

UNITED NATIONS / SOUTH AFRICA SYMPOSIUM ON BASIC SPACE TECHNOLOGY

Small Satellite Missions for Scientific and Technological Advancement

Young African Space Engineers in the Global Space:
Opportunities & Challenges

THEME: The Space Industry in Africa

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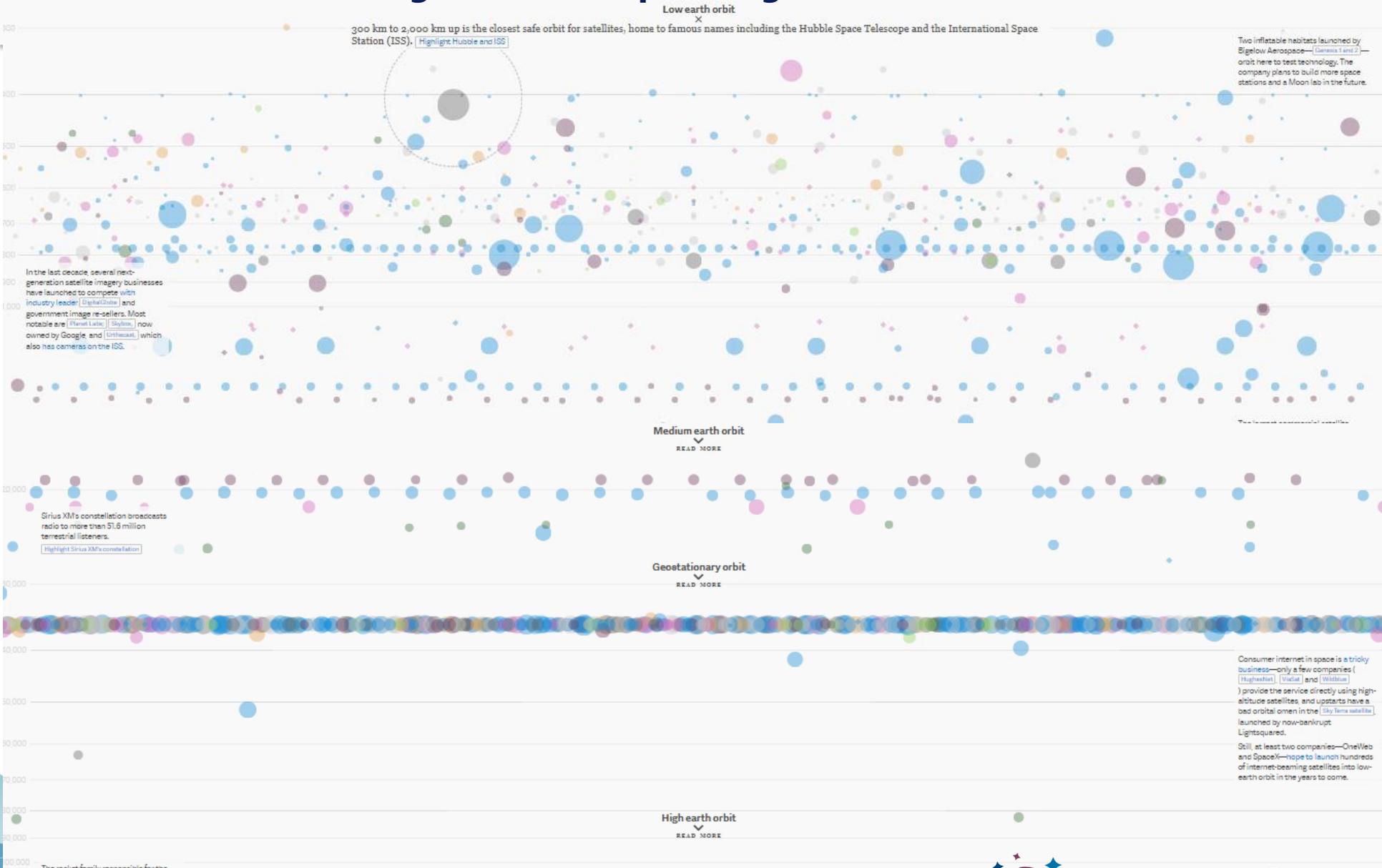
NEWSPACE
SYSTEMS



SPACE GENERATION
ADVISORY COUNCIL



2017: >70 States, commercial companies & international organizations operating >1500 satellites



AFRICA : *the journey towards space*

Space embodies continued innovation: rockets and spaceships, nanosatellites and asteroid miners, spaceports and zero-gravity 3-D printers.

IS IT FOR US?

“From the ancient libraries of Timbuktu in Mali, which preserved the medieval study of science and astronomy on the continent, to the unearthing of an astronomical observatory in Sudan thought to date back to 7 000 BCE, Africa is no stranger to space science.” - Paul Boateng

“35 of the 40 objectives in the AU Agenda 2063 require space-related applications” - Dr. Munsami

A JOURNEY TOWARDS SPACE & why africa?

BENEFITS OF SUSTAINABILITY – why a nascent industry is critical?

Space Technology Enables Better Decision Making

Nig Sat-1's data & imagery was used to help monitor conditions that could affect agriculture, a sector employing more than 70% of the country's population. It was also used to create the first detailed map of Nigeria, allowing government stakeholders to determine where farming was taking place, and provide better support for its large rural communities.

Investing in Space Science and Technology Enables:

- Economic Diversification
- New industry [creation of a local supply chain & downstream applications], leads to new employment opportunities
- Catalyst for broader human capacity-building & investment in infrastructure



THE JOURNEY TOWARDS SPACE : why africa?

CHALLENGES TO SUSTAINABILITY: why a dynamic nascent industry is critical?

