Global Monitoring for Environment and Security (GMES) & Africa Initiative

African Union Commission
Department of Human Resources, Science and Technology
Building on past achievements while innovating and expanding


(2017-2020)
GMES and Africa Initiative

• GMES & Africa was launched in Lisbon, 2007 during the 2\textsuperscript{nd} EU - Africa Summit as a Long-term cooperation framework between EU and Africa making use of Copernicus Services.

• Development of local capacities in Africa: institutional, human and technical, for the access and exploitation of EO-based services on operational basis.

• Main aim is to provide evidence-based knowledge for policymakers, scientists, businesses and the public to make informed decisions.
GMES & Africa contributing to the implementation of African Space Policy and Strategy

• The African Space Policy and Strategy (adopted by the Heads of State and Government) provides strategic context of the initiative

• Space Policy and Strategy to formalize an African Space program focusing on the following themes:
  1. *Earth Observation*
  2. *Satellite Communication*
  3. *Navigation and Positioning*
  4. *Space Science and Astronomy*

• GMES & Africa will contribute to a sustainable *African EO framework*
GMES & Africa Thematic Areas

- Natural Resources
- Water Resource
- Marine & Coastal Areas
- Food Security & Rural Development
- Climate variability & change
- Natural & Human induced disasters
- Conflict & Political crises
- Infrastructure for territorial development
- Health Management

Cross-cutting issues of Policy, capacity Building, Finance, Monitoring and Evaluation
GMES and Africa Phase 1: Support Programme (2017-2020)

Phase 1: 3 Thematic Areas = 2 services = 23 applications

- Natural Resources
- Water Resource
- Marine & Coastal Areas

3 Thematic Areas → Water, Natural Resources → Marine & Coastal Areas

2 Services → 23 applications

Automate Mapping in the Cloud
23 Applications

- Water and Natural Resources Service - 15 applications:
  - 7 applications for water resources and
  - 8 applications for Natural resources.

- Marine and Costal Areas Service: 8 applications
Applications supporting Water and Natural Resources service

Consolidating and/or extending applications

1. L112 - Water Level for Fluvial Navigability and Hydrology Cycle Monitoring and Assessment (CEMAC)
2. L113 - Riverine Floods Monitoring and Assessment (SADC)
3. L221 - Land Degradation Monitoring and Assessment (IGAD)
4. L222 - Natural Habitats Monitoring and Assessment (IGAD)
5. L223 - Tropical Forest Surveillance, Monitoring and Assessment (IGAD)
6. L231 - Agriculture Seasonal Monitoring, Early Warning and Assessment (ECOWAS and SADC)
7. L232 - Pasture Seasonal Monitoring, Early Warning and Assessment (ECOWAS)
8. L233 - Wildfires Seasonal Monitoring, Early Warning and Assessment (ECOWAS and SADC)
Applications for water and Natural Resources service

New applications

1. **L111** - Water Balance Monitoring
2. **L114** - Major African Great Lakes Biophysical Parameters Monitoring
3. **L115** - Wetlands Monitoring and Assessment
4. **L121** - Consolidation of Knowledge on Large Trans-boundary Aquifers
5. **L122** - Water Abstraction Surveillance, Monitoring and Assessment in Irrigated Areas
6. **L211** - Open Geographical Regional Reference Vector Database (~1:1M scale) for Water and agro-ecological zonings
7. **L224** - Surveillance, Monitoring and Assessment of Environmental Impacts of Mining activities
Applications for Marine and Coastal Areas

Consolidating and/or expanding applications

1. M111 - Monitoring and forecasting of physical and biological oceanography variables (IOC, Parts of SADC, IGAD, ECOWAS and CEMAC)
2. M112 - Fishing Zones Monitoring and Protection (IOC, Parts of SADC, IGAD, ECOWAS and CEMAC)
3. M221 - Coastal Vulnerability (IOC, Parts of SADC, IGAD, ECOWAS and CEMAC)
4. M441 - 3 days Marine Weather Forecast (ECOWAS and CEMAC)

New applications

1. M122 - Aquaculture Site Monitoring and Protection
2. M211 - Coastal Ecosystems Mapping, Monitoring and Assessment
3. M311 - Ship Traffic Monitoring
4. M. 321 - Oil Spills Monitoring and Warning
Coverage Areas: Geographical Distribution

• **North Africa** (Morocco, Algeria, Tunisia, Libya, Egypt, Mauritania, Sahrawi Republic)

• **West Africa** (Senegal, Gambia, Guinea Conakry, Guinea Bissau, Liberia, Sierra Leone, Ivory Coast, Ghana, Togo, Benin, Nigeria, Cabo Verde, Mali, Burkina, Niger)

• **Central Africa** (Chad, Central Africa, Cameroon, Gabon, Equatorial Guinea, Congo Brazzaville, Congo RDC, Burundi, Sao Tome & Principe)

