

# UNISEC-SAR (Southern African Region)

**The Second UNISEC-Global Meeting  
November 18-20, 2014, Kitakyushu, Japan**



# The original plan

- UNISEC-SA? as South Africa have critical mass to create UNISEC chapter
- UNISEC-Namibia?
  - Keen interest
  - Limited experience in space
  - Currently only one University option
- UNISEC-Angola?
  - Keen interest
  - Limited experience in space
  - Currently no University option, but government organization established to develop space activities

# Now: UNISEC-SAR

- Transfer of knowledge and experience from South Africa to Namibia and Angola
  - Ms Smita Francis – Enrolled PhD at Cape Peninsula University of Technology
  - Mr Zolana João – Enrolled PhD at Stellenbosch University
- Create UNISEC-SAR to include Namibia, Angola and South Africa (and any Southern African Country)

# UNISEC-SAR Founded

- 2<sup>nd</sup> International African CubeSat Workshop held on 4 November 2014
- Universities, Government Agencies and Industry all represented – Ideal event to Launch UNISEC-SAR



# Founding Members

- Stellenbosch University (SU)
- Cape Peninsula University of Technology (CPUT)
- University of Cape Town (UCT)
- Vaal University of Technology (VUT)
- Namibian University of Science and Technology (NUST)
- Angola (Angolan National Office for Space Affairs)

# UNISEC-SAR Coverage



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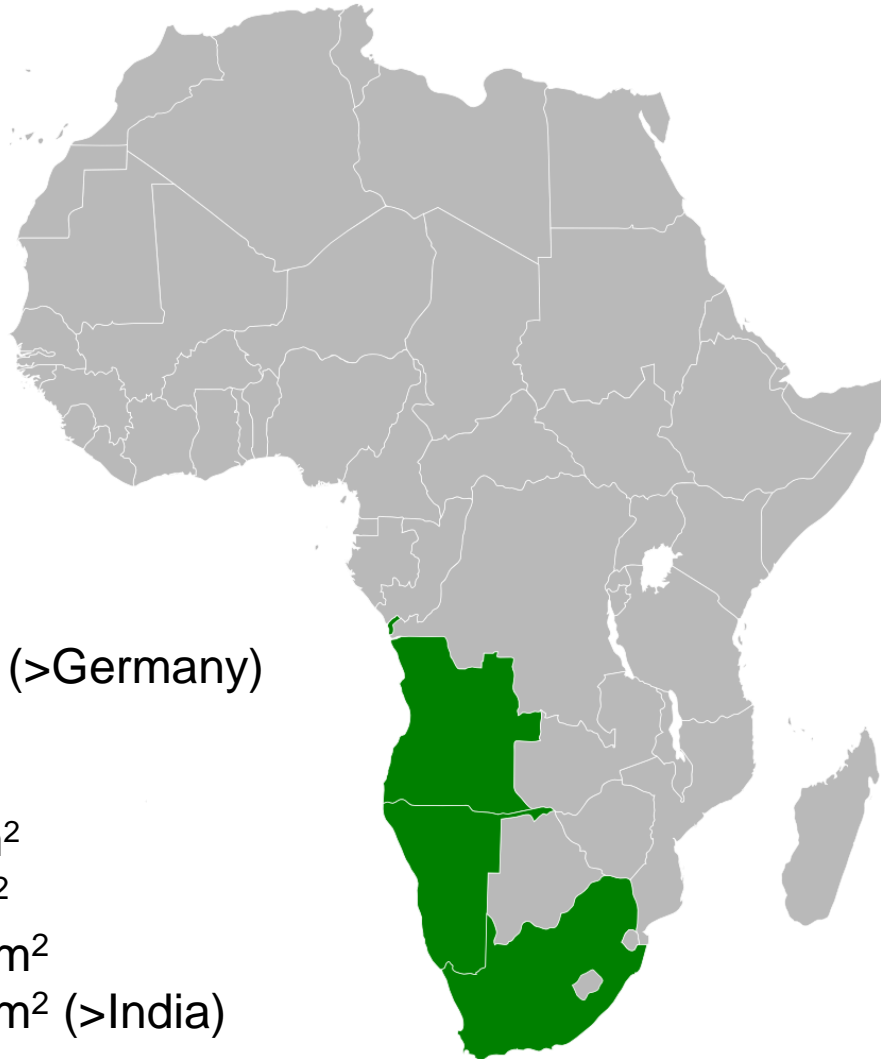
# UNISEC-SAR Coverage



# UNISEC-SAR Coverage

Population:  
54,002,000  
+ 2,113,077  
+ 24,383,301  
= 80,498,378 (>Germany)

Area:  
1,221,037 km<sup>2</sup>  
+825,615 km<sup>2</sup>  
+1,246,700 km<sup>2</sup>  
= 3,293,352 km<sup>2</sup> (>India)



# UNISEC-SAR Current

- South African research activities presented by UNISON presentation
- CPUT – CanSat program with various schools, one school has “launched” using captive helium balloon
- CPUT – NUST cooperation – GPS research to enable more accurate GIS data capturing
- CPUT – Research chair in Satellite systems
- SU – Commercialization of CubeSat technology – 18+ ADCS packages delivered for QB50 participants

# UNISEC-SAR Challenges

- Reaching and including other Universities involved in space engineering
  - 2/3 Candidates identified
- Growing “space” capacity at all member Universities
  - SU & CPUT are established, but can grow
  - UCT, VUT, NUTS, Angola single persons interested have big growth potential
- Expanding UNISON members and activities
- Reaching broader range of schools
  - Expanding school projects and guest lectures at schools
  - Importance of students to be interested in science (and of course space)

# UNISEC-SAR Challenges II

- Creating opportunities and platforms to enable and improve knowledge sharing between UNISEC-SAR members
  - Yearly symposium on space engineering?
  - Yearly UNISEC-SAR members meeting?
  - Yearly UNISON-SAR meeting/symposium/competition?
- Host UNISEC-Global Meeting – 2016?

# UNISEC-SAR Web-space

- Single source for UNISEC-SAR information
  - Members, structure, contact details
- Platform for information sharing
  - Distribution of UNISEC-Global information to members eg. UNISEC/UNISON Global meeting, MIC
  - Member areas for publishing resource information
  - Hosting of education material for universities and schools
- Online project collaboration
  - Improves accessibility
  - Reduce cost of travel

# Thank you

Any Questions?

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