of grassroots innovators from the current 290 by an additional 100 targeted for the year, the TIA will employ a multifaceted strategy that leverages partnerships, outreach and capacity-building initiatives. First, the Agency will intensify its collaboration with its existing partners such as the SETAs, government departments and the private sector and expand joint programmes to target new regions and sectors with untapped innovation potential. By working closely with local civil-society organisations, particularly those embedded in rural and marginalised communities, the Agency will identify and nurture promising innovators who may otherwise be overlooked.

Second, scaling up the number and geographic spread of Innovation Centres, Living Labs and digital hubs will provide accessible entry points for grassroots innovators. These centres should offer tailored mentorship, prototyping facilities and business development support which will enable innovators to refine their solutions and progress towards commercial viability. Deploying mobile innovation units to remote areas will broaden the reach of the Agency's support further, which will in turn ensure inclusivity and diversity in the innovation pipeline.

In addition, the TIA will implement a targeted outreach and communication strategy that uses local media, community networks and digital channels to raise awareness of the available support and to encourage applications. Hosting innovation challenges, roadshows and workshops could engage potential innovators actively and lead to their being onboarded. The use of Implementing Partners to manage the recruitment, support and monitoring processes will be crucial to maintaining quality and relevance across a growing and widely distributed portfolio.

## Beneficiaries accessing support with SETAs, government entities, the private sector and civil society

To achieve a target of 10,000 beneficiaries accessing support from SETAs, government entities, the private sector and civil society, a co-ordinated and multi-pronged approach is essential. This will involve:

- a) expanding collaboration with all 21 SETAs, the National Skills Fund and relevant government departments to ensure that skills development and mentorship opportunities reach a wide audience;
- b) engaging the private sector, particularly companies with significant R&D budgets and Enterprise and Supplier Development Programmes, to broaden the support base;
- c) strengthening ties with active civil society organisations, especially those operating in rural and marginalised communities, to amplify their reach and impact;
- d) enhancing education and skills development by digitalising tailored accredited short learning programmes. These will be piloted in support of TVET colleges and universities and should lead to the expansion and the accessing of high-end skills, the promotion of apprenticeship programmes and the enhancement of the 'train the trainer' programme in technology integration for future skills. Both undergraduate and post-doctoral students will be funded or co-funded through TIA programmes aimed at increasing competitiveness and new industry development while also creating career development pathways for scientists and engineers. The Agency will also enhance skills development initiatives that promote innovation and enterprise development:
  - Work-integrated learning (WIL): The Agency will work towards incorporating internships, graduate training and other WIL opportunities into academic programmes. This will enable both interns and graduates to gain practical experience at and build connections with potential employers.
  - Strengthen technical and vocational skills: TVET graduates must be equipped with the necessary technical and vocational skills that are relevant to industry requirements. This should include hands-on training in machinery operation, construction techniques and software applications.

- e) accelerating the establishment of new Innovation Centres and digital hubs, particularly in underrepresented areas. These centres could serve as focal points for training, mentorship and access to digital infrastructure, ensuring that beneficiaries receive the kind of holistic support that is tailored to their needs;
- f) developing a comprehensive communication plan to raise awareness of the available support, using local media, community networks and digital platforms. This should include hosting roadshows, workshops and mobile innovation units in underserved areas so as to engage potential beneficiaries directly and to facilitate enrolment; and
- g) deploying a network of implementing partners to manage outreach, onboarding and ongoing support for beneficiaries. This approach will ensure local relevance and allow for tailored interventions that cater to the specific challenges of each community.

By harnessing the collective capacity of SETAs, the government, the private sector and civil society, and by deploying targeted locally relevant interventions, it is feasible to reach 10,000 beneficiaries.

## Building black and women fund managers to accelerate start-up and spinout formation

The implementation of the Fund-of-Funds model is a strategic response to the need for NSI financial sustainability. By establishing the Fund of Funds Office in 2026/27, TIA transitions from a sole primary funder to a sophisticated market-enabler in the Consolidate Phase of the TIA 2.0 Corporate Strategy. Specialised investment expertise has been recruited, with the next step the finalisation of governance frameworks for co-investment. This structural readiness is what enables the achievement of output indicator 2.1 (R325m leveraged) and output indicator 2.12 (six start-ups and spinouts supported through fund managers), ensuring that TIA acts as a catalyst for venture capital participation in de-risking South African innovations.

The TIA has introduced a dedicated funding instrument through the establishment of the Fund-of-Funds Model. Through this, the Agency will build on the baseline funding provided by the DSTI under the Innovation Fund. It has identified and onboarded selected fund managers as part of the initial phase of the launch of the programme. The call for proposals issued by the TIA in the 2025/26 Financial Year showed that there was a significant demand for this type of instrument to grow and transform the Venture Capital ecosystem.

Efforts at growing this programme into the future will entail a multifaceted approach that includes targeted funding, capacity-building, ecosystem integration and co-investment schemes specifically tailored to black and women fund managers. These will aim to ensure that these groups have equitable access to capital for both their operations and the start-ups they support.

This funding will be complemented by preferential procurement policies and incentives for private-sector partners to collaborate with these fund managers.

The TIA will also develop structured mentorship and skills development programmes in partnership with SETAs, established venture capitalists and industry experts. These initiatives will focus on strengthening the investment, management and operational capabilities of black and women fund managers, while facilitating peer-to-peer learning and exposure to best practices. In addition, the Agency will facilitate access to corporate networks and enterprise development programmes, thereby expanding the pipeline of investment-ready start-ups and spinouts managed by these fund managers.

The TIA will also foster collaboration between fund managers, the government, the private sector and civil society through regular forums, workshops, and knowledge-sharing platforms. This will help black and women fund managers to build strong networks, identify co-investment opportunities and participate in technology transfer and commercialisation initiatives.

