Report on the GMES & Africa Consolidation-Validation Workshop 24-25 October 2013, Johannesburg, South Africa

The aim of the GMES & Africa Consolidation-Validation Workshop was to bring together representatives from a significant number of African countries to discuss three thematic areas of the GMES & Africa Action Plan (GAAP), and two cross-cutting issues. The three thematic chapters, Marine and Coastal Areas, Water Resources Management, and Natural Resources Management, had been discussed in previous GMES & Africa Workshops help in October 2012 (Mombasa-Kenya), May 2013 (Abuja-Nigeria), and June 2013 Sharm El-Sheikh) respectively. The two cross cutting issues, Governance and Infrastructure, were here addressed at a workshop level for the first time, with a view to furthering discussions on the implementation of the GMES & Africa process.

The workshop was attended by 100 participants, 46 of whom were representing 30 African countries (*Annex 1*). Key African Institutions present were the African National Space Agencies of Nigeria, Egypt, and South Africa, the Southern African Development Community (SADC), the African Ministerial Council on Science and Technology (AMCOST), the African Association of Remote Sensing for the Environment (AARSE), African Universities, etc. The African Union Commission was very well represented, with the four departments involved in the internal AUC Space Platform being present (Human Resources Science and Technology (HRST); Rural Economy and Agriculture (REA); Peace and Security; Infrastructure and Energy). The host country South Africa was represented by the co-organiser and BRAGMA partner Department of Science and Technology (DST), as well as by participants from the South African National Space Agency (SANSA), Department of International Relations and Cooperation (DIRCO), Council for Scientific and Industrial Research (CSIR).

The workshop was opened by the Deputy Director General, International Cooperation and Resources of DST, Mr. Mmboneni Muofhe, who welcomed participants on behalf of the host country South Africa (*see Agenda in Annex 2*). This was followed by welcome addresses by the European Commission, AMCOST Chair, and African Union Commission, which highlighted the importance of the GMES & Africa process in contributing to sustainable development in Africa, as well as the important role that the outcomes of this meeting will play in contributing to the implementation of the initiative through specific points of action.

The first session provided a context and background to the GMES & Africa Process. Topics covered were the Draft African Space Policy, existing Earth Observation initiatives in Africa (presentations included the AfriGEOSS and MESA initiatives), and Copernicus/GMES, the European Earth Observation Programme. Finally, the GMES & Africa initiative was outlined and presented by Mr. Mahama Ouedraogo of the AUC/HRST. This comprehensive information session allowed for all participants to be brought to the same level of knowledge and understanding, and also informed participants of the precise objectives of the workshop, including what was expected from the participants as well as the next steps for the GMES & Africa process.

The second session began following a clarification session of questions and answers (Q&A), where issues such as the distinction between GMES & Africa and MESA were discussed. The second session consisted of a combined presentation of the implementation plans prepared for the priority services of the GAAP that were addressed through workshops in 2012 and 2013 (Marine and Coastal Areas, Water Resources Management, and Natural Resources Management). During the second part of this session, participants were invited to provide their feedback on the previous presentations by addressing key concerns and challenges, and commenting on the roadmap and respective priority actions (*Annex 3*). Some of the considerations for the thematic implementation plan include the harmonization of thematic chapters across the GAAP, the acknowledgement the importance of capacity building as well as of existing higher education facilities in Africa, and the importance of a clear link with existing initiatives as well as between the thematic chapter and the infrastructure chapter.

The third session addressed the Space and In Situ Infrastructure cross cutting issue (*Annex 4*). This session proposed actions to target the development of Space and in situ Infrastructure in order to fill the gaps in the thematic areas of the GAAP, specifically the thematic areas addressed above. The issue of data accessibility was also recognized as a key issue to be addressed. This chapter requires further reflection and consolidation in order to reach an adequate level of completion.

The fourth session addressed the other cross cutting issue, Governance (Policy and Institutional Framework) (*Annex 5*). The discussions launched during this session highlighted the importance of this issue and a decision was taken to embed this matter into the ongoing work of the African Working Group on Space regarding the African Space Policy. The African Space Policy will be endorsed by AMCOST at the end of 2014.

