

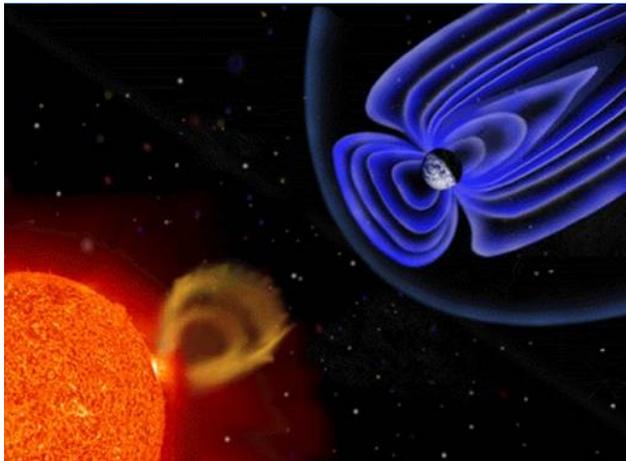


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Briefing to the Portfolio Committee on Trade & Industry and the Portfolio Committee on Science and Technology

The South African National Space Policy



Presented by Ms Nomfuneko Majaja on 1 September 2009

Chief Director of Advanced Manufacturing, Industrial Development Division



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Overview

- **INTRODUCTION**
- **POLICY STATEMENT**
- **POLICY PRINCIPLES**
- **POLICY OBJECTIVES**
- **GENERAL IMPLEMENTATION GUIDELINES**
- **MONITORING, EVALUATION AND REVIEW OF THE POLICY**

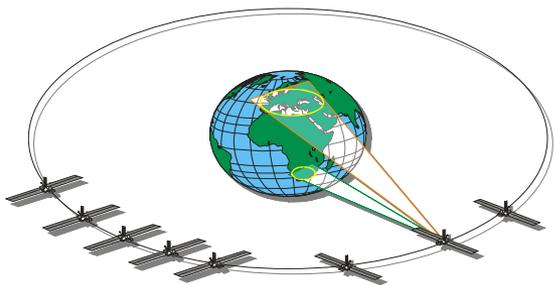


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Why Space

Space has increasing applications in our daily lives:
Satellite Applications

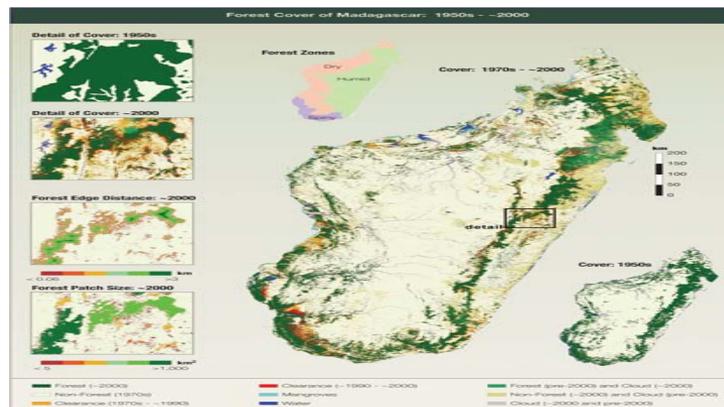


Communications and
broadcasting



Close-up of progressing fire
A (4,3,2) band combination of SPOT4 Xi imagery
highlights the fire front and hot spots.

