

South Africa's National Innovation System: Policy and Institutional Landscape



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science
& technology

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

DST Structure

Minister
Derek Hanekom



Programme 1:
Corporate Services & Governance

Programme 2:
Research Development & Innovation

Programme 3:
International Cooperation & Resources

Programme 4:
Human Capital & Knowledge Systems

Programme 5:
Socio-Economic Partnerships

DG
Dr Phil
Mjwara





5 Key Programmes

Ms N Mokoena

**Programme 1:
Corporate Services & Governance**

**Mr T Mavuso
(COO)**

Dr V Munsami

**Programme 2:
Research Development & Innovation**

Mr M Muofhe

**Programme 3:
International Cooperation & Resources**

Dr T Auf Der Heyde

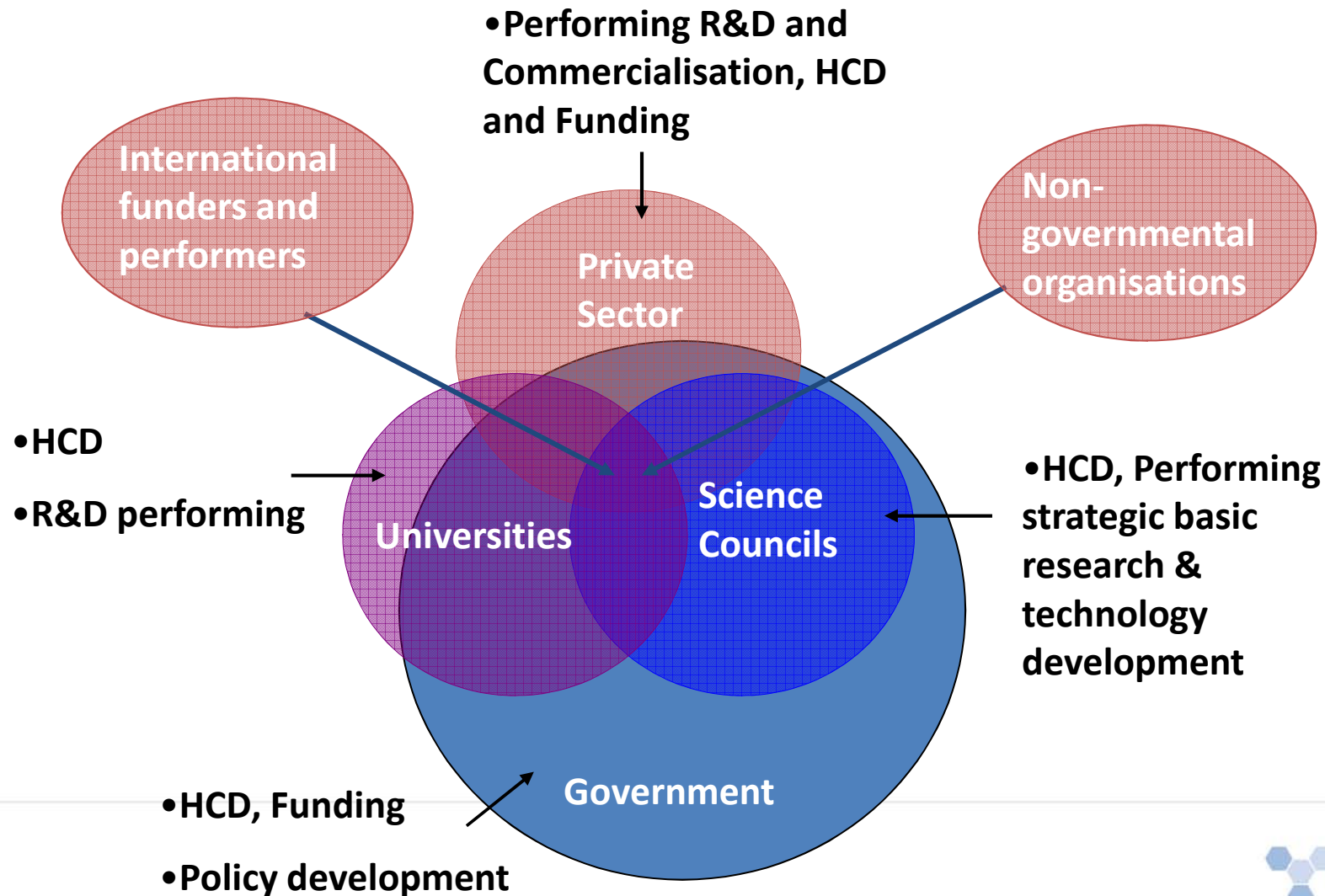
**Programme 4:
Human Capital & Knowledge Systems**