At the end of the workshop a "Call for the Implementation of GMES and Africa" was discussed and adopted by all present (*Annex 6*). This document outlines the basis for future actions for the GMES & Africa process as well for Earth Observation in Africa and will be submitted at the EU-Africa Summit in 2014, in order to encourage and strengthen cooperation in the framework of the GMES & Africa Initiative.

Annex 1: List of Participants of the GMES & Africa Consolidation-Validation Workshop, 24-25 October 2013, Johannesburg, South Africa.



24-25 October 2013
Johannesburg
South Africa

First name	Last name	Organisation	Country
Mamdouh	Abdeen	NARSS	Egypt
Islam	Abou El-Magd	National Authority for Remote Sensing and Space Sciences (NARSS)	Egypt
Jude	Adeleke	National Space Research and Development Agency (NASRDA)	Nigeria
Anthony Oyagbatse	Agunu	Federal Ministry of Environment	Nigeria
Mohamed Galal	Ahmed	National Center for Research	Sudan
Bruno	Ahouaga	Ministère de l'Environnement	Benin
Mamane	Almadjir	Ministère de l' Environnement	Niger
Joseph Addo	Ampofo	Water Research Institute, CSIR	Ghana
Adane	Asmamaw	African Union Comission	Ethiopia
Ibrahima	Bangoura	Ministère de l'Environnement, Eaux et Forets	Guinee Conakry
Emilio	Barisano	EUMETSAT	Germany
Andre	Bassolé	Centre d'Etudes, de Recherche et de Production en Information pour l'Environnement et le Développement Durable (CERPINEDD)	Burkina Faso
Hend	Ben Hadji	Centre d'Etudes et de Recherche des telecommunications (CERT)	Tunisia
Kidist	Berhane	African Union Comission	Ethiopia
Stewart	Bernard	Council for Scientific and Industrial Research (CSIR)	South Africa
Martha	Biong	Ministry of Environment	South Sudan
Thato	Bolila	Department of Science and Technology	Lesotho
Kishore	Boodhoo	University of Mauritius	Mauritius
Clobite	Bouka Biona	Université Marien Ngouabi	Congo
Nuno	Cunha	AAVANZ	Portugal

First name	Last name	Organisation	Country
Thierno Daouda	Diallo	Centre de Foresterie Rurale, de Promotion des Forets Communitaires et Privées	Guinee Conakr
Sikelela F.	Dlamini	Ministry of Information, Communications and Technology	Swaziland
Daan	du Toit	Department of Science and Technology	South Africa
Pauline O.	Dube	University of Botswana	Botswana
Moutaman Mirghani	Elbasheer	Ministry of Science and Communication	Sudan
Ayman	El-Dessouki	National Authority for Remote Sensing and Space Sciences (NARSS)	Egypt
Abdul Hakim	Elwaer	African Union Comission	Ethiopia
Vincent	Gabaglio	EUMETSAT	Germany
Messanvi	Gbeassor	Ministère de l'enseignement supérieur et de la recherche	Togo
Gerbaba	Getachew Atintie	Ministry of Science and Technology	Ethiopia
Mubarak	Ginawi	Ministry of Environment, Forestry and Physical Developement	Sudan
Haruna Kachalla	Gujba	African Union Comission	Ethiopia
Mahamat	Hassabarassoul	Ministry of Higher Education and Scientific Research	Chad
Rihanath Olga	Ichola	Ministère de l'Environnement	Benin
Alhagi	Jabbi	Department of Water Resources	Gambia
Hannah	Jaenicke	Independant Consultant	Germany
Tarek	Kechida	Ministère des technologies de l'information et de la communication	Tunisia
Tumi	Kekana	Department of Science and Technology	South Africa
Cecilia Mogga	Kenyi	Ministry of Environment	South Sudan
Cynthia	Kgethe	Department of Science and Technology	South Africa