• **South Africa** (Angola, Namibia, South Africa, Lesotho, Mozambique, Swaziland, Zambia, Zimbabwe, Botswana, Malawi,)

• **East Africa** (Sudan, South Sudan, Eritrea, Djibouti, Ethiopia, Uganda, Kenya, Rwanda, Somalia, Tanzania, Madagascar, Mauritius, Seychelles, Comoros)
A € 30 Million investment for the Phase 1 of GMES & Africa

- GMES & Africa is funded by EC through the PanAfrican Instrument with an envelope of € 29.5M:
  - € 17.5 M for Grants
  - € 6 M for Staffing, Program Management, coordination, outreach and capacity building among others
  - € 6 M for JRC and Technical Assistance Team (TAT)

- AUC: GMES & Africa Coordinator – Secretariat – internal experts support (€ 0.5M)

- AUC is the Delegated Authority for Grants and management

- Continued support from European Institutes (JRC, EUMATSAT, ESA, etc.)
Governance of GMES & African Support Program

Policy Coordination and Advisory Committee

African Union Commission internal Coordination and Integration Board

GMES & Africa Support Program Continental Forum

GMES & Africa Support Program Management Unit

Through RICs

Regional Implementation Advisory Committee

Through RECs

GMES & Africa Technical Expert Committee
Achievements and Current Status
Achievements since the 1st MESA Forum

1. Programme formulation concluded
2. 2 services identified and 23 applications proposed
3. Call for Concept Note issued and analyzed to shape the future Call for Proposal
4. Programme Management Unit (PMU) and Technical Assistance Team (TAT) in place
5. GMES & Africa Officially Launched in November, 2016
6. Financing and institutional arrangements concluded and signed:
   i. Delegation Agreement (PAGoDA) with AUC-Dec. 2016 for 48 months
7. The GMES & Africa Call for Proposal and Guidelines for applicants finalized (French and English)
8. Five Regional Information Sessions completed (awareness of Call for Proposal and capacity building with respect to AUC Procurement and Grant management and procedures)
Next Steps
Next key actions

1. GMES & Africa identity: Finalizing Logo selection

2. Finalizing the transition work plan from MESA to GMES & Africa

3. Publication of the Call for Proposal and the associated guidelines

4. Selection of assessors

5. Assessment of proposals and awarding Regional Implementation Centers (RICs)

6. Signing and implementing Grant contracts

7. PCAC and GMES & Africa Coordination Team Meetings: Lessons learnt and following phases development strategy (implementing other themes)
Synopsis of the transition work plan from MESA to GMES & Africa

Projects and Grants Management
1. Learning from MESA components, GMES & Africa will develop an integrated Programme Management Information System
2. MESA Monitoring and Evaluation reports and other resources to consulted with a view to improve management of GMES & Africa activities

Data and infrastructure
1. Maintaining the existing (174) receiving stations
2. Building on MESA existing regional and national networks for data accessing/sharing and infrastructure utilization
Service delivery

1. Service development cycle will inherit the approach of MESA
   a. Level A - generation of Maps, Graphs, Statistics, Indices, etc
   b. Level B - Synthesizing information in Level A into Bulletins
   c. Level C - Simplifying technical information in the Bulletins into Policy Briefs and Alert Notes

2. MESA to share the status of service maturity levels at the end of the project. This information will guide the consolidation and/or extension of applications in GMES & Africa. Among the 23 applications:
   a. 12 are existing (15 inherited from MESA ‘services’ and consolidated to 12)
   b. 11 new applications based on identified needs (resulting from identification study that carried out surveys across the regions and institutions)
Capacity development and utilization

- Transfer of Learning Management System (web-hosting arrangement, document resources)
- Transfer of the training materials such as strategy, plan, assessment reports, and other training material including modules
- Sharing of the training curriculum
- Transfer database of trainees across all the three tiers (continental, Regional and National). The database for Training of Trainers is of special
- RICs to continue training their networks for specific regional needs
- All the 6 blocks of MESA training modules will be continued and expanded
- Course modules will be revised to accommodate the need of implementing institutions (should the schema change), especially for North Africa
- Capacity utilization to respond to gap analysis: building from previous and existing initiatives such as MESA
Synopsis of the transition work plan from MESA to GMES & Africa (Cont’d 4)

Communication: outreach and raising awareness

Specific branding for GMES & Africa Support Programme in adapting MESA equipment/tools and key products:

a. GMES & Africa to transfer and continue using video-conferencing and audio-visual production equipment/tools
b. Transfer of the MESA database and Integration of MESA and GMES Websites
c. Adaptation of the MESA Communications Network
d. Integration of MESA and GMES Social media sites
e. Transfer of the MESA campaign tools (eg mail chimp)
f. Adaptation of MESA virtual e-forum
g. Continue producing continental bulletin without interruption building on MESA
h. Adopting the MESA policy briefs
i. Continental and regional Geo-portals to be improved based on existing MESA
Thank You

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