

# AMCOMET

8<sup>th</sup> RAIDEG Meeting  
1 – 2 November 2017  
Geneva, Switzerland



**WMO OMM**

World Meteorological Organization  
Organisation météorologique mondiale

Dr. J. R. Mukabana  
Director  
Regional Office for Africa and LDCs  
AMCOMET Secretariat

# AMCOMET and the African Space Programme

October 2012  
AMCOMET-2

**Ministerial  
Decision 02/5**  
... investigate  
the feasibility  
of developing  
an African  
Regional Space  
Programme ...

January 2013  
AU Summit

**Decision 744**  
Establishment of  
a Joint Task  
Force, ensuring  
close  
coordination with  
other relevant  
(AUC)  
Departments and  
stakeholders

May 2014  
Bureau Meeting

**Decision**  
Request the AUC,  
AMCOST and  
AMCOMET to link  
the African  
Regional Space  
Programme with  
the WMO Space  
Programme

February 2015  
AMCOMET-3

**Praia Ministerial  
Declaration**  
Endorsement of the  
draft African Space  
Policy and the  
African Space  
Strategy  
**WMO RAI**  
Endorsement of  
Concept Note for the  
African Regional  
Space Programme

# January 2016 AU Summit Decision on the African Space Programme

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- African Space Policy and Strategy **approved** by the AU Assembly
- The AU Space Working Group to coordinate the development of an Implementation Plan
- The AU Space Working Group to develop an appropriate Governance Framework

***Next Steps for WMO and AMCOMET:***

***to define concretely meteorological inputs into the African Space Implementation Plan***

# Key elements of the African Space Policy and Strategy and the context for the user requirements of the African meteorological community

# Space Policy Goals

1. To use space science and technology to derive optimal socio-economic benefits that improves the quality of lives and creates wealth
2. To develop and maintain indigenous infrastructure and capabilities that services an African market

# Addressing user needs

- Improve the economy and quality of life
- Address the essential needs of the African market
- Development of services and products using African capacities
- Develop requisite human resources to address user needs
- Maintain efficiency and sustainability

# Identified user needs

Disasters

Health

Energy

Climate

Water

Weather

Ecosystems

Biodiversity

Peace &  
Security

Education

Communication

Trade &  
Industry

Transport

Infrastructure



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# Space Applications

- Develop a data sharing policy
- Timely access to the right datasets
- Provision of appropriate services and products
- Robust processing capabilities
- Ensure all levels of government are able to access data through a centralised portal
- Provide geospatial and scientific data for R&D and education
- Provide geospatial data for commercial exploitation





# Accessing space services

- Use existing space infrastructure
- Promote capacity building for accessing space services
- Adopt a data sharing framework
- Develop and increase our asset base
- Establishment of regional and sub-regional centers of excellence



# Good governance and management

- Establish an organisational framework
- African financial support as the main funding source
- Promote knowledge sharing
- Monitor and evaluate space activities
- Regulate space activities
- Maintain an awareness campaign



# Accessing space services

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# Meteorological Inputs into the African Space Implementation Plan

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## Five (5) Thematic Areas of the African Space Programme

1. Earth Observations
2. Navigation and Positioning
3. Satellite Communications
4. Space Physics
5. Astronomy

# Meteorological Inputs into the African Space Implementation Plan

## Proposed Activities

- ❑ **Building a Ground Segment** (for receiving and accessing existing satellite data and products)
- ❑ **Strengthening Application Segment Capacity**
  - ❑ building for a critical mass of expertise in the use of satellite data
  - ❑ identifying gaps in existing space observations
  - ❑ Acquiring of requisite infrastructure and knowledge to support the exploitation of existing satellite data
- ❑ Development of a **Space Segment to be considered** based on:
  - ❑ Rich experience gained through applications of existing satellite systems
  - ❑ Identification of more precise needs and identified gaps in current and planned systems using WMO Rolling Review of Requirements Process

# Outcomes & Recommendations from EUMETSAT User Forum (2016)

- ❑ Recommendation #2: MTG Africa and AMCOMET The Forum **recommended AMCOMET Secretariat and AMCOMET Space Task Team**, as part of their respective **mandate to take into account the increase in capacity required for Africa to fully benefit from MTG** (i.e. training, user station, EUMETCast bandwidth for data access) and to consider the MTG Africa roadmap that will be proposed by EUMETSAT and RAIDEG
- ❑ Recommendation #3: MTG Africa – Resources mobilisation The Forum noted the bandwidth limitations and the efforts made by EUMETSAT to guarantee the continuity of an optimum satellite geostationary service to Africa. The Forum recommended to **AMCOMET and AUC to support the NMHS in their resources mobilisation to prepare for the reception of MTG data in Africa;**

# Outcomes & Recommendations from EUMETSAT User Forum (2016)

- ❑ **Recommendation #22:** Specialized training for NWP. The Forum noted that the new technologies implemented within initiatives for the use of EPS meteorological satellite data in support to the production of numerical weather prevision (NWP), e.g. the SAWIDRA project, require a substantial update of African expertise. The Forum ***recommended AMCOMET, WMO and AUC, in the framework of their own mandate of capacity building, to rapidly put in place a specialised training programme*** (e.g., masters) involving African training centres, in close relationship with relevant international partners.
- ❑ **Recommendation #25:** African Space Strategy Implementation Plan and existing initiatives. The Forum recommended to AU Space Working Group and ***AMCOMET Space Task Team to take into account, during the drafting and implementation of the African Space Strategy Implementation Plan, existing initiatives and projects such as RAIDEG, AfriGEOSS, MESA, GMES and Africa and SAWIDRA, in order to ensure technological and thematic coherence, in particular in the area of meteorology and climate***, and optimise mutual benefits and synergies and ensuring contribution of Earth observation to development goals.



# Outcomes & Recommendations from EUMETSAT User Forum (2016)

- ❑ **Recommendation #26: Earth Observation (EO) data acquisition, dissemination and sharing.** The Forum recommended AUC, AMCOMET, WMO and GEO, in the framework of the African Space Policy and Strategy, ***to come up with a continental policy for the acquisition, dissemination and sharing of EO data and other in-situ relevant data.***



# Considerations & Next Steps

- ❑ There are many **complementarities in the various activities** of WMO, AMCOMET and other partners

*How do we **converge all the various activities to improve capacity building** efforts for NMHSs in Africa [i.e. RAIDEG, MESA, GMES&Africa, Copernicus Climate Change Services (C3S), Meteosat Third Generation (MTG), AfriGEOSS, various training resources available, among others]*

*How do we **leverage these existing activities** and use them as concrete input into the Implementation Plan of the African Space Programme*

- ❑ There is a need to **enhance cooperation** between on-going initiatives / programmes to maximize benefits and create synergies

*Agree on a **Framework to identify needs and gaps** (infrastructure & application) in the exploitation of satellite data for improved weather and climate services*

***Identify Strategic Partnerships** (both funding and cooperation):*  
*Consider enhancing the **ASMET** (Africa Satellite Meteorology Education and Training) Programme.*



**AMCOMET**

Thank you  
Merci

[www.wmo.int/amcomet](http://www.wmo.int/amcomet)



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