



SANSA


Space Operations



SANSA Space Operations



Overview – SANSA Space Operations


- SAC is uniquely positioned as a primary ground receiving station in Africa
 - All the frequency bands presently used in the market
 - Operationally and technically capable to serve local and international markets
 - Recognised internationally
 - Preferred mission control entity for the SA space programme
 - Excellent track record locally and internationally
 - Well balanced staff compliment
 - Internationally competitive
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Capabilities

The SO has gained valuable experience in successfully implementing TT&C support projects involving upgrading of facilities, interfacing existing capabilities with customer furnished equipment, setting up data communications links, and training operations teams for new support and services.




Objectives of the ATF for TT&C

- Developing an internship programme that will offer graduates opportunity to gain working experience
 - Increasing the exposure, knowledge, and skills of Space Ops employees to enhance the quality of services
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TT&C SWOT

- Strengths
 - *Skills/people infrastructure*
 - Dynamic thinking people: think outside their domains
 - Early adoptors of new technology
 - Physical comms networks
 - Location (regionally), track record, history (heritage)
 - Gateway to Africa
 - *Relationships*
 - Our relationships to commercial companies: not competing with industry
 - CEOS chairmanship/GEO, now full member
 - Duration of some relationships 10-40 years
 - Stakeholder management (could be more structured)
 - Customer focus

TT&C SWOT.. Cont

- Staff retention
 - Values, dedication
 - Diverse service offerings
 - Flexibility/adaptability
 - Collaborative thinking
 - SumbandilaSat: operational satellite
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TT&C WEAKNESSES

- *Human resources*
 - Quality
 - Succession planning/skills transfer knowledge management
 - Internal/external comms
 - Lack of specialisation
 - SANSA Space Operations: seems to be closed to outside (physical)
 - Currently SAP system weakness
 - Lost identity with re-branding
 - Disaster recovery plan?
 - Our own physical environment
 - i.e data
 - Office space
 - HCD focus
 - Job models


TT&C OPPORTUNITIES

- Growth
 - If numbers grow
- New identity as agency
- If good funding under 3A
- Can now speak at agency level
 - Agency to agency dialogue
- New international bodies can be accessed
- Branding ourselves as disaster management centre
- Space science grand challenge
- BRICS
- Examples:
 - Outreach
 - Laser comms
 - LEOPs in Scientific mission can be exploited further
 - Creat PM office

TT&C THREAT

- Board background on our capabilities
- This site at physical risk: our security risk profile change
 - ie information security
- Need to improve skill set
- Lack of commercial mindset
 - Stay competitive
 - If no commercial threat – no drive to complete
- Resources (critical)
- Succession planning
- Technological obsolescence
 - Change in TT&C technology - recorded data – become redundant


TT&C THREAT Cont...

- 3A funding issue: fluctuations in budget
 - No satellite building programme
 - Public perception of our value
 - Guard against bureaucracy and red tape
 - SA political change every five years
 - Further organisational change (no stability)
 - National space strategy delayed
 - Dependence on international sats
 - Pool car scheme
 - SumbandilaSat life expectancy
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TT&C and EO WISHLIST

- EO cal sites
- Office space
- SA Sat programme
- Ku IOT Antenna
- Dedicated server room
- More staff
- ICT lab
- Disaster management centre
 - Mobile deployment
- Dark fibre
- Canteen
- Upgraded greenhouse
- EO showcase/mobile edulat (outreach)
- Guest/game farm with fence and 4x4
- Cherry picker

WISHLIST Cont...

- Test equipment
 - On site mobility – site getting bigger
 - Storage dept. spares etc
 - Deep space antenna
 - Antarctic station
 - Physical presence close to industry (shop)
 - Video-conferencing equipment
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Thank You