## 14.4 Resource considerations

**Table 20: Enabling the innovation ecosystem: expenditure estimates**

	2026/27 (R'000)	2027/28 (R'000)	2028/29 (R'000)
<b>Income</b>	<b>602,619</b>	<b>590,445</b>	<b>625,906</b>
MTEF ring-fenced	53,503	55,923	58,433
MTEF baseline	67,605	31,871	–
Other income (specific contracts, interest and royalties)	481,510	502,651	567,473
<b>Operational expenditure</b>	<b>31,610</b>	<b>42,020</b>	<b>48,671</b>
Support and infrastructure costs	5,302	5,869	12,520
Human resources	26,308	36,151	36,151
<b>Investment expenditure</b>	<b>571,009</b>	<b>548,45</b>	<b>577,236</b>
MTEF allocation	474,440	441,450	451,414
Specific contracts	96,569	106,975	125,821

## 15. A MORE CAPABLE, SCALED-UP, AGILE AND SUSTAINABLE TIA SUPPORTING A CAPABLE STATE

Outcome 3 will focus on capacitating the TIA towards greater efficiency and an increased impact. The broad framework developed towards TIA 2.0 informs this outcome. The roadmap towards TIA 2.0 involves moving through three phases: Consolidate, Grow and Scale. The Consolidate phase is aimed at capacitating the Agency optimally towards growth and ultimately becoming self-sustaining and less dependent on the fiscus.

This outcome also seeks to support the state in becoming more efficient by developing innovations that improve service delivery and enhance the state's capacity.

### 15.1 Outcome 3: A more capable, scaled-up, agile and sustainable TIA supporting a capable state

Outcome 3 seeks to provide an effective and efficient enabling environment in which the TIA is able to realise its strategies and transition to a TIA 2.0 by providing systems, processes and people and by prioritising appropriate resources (human and financial) in accordance with good corporate governance, legislative requirements and risk management practices. The design and prioritisation of Outcome 3 is also directly informed by the MTDP's cross-cutting priority of building a Capable, Ethical, and Developmental State by deploying cutting-edge innovations in government departments with the aim of improving their service delivery to citizens.

The APP focuses on output-level targets, a necessary pathway to the outcomes and impacts defined in the 2025-2030 Strategic Plan. The contribution pathway logic model depicted below demonstrates how the planned 2026/27 outputs facilitate the achievement of the Strategic Plan's pre-set Outcome 3 and outcome targets with respect to a more capable, scaled-up, agile and sustainable TIA supporting a capable state.

**Table 21: Contribution pathway logic model for Outcome 3**

Component	Content / Strategic Mapping
Strategic Context	National Priority: Building a capable, ethical and developmental state.
Activities	Strengthening leadership capacity, skills and systems; strengthen control environment; implementing a micro-organisational design; undertake an integrated work study (organisational design, digital maturity and business process reviews); continue implementation of SBRI and TADF programmes; and transitioning to a Fund-of-Funds model to ensure long-term operational sustainability.
Outputs	Improved institutional capacitation towards supporting delivery of TIA 2.0 Improved investment decision turnaround time for funding applications Income raised to reduce reliance on MTEF through royalties, sales and exits from commercialised innovations Income raised to reduce reliance on MTEF via funding managed through partnerships Measures introduced towards digital transformation and business optimisation Innovations that improve operations in government in support of a capable state Innovations that improve service delivery in support of a capable state A positive TIA brand
Outcome	<b>Outcome 3: A more capable, scaled-up, agile and sustainable TIA supporting a capable state</b>  A more responsive and capable TIA; innovation in support of a capable and developmental state.
Impact	<b>Improving the quality of life of all South Africans through innovation</b>  Capable State: Improved service delivery.

## 15.2 Planned outputs and output targets

First, the TIA will strengthen its internal control environment to prevent adverse audit findings: adequate management of financial and performance information is required for it to attain positive audit outcomes. Second, the TIA 2.0 strategy requires the Agency's organisational structure to be transformed, a process that will require the upskilling of personnel and the filling of critical vacant positions if optimal organisational performance is to be attained. The Agency's plans to scale up its performance and increase its impact require it to be properly capacitated.

Outcome 3 responds to MTDP priority 3: A more capable, scaled-up, agile and sustainable TIA supporting a capable state. This outcome focuses on partnering with public-sector stakeholders (government departments, municipalities, government agencies, etc.) to diffuse and launch innovations and technologies that improve operations and service delivery. This initiative is aimed at contributing to the development of a capable state.

The Agency seeks also to improve the collection of royalties and aims to form partnerships that pool funds in support of an entity that is both self-sustaining and less reliant on government allocations. The development of a new TIA 2.0 corporate strategy, business model, operating model and organisational structure is aimed at ensuring that the Agency becomes effective and efficient in delivering on its mandate in support of a capable state.

Moreover, the Consolidate phase of the broad TIA 2.0 framework requires the Agency to ‘fix’ its ecosystem failures in order to build a sound base for the grow phase. Efficient turnaround times for investment decisions are critical to this process as they will enable overall efficiency in the Agency.

The revenue generated from royalties and exits, together with the total rand value managed from partnerships, will be a measure of the Agency’s drive towards sustainability: it will be demonstrated by making profitable investments and being able to leverage funding from entities that share similar objectives.

The TIA’s output targets in support of delivering on enabling and strengthening the innovation ecosystem are presented in Table 22 and 23.

**Table 22: Administration outputs, performance indicators and targets**

Outputs	Output indicators	Audited actual performance			Estimated performance	MTEF period targets		
		2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
3.1 Improved institutional capacitation towards supporting delivery of TIA 2.0	Percentage of approved funded positions filled annually	New indicator	New indicator	New indicator	85%	90%	90%	90%
3.2 Improved investment decision turnaround time for funding applications <sup>9</sup>	Investment decision turnaround time for funding applications	New indicator	New indicator	New indicator	New indicator	70% of applications assessed within the targeted time	75% of applications assessed within the targeted time	85% of applications assessed within the targeted time
3.3 Income raised to reduce reliance on MTEF	Total rand value of royalties, sales and exits from commercialised innovations	New indicator	R43.92m	R31.17m	R20m	R25m	R35m	R40m
3.4 Income raised to reduce reliance on MTEF	Total rand value managed from partnerships	New indicator	New indicator	New indicator	R300m	R400m	R400m	R450m
3.5 Measures introduced towards digital transformation and business optimisation	Number of new business processes optimised and digitalised	New indicator	New indicator	New indicator	3	4	4	4

<sup>9</sup> The time frame in each target reflects the time taken at the TIA in line with its assessment and approval processes and does not include the time that potential applicants may spend in developing and refining their applications.