Mr I Patel

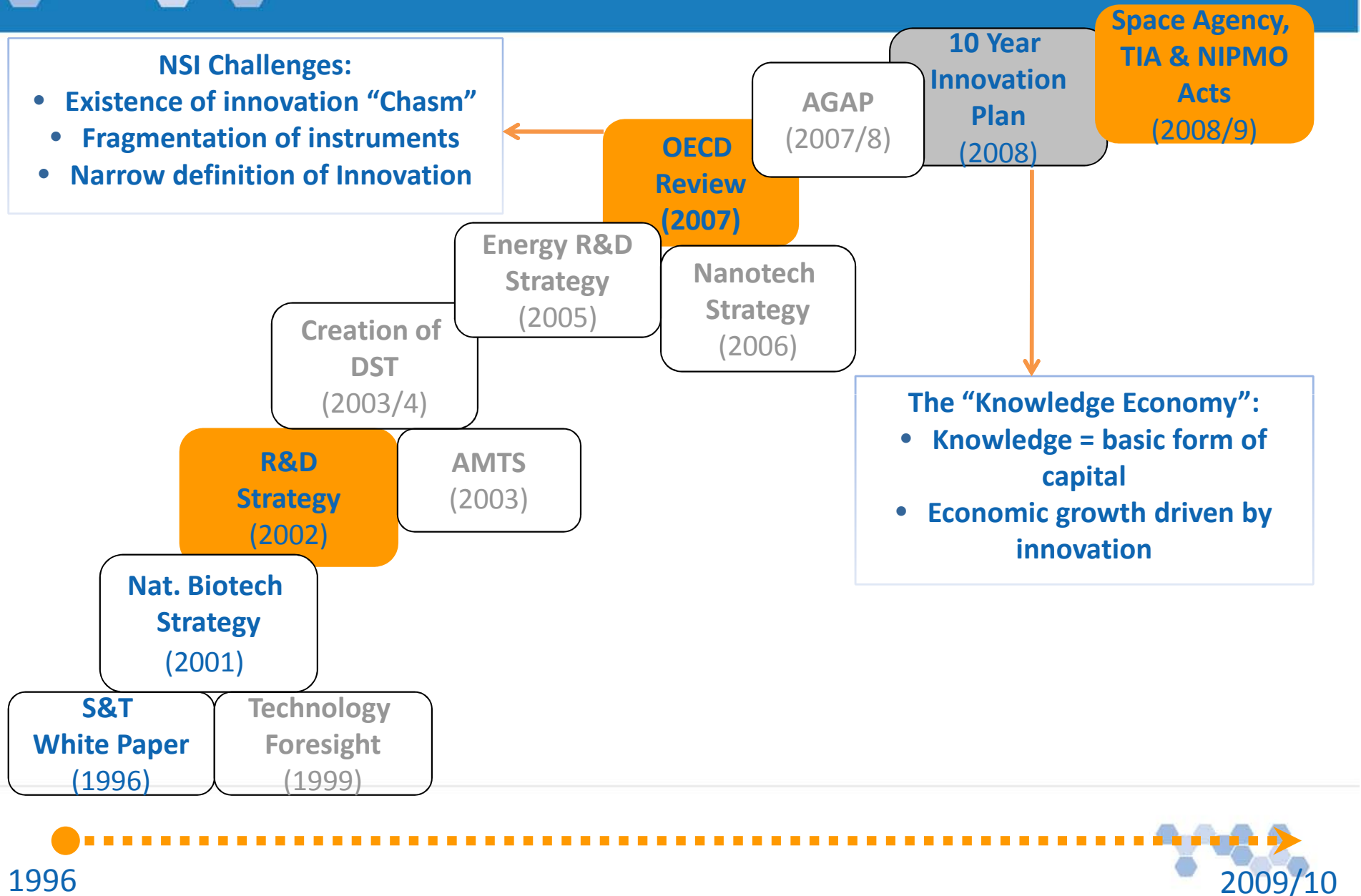
**Programme 5:
Socio-Economic Partnerships**



The National System of Innovation (NSI)

