



science
& technology

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Science and Technology
REPUBLIC OF SOUTH AFRICA

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DST Briefing to the Parliamentary Select Committee

09 May 2007

Room V227, Old Assembly, Parliament

Lefapha la Saense le Thekenoloji • uMnyango wezeSayensi neTheknoloji • Muhasho wa Saints na Thekinlodzhi • Departement van Wetenskap en
Tegnologie • Kgoro ya Saense le Theknolotši • Ndzawulo ya Sayense na Theknoloji • LiTiko leTesayensi neTheknoloji • ISebe lezeNzululwazi
neTeknoloji • UmNyango wezeSayensi neTheknoloji

Batho Pele - putting people first

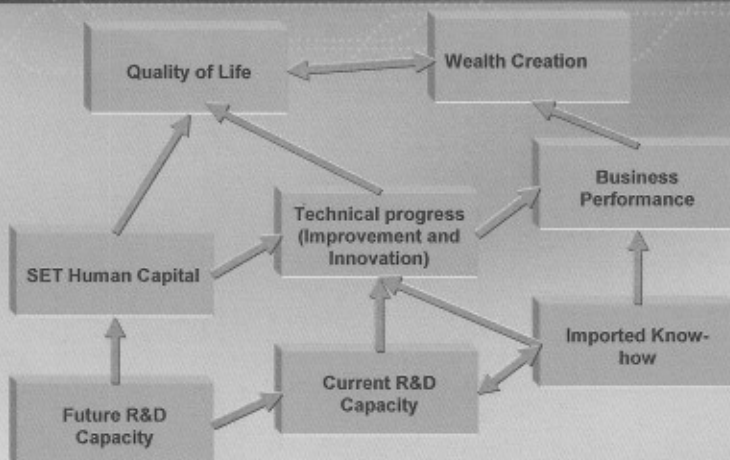
DST
Budget & Strategic Plan 2007/08-
2009/10