First name	Last name	Organisation	Country
Abdalla	Khyar	Sudan Meteorological Authority	Sudan
Kouami	Kokou	Université de Lomé	Togo
Isaac	Kusane	SADC - Climate Service Centre	Botswana
Kentse	Letihoo	Department of Science and Technology	South Africa
Bernardus	Maathuis	ITC-University of Twente	Netherlands
Lengeta David	Mabea	Appropriate Technology Services	Lesotho
Cheka	Mailula	Department of Science and Technology	South Africa
tumeleng	Makoloi	Department of Science and Technology	South Africa
Aboubakar	Ndjoungui	Institut de recherche pour le développement (IRD)	France
Geoffrey	Matipano	Ministry of Environment and Natural Resources Management	Zimbabwe
Leluma	Matooane	Department of Science and Technology	South Africa
Tugela	Matubatuba	Department of Science and Technology	South Africa
Andiswa	Mlisa	Department of Science and Technology	South Africa
Katleho	Moorosi	Department of International Relations and Cooperation	South Africa
Ana	Morgado	Tropical Research Institute	Portugal
Anneline	Morgan	Department of Science and Technology	South Africa
Kaizer	Moroka	Department of Science and Technology	South Africa
Sias	Mostert	African Association of Remote Sensing of the Environment (AARSE)	South Africa
Palesa	Motsoeneng	Department of Science and Technology	South Africa
Humbulani	Mudau	Department of Science and Technology	South Africa

First name	t name Crganisation		Country	
Massalatchi Mahaman	Sani	Ministère de l'environnement, de la salubrité urbaine et du développement durable	Niger	
Wilfried Relwende	Sawadogo	African Union Comission	Ethiopia	
Lucy	Scott	Aulhas Somali Current Large Marine Ecosystem (ASCLME)	South Africa	
Tumisang	Sebitloane	Department of Science and Technology (DST)	South Africa	
Kediija	Seid	African Union Comission	Ethiopia	
Halilu	Shaba	National Space Research and Development Agency (NASRDA)	Nigeria	
Hédi	Shili	Ministère de l'Equipement et de l'Environnement	Tunisia	
Ahmed Said	Soilihi	Direction Générale des Ressouces Halieutiques	Comoros	
Collette	Suda	Ministry of Higher Education Science and Technology (MoHEST)	Kenya	
David Tamba Ocil	Taluva	Ministry of Defence	Sierra Leone	
Mariane	Tambwe	Joint Africa-EU Strategy Support Mechanism (JAES SM)	Belgium	
Botlhale	Tema	Independant Consultant	Botswana	
Musa I.	Touray	Ministry of Higher Education, Research, Science & Technology	Gambia	
Vestine	Uwera	African Union Comission	Ethiopia	
lkenna Ogochokwu	Uzoukwu	Federal Ministry of Environment	Nigeria	
Bart	Van Wythem	EU Embassy to SA	South Africa	
Rodrigo	Vila	European Commission - DG ENTR	Belgium	
Jolly	Wasambo	African Union Comission	Ethiopia	
Ben	Yasin	Environmental Affairs Department	Malawi	
Tigist	Yeheyes	Ministry of Science and Technology	Ethiopia	
Oirdi	Zaher	Direction Générale des Ressouces Halieutiques	Comoros	

GMES and Africa Consolidation - Validation Workshop

24-25 October 2013
Johannesburg
South Africa

DAY 1: 24 October 2013 (am)

Vs 28.10.13

	Registration	İ
09:00-09:30	Opening Ceremony	DST
	Welcome Address by South Africa	DST: Mmboneni Muofhe (DDG ICR)
		EC: Rodrigo Vila
	Addresses by EC, AMCOST and AUC	AMCOST Chair: Prof. Bouka AUC: Abdul Hakim Elwaer
9:30-10:30	1st Session: Context and Background	AMCOST
	African Draft Space Policy	Chair of African Space WG Val Munsami
	Editor FOLDER OF MEDIA ACCORDON	DST Humbulani Mudau
	Existing EO initiatives (MESA, AfriGEOSS,)	AUC / REA Jolly Wasambo
	Copernicus/GMES - The European EO Programme	EC - DG ENTR Rodrigo Vila
	GMES & Africa Initiative	AUC / HRST Mahama Ouedraogo
	Coffee Break & Group Photogr	raph
1:30-12:30	2 rd Session: Three GMES & Africa Thematic Areas Methodological approach, Key coordination & Implementation Issues	BRAGMA
	Marine and Coastal Areas	Lucy Scott
	Water Resources Management	Ben Maathuis
	Long Term Management of Natural Resources	Hannah Jaenicke
	Lunch Break	
4:00-15:30	2 rd Session: Three GMES & Africa Thematic Areas Consolidation & Conclusions	AUC
	Marine and Coastal Areas	Lucy Scott
	Water Resources Management	Ben Maathuis
	Long Term Management of Natural Resources	Hannah Jaenicke
	Coffee Break	
5:00-17:30	3 rd Session: In Situ and Space Infrastructure	African Space WG
	In Situ and Space Infrastructures	André Bassolé
	Consolidation and Conclusions	