Disaster management



Natural resource
management

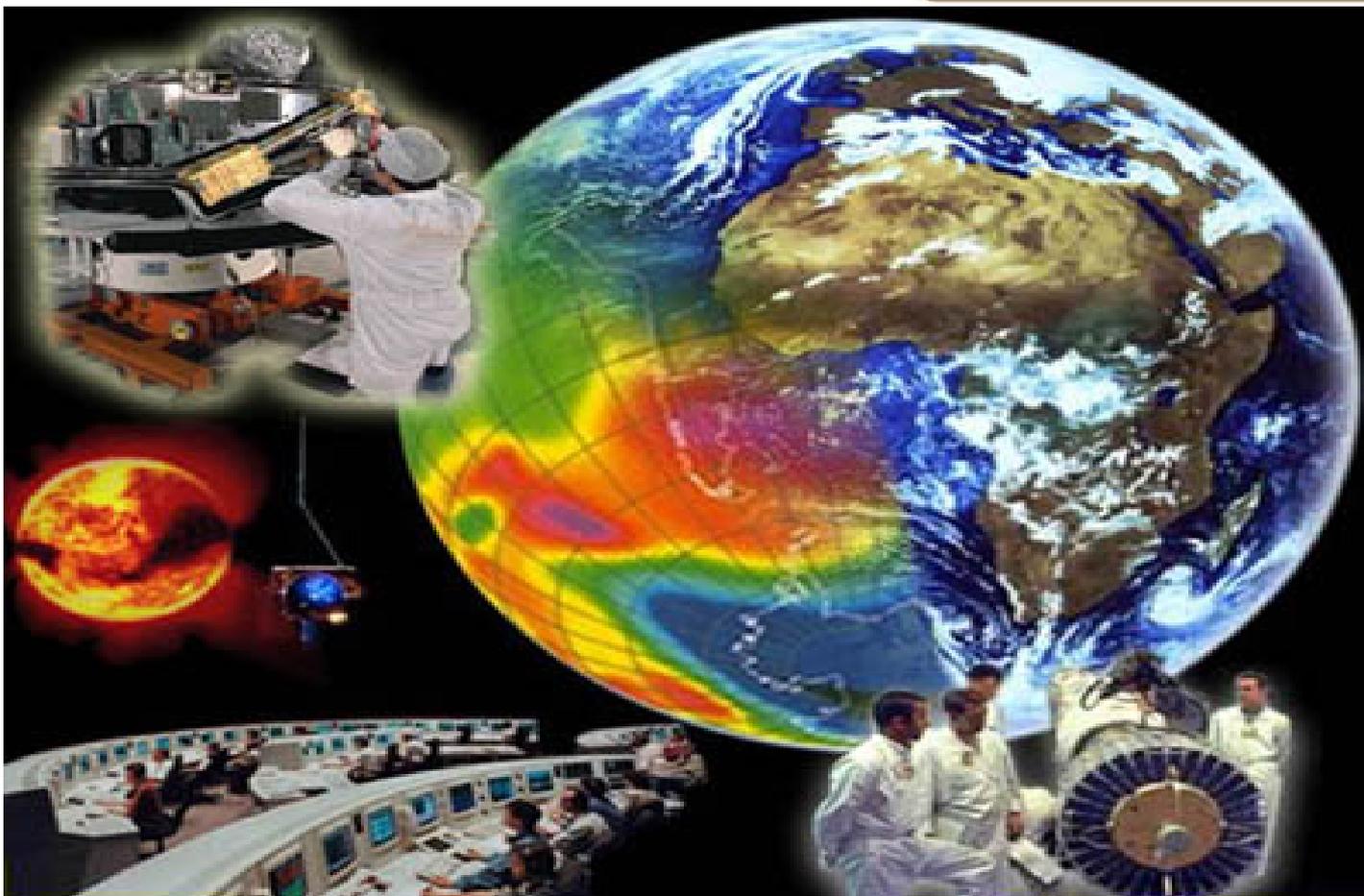


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Why Space

Stimulus for High Tech Industry: Aerospace , ICT, TV & Film etc





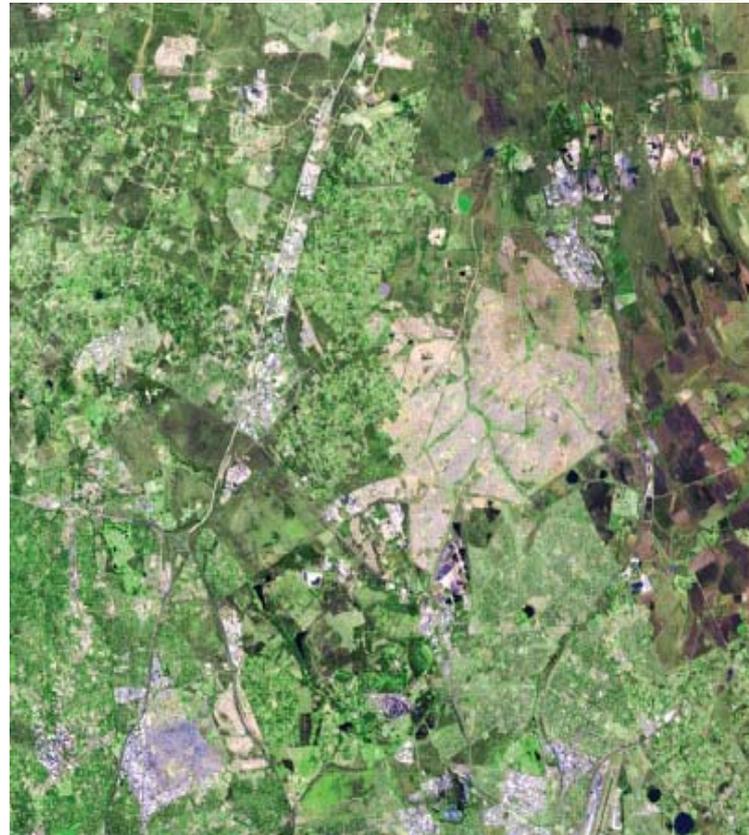
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Why Space : Environmental Change



