ADDRESS BY THE MINISTER OF SCIENCE, TECHNOLOGY AND INNOVATION, PROF BLADE NZIMANDE ON THE OCCASION OF THE BUDGET VOTE DEBATE OF THE DEPARTMENT OF SCIENCE, TECHNOLOGY AND INNOVATION, 9 JULY 2025

Honorable Chairperson;

Honorable Members;

Deputy Minister of Science, Technology and Innovation, Honourable, Dr. Nomalungelo Gina;

Members of the Portfolio Committee on Science, Technology and Innovation;

Director-General of the Department of Science, Technology and Innovation, Dr. Mlungisi Cele;

Deputy Directors-General;

Chairpersons and CEOs of our Entities;

Officials of the Department of Science, Technology and Innovation;

My special guests, the school children and Principals;

Fellow South Africans:

We deliver this Budget Vote against the background of a complex set of national and global challenges, some of which include economic stagnation, rising social inequality, a breakdown of social cohesion, the negative impact of climate change, technological disruption and new tensions arising from changes in the international economic and political system.

We hold the view that our country must place science, technology and innovation at the centre of government, education, industry and society if we are to secure our sovereignty and future sustainability.

Our work continues to be guided by our country's National Development Plan 2030, our 2019 White Paper on Science, Technology and Innovation and the Decadal Plan for Science, Technology and Innovation (2022-2030).

And of course, the priorities of government as articulated by the President, His Excellency, Mr. Cyril Ramaphosa during his February State of The Nation Address.

In mining, the Mandela Mining Precinct delivered groundbreaking technological and knowledge outputs. This includes sensors that enable the detection of loose rock formations at a safe distance and improved understanding of pillar extraction options to maximise the life of mines.

In manufacturing, we have established the South Africa Circular Manufacturing Initiative using new technologies to optimize efficient use of production inputs.

Through our entity the CSIR, we intend to complete a preindustrial prototype additive manufacturing machine, Metalix. This work is targeted for completion in March 2026.

In agriculture, our Agricultural Bioeconomy Innovation Partnership Programme (ABIPP), we have leveraged over R300 million and expanded farmer support to deepen the impact of agricultural innovation.

In health innovation, in May last year, together with the University of Pretoria and other institutional partners, we launched the Nuclear Medicine Research Infrastructure (NuMeRI) at the Steve Biko Academic Hospital.

This state-of-the art facility intends to advance drug development and clinical research and provide cutting-edge diagnostics and treatment in relation to cancer, tuberculosis (TB) and other major diseases.

NuMERI is the only facility of its kind on the African continent. This facility is part of our 13 research infrastructure facilities, and we have contributed R720 million towards the establishment of the NuMeRi facility.

Through our Vaccine Innovation and Manufacturing Strategy (VIMS), we aim to promote the domestic design and development of vaccines targeting Corona viruses, Rift Valley fever virus, human papillomavirus, respiratory syncytial virus and Hepatitis B, among other diseases.

We will intensify our efforts to support **energy security** through among others, our Hydrogen Society Roadmap, the Platinum Valley Initiative, the Green Hydrogen Commercialisation Strategy, and South African Renewable Energy Master Plan.

The CSIR has developed Clean Coal Technologies (CCT). This innovative technology will enhance the efficiency and environmental acceptability of coal throughout the value chain.

In the digital space, the research firm Forrester, projects that "the global digital economy will reach \$16.5 trillion and capture 17% of global GDP by 2028". We are already developing capacity in this area.

In addition to our Foundational Digital Capabilities Research platform, the National Advisory Council on Innovation (NACI), has already developed a new AI strategic framework specifically for the NSI.

This work is intended to align our AI interventions with the NDP, our Decadal Plan, and support the work of the Department of Communications and Digital Technologies, which is the lead department in this regard.

Astronomy remains one of our country's top priorities and we are advanced in the construction of the **Square Kilometre Array** (SKA), and it is expected to be completed by 2030.

The total foreign direct investment in South Africa from the SKA Observatory member countries for the SKA Mid-Array will be R9,5 billion, of which R3,2 billion will be awarded to the South African Radio Astronomy Observatory and South African industry through construction contracts.