18H30 FOR 19H00 WELCOME DINNER EMPERORS PALACE (TRANSPORT LEAVES AT 18H30 FROM RECEPTION)

DAY 2: 25 October 2013

09:00-10:30	4 th Session: Governance	AUC	
	GMES & Africa Governance	Botihale Tema	
	Consolidation and Conclusions		
	Coffee Break		
11:00-12:30	5th Session: GMES & Africa Implementation	AUC	
	Conclusions Thematic and Cross Cutting issues		
	Recommendations for Implementation of GMES & Africa		
	CLOSURE		
	Lunch Break		



















































































My Assumptions

- That GMES & Africa is a premier programme in the EU & AU partnership based on its support at the highest levels(AU & EU Summit)
- Given that high level support. We care called to ensure effective implementation through appropriate structures
- Implementation should take into account the Africa Space Policy and be accountable to the high level support
- Where possible GMES & Africa should have formal support at implementation level

THE CONTEXT OF GMES & AFRICA

Africa hosts numerous EO initiatives Initiatives are:

- mostly of donor funded with self-determined objectives
- · Uncoordinated to yield maximum benefit to Africa
- Uncertain sustainability due to lack of grounding in African Space Policy and Strategy
- Recently developed African Space Policy & Strategy to follow

THE NEED FOR GMES & AFRICA GOVERNANCE

- Follow up Action based on Joint EU-AU Strategy
- Ensure coordinated & effective implementation of GMES & Africa
- Provide access to quality data and information by AU member states & evidence-based policy decision making
- Support emerging African Space Programme through involvement of its institutions
- Access interphase with AU Space Policy and decisionmakers

PROPOSED ORGANIZATIONAL STRUCTURE - Implementation Structure

A Continental EO Coordinating structure (EOCoord) based at the AUC to:

- Mobilize continental stakeholders & experts for implementation of thematic areas;
- Facilitate the establishment of regional coordinating teams
- Liaise with EC technical team, AUC Deputy chairperson as DRAO in support of implementation in regions

PROPOSED ORGANIZATIONAL STRUCTURE

- Implementation Structure(cont)
- Facilitate interphase with AUC high level Space Governance structure
- Ensure development of coherent capacity building and training programme in regions
- Liaise with Pan-African Space University for further training

REGIONAL GOVERNANCE STRUCTURE

A Regional Coordinating structure would operate under the auspices of the RECs to:

- Mobilize regional and national institutions, National Space Agencies and Centres of Excellence for implementation
- Liaise with member states towards the identification of national focal points
- Identify in collaboration with RECs competent regional institutions to drive implementation of each thematic areas

REGIONAL GOVERNANCE STRUCTURE (cont.)

- Support the establishment of steering committees for each thematic area
- Identify regional institutions for capacity building
- Liaise with continental EOCoord and the EC technical team for implementation and capacity building
- Liaise with Pan-African Space University for further training

THE INTERPHASE

- Concerns interaction between GMES & Africa and African Space Policy and decision-making structures
- Structures would have been created on the basis of the African Space Policy and Strategy
- If structures have not been created yet, the following is proposed:
 - The creation of an Space Ministerial Council consisting of bureau chairpersons of AMCOW, AMCEN, AMCOST & Ministers of Infrastructure (mainly EO users)

THE INTERPHASE (cont.)