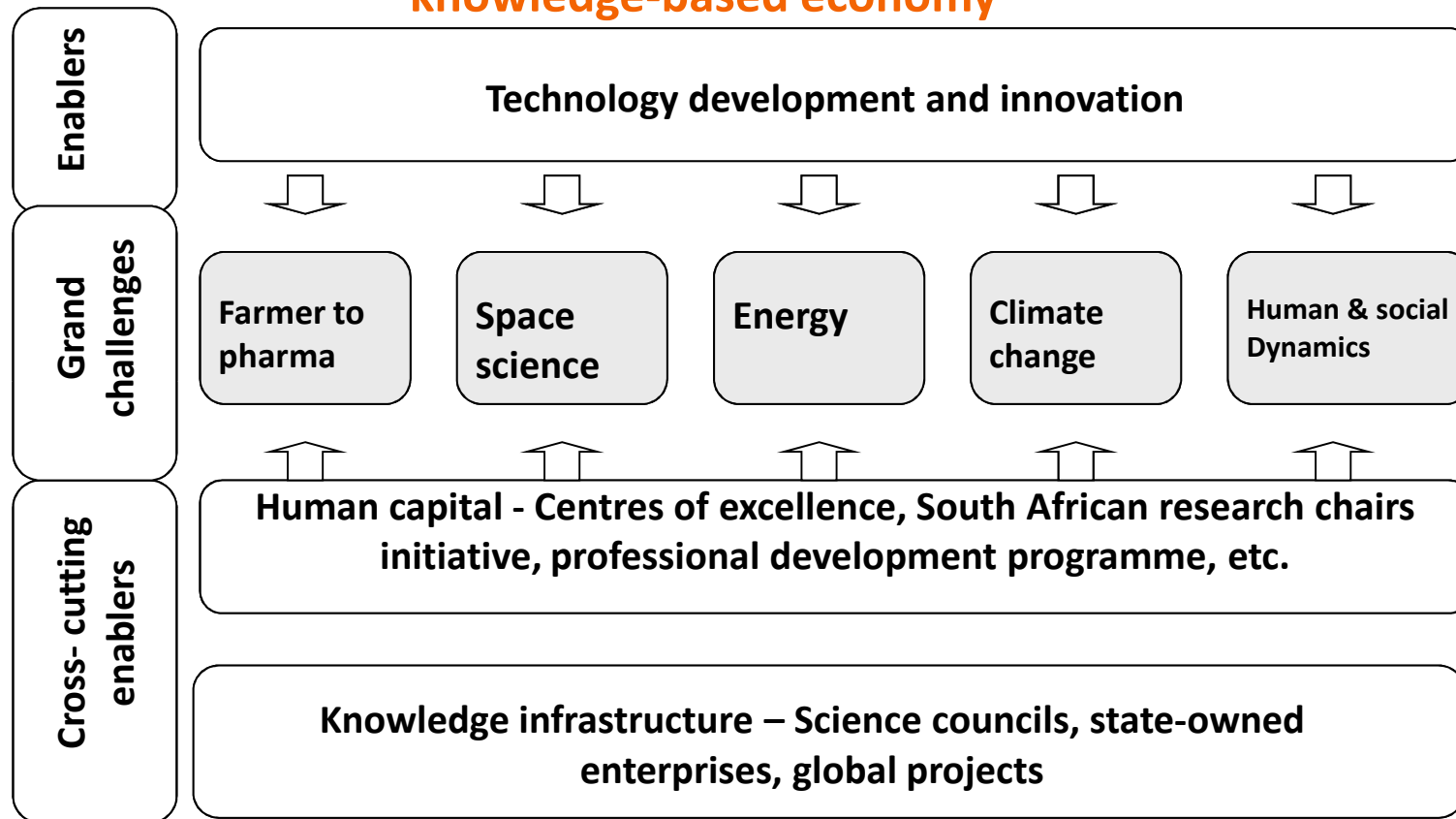


S&T Policy / Strategy Milestones



The Ten Year Innovation Plan: 2008 to 2018

Aimed at guiding SA's medium to longer term transformation towards a knowledge-based economy