Midrand in 1985



Midrand in 2001



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Why Space Policy

A more co-ordinated & a strategic approach (Policy) to space activities is necessary because of the following:

- **The country's increasing reliance on space technology,**
- **The current govt commitment to space & its increasing participation in international space-related activities.**
- **The country's space arena within the public sector comprises a number of govt depts & agencies, all have independent administrations with their own policy frameworks for guiding decisions on the pursuit and funding of space-related activities.**



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Legislative & Guiding Framework for South Africa's National Space Policy

Space Affairs Act Section 2

Mandates Minister of Trade and Industry to determine general policy on space affairs

Consultation with SA Council for Space Affairs and with concurrence of other relevant Ministers

• The Policy :

- Provides guidance to all SA stakeholders in space arena
- Informs SA participation in space activities
- Promotes improved coordination and cooperative governance

Supporting & promoting relevant scientific research

Promote Capacity building

Stimulate Innovation ,competition & industrial development



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Linking Space Policy to Space Strategy

Frame of Reference

**Space Policy
(the dti)**

Section 2 of Space Affairs Act of 1993, as amended in 1995, mandates the dti to “...determine the policy to be followed in the Republic.”

The policy lays the foundation embedded in the guidelines for participation in the space arena

**Programme
Strategy (DST)**

The strategy is in response to the DST’s 10 Year Innovation Plan for which space and technology is one of five grand challenges.

The strategy builds on the policy foundation and draws key priority programme areas.



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Governance

**Policy
and Programme
Strategy**

**National instruments driven by two line
departments – the dti and DST**

**Implementation is guided
by these national instruments**

**Rests with relevant stakeholders (line
departments, national agencies and
facilities, academia & industry**

Coordination

**SANSA will serve as a coordination
institutional vehicle**

**Will be promoted through regular
monitoring and evaluation of programmes
and periodic evaluation of the relevance
of these instruments.**



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POLICY STATEMENT

- **SA has a variety of institutions and programmes that play a significant role in the scientific study, engineering, exploration and utilisation of space**
 - Initiatives are situated in academia, science councils, national facilities, government departments and industry
 - Broad competencies in satellite applications, satellite engineering and space science, and their supporting technologies
- **Space Science and technology has become an area of strategic importance to South Africa because of the country's critical reliance on this technology**
 - Space-based systems deliver information and services that protect lives and the environment: disaster monitoring & management
 - Enhance prosperity and security
 - Stimulate scientific, industrial and economic development.
- **In order to maximise the benefits of space science and technology for sustainable development, South Africa requires:**
 - Guiding framework in the form of a policy through coordination and cooperative governance;
 - Central institutional framework; Agency that will streamline development and maintenance of efficient and robust space capabilities &
 - Cooperation with other nations in areas of mutual interest



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POLICY PRINCIPLES

The pursuit of space activities in SA is informed by the overarching principle that *such activities should contribute to economic growth and sustainable development*

6 Guiding Principles: SA commitment

Utilise outer space for peaceful purposes

Develop and maintain a robust and appropriate set of capabilities, services and products

Ensure SA stakeholders are responsible users of the space environment; international treaties

Promote R&D in space science and technology

Achieve greater levels of self sufficiency and international competitiveness

Mutually beneficial cooperation with other nations



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POLICY OBJECTIVES

Improve coordination in SA space arena

Promote the development of an appropriate, competitive domestic space sector

Improved cooperation with other nations

Promote greater awareness and appreciation

Promote Capacity building emphasis on HDIs

Facilitate provision of appropriate and adequate space capabilities

Creation of a Supportive regulatory environment

Foster a robust science & technology base



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Alignment of Space Policy Objectives & Space Programme Strategy

Improve coordination in the SA space arena



Organise some of the current space science & technology activities into strategic programmes