- Establishment of a steering committee consisting of relevant senior officials, Space experts, EC technical representatives and relevant partners to advice Space Ministerial Council
- Space Ministerial Council + Space steering committee = Communications Forum which meets periodically:
- Assesses alignment of GMES & Africa to African Space Policy & Strategy
- Assess GMES & Africa's ability to meet user needs based on its reports
- Consider infrastructure needs of AU member states
- Advice accordingly
- Advice African Heads of State & Government on progress of GMES & Africa in preparation for Summits

PRIORITIZATION & TIMELINES

Based on the 10year Strategic Plan implementation will take place in 3 phases:

- Phase 1: 12 -24 months
 - AUC establishes Continental EDCoord, and appoints head 8. staff
- AUC assumes role as DRAO

EOcoord undertakes the following:

- facilitates the establishment of regional EOcoords
- Mobilizes continental institutions and partners for implementation
- If necessary, proposes to AU decision-makers the establishment of a high level Communication Forum.

PRIORITIZATION & TIMELINES

Regionally the EOcoords shall:

- Mobilize regional member states for participation & call for nomination of National Focal Points
- Facilitate assessment of technical capacity and infrastructure of regional institutions and organizations related to 3 thematic areas
- Facilitate appointment of Regional Implementation Centres for each thematic area
- Facilitate the initiation of pilot projects of high priority products

PRIORITIZATION & TIMELINES

Phase 2: 24 - 36 months

- *Develop strategies for long-term financial and technical support for GMES & Africa
- *Review and up-scale pilot projects initiated in Phase 1
- *Support & enhance data collection, processing, product generation and dissemination
- *Develop comprehensive training programme in RECs
- +Assess the effectiveness of RICS & strengthen them accordingly

PRIORITIZATION & TIMELINES

Phase 3: 36months onwards

- A fully operational GMES and Africa programme in all RECs
- Effective coordination of services at continental and regional levels
- Established support for the African Space agenda as well as mutually beneficial outcomes between the AU & EU
- A continuous pipeline for GMES & Africa short-term training and long-term training in Pan-African University for Space.

THANK YOU

Annex 6: Call for the Implementation of GMES and Africa











CALL FOR IMPLEMENTATION of GMES and Africa

Johannesburg, 24th - 25th October 2013

Delegates from the African Member States, the African Union Commission, the European Commission and specialised organisations present at the GMES and Africa Consolidation-Validation Workshop, held in Johannesburg, South Africa from the 24th to 25th October 2013 hereby:

- Recognise the strategic role that Earth Observation (EO) can play in supporting national, regional and
 continental policies for sustainable socio-economic development, and its importance in providing services
 and products that will help attainment of Millennium Development Goals (MDGs) in Africa and other
 socio-economic objectives.
- Reiterate Africa's Commitment to the GMES & Africa initiative as a framework to take into account
 African EO initiatives and activities, and recognise the added value of EO for the sustainable development
 of the continent.
- Acknowledge the strategic importance of the "Maputo Declaration" (2006), the "Lisbon Declaration" (2007) and the "Hammamet High Level Strategic Document" (2010), all calling for increased cooperation between Europe and Africa and in particular the development of the "GMES and Africa" initiative, which is a fundamental element of the JAES.
- Adopt the three thematic chapters (marine, water and natural resources) endorsed by the thematic and
 validation workshops, as they succeed in capturing the priority actions in each of these areas for Africa,
 and call upon the AUC to take the necessary action for implementation of the initiatives.
- Underline the need for GMES & Africa to build on existing infrastructure and to concentrate on facilitating access to existing and future European, African and Global EO data.
- Request the AUC to put in place an institutional arrangement, involving RECs for the present
 coordination of GMES & Africa initiative and EO projects, while developing the final AU governance of
 the African Space Policy and Strategy to be adopted by AMCOST.
- Call upon Member States and RECs to participate in the GMES & Africa Process and to nominate their Focal Points.
- Further Call upon the African Union Commission and European Commission to seek the necessary financial, technical resources and partnerships for the implementation of the priority actions identified and capacity development.
- Note the importance to finalize, validate and set in place implementation mechanisms for the overall GMES and Africa Action Plan through an adequate participatory, multi-stakeholder consultation process.
- Call upon the next EU-Africa Summit in 2014, to highlight the long term cooperation on Earth
 Observation between Europe and Africa, and to encourage and strengthen this cooperation in the
 framework of the GMES & Africa initiative which forms part of Africa's contribution to the Group
 on Earth Observations (GEO).