International relations and technology transfer strategies

Investment plan based on strategic priorities

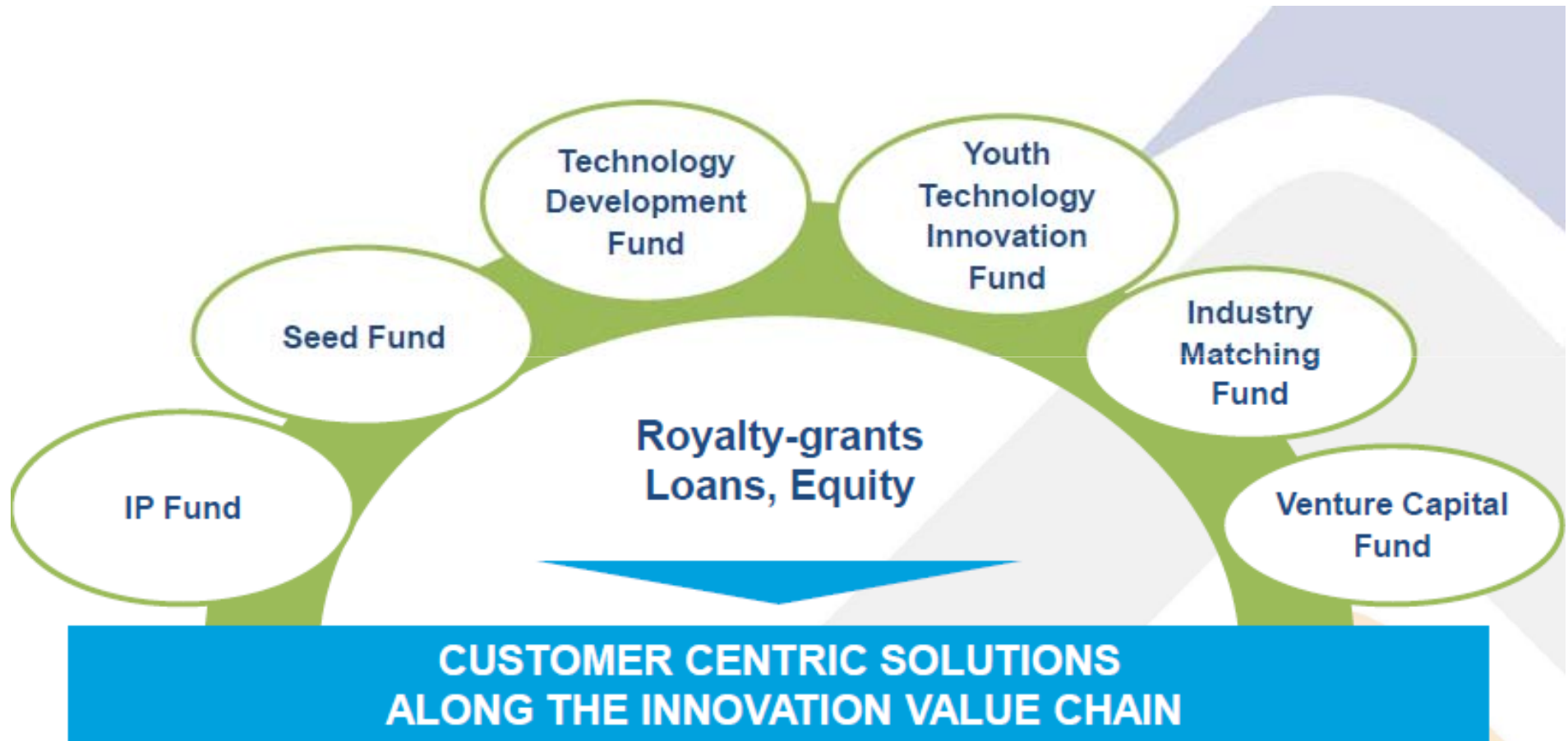


Bridging the Innovation Chasm

- The TIA Act [No 26 of 2008]
 - “The object of the Agency 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 by supporting the development and exploitation of technological innovations”
- TIA Offerings
 - Funding Instruments
 - Business Support & Strategic Partnerships
 - Technology Development Infrastructure
 - Innovation Skills Development