Outputs	Output indicators	Audited actual performance			Estimated performance	MTEF period targets		
		2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
3.6 Innovations in support of a capable state	Number of innovations that improve operations in government	New indicator	New indicator	New indicator	–	1	2	3
3.7 Innovations in support of a capable state	Number of innovations that improve service delivery	New indicator	New indicator	New indicator	10	15	20	25
3.8 A positive TIA brand	Increased TIA brand equity	New indicator	New indicator	New indicator	Brand awareness level averaging between 8 and 10	Brand awareness level averaging between 8 and 10	Brand awareness level averaging between 8 and 10	Brand awareness level averaging between 8 and 10

**Table 23: Administration output indicators and annual and quarterly targets**

Output indicators	Annual target	Q1	Q2	Q3	Q4
3.1 Percentage of approved funded positions filled annually	90%	No target	No target	No target	90%
3.2 Investment decision turnaround time for funding applications	70% of applications assessed within targeted time	No target	70% of applications assessed within targeted time	No target	70% of applications assessed within targeted time
3.3 Total rand value of royalties, sales and exits	R25m	No target	No target	R5m	R20m
3.4 Total rand value managed from partnerships	R400m	No target	R50m	R150m	R200m
3.5 Number of new business processes digitalised	4	No target	No target	1	3
3.6 Number of innovations that improve operations in government	1	No target	No target	No target	1
3.7 Number of innovations that improve service delivery	15	No target	No target	5	10
3.8 Increased TIA brand equity	Brand awareness level averaging between 8 and 10	No target	No target	No target	Brand awareness level averaging between 8 and 10



## 15.3 Explanation of planned performance

The TIA will pursue the realisation of the set objectives under Outcome 3 through several specific interventions.

### Operational Capacity and TIA 2.0 Readiness

Through the implementation of the TIA 2.0 Corporate Strategy aimed at the recalibration of the Agency towards greater efficiency, the organisation's capacity will be strengthened by sourcing new relevant skills and the upskilling of existing employees, amongst other initiatives. To ensure the successful execution of the TIA 2.0 Corporate Strategy, the Agency will implement an Operational Readiness Framework during the 2026/27 financial year in support of transitioning to a digitally-led operating model. This framework directly addresses identified internal capacity constraints through three strategic pillars:

#### 1. People (Capacity, Capability and Culture):

- Undertake a skills gap analysis to ensure the workforce is equipped for the technical demands of curated portfolio management.
- Transitioning from legacy roles to future-fit capabilities by finalising the Micro-Organisational Design.
- Fill critical vacant funded positions, particularly at the executive level.
- Implementing a culture re-engineering program aligned with TIA 2.0 values.

#### 2. Processes and Systems (Digital Transformation and Efficiency):

- Modernising ICT infrastructure based on a third-party IT Digital Maturity Assessment to reduce turnaround times.
- Overhauling internal procedures and policies.
- Automate and digitalise core workflows, specifically investment applications and performance monitoring.

#### 3. Positioning (Stakeholder Trust and Brand Equity):

- Execute a dual-track Integrated Communications Strategy to strengthen trust with stakeholders.

The planned performance in 2026/27 will entail building the Agency's operational capacity in preparation for a fit-for-purpose TIA 2.0. The Agency will undertake a 12-month integrated work study conducted by expert service providers covering organisational design, digital maturity and business process reviews. Success will be monitored at a management indicator level through specific benchmarks: system uptime, policy review cycles, employee engagement scores and stakeholder satisfaction indices.

### Reduce reliance on Medium-Term Expenditure Framework

The TIA's scaling and sustainability drive is aimed at ensuring that it reduces its reliance on the MTEF. The Agency will raise funding in the first instance through establishing partnerships with various players in the NSI that share similar objectives. The amount of funds derived from commercialised innovations includes the tracking of royalty payments, revenue generated through the sales of TIA-supported products, processes and services; and redemptions from exits is the second mechanism the Agency will use to raise funding. Reducing its reliance on fiscal allocations will signify that the organisation is self-reliant and is operating at a level at which its investments and programmes have a substantial impact on the country's socio-economic landscape.

Over the medium term, TIA is assessing the feasibility of transitioning from its current Schedule 3A classification to a Schedule 3B National Government Business Enterprise. This is aligned with the evolving operating model and the strategic intent to strengthen the Agency's commercial orientation. The strategic rationale for this consideration is namely due to reducing the Agencies dependency on the National Revenue Fund, whilst a Schedule 3B classification allows for increased use of self-generated revenue and diversified funding sources, enabling a progressive shift away from reliance on fiscus-based transfers. Currently, there exists several limitations regarding the deployment of financial and nonfinancial instruments, partnership formation, and transaction agility. As TIA intensifies its focus on investment, commercialisation, and revenue-generating instruments, the governance and operating model of a Schedule 3B entity offer a more suitable platform from which to deliver on its mandate.

While the long-term repositioning unfolds, TIA will actively pursue standing exemptions under the PFMA and Treasury Regulations to enhance responsiveness and operational agility within its current Schedule 3A status. The purpose of these standing exemptions will support operational efficiency by enabling:

- Accelerated investment decisionmaking.
- Streamlined procurement processes adapted to innovation funding contexts.
- More flexible financial delegations aligned to investment portfolios.
- Faster turnaround times in structuring funding partnerships and transactions.
- Expanded use of financing instruments across the innovation value chain.

These exemptions are critical interim mechanisms that allow TIA to perform with greater agility while still maintaining full compliance within the Schedule 3A framework.

## Improve achievement of positive audit outcomes

The TIA continues to strengthen its financial governance framework through a comprehensive set of internal control, oversight and compliance measures that are designed to enhance accountability and improve audit outcomes. Given the recent external audit findings, the Agency has recognised the need to improve its control environment. As per the five-year strategic plan, the intention is to obtain a clean external audit opinion annually.

The implementation of the Internal Control Action Plan remains central to this effort, with progress being monitored continuously and reviewed quarterly by both Internal Audit and the Audit and Risk Committee, with independent assurance from the Agency's Internal Audit function. Furthermore, the Agency has an audit tracking mechanism to ensure that findings are appropriately resolved and reported to its senior management and the Board.

