

The Pan African University



United Nations / South Africa Symposium on Basic Space Technology “Small satellite missions for scientific and technological advancement.

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Thabo Dikgale



science
& technology

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



higher education
& training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA



Presentation Overview

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Brief History of the PAU

The Pan African University (PAU) is a University network owned by The AUC that was established as a network of PAU Institutes within existing African Universities in the five African sub-regions recognised by the AU based on a competitive selection process coordinated by the PAU and supported by experienced African academicians.



Brief History of the PAU Contd...

- **PAU was established by The African Heads of State and Government in 2010 and it was formally launched in Addis Ababa in December 2011 as a continental flagship initiative.**
- **The maiden PAU Statute was adopted in the year 2013. However, in order to improve flexibility of its operations, a revised version of the PAU Statute was revised in 2015 and approved by The January 2016 AU Summit.**
- **In January 2015, The AU Summit approved relocation of The Rectorate from Addis Ababa to Yaounde, Cameroon. The Summit also elected Prof. Tolly.S.A. Mbwette of Tanzania as The maiden President of PAU Council while Prof. Paolo De Carvalho of Angola as Vice President of The Council for a period of 3 years.**



Policy Context

- **Agenda 2063** - based on continental aspirations for inclusive growth, sustainable development and social integration, the agenda draws upon the potential of African people, especially women and youth, for its delivery.
- **The 10-year Science, Technology and Innovation Strategy for Africa (STISA-2024)**, adopted by the AU Assembly Heads of State and Governments in June 2014 - building the requisite space science and technology capacity to respond to the socio-economic challenges of the African continent.
- **The African Space Policy and the African Space Strategy** were approved by the AU Assembly Heads of State in January 2016.



Expected Role of the PAU in the African Higher Education Space

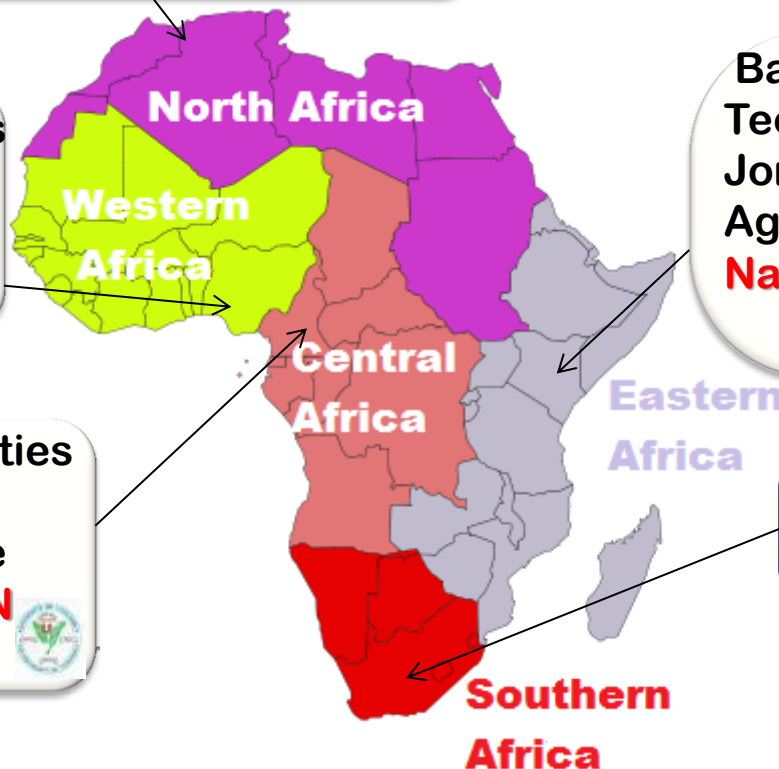
- **The establishment of PAU was expected to strengthen the African HE & Research with respect to:**
- **Enhanced quality,**
- **Enhanced South-South collaboration,**
- **Enhanced Knowledge generation to solve African problems,**
- **Enhanced STI Innovation in selected African higher education institutions with enhanced links to Industry and the social sector through internships for its students.**
- **To contribute towards production of the critical mass of high quality researchers through PG programmes and empowerment through command of the AU languages.**
- **To make African HE & Research more attractive, globally more competitive, more relevant to the development of Africa as defined in Agenda 2063 whose vision is outlined in the seven (7) strategic objectives built around the theme of “The Africa that we want”**