We will also continue our partnership with the Department of Tourism to implement our country's **Astro-Tourism Strategy**. This Strategy has the potential to become a game-changer for science and tourism.

We will scale up the **implementation of the Innovation Fund programme.** During this financial year, our target is to support between 10 and 15 venture capital funds through strategic partnerships with among others, our entity, the Technology Innovation Agency.

As part of **advancing indigenous knowledge systems**, we are implementing the 2019 IKS Act and are investing in new IKS based laboratories at the Universities of Venda, Pretoria and the Free State. The Deputy Minister will elaborate more on our IKS interventions.

The **development of critical scientific skills** remains central to our mandate. To date, we have awarded 288 Research Chairs to 22 Universities and National Research facilities in various research disciplines.

I am however deeply concerned that black researchers and historically disadvantaged institutions (HDIs) have not benefitted from this initiative in the manner that we had anticipated.

To address this, we are working with the NRF to establish Research Chairs that will specifically address these and other transformation deficits.

Further to this, our National System of Innovation is still characterised by a number of other **transformation deficits**, including the **low participation of women at the highest levels**.

In March this year, I **hosted our country's first Summit on the Transformation of our National System of Innovation**. Under the leadership of our DG, the resolutions of this Summit are being incorporated into the Strategic Plan of the Department. I will be providing Parliament with regular progress updates on this.

Embedding innovation at the sub-national level is critical for enabling efficient service delivery. We will therefore continue piloting innovative service-delivery models that support the District Development Model (DDM). The Deputy Minister will also elaborate further on this.

Chairperson and Honorable Members, our country's foreign policy is underpinned by the values of multilateralism, solidarity, human dignity and a respect for the sovereignty of all nations.

Consistent with this, we will continue to diversify our international relations through BRICS, South-South cooperation, the EU and our G20 partnerships.

We will also **continue our support for Palestinian institutions and researchers**. This project is making steady progress.

As part of our country's G20 Presidency, we will continue to **use** our role as Chair of the Research Innovation Working Group (RIWG) to advance our STI priorities and those of the African continent.

To protect the sovereignty of our research and development agenda, I recently established a Working Group to advise me on the impact of the withdrawal of funding by US for key scientific projects between the US and South African research and academic institutions.

I am pleased to indicate that this work has now been completed and after due consideration of the Report, I intend to share its findings first with Cabinet and thereafter, with Parliament.

Towards the end of this year, we will host our 2025 South Africa Forum South Africa and the World Conference of Science Journalists (WCSJ).

Inspired by our mantra, which is "Placing Science, Technology and Innovation at the Centre of Government, Education, Industry and Society", over the next 4 years, we intend to raise the profile and scale of our work by:

1.Intenstifying efforts to increase the Gross Expenditure on Research and Development to 1.5% as per the NDP, including a strategic compact between organised business, government and labour to agree on its future funding;

2.Accelerating the transformation and expansion of STI human resources and research workforce, among others, the Presidential PhD Programme;

3.**Strengthening the coordination and direction of our National System of Innovation (NSI)** system through the Inter-Ministerial Committee on STI, Presidential Plenary for STI and policy coordination instruments;

4. Maintaining and upgrading key science infrastructure and projects such as the SKA, NuMeRi and the development of credible pandemic preparedness capacity;

5.**Building strategic innovation compacts** by aligning the strategic focus areas of our Decadal Plan with the corresponding line function departments;

6.Mobilising additional funding and resources to raise the scale of our key programmes such as artificial intelligence,

energy security, space, vaccine innovation manufacturing, IKS; and

7.Increasing public awareness of the important contributions of the NSI to human development through an aggressive public engagement and communication campaign.

Chairperson and Honorable Members, we table this Budget Vote as our commitment to take science, technology and innovation to the villages, townships and all the corners of our country. I trust we can rely on the support of all Honorable Members in fulfilling this noble task.

In conclusion, I wish to thank our Deputy Minister, our Director-General, the Senior Management and Staff of my Department, our Entities, our key Public and Private stakeholders and most importantly, my wife Phumelele for the unwavering support.