Programme audits, which cover both internal and externally hosted initiatives, are conducted to ensure alignment with the requirements of the PFMA, internal policies and sound financial management practices. Where deficiencies are identified, targeted corrective actions will be implemented promptly, supported by strengthened risk management processes, robust supply chain controls and proactive fraud- and corruption-prevention mechanisms, including whistleblower protection and regular ethics training.

In parallel, the TIA has intensified its organisational performance oversight to ensure that good financial governance is reinforced by strong institutional capability. The Board plays a more active role in monitoring performance trends, with early-warning mechanisms and catch-up plans being in place for those KPIs requiring intervention. Structured Performance Improvement Plans are being used to embed a culture of accountability among the Agency's staff members; these plans are supported by measurable standards, scenario-based training for managers and the clear documentation of financial decisions. Executive management and the Board will ensure greater transparency through regular engagement with the DSTI and the Parliamentary Portfolio Committee.

Collectively, these practical measures enable the Agency to safeguard public resources, strengthen stewardship and entrench the discipline required to achieve clean and sustainable audit outcomes consistently.

## Investment decision turnaround times

The TIA will put additional measures in place to promote improved turnaround time for decision-making, building on the gains of the previous financial year. New approaches will be incorporated, including the use of experts and automation through the Enterprise Resource System (ERS), which has begun in earnest. The Agency has also re-examined its historical data pertaining to turnaround time and has amended its targets accordingly based on actual achievements.

A key initiative in remedying slow investment decision turnaround times will be a comprehensive review of the Agency's business processes and the implementation of the necessary improvement measures. This business process review is not focused exclusively on improving turnaround times, but will serve as a critical intervention in a multi-faceted approach to speed up the time taken to make investment decisions.

Additional measures that will be improved upon include the following specific initiatives:

- Implementing a pre-investment application-building instrument that will improve the quality of applications to ensure their smooth and efficient processing.
- Introducing a deal team approach to due diligence and investment assessment, thus minimising the time lag between the various due diligence components (legal, finance, IP, technical and commercial).
- Expanding the current database of external experts and increasing its adoption internally.
- Implementing a Post-Investment Management Structure as part of the organisational realignment towards TIA 2.0 in order to enable a clear segregation of duties among portfolio managers.
- Increasing the use of the existing Enterprise Resource Management System (ERMS) and expanding it to include the growing pool of TIA-funded stakeholders.

- Disseminating the TIA's investment process handbook, guidelines and frequently asked questions via the Agency's website so as to enable applicants to understand the Agency's processes and expectations, including its investment appeals process guide.

## Improving TIA's brand equity

To increase the TIA's brand equity, the services of a public relations and strategic communications agency will be sought. In addition, the TIA 2.0 strategy will focus on brand positioning. The TIA 2.0 process will focus specifically on growing and deepening the strength of the TIA brand in the broader innovation ecosystem with a sharp focus on shareholder and stakeholder confidence, the affinity of the brand with its strategic partners and the beneficiaries of its work. The Agency is a stakeholder-, beneficiary- and partner-centric organisation. The services of a public relations agency will be required to develop and execute a detailed public relations and strategic communication strategy to position the agency and enhance the visibility of the brand. The strategy will include but will not be limited to print, social media, online media and broadcast media (radio and television).

## Innovation for service delivery

The development and deployment of innovations that improve operations in government departments and those that improve service delivery constitute significant efforts by the TIA to contribute to an important priority of the MTDP, that is, 'Building a capable, ethical and developmental state', and the DDM.

For this purpose, the TIA launched the SBRI Programme in 2024 with the aim of promoting the development, commercialisation and deployment of locally developed technologies to resolve the country's service delivery challenges and improve operational efficiency challenges in government. Modelled on and benchmarked against international best practices from other countries that have successfully implemented a similar programme, it aims to pursue the specific Strategic Intent of the White Paper, that is, 'using public procurement to further innovation', and therefore leverage public expenditure to promote the procurement of locally developed technologies.

The Agency's SBRI programme complements the DDM because it turns the DDM's place-based One Plan priorities into a structured innovation pipeline that can rapidly generate, test and scale solutions, especially those able to resolve service delivery and local economic development (LED) challenges.

In this, the TIA will build on its existing portfolio of investments in technology solutions for service delivery, which also includes outputs from a number of service delivery interventions implemented on behalf of the DSTI. These include, among others, the Technology Acquisition and Deployment Fund (TADF), the Validation and Verification of Service Delivery Programme and the Grassroots Innovation Programme.

During the financial year, the TIA will solicit applications in three focus areas:

- a) Technologies and products for enhanced service delivery in areas of water and sanitation; roads and transport; energy and electricity; waste management; safety and security, among others.
- b) Decision support tools geared towards improving decision-making by government departments and their entities, including government at district and local municipality levels.
- c) Innovations to improve operational efficiencies in government departments through digital transformation interventions.

In implementing these initiatives, the TIA will build partnerships with relevant government departments at all levels, identify challenges and collaborate in creating test-bed opportunities for matured technologies, leading to the development of minimum Viable Products and market uptake or products for deployment. Key among these partners are SALGA, the Department of Cooperative Governance (DCG) and the SETAs such as the LGSETA for innovation and skills development.

## 15.4 Resource considerations

**Table 24: Support Division: expenditure estimates**

	2026/27 (R'000)	2027/28 (R'000)	2028/29 (R'000)
<b>Income</b>	<b>71,332</b>	<b>71,759</b>	<b>73,952</b>
MTEF ring-fenced	–	–	–
MTEF baseline	17,169	17,596	6,276
Other income (specific contracts, interest and royalties)	54,163	54,163	67,676
<b>Operational expenditure</b>	<b>71,332</b>	<b>71,759</b>	<b>73,952</b>
Support and infrastructure costs	26,736	27,163	25,309
Human resources	44,596	44,756	48,643

## 16. INSTITUTIONAL RESOURCE CONSIDERATIONS

### Operational costs

Support and infrastructure cost allocations have been prepared using a zero-based budgeting process that focuses on improving the efficiency ratio in the TIA through cost-saving initiatives. Human resource costs have been budgeted for based on key vacancies being filled. A continuing focus remains on improving the efficiency ratio. In line with the National Treasury spending review recommendations, approximately 10% of funding has been directed at operational costs.

