

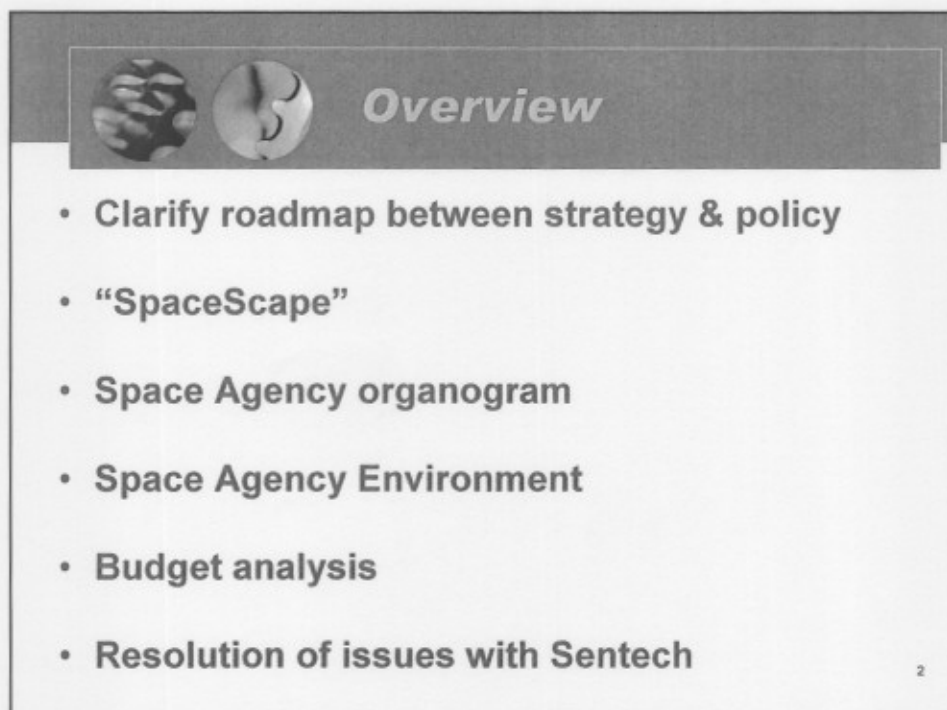


**Presentation to the Portfolio
Committee on Science and
Technology**

**South African National
Space Agency Bill**

**DST Response
17 June 2008**

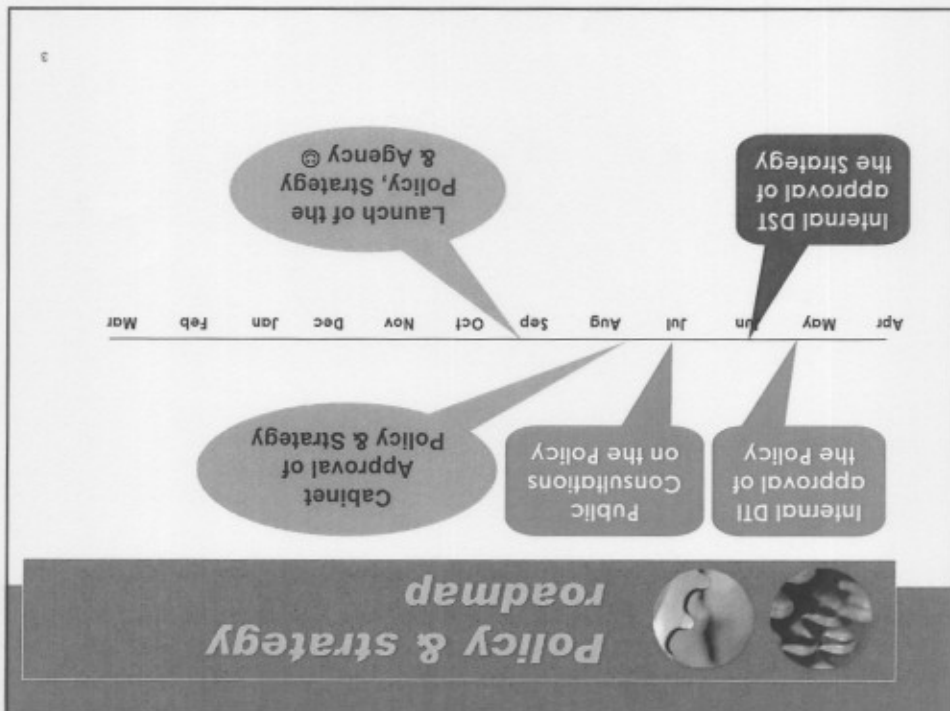
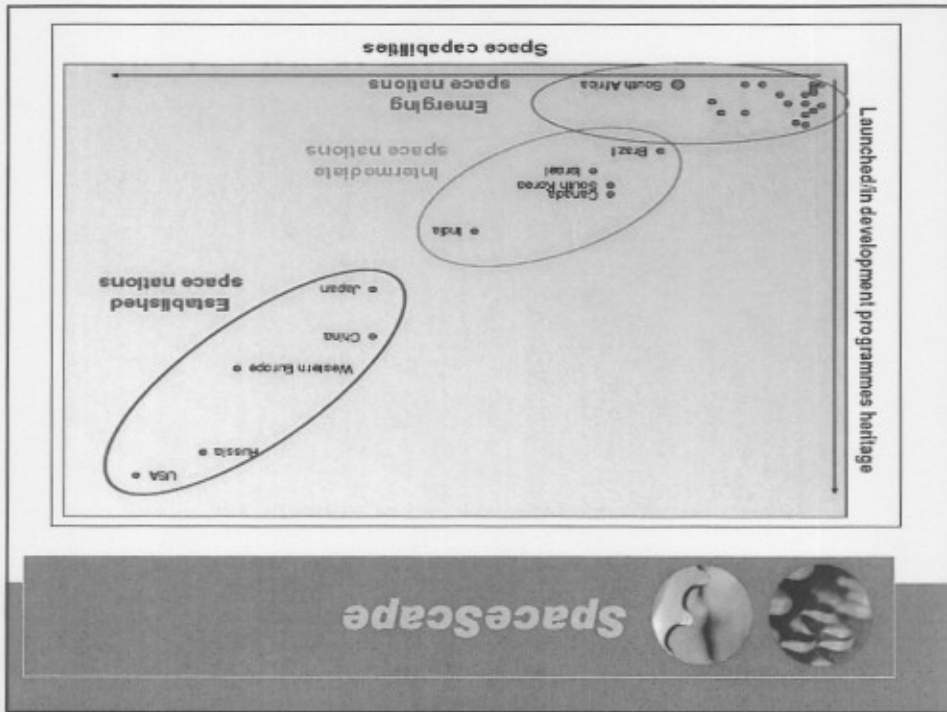
 **science
& technology**
Department
of Science and Technology
REPUBLIC OF SOUTH AFRICA



Overview

- Clarify roadmap between strategy & policy
- “SpaceScape”
- Space Agency organogram
- Space Agency Environment
- Budget analysis
- Resolution of issues with Sentech

2



- 2 ISO 9001 (Normal Standard)
- 3 EN 9100 (Aeronautic standard)
- 5 CMMI Level 3 (High level standard)

SpaceScope

Space capabilities

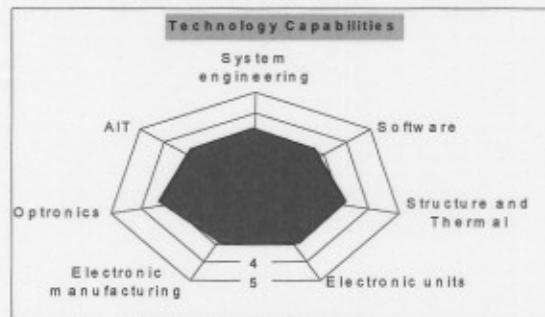
Launched in development programmes heritage

SpaceScope



SpaceScape

- 1 For ground fixed application
- 2 For embedded ground/naval application (automotive, marine)
- 3 For embedded aeronautic application (airplane, missile....)
- 4 For space application (nano or micro satellite)
- 5 For space application (large operational satellite)