06 March 2007

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R & D Strategy Framework



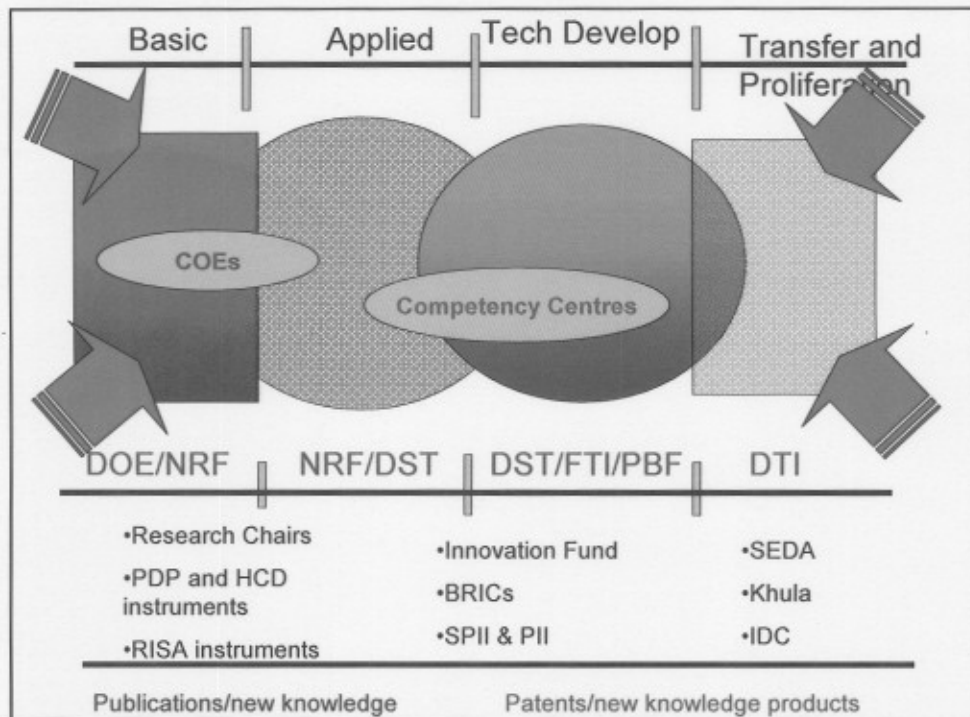
Mapping Exercise

	Schools	FET/Ulec h Skills Programmes	University Undergraduate /Honours	University Research	Research Councils	Intermedi- aries Agencies	Business	Communi- ties/Publi- c Benefi- t	Internatio- nal and Global
Frontiers "Innovation later"				HE, Nmm, K. S.A.V. ZASat CHPC	H2 Natio- nal S.A.S.T. ZASat	Nomf, DST, Innov. F.			EU
Innovation now layer		Tshumis- an o Tooling Inst	PHRIP	CoE P.A. SUPPORT	NER, Peta- S.A.S.T.	Mgmt CoE NRF, AMI	F. P. C. Ter Post	Sodal Incentive	EU
Research Layer				BRIC Platforms Research CoE KS	BRIC Platforms, AMI, AMTS	AMTS, NRF, ah chairs	Tax incentive \$		Bilaterals
Human Capital Development	Olympiad s Track- ing Prog	NRF grants/ Incentive	NRF Hons Prog	NRF Fellow- ships	PDP Intern- ships	NRF, PHRIP			Bilaterals
Public Infrastructur- e	Science centres/ labs			Res Centres/ labs	CHPC	NBN Nat- l facilities SANREN	Fablab	Dig Doorway IKS labs, FARMS	SALT Partners

SAASTA

Innovation
Parks

NACI,
Academies



DST Strategic Initiatives

- 10 year plan process initiated
- Foundation for Technological Innovation
- Foundation for Public Goods
- Competency Centres
- National Human Capital Strategy

Achievements – Highlights

- New DST structure approved & implemented with effect from 01 October 2006
- System-wide reviews completed
- Innovation fund has matured and is increasingly successful
- Space Agency for South Africa approved
- Tax incentives for R&D approved
- IPR from publicly funded research

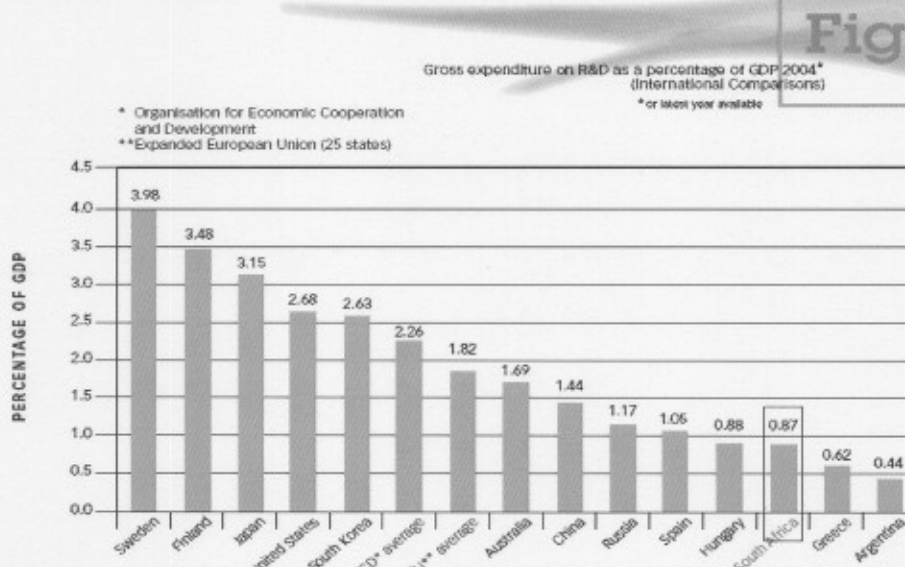
Achievements – Highlights (cont.)

- R10mil of international leveraging money has brought R80mil to SA science from foreign sources
- International Centre for Genetic Engineering and Biotechnology (Africa Node) will be in Cape Town
- SumbandilaSAT construction completed
- Short-listed for hosting SKA
- Completed design of KAT prototype dish
- Attracted significant foreign direct investment in local biotechnology industry

Achievements – Highlights (cont.)