### Investment funding

Given the current economic conditions, investment funding remains a challenge as applications for funding far exceed the funding available. This is mitigated to some extent by leveraging funds for projects from other parties, including the co-funding of projects.

### Other income

Funding is an important factor that enables the TIA to enhance its de-risking role as the primary funder of early-stage technology innovations in the NSI. To this end, the Agency pursues strategies that strengthen its funding base, especially under the current constrained fiscal conditions. The Agency has shown that it has the ability to implement specific programmes adequately. As a result, it has seen an increase in the number and value of specific contracts with the DSTI.

The TIA will continue to focus on obtaining other sources of income to support its programmes and project funding initiatives, including remedying the significant underfunding of its commercialisation mandate. This will be done through contract-specific funds obtained from the DSTI, including the Innovation Fund, and also from other government institutions and through partnerships with the public and the private sectors (using the Hub and Spoke model).

Maturing technology development projects are expected to yield financial returns in the form of royalties, loan repayments and other forms of commercialisation support. With effective working capital management, the Agency aims to maximise the interest earned on cash reserves deposited with the Corporation for Public Deposits at the South African Reserve Bank. The returns generated will be used to fund innovation initiatives.

**Table 25: TIA budget allocation for the MTEF period 2026/27 to 2028/29**

	<b>Budget 2026/27 R'000</b>	<b>Budget 2027/28 R'000</b>	<b>Budget 2028/29 R'000</b>
<b>Administration</b>	<b>207,837</b>	<b>215,297</b>	<b>228,304</b>
Support and infrastructure cost	52,337	54,954	57,702
Human Resources	155,500	160,343	170,602
<b>Investments</b>	<b>821,593</b>	<b>911,778</b>	<b>1,049,941</b>
<b>Bio-economy</b>	<b>164,030</b>	<b>228,778</b>	<b>292,827</b>
Ringfenced	129,030	190,278	201,616
Specific Contracts	35,000	38,500	91,211
<b>Technology stations</b>	<b>99,111</b>	<b>103,902</b>	<b>108,811</b>
Ringfenced	45,607	47,979	50,378
Specific Contracts	53,504	55,923	58,433
<b>Commercialisation</b>	<b>86,554</b>	<b>134,574</b>	<b>179,878</b>
<b>Innovation Enabling</b>	<b>471,898</b>	<b>444,524</b>	<b>468,425</b>
Baseline	419,236	386,028	391,211
Specific Contracts	52,662	58,495	77,214
<b>Total Expenditure</b>	<b>1,029,430</b>	<b>1,127,075</b>	<b>1,278,245</b>
<b>Total funding received</b>	<b>1,029,430</b>	<b>1,127,075</b>	<b>1,278,246</b>
Allocation from DSI	458,756	531,762	555,633
Baseline	210,081	219,581	229,438
Bio-economy	195,171	256,258	267,762
Technology stations	53,504	55,923	58,433
Additional income target	531,569	545,475	667,032
Other Income	25,000	35,000	40,000
Interest	14,105	14,838	15,580
Surplus/(deficit)	-	-	-

## 17. UPDATED KEY RISKS AND MITIGATION FROM STRATEGIC PLAN

Stemming from the Strategic Plan, the TIA employs a robust, systematic process at both the operational and the strategic level. This process is integrated into and central to its strategic planning process. The methodology applied is derived from the prescripts of the Committee of Sponsoring Organisations of the Treadway Commission: Enterprise Risk Management Integrated Framework, ISO31000 Risk Management, the National Treasury's Public Sector Risk Management Framework, the Institute of Risk Management South Africa's risk principles and the TIA's own Enterprise Risk Management Policy. The Agency manages its risks at the strategic, operational and project levels.

Table 26 outlines the key risks relating to the TIA's outcomes, together with identified risk-mitigation measures.

**Table 26: Strategic risks and mitigation plans (2025–2030)**

Outcome	Key risk	Risk mitigation
Intensified commercialised innovations	Inadequate internal commercialisation capacity and capability.	Leverage implementing partner model and expand the external experts' database to enhance and supplement internal capacity and capabilities.
	Low market uptake of and access to funded innovations.	Build and develop investment portfolio and technologies in partnerships with industry (market-led investment strategy).
	Insufficient support tools for commercialisation.	Develop and implement comprehensive support tools to facilitate the commercialisation process.
	Lack of follow-on funding for entities may prevent them from advancing to the commercialisation stage.	Develop and pilot a Venture Builder business model.
Enabling and strengthening of the innovation ecosystem	Lack of acceptance and recognition of the TIA's role by stakeholders in the innovation ecosystems.	Foster robust and collaborative relationships with key stakeholders and partners. Revise the TIA's branding and marking strategy.
	Lack of capacity to drive thought leadership.	Build business intelligence capabilities in the TIA.
	Insufficient transformation and inclusivity.	Launch and implement Transformation Programmes for Youths, Women and Persons with Disabilities.
A more capable, scaled-up, agile and sustainable TIA	Demand for technology development funding emanating from the investment pipeline may exceed available funding resources (financial sustainability).	Enhanced revenue and funding model that drives the viability and sustainability of the TIA.
	Organisational design may not support the delivery of the strategy.	Review the operating model and organisational design and implement necessary measures. Expansion and use of the external experts' database to enhance and supplement internal capacity and capabilities.
	Inability to deliver services in an agile and effective manner.	Leverage AI, digitalisation and automation to enhance the delivery of services, ensuring that the TIA operates with greater agility and effectiveness.