TIA Funding Instruments

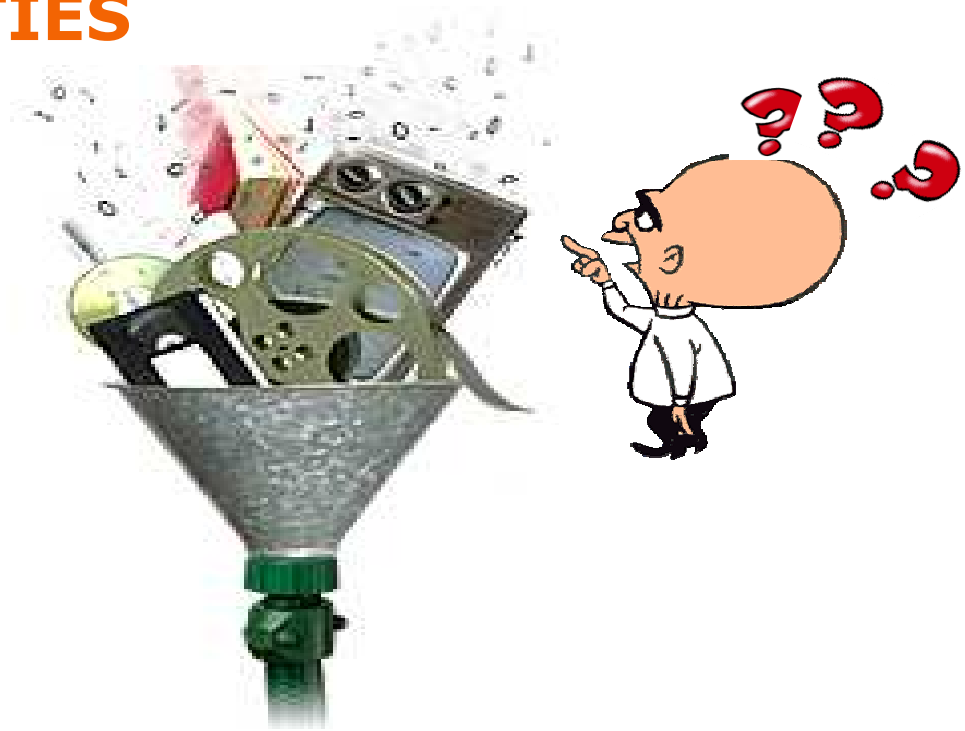


- **Youth Technology Innovation Fund (YTIF)** - promote and stimulate the culture of technology innovation and entrepreneurship among young South Africans by providing access to financial and business support resources
- Targeted at the youth between the ages of 18 to 30. The Fund uses a voucher system with the following six (6) offerings:
 - R250 000.00 for prototype development at TIA's Technology Stations
 - R150 000.00 for Intellectual Property Protection
 - R100 000. 00 for SABS Testing and product Certification
 - Stipend of R60 000.00 per person per annum, for up to 4 people for use towards establishing an enterprise
 - 160 Hours for Business Coaching
 - Incubation Services at TIA recognized incubators for 2 years.

(www.tia.org.za)



INVESTMENT OF PUBLIC FUNDS IN R&D ACTIVITIES



RETURNS ON INVESTMENT

- The Intellectual Property from Publicly Financed Research and Development Act [No 51 of 2008]
 - Balance of interests of institutions and IP creators (benefit sharing)
 - Establishment of Offices of Technology Transfer (OTTs)
 - Balance of interests of the State and recipients of public funds
 - Establishment of the National Intellectual Property Management Office (NIPMO)
- NIPMO
 - established in mid-2011 in terms of the Act to promote and manage the objects of the Act
 - identification, disclosure and statutory protection, and management and commercialisation of the IP referred to it by a recipient of public R&D funds
 - interim office within the Department of Science and Technology





Centres of Competence

- A form of alliance between university, industry, and research organisations primarily undertaking applied research and development that ultimately produce new innovations.
- Outcomes includes among others:
 - New technology based products and services
 - Innovations
 - Intellectual property (which maybe further developed and or licensed)
 - New technology based enterprises

- National Hydrogen and Fuel Cell Technologies Research, Development and Innovation Strategy (Hydrogen South Africa (HySA)) 2008
 - stimulates and guides innovation along the value chain of hydrogen and fuel cell technologies in South Africa
 - drive and optimise local benefits from supplying high value-added platinum group metal products
- Three CoCs established:
 - *HySA Systems: hydrogen systems integration and technology validation*, hosted by the University of the Western Cape.
 - *HySA Catalysis: hydrogen catalysis; co-hosted by the University of Cape Town and MINTEK.*
 - *HySA Infrastructure: hydrogen generation, storage and distribution*, co-hosted by the North West University and the Council for Scientific and Industrial Research (CSIR).





Technology Localisation Programme

- Increase the capability and scope of local production (reduced imports, create and save local jobs)
 - Assist local firms to improve their competitiveness (quality, cost, uniqueness, etc.) through provision of:
 - Technology Assistance Packages (TAPs)
 - Focused sector intervention (Foundries)
 - Support focused technology development
 - Technology/Product Development Grants



**Technology Localisation
Implementation Unit**
hosted by the CSIR



On the very near horizon....

- Bioeconomy Strategy (presented to Cabinet for approval)
 - "Bioeconomy" refers to activities that make use of bioinnovations, based on biological sources, materials and processes to generate sustainable economic, social and environmental development
 - Build on the achievements of the National Biotechnology Strategy
 - Three key economic sectors: **agriculture, health and industry**
 - More than R400 million budgeted for the implementation of the strategy



- Regional Innovation Forums (RIF)
- Programme 5 – Johann Strauss
 - Regional aka provincial
 - Sub-regional – metro, local municipal levels.
 - Assists with feasibility studies – science parks
 - Brings together a whole host of role players within a particular area
 - EC, Free State, Southern Gauteng, NC and other provinces to be rolled out



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



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