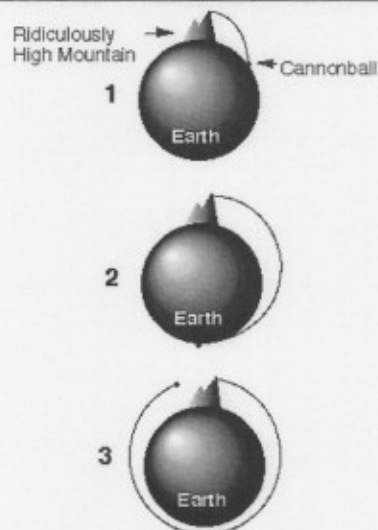


AIT – Assembly, Integration & Testing

7



Satellite Orbits



8

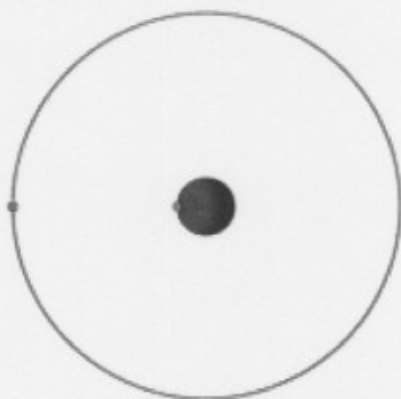
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Resolution

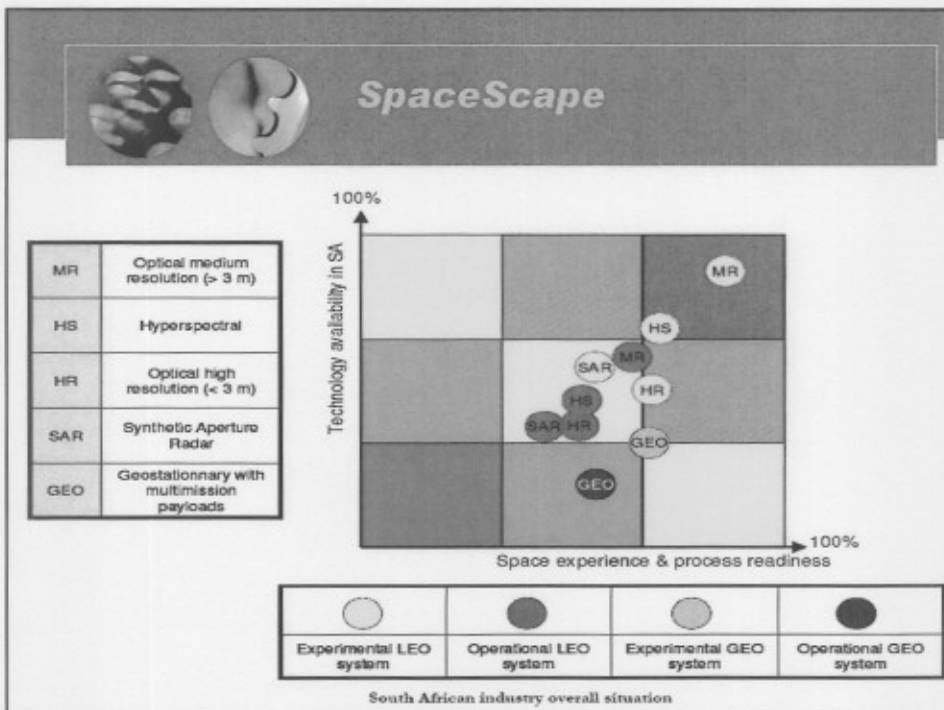
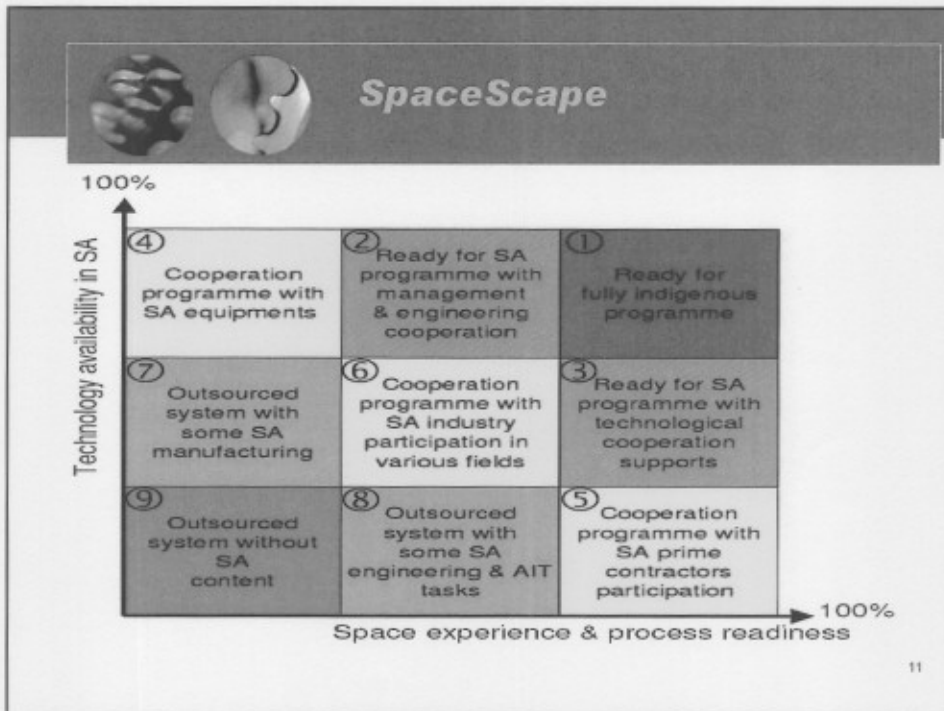