# **PART D**

## **TEACHNICAL INDICATOR DESCRIPTIONS**

## Outcome I: Intensified commercialised innovations in support of inclusive economic growth, sustainable development and transformations

Indicator title	I.1 Number of projects involving industry being executed
Definition	Number of collaborative projects or businesses, or initiatives or programmes, with the private sector in developing and/or commercialising technology. The collaboration can be either financial or non-financial. The joint collaborations may involve publicly funded research organisations (inclusive of publicly funded higher education institutions and science councils) and industry
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Projects or businesses, or initiatives or programmes, have existing or new partnerships with the private sector
Disaggregation of beneficiaries	Women: $\geq 30\%$ Youths: $\geq 20\%$ Persons with disabilities: $\geq 10\%$
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Quarterly
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Innovation Enabling

Indicator title	I.2 Number of successfully diffused technologies
Definition	Number of technologies that have been introduced into the market (community structures, SMMEs, co-operatives and other business formations) for social gain, either directly or indirectly (products, processes or services)
Source of data	Programme or project databases Reports Contracts or agreements Invoices Testimonies Publications
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Availability and approval of funding Innovation outputs developed successfully to demonstration stage (or higher) where there is a market for social diffusion A diffused technology can be counted more than once only if a derivative, modified or customised version of the original technology is diffused
Disaggregation of beneficiaries	Women: $\geq 30\%$ Youths: $\geq 20\%$ Persons with disabilities: $\geq 10\%$
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Quarterly
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Commercialisation

Indicator title	1.3 Number of products launched
Definition	The number of products that have been successfully launched into the market by entrepreneurs, start-ups or SMMEs
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	The product is fully developed and ready for market entry A product launched can be counted more than once only if a derivative modified or customised version of the original product is launched
Disaggregation of beneficiaries	Women: $\geq 30\%$ Youths: $\geq 20\%$ Persons with disabilities: $\geq 10\%$
Spatial transformation (DDM)	To be informed by and aligned with the priorities of government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Quarterly
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Commercialisation

Indicator title	1.4 Number of successfully demonstrated bio-based technologies
Definition	Bio-based technologies, products or services that have reached demonstration stage in agriculture, health, industrial biotechnology, IKS and other bio-based domains. Bio-based refers to a technological application that uses biological systems, living organisms or derivatives of them to make or modify products or processes. These include diagnostic kits, bio-processes, technology packages and allied technological applications
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Availability and approval of funding
Disaggregation of beneficiaries	Women: $\geq 30\%$ Youths: $\geq 20\%$ Persons with disabilities: $\geq 10\%$
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Quarterly
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Bio-economy

Indicator title	1.5 Number of IP and knowledge-based innovation products produced
Definition	Knowledge or innovation product: the output (discrete intermediate steps or finalisation) of knowledge or innovation (process, market, product or improved service delivery) that is quantifiable (e.g., invention disclosure, patent, prototype, technology transfer package, technology demonstrator, plant-breeders' rights). It should be noted that different technologies and processes have slightly different phases, conventions and names
Source of data	Programme or project databases Register of knowledge and innovation products Quotations or invoices (scope of work) Reports Acceptance of work/delivery note/project sign-off
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Researchers lodge their IP outputs through formal channels in the Office of Technology Transfer of the university or science council as per the Intellectual Property Rights Act. Publicly funded research organisations have existing frameworks to categorise the different types of knowledge-based product
Disaggregation of beneficiaries	Historically disadvantaged individuals: ≥80% Women: ≥45% Youths: ≥40% Persons with disabilities: ≥3%
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Quarterly
Desired performance	Meet or exceed the target set
Indicator responsibility	All core Executives

Indicator title	1.6 Allocation of funds to underserved provinces
Definition	Available investment funds directed to support innovation projects and initiatives in underserved provinces
Source of data	Programme or project databases Agreements or contracts
Method of calculation	Simple count of the value of signed agreements entered into with recipients (i.e., investees) in underserved provinces divided by (the total value of uncommitted funds at the beginning of the financial year minus the total value of unspent funds at the end of the financial year) as a percentage Uncommitted funds exclude multi-year contractual commitments as part of agreements signed in previous years and also funds earmarked for deployment under existing programmes
Means of verification	Verification of supporting documentation
Assumptions	Availability of sufficient unspent and uncommitted funds as at 1 April 2025 Willing partners/funding recipients Funds are to be spent in underserved provinces
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	Recipients or investees in the Northern Cape, Limpopo, Free State, Eastern Cape, North West and Mpumalanga provinces Supports the DSTI's selected district and metropolitan municipalities (e.g., Ugu, Zululand and Ekurhuleni)
Calculation type	Cumulative
Reporting cycle	Annually in Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	All core Executives

Indicator title	1.7 Allocation of funds to designated groups
Definition	Available investment funds directed to black recipients
Source of data	Programme or project databases Agreements or contracts
Method of calculation	Simple count of the value of signed agreements entered into with transformed or black recipients (i.e., investees) divided by (the total value of uncommitted funds at the beginning of the financial year minus the total value of unspent funds at the end of the financial year) as a percentage Uncommitted funds exclude multi-year contractual commitments as part of agreements signed in previous years and also funds earmarked for deployment under existing programmes
Means of verification	Verification of supporting documentation
Assumptions	Availability of sufficient unspent funds as at 1 April 2025 Willing partners, funding recipients or investees
Disaggregation of beneficiaries	Black recipients with a minimum black ownership of 30%; or recipients or investees who are at B-BBEE Level 4 or better
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Annually in Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	All core Executives

## Outcome 2: Enabling and strengthening of the innovation ecosystem

Indicator title	2.1 Total rand value leveraged
Definition	The amount of funds contributed by third parties to investment initiatives for the purposes of funding technology development, technology commercialisation and related support activities
Source of data	Programme or project databases Award letters Funding confirmation letters Contracts or agreements
Method of calculation	Simple count of the value of signed agreements entered into with third parties (the TIA's co-investment with third parties, financial and/or follow-on funding)
Means of verification	Verification of supporting documentation
Assumptions	Third parties will continue to have available funds to spend on innovation
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Quarterly
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Innovation Enabling

<b>Indicator title</b>	<b>2.2 Number of New Strategic Innovation Programmes developed</b>
Definition	The development of new large-scale, multi-year and multi-stakeholder collaborative innovation programmes
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Buy-in of external partners and internal TIA capabilities Adequate funding and resources are made available (disbursement)
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Annually in Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	All core Executives

<b>Indicator title</b>	<b>2.3 Number of government departments and public entities participating in SBRI</b>
Definition	Use of locally developed technologies to resolve service delivery challenges by government
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	There are locally developed technologies that can resolve service delivery challenges
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Innovation Enabling