- *PAU is expected to prioritise its research activities in the following initial priority areas that will be periodically reviewed in future:*
- **Governance, Regional integration through minimisation of language barriers and capacity building in interpretation & translation, Water, Energy, Climate change, Science Technology & Innovation, Health, Agriculture, Earth sciences, Space Science.**

PAUSSI, the fifth hub of PAU

**Water & Energy Sciences
(including Climate Change)
University of Tlemcen
Tlemcen, ALGERIA**

**Life & Earth Sciences
University of Ibadan,
Ibadan, NIGERIA**



**Basic Sciences,
Technology & Innovation
Jomo Kenyatta University of
Agriculture & Technology
Nairobi, KENYA**



**Governance, Humanities
and Social Sciences
University of Yaounde
Yaoundé, CAMEROON**



**Space Sciences
SOUTH AFRICA**



Local Audit – May 2016

- **Undertook audit of the relevant academic programs and support programs**
- **Took stock of institutions identified and possible infrastructure for use by PAUSSI**
- **Identified additional needs in terms of teaching and research equipment**
- **Identified human resource requirements (academic, technical and administrative)**
- **Assessed library facilities and resources to be made available**
- **Established the extent of academic and research networks**
- **Identified legal implications for hosting**
- **Developed a possible hosting model**
- **Made recommendations**



Recommendations for implementation

- **No premises, property and assets should be ceded to PAUSSI.**
- **The PAUSSI executive structure should be independent of the participating universities.**
- **The PAUSSI Board should have representation of the participating universities; perform the student vetting process; and oversight role of all partner university programmes.**
- **Tax exemptions and similar concessions should be considered within the framework of South African Law. (Article 9 (5) Host Country Agreement)**
- **Intellectual property should be handled in terms of the IPR Act, 2008.**
- **Curricula to be developed by collaboration between the PAUSS Institute and the degree awarding University according to their normal procedures and follow the requirements of the South African Qualifications Authority (SAQA).**
- **PAUSSI Branding and Diplomatic immunities.**
- **CPUT – African Studies, Gender and Human Rights and French/English.**

- **Space Engineering - CPUT & SU**
 - Satellite Engineering
 - Ground Segments
- **Space Sciences – UCT, NWU, DUT & UKZN**
 - Space Physics
 - Satellite Communications
 - Navigation and Positioning
- **Space Applications – UFH, UP**
 - Astronomy
 - Earth Observations

- **Host Country Agreement**
- **Host University agreement – Governance Model**
- **Tri-partite Agreement**
- **National Steering Committee**
- **Pilot and Phase 2 – UFH, UP, UCT & DUT**


Financial Considerations

- **Scholarship – PhD 4800 \$ MSc 4200 \$**
- **Stipend – 1100 \$ and 750 \$ respectively (Per Month / Per Year)**
- **Experts**
- **Logistics**



Road Map

- **January 2018 – Signing of the Host Country Agreement (AU Summit)**
- **March 2018 – Signing of the Host University Agreement**
- **June 2018 – Signing of the Participating Universities Agreement and official launch of the PAUSSI**
- **June 2018 – Signing of the Tri-partite agreement**
- **February 2019 – First PAUSSI students intake**



Key Partnerships and Collaborations: Considerations for Sustainability

Government – DST, DHET & DIRCO

Thematic Partners

- **Potential thematic and strategic partners UK, EU, USA, RUSSIA [BRICS]**
- **Role:**
 - Financial partner/contributor
 - Advisor
 - Exchange programmes
 - Joint research initiatives
 - Internships
- **Tripartite Agreement – [i.e. between the AU; RSA and a Thematic Partner]**

E-learning platform

Bottom up approach – Leveraging existing programmes and institutions
Student Contributions



THANK YOU