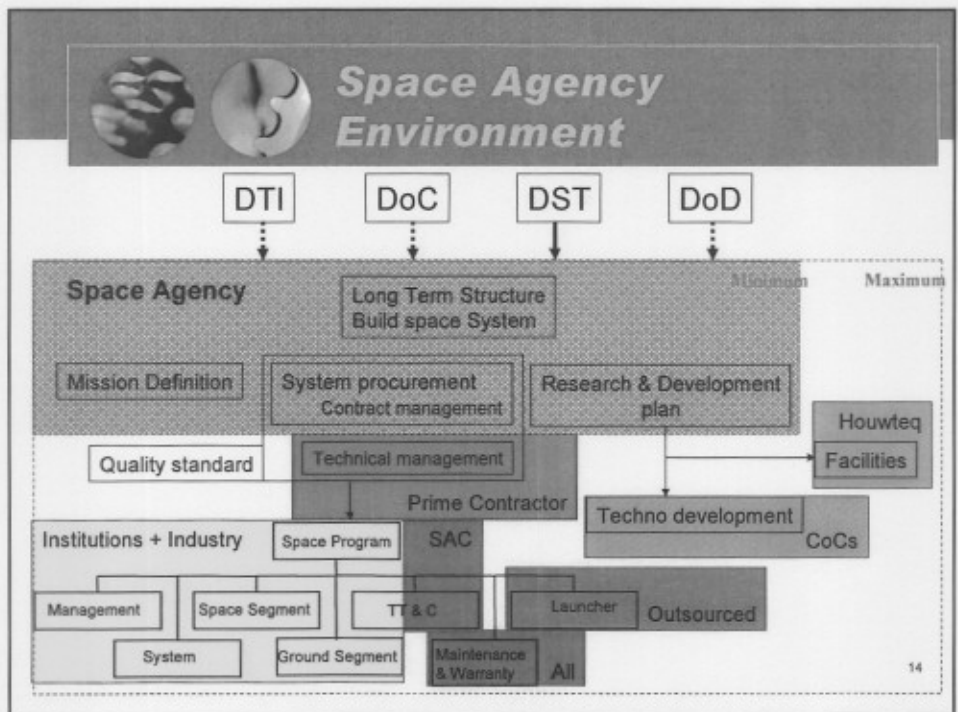
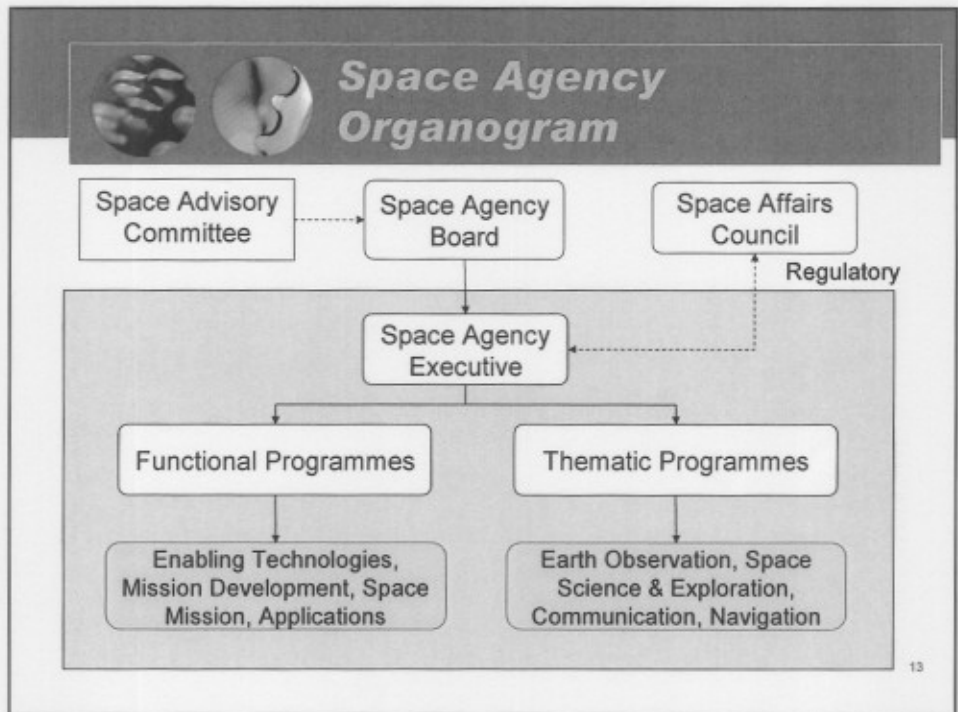
9