<b>Indicator title</b>	<b>2.4 Number of partnerships established</b>
Definition	Initiatives to harmonise and streamline innovation funding and processes from Development Finance Institutions. Partnerships that are created in support of the creation of thematic networks to drive strategic innovation programmes
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Adequate funding and resources are made available (disbursement) or obtained from third parties to assist with the funding and establishment of these initiatives
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	All core Executives

<b>Indicator title</b>	<b>2.5 Host annual SA Innovation Week</b>
Definition	Promoting SA as an innovation investment destination
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Existence of internal TIA funding, expertise and human resources
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Non-cumulative
Reporting cycle	Annually in Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Innovation Enabling

<b>Indicator title</b>	<b>2.6 Publication on Innovation topics</b>
Definition	Thought leadership publications on the SA innovation ecosystem
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Existence of internal TIA research and intelligence capability, funding, expertise and human resources
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	All core Executives

<b>Indicator title</b>	<b>2.7 Number of new technology and innovation support centres providing SET support in targeted regions</b>
Definition	New centres established and supported
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Adequate funding and resources are made available (disbursement) or obtained from third parties to assist with the funding and establishment of such facilities Willing hosts, champions and shareholders (including the DSTI) commit and agree to the establishment of such facilities
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Q2 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Innovation Enabling

Indicator title	2.8 Number of SMMEs and co-operatives receiving SET and enterprise development support
Definition	SET and enterprise development support provided to SMMEs and co-operatives
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	An adequate number of SMMEs and co-operatives will be interested in the services offered by Technology Stations, possess adequate expertise and have access to adequate funding to provide and maintain the infrastructure required for SET support
Disaggregation of beneficiaries	Entrepreneurs who are historically disadvantaged individuals or businesses owned by historically disadvantaged individuals: ≥80% Women-owned businesses or women entrepreneurs: ≥45% Youth-owned businesses or youth entrepreneurs: ≥40% Entrepreneurs who are persons with disabilities or businesses owned by persons with disabilities: ≥3%
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Q2, Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Innovation Enabling

Indicator title	2.9 Number of grassroots innovators supported
Definition	Number of grassroots innovators accessing support through the TIA's innovation infrastructure and entrepreneurship skills programmes
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Adequate funding and resources are made available (disbursement) or obtained from third parties to assist with the funding of beneficiaries
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Innovation Enabling

<b>Indicator title</b>	<b>2.10 Number of beneficiaries accessing support from partnerships established with SETAs, private sector, government and civil society</b>
Definition	Partnership for capacity-building and skills and innovation management by co-ordinating the placement of SMMEs and entrepreneurs
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Adequate funding and resources are made available (disbursement) or obtained from third parties to assist with the funding of beneficiaries
Disaggregation of beneficiaries	Women: $\geq 30\%$ Youths: $\geq 50\%$ Persons with disabilities: $\geq 10\%$
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Q2, Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Innovation Enabling

<b>Indicator title</b>	<b>2.11 Number of black or women fund managers established</b>
Definition	Number of new fund managers that have been registered with the Financial Services Board
Source of data	Registration documents
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Adequate pipeline of potential fund principals and available funding to assist with the creation of new fund managers
Disaggregation of beneficiaries	Historically disadvantaged individuals: $\geq 100\%$ Women: $\geq 50\%$
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Chief Investment Officer

Indicator title	2.12 Number of start-ups and spinouts supported through fund managers
Definition	Number of start-ups and spinouts invested in venture capital fund managers.
Source of data	Programme or project databases Reports Contracts or agreements
Method of calculation	Simple count
Means of verification	Verification of supporting documentation
Assumptions	Successful raising of capital by fund managers to support investment into underlying start-ups and spinouts
Disaggregation of beneficiaries	Entrepreneurs who are historically disadvantaged individuals or businesses owned by historically disadvantaged individuals: $\geq 80\%$ Women-owned businesses or women entrepreneurs: $\geq 45\%$ Youth-owned businesses or youth entrepreneurs: $\geq 40\%$ Entrepreneurs who are persons with disabilities or businesses owned by persons with disabilities: $\geq 3\%$
Spatial transformation (DDM)	To be informed by and aligned with the priorities of the government's 2024–2029 MTDP, in support of the DSTI
Calculation type	Cumulative
Reporting cycle	Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Innovation Enabling

## Outcome 3: A more capable, scaled-up, agile and sustainable TIA in support of a capable state

Indicator title	3.1 Percentage of approved funded positions filled annually
Definition	The number of vacant funded positions in the approved organisational structure. This includes the tracking of filled positions in the organisational structure to ensure adequate capacitation
Source of data	Payroll
Method of calculation	Percentage of filled positions against total number of funded positions in approved organogram
Means of verification	Verification of supporting documentation
Assumptions	New organisational structure approved; no moratorium on filling of vacancies issued by National Treasury
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	N/A
Calculation type	Non-cumulative
Reporting cycle	Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Corporate Services

Indicator title	3.2 Investment decision turnaround time for funding applications								
Definition	<p>Investment decision turnaround time is measured as the time taken by the TIA to process and conclude funding applications, from receipt of a full funding application until when an investment decision is taken. The desired investment decision turnaround time is determined by the quantum of funding</p> <table border="1"> <thead> <tr> <th>Funding application quantum</th> <th>Investment decision turnaround time target</th> </tr> </thead> <tbody> <tr> <td>&lt;R1m</td> <td>≤12 weeks</td> </tr> <tr> <td>≥R1m &amp; &lt;R15m</td> <td>≤15 weeks</td> </tr> <tr> <td>≥R15m</td> <td>≤26 weeks</td> </tr> </tbody> </table>	Funding application quantum	Investment decision turnaround time target	<R1m	≤12 weeks	≥R1m & <R15m	≤15 weeks	≥R15m	≤26 weeks
Funding application quantum	Investment decision turnaround time target								
<R1m	≤12 weeks								
≥R1m & <R15m	≤15 weeks								
≥R15m	≤26 weeks								
Source of data	<p>System-generated report or Excel spreadsheet with turnaround time calculations  Date of receipt of a full funding application (e.g., system screen shot, emails)  Date of investment decision, as per the delegation of authority  Evidence of check-outs and check-ins when applicable</p>								
Method of calculation	<p>(Percentage of full funding application assessment decisions concluded within the targeted turnaround time) / (Total number of full funding applications received) × 100%</p> <p>(a) Funding applications &lt;R1m≤12 weeks  (b) Funding applications ≥R1m &amp; &lt;R15m≤15 weeks  (c) Funding applications ≥R15m≤26 weeks</p>								
Means of verification	Verification of supporting documentation								
Assumptions	All transaction information is accurately recorded on the investment system. Open funding applications (where an investment decision has not yet been made) are excluded from calculations. The time taken by the applicant to respond to questions and to provide more information will be deducted from the total time taken for each individual application from receipt of a full application until when an investment decision is taken. Turnaround calculations must straddle financial years, i.e. applications received in a previous financial year but concluded in a subsequent financial year must be included								
Disaggregation of beneficiaries	N/A								
Spatial transformation (DDM)	N/A								
Calculation type	Non-cumulative								
Reporting cycle	Q2 and Q4								
Desired performance	Meet or exceed the target set								
Indicator responsibility	All core Executives								