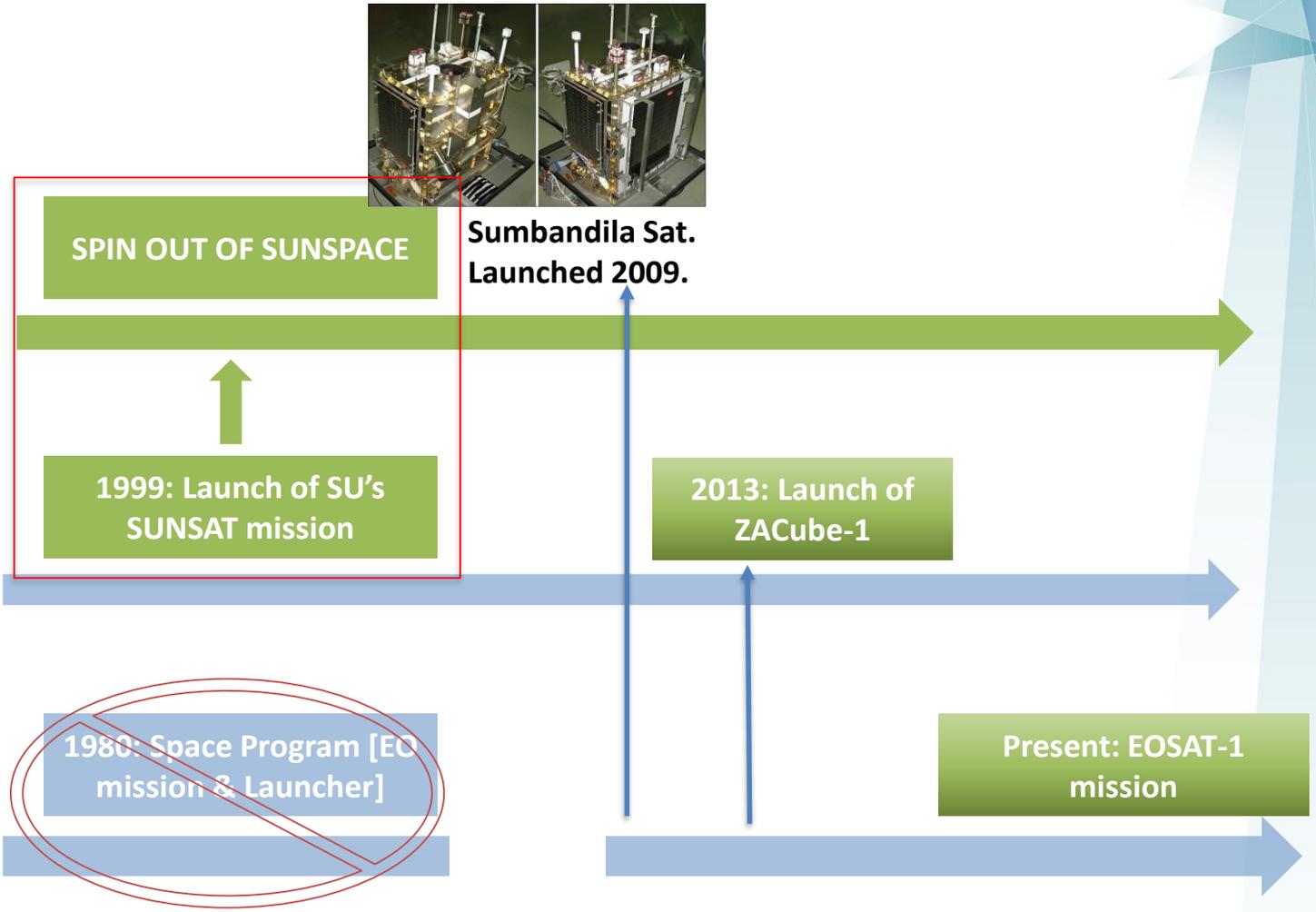
- Sporadic Funding
- Change in Leadership / Public Opinion
- Adverse Environment [e.g. conflict/protests or natural disasters etc.]
- Acquisition rather than Indigenous Capacity Building
- Others....

SOUTH AFRICAN CASE : model worth following?

commercialisation
Private Industry

innovation
Academia

Impartial support
National Gov.



SOUTH AFRICAN CASE : model worth following?

JUST MAYBE...



HOWEVER,

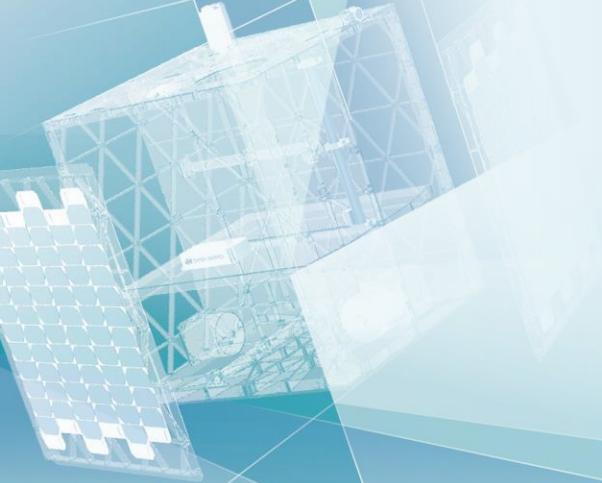
These roles are important to remember as significant outcomes from government funded space research should always be the development of new commercial products/services and the eventual spin-out of a company.

Otherwise it could inadvertently become a 'greenhouse' supporting dependents while undermining private industry which ultimately would undermine the sustainability of the industry itself.

THANK YOU

Let us continue to work towards nascent space industries that supports responsible governance, sustainable job creation and importantly, the upskilling of our local communities so that they may not be left behind. Let us ensure the benefits of space becomes tangible to even a child living in the remotest regions of this continent.

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