Geostationary Orbit

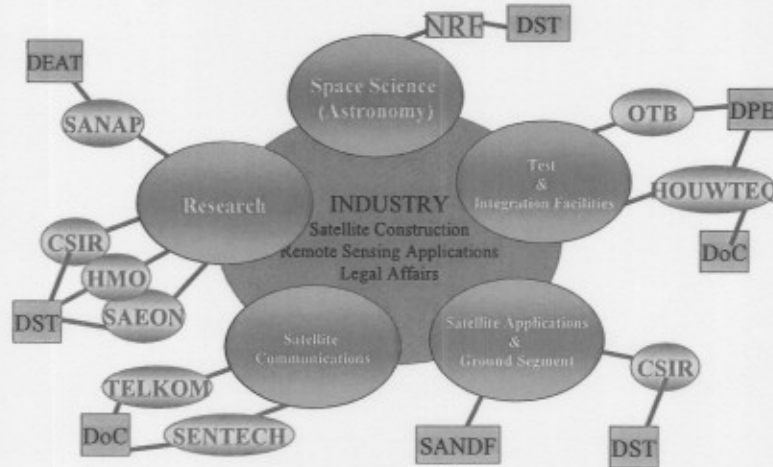








Space Agency Environment



15



Budget Analysis

	Item	2012	2015	2017
		R'000	R'000	R'000
Public Institutions	Mission development	200,000	240,000	280,000
	Mission operations	70,000	100,000	120,000
	Infrastructure	80,000	90,000	100,000
	Sub-Total	350,000	430,000	500,000
R&D	Applications	150,000	400,000	800,000
	Enabling technologies	150,000	400,000	800,000
	Human capital development	100,000	120,000	150,000
	Public awareness	20,000	30,000	50,000
	Sub-Total	420,000	950,000	1,800,000
	Total	770,000	1,380,000	2,300,000

Current spend is estimated between R120m to R600m, mainly on applications

16



Budget Analysis

License Cost (SAC Only)

Satellite	Resolution	Price per annum	Rand value [R]
Landsat 5	30m	\$150,000	1,230,000
Spot Image	5m, 10m, 20m	€ 1,500,000	18,750,000
CartoSat	2m	\$1,500,000	12,300,000

Satellite	Coverage/Resolution	Price per image	Rand value [R]
GeoEye (1m, 4m)	2500 km ²	\$80,000	656,000
	5000 km ²	\$85,000	697,000
	100000 km ²	\$180,000	1,476,000
	150000 km ²	\$225,000	1,845,000
Quick Bird (0.8m, 4m)	32458 km ²	\$500,000	4,100,000
	52448 km ²	\$750,000	6,150,000
	75758 km ²	\$1,000,000	8,200,000
TeraSAR	1m	€ 250,000	3,125,000
	3m	€ 500,000	6,250,000
	15m	€ 750,000	9,375,000

17



Sentech/NSA Issue

5 (1) (d): "acquire, assimilate and disseminate space satellite imagery."

18



Sentech/NSA Issue

“Satellite imagery” consists of photographs of the Earth or of other planets made by means of artificial satellites and the images can be in visible colour or in other spectra.

19



THANK YOU

20