Indicator title	3.3 Total rand value of royalties, sales and exits
Definition	The amount of funds derived from commercialised innovations. This includes the tracking of royalty payments, revenue generated through the sales of TIA-supported products, processes and services, and redemptions from exits
Source of data	<p>Programme or project databases/royalty register  Invoices, statements and GL/financials  Contracts/awards or agreements/letters of intent  Audited certificate of sales figures</p>
Method of calculation	Simple count of the combined value of royalty payments, revenue generated through the sales of TIA-supported products, processes and services and redemptions from exits. Levy calculation against sales figures
Means of verification	Verification of supporting documentation
Assumptions	Third parties have available funds to spend on innovation; the ability to repay does not stifle the growth of the company/tech
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	N/A
Calculation type	Cumulative
Reporting cycle	Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Commercialisation

<b>Indicator title</b>	<b>3.4 Total rand value managed from partnerships</b>
Definition	Income raised to reduce reliance on MTEF total rand value managed from partnerships
Source of data	Programme or project databases/royalty register Invoices, statements and GL/financials Contracts/awards or agreements/letters of intent Audited certificate of sales figures
Method of calculation	Simple count of the combined value of funds pooled to fund TIA programmes and projects
Means of verification	Verification of supporting documentation
Assumptions	Partners have available funds to spend on innovation
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	N/A
Calculation type	Cumulative
Reporting cycle	Q2, Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	All core Executives

<b>Indicator title</b>	<b>3.5 Number of new business processes digitalised</b>
Definition	Digitalisation of business processes for improved efficiency
Source of data	Programme or project databases/royalty register Contracts/awards or agreements/letters of intent Audited certificate of sales figures
Method of calculation	Simple count of the number of business processes that are optimised and digitalised
Means of verification	Verification of supporting documentation
Assumptions	A sizeable number of business processes still need to be optimised and digitalised
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	N/A
Calculation type	Cumulative
Reporting cycle	Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Corporate Services

<b>Indicator title</b>	<b>3.6 Number of innovations that improve operations in government</b>
Definition	Innovations or technologies launched through or diffused from partnerships with public-sector stakeholders (government departments, municipalities, government agencies, etc.) that improve their operations
Source of data	Contracts/awards or agreements/letters of intent
Method of calculation	Simple count of the innovations developed that support state capacity
Means of verification	Verification of supporting documentation
Assumptions	Government departments will support and participate in initiative
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	N/A
Calculation type	Cumulative
Reporting cycle	Annually in Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	All core Executives

Indicator title	3.7 Number of innovations that improve service delivery
Definition	Innovations or technologies launched through or diffused from partnerships with public-sector stakeholders (government departments, municipalities, government agencies, etc.) that improve service delivery
Source of data	Contracts/awards or agreements/letters of intent
Method of calculation	Simple count of the number of innovations that improve service delivery
Means of verification	Verification of supporting documentation
Assumptions	Third parties have available funds to spend on innovation; the ability to repay does not stifle the growth of the company/tech
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	N/A
Calculation type	Cumulative
Reporting cycle	Q3 and Q4
Desired performance	Meet or exceed the target set
Indicator responsibility	All core Executives

Indicator title	3.8 Increased TIA brand equity
Definition	Rating from customer/stakeholder survey undertaken to measure the Agency's performance against measures implemented
Source of data	Customer/stakeholder survey report
Method of calculation	Qualitative and quantitative survey methods agreed to between the TIA and the appointed service provider, based on industry best practice
Means of verification	Verification of supporting documentation
Assumptions	High level of participation by sampled participants
Disaggregation of beneficiaries	N/A
Spatial transformation (DDM)	N/A
Calculation type	Non-cumulative
Reporting cycle	Annual
Desired performance	Meet or exceed the target set
Indicator responsibility	Executive: Corporate Services

**Note regarding disaggregation of beneficiaries:**

For the sake of simplicity, the following terms are more fully described depending on the context and the nature of the indicator.

Term	Description
Historically disadvantaged individuals	Entrepreneurs who are historically disadvantaged individuals or businesses owned by historically disadvantaged individuals
Women	Women-owned businesses or women entrepreneurs
Youths	Youth-owned businesses or youth entrepreneurs
Persons with disabilities	Entrepreneurs who are persons with disabilities or businesses owned by Persons with disabilities





**Gauteng Head Office**

+27 (0) 12 427 2700

Postal Address  
P.O. Box 172  
Menlyn  
Pretoria  
0181

Physical Address  
TIA House  
83 Lois Avenue  
Menlyn  
Pretoria

**KwaZulu-Natal Office**

+27 (0) 31 220 3101

Postal Address  
P.O. Box 30603  
Mayville  
Durban  
4058

Physical Address  
4th Floor  
102 Stephen Dlamini Road  
Musgrave  
Durban

**Western Cape Office**

+27 (0) 21 442 3780

Postal Address  
P.O. Box 13372  
Mowbray  
Cape Town  
7705

Physical Address  
4th Floor, Central Park  
Black River Business Park  
Fir Road, Observatory  
Cape Town

[www.tia.org.za](http://www.tia.org.za)

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