- New infrastructure funding
 - High Performance Computing Centre on track
 - South African Research Network plan coordinated with DPE InfraCo proposals
 - Nanotechnology second equipment call finalised
 - Research equipment call finalised (heavily over-subscribed)
- SARCI (research chairs)
 - First call allocated
 - Second call in process

Gross Exp on R&D as % of GDP From R&D: Survey of 2004



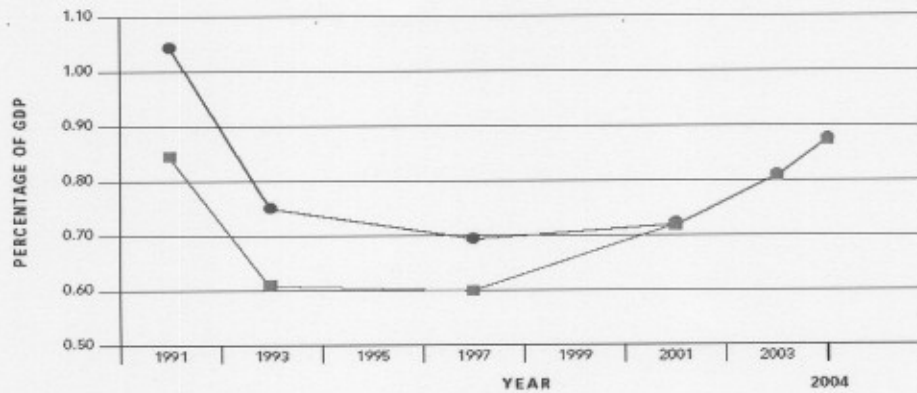
Gross exp on R&D % of GDP 2004 R&D Survey



Fig

Unrevised —●—
Revised —■—

Gross expenditure on R&D as a percentage of GDP (revised and unrevised)
(South Africa, 1991-2004)



Options for 2007 MTEF



Themes	2007/08	2008/09	2009/10
<u>Leveraging strategic research and development</u>	391	536	827
<u>S&T engineering</u>			
<u>Human resources</u>	245	446	560
<u>S&T policy planning, M&E</u>	57	61	71
Infrastructure			
<u>S&T core Infrastructure</u>	661	763	752
<u>SKA 10%</u>	-	200	300
TOTAL	1,354	2,006	2,510

Absorptive Capacity of S&T system for new funding

- Innovation and research funding oversubscribed – need new centres of excellence, more chairs in outer years
- NRF human capital spending need increase in both reach and grant size
- Research equipment: heavily oversubscribed in most recent NRF call
- New large infrastructure programmes are based on dedicated delivery teams that are in place already

Expenditure Estimates

Rm				
Programme	2006/7	2007/8	2008/9	2009/10
Administration	217	85	90	97
RDI	406	546	789	1,026
ICR	123	118	145	158
HC&KS	863	1,257	1,422	1,571
SEP	1,008	1,135	1,193	1,236
	2,617	3,142	3,639	4,088
Change to 2006 baseline		234	389	
% change to 2006 baseline	Note 1	8%	12%	

Note 1 = incremental growth > inflation expectations

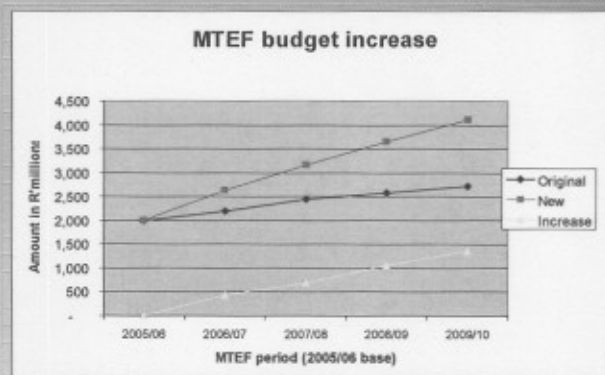
New Funding

- 10% SKA,
- Human Capital Development Strategy
- Core R&D infrastructure
- S&T policy planning, M&E