Optimise the organisation of future space activities

Facilitate provision of appropriate and adequate space capabilities



Develop products and services to respond to user needs

Promote capacity building



Strengthen training and technology transfer programmes

Foster a robust science and technology base



Promote space science and technology in academic institutions & science centres



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Continuation of Alignment of Objectives

Promoting the development of a competitive domestic space industry



Develop the local private space science & technology industry sector

Develop the export market for satellite equipment and services

Improve cooperation with other Nations



Partnerships with established and developing space-faring countries

Responding to challenges and opportunities in Africa

Promote greater awareness and appreciation



Advocating the importance of space science and technology

Building local awareness of space science and technology and its benefits



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General Implementation Guidelines



**Cooperative governance
& Coordination**

**Developing adequate space
capabilities**

**Strengthening the space science
technology base**

**Developing and fostering
national space infrastructure**

**Promoting a domestic space
industry**

**Promoting and enhanced space
awareness at all levels**

**Enhancing international
cooperation**

Space Affairs Act 1993

the dti supported by SA Council for Space Affairs deals with policy, regulatory & advocacy matters international agreements

Industrial Development framework

the dti liaises with rel govt depts & agencies mandated to administer Acts relating to space activities

National Space Programme

DST is the lead dept in consultation with Council

Space Communications matters

DoC is the lead department

Financial resources

National Treasury has a key role of committing financial resources

DICO: supports & facilitates int'al co-operation in line with dti & other relevant depts



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Intra Government and Intra Agency Cooperation

The SA space arena comprises many role players spread across different government Departments and its institutions or agencies.

Requires a coordinated effort for more efficient use of resources to deliver the benefits of space capabilities to the nation

Inter-Departmental fora involving relevant experts, or through the establishment of focal points in various Govt Department Clusters

Greater inter-disciplinary cooperation among public sector institutions and agencies in particular greater cooperation in space research and earth observation should be encouraged and facilitated (DST led fora)



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General Implementation Guidelines

Cooperative governance

Developing adequate space capabilities

Strengthening the space science technology base

Developing and fostering national space infrastructure

Promoting a domestic space industry

Promoting and enhanced space awareness at all levels

Enhancing international cooperation



Build human capital

How do we Address capability requirements?

- National requirements will be driven by Government needs in scientific, technical and industrial areas
- Will have to be developed locally or & acquired abroad through strategic partnerships
- Assured access to space is a critical capability that should be pursued through commercial means or strategic partnerships



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R&D activities in space science & technology to form one of the cornerstones upon which the national space programme is built

Existing capabilities of science councils, national research facilities & scientific institutes falling under various agencies should be used to maximum effect in the space programme

The university research community represents another strength in the system that should be harnessed through the provision of targeted R&D programmes



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SA possesses operations infrastructure for ground segment operations of space system, satellite assembly, testing and integration facilities as well as facilities to support flight testing and space launch activities

This represents a significant investment, that should be reinvigorated and harnessed

Space Infrastructure is costly and highly specialised and should be utilised in an optimal manner by both public & private sector users

Facilities require a steady level of usage in order to maintain adequate levels of expertise, safety and quality



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Development of a Space Industrial Framework for the country to unlock industrial opportunities

Dti is commissioning a research to support the NIPF's vision of L-T intensification of the country's industrialisation process towards knowledge economy

Building capacity in the domestic industry – (through maximum participation of the SA private sector in public sector space projects)

Create the appropriate regulatory environment – SA Space Council

Manage innovation and technology transfer to and from the space sector – partnerships – Space Agency and Technology Innovation Agency



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Space Affairs Act mandates the Space Council to promote space awareness & provide information about its activities

Government departments and their agencies undertaking space science and technology activities should work towards a sustained effort to communicate at all levels of society to create public awareness

Private sector participants of publicly funded space programmes should align a component of their activities to support enhanced awareness.

A Collective effort would be encouraged for maximum impact



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SA will pursue mutually beneficial and appropriate international cooperation opportunities consistent with our foreign policy objectives and international obligations

Promote enhanced cooperation with and among African countries including diplomatic & communications efforts (South-South relations)

The dti , with the Council is the lead department to conclude country international agreements

SA shall actively participate in regional and global multilateral fora for the peaceful uses of outer space



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Monitoring and Evaluation of the Policy

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**Will put in place mechanisms
to monitor and evaluate the
implementation of this policy**

**Shall review the space policy
after every 10 years, or at any
time before as determined by
the Minister of Trade and
Industry**



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Discussions

Thank you

Comments & Inputs