MTEF Comparison

Main increase due to:

- New R & D strategy funding
- New Infrastructure funds



MTEF Allocation

R Thousand

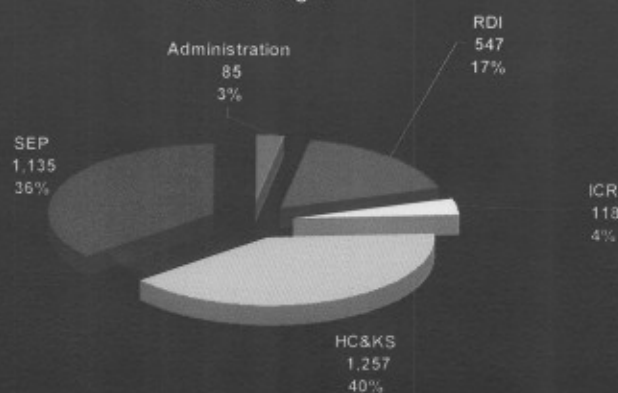
Economic Classification	2007/08	2008/09	2009/10
Opex pymnts	222,226	256,958	284,196
Transf & Subs	2,917,799	3,380,159	3,801,644
Capital pymnts	2,454	2,380	2,521
Total Budget	3,142,479	3,639,497	4,088,361

% current pymnts 7%

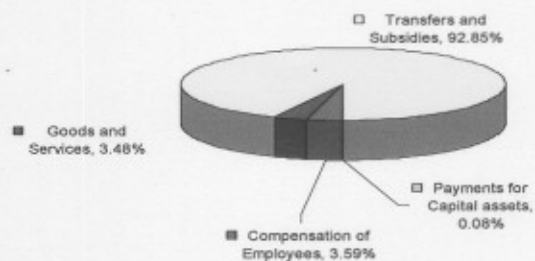
% transf & subs 92.9%

% capital pymnts 0.1%

2007/8 budget



Economic classification of Expenditure



Public entities

Rm	2006/7	2007/8	% incr	2008/9	% incr	2009/10	% incr
CSIR	483	517	7%	545	5%	571	5%
NRF	587	650	11%	686	6%	693	1%
HSRC	120	156	30%	157	1%	150	-4%
AISA	25	27	8%	28	4%	27	-4%
ARC (Public Assets)	43	43	0%	45	5%	48	7%
SANERI	40	42	5%	44	5%	46	5%
Tenumbano	24	36	50%	36	0%	36	0%
ASSP	3	3	0%	4	33%	4	0%

Major programmes

R/m	2006/7	2007/8	% incr	2008/9	% incr	2009/10	% incr
Biotechnology	148	167	13%	176	5%	176	0%
Innovation Fund	128	142	11%	149	5%	152	2%
SPSA	19	104	447%	290	179%	484	67%
IKS	5	5	0%	5	0%	17	240%
Science & Youth	20	29	45%	43	48%	55	28%
Science Themes	51	40	-22%	42	5%	58	38%
HRD	55	184	235%	237	29%	266	12%
Frontier science	48	105	119%	145	38%	154	6%
Global Science	24	40	67%	42	5%	45	7%
Sustainable livelihoods	52	56	8%	59	5%	62	5%
NSRF	15	16	7%	17	6%	17	0%

Legislation 2007

Legislation	Date, Cabinet Comm	Cabinet Meeting
Intellectual Property Right from Publicly Financed Research Bill	13 March Governance & Admin, Economic Sector	20 March 2007
South Africa Academy of Engineering Bill	September Governance & Admin	16 September 2007
Inventions Development Amendment Bill	24 April Governance & Admin Economic Sector	16 May 2007
Space Agency Bill	08 May Governance & Admin	30 May 2007

Summary

- Contribute to economic growth and job creation
- Develop human resources
- Provide required infrastructure
- R&D innovation
- Maintain focus on new technologies

**Siyabonga
Re a leboga
Thanks**