

## **RECOMMENDATIONS OF THE 11TH EUMETSAT USER FORUM IN AFRICA 8 SEPTEMBER - 12 SEPTEMBER 2014, Benoni, South Africa**

### **Sorted as follow:**

1. *EUMETSAT programme and RAIDEG – recommendations #1 to #3*
2. *Climate and GFCS – recommendations #4 and #5*
3. *RARS Africa project – recommendations #6 to #12*
4. *MESA project (inc. North Africa) – recommendations #13 to #19*
5. *Marine applications – recommendations #20 to #23*
6. *Training and Research activities – recommendations #24 to #30*
7. *Space and Earth Observation – recommendations #31 to #34*

### **1. EUMETSAT Programme and RAIDEG**

#### **Recommendation #1 IODC continuation**

Taking note of the on-going international discussions in the World Meteorological Organization (WMO) Coordination Group for Meteorological Satellites (CGMS) framework (in particular between EUMETSAT, China Meteorological Administration (CMA), Indian Space Research Organisation (ISRO), and ROSHYDROMET) to secure continuity of the Indian Ocean Data Coverage (IODC) beyond the end of Meteosat-7 decommissioning at end of 2016, the Forum recommended CGMS, via EUMETSAT:

- to come up with a timely solution in order to avoid any data gap over the region;
- to ensure that the new satellite(s) covering the IODC will provide at least similar coverage as the current IODC, in terms of imagery and Data Collection Service;
- to inform the African user community about the solution and the corresponding calendar, so that users can prepare themselves for the transition;
- to ensure dissemination of the IODC data, from whatever satellite, through EUMETCast-Africa for a seamless transition;

#### **Recommendation #2 MTG preparedness**

The Forum took note of the capacities of the new Meteosat Third Generation (MTG) programme, whose first satellite is expected to be launched in 2019. The Forum recommended:

- EUMETSAT to initiate the MTG user preparedness activities, in particular through an initial study that would highlight the potential benefits of MTG for various applications in Africa;
- the African meteorological user community, through RA-I Dissemination Expert Group (RAIDEG), to come-up with their priorities in terms of MTG applications on the basis of the study;
- EUMETSAT to take into account these African priorities when designing MTG preparatory activities on various topics (training, data dissemination, etc)

- the African meteorological user community and EUMETSAT to initiate discussions related to the upgrade of the user infrastructure to MTG (inc. meteorological data display system, MTG data processing and assimilation), engaging with the African Union Commission (AUC), the Regional Economic Communities (RECs) and potential donors in their discussions;
- EUMETSAT and RAIDEG to report on the outcomes of these activities at the next EUMETSAT User Forum in Africa.

### **Recommendation #3 RAIDEG within WIGOS**

The Forum noted and supported the recommendations of the 5<sup>th</sup> RAIDEG meeting as presented during the Forum and call upon all relevant partners to respond to these recommendations before the next meeting of the RAIDEG planned in mid-2015.

In particular, the Forum recommended WMO RA-I to recognise RAIDEG in the Regional working structures of WMO Integrated Global Observing System (WIGOS), as further recommended by the Commission on Basic Systems (CBS), at its next conference, and to ask each country to nominate a focal point to interface with the representative of their region within the RAIDEG.

## **2. Climate and GFCS**

### **Recommendation #4 Benoni statement on GFCS-ACP**

The Forum welcomed the Benoni Statement on the Implementation of the Global Framework for Climate Services in Africa, and its call for initiating a GFCS-ACP project targeting the regional level of the GFCS in Africa, under the understanding that a strong regional component will facilitate national level GFCS activities. The Forum noted that AUC and the Republic of South Africa will draw the Statement to the attention of the African Ministerial Conference on Meteorology (AMCOMET) or relevant Specialised Technical Committees (STC), WMO, Intergovernmental Board Climate Services (IBCS), RECs, ACP Secretariat and the European Union.

The Forum recommended the GFCS-ACP Task Team:

- to ensure that the strengthening of regional and national institutions focuses on creating links with the global and with the national components and aims at supporting the national level which is central to a successful and sustainable implementation of the framework;
- to continuously engage with their member states during the project preparation process, i.e. to inform and consult in order to ensure that the national needs are conveyed and integrated into the implementation of the framework, and in particular to ensure the integration of all the priority application areas such as health, agriculture, disaster risk management and water resources, etc.;
- to ensure that training and building capacity is an integral part of the implementation of the framework at regional and national levels;

The Forum also recommended all Forum participants to draw the Benoni statement to the attention of their authorities and to encourage them to initiate the implementation of GFCS at national level, following the example from various countries.

### **Recommendation #5 Climate data sets applications**

The Forum recommended that the Regional and National climate institutions explore the application of gridded climate datasets derived from satellite sources in their product generation and further requests those with such data to support training in the Region.

### **3. RARS Africa for Disaster Risk Management (DRM)**

Recognising the significant contribution satellite data is already playing in the generation of severe weather forecasts, the Forum welcomed the new EU funded intra-ACP Programme “*Building Disaster Resilience to Natural Hazards in Sub-Saharan African Regions, Countries and Communities*” and especially its Result #3 which will be implemented through the ClimDev Special Fund (CDSF), and will include the following activities:

- the implementation of Regional Advanced Retransmission Service (RARS) in Africa to access polar orbiting meteorological satellites;
- the enhancement of the regional Numerical Weather Prediction (NWP) capacities in Africa;
- the strengthening of national capacities on NWP for Disaster Reduction Management (DRM).

### **Recommendation #6 Preparation of RARS-DRR projects**

The Forum recommended ACMAD, AGRHYMET, ICPAC, ECCAS and SADC-CSC to expedite the preparation of their “Application for funding” under the CDSF that would lead to one continental project (ACMAD) and four regional projects (Western, Central, Eastern and Southern Africa);

### **Recommendation #7 Use of EUMETCast for model boundary conditions**

Taking into account the existing infrastructure and capability of the network of EUMETCast stations within the African continent, the Forum recommended that EUMETSAT together with Regional centres explore the potential use of this network for the delivery of model boundary condition information (including data from ACMAD) to the wider NMHS community in Africa.

### **Recommendation #8**

#### **Building upon existing capabilities and exchanging knowledge and expertise**

Recalling the success of the Severe Weather Forecasting Demonstration Project (SWFDP), the Forum recommended that these RARS-DRR projects leverage on existing SWFDP national and regional structures, which are seen as best practice.

Noting the importance of model forecast data in the generation of Severe Weather Forecasts (SWF) and Extreme Forecast Indices (FMI), the Forum recommended that regional centres and national NMHSs request training support through the WMO Centres of Excellence in the use and interpretation of NWP data.

### **Recommendation #9**

#### **Engaging with DRM community and contributing to Disaster Risk Reduction (DRR) strategies**

Recognising the need for DRM authorities to understand the potential and limitations of the SWF they receive, the Forum recommended:

- to countries, with the support of AUC and RECs, to take into account these projects as a contribution to the implementation of the African regional strategy for disaster risk reduction and its programme of action (which is in line with the Hyogo Framework for Action), and support its alignment with other programmes and services.
- to the NMHS providers to recognise the critical role that the African Regional Strategy and its programme of action play in advancing DRR on the continent and support its implementation;
- to regional centres to develop a communication and awareness plan to promote the activities and benefits of the EU-AUC RARS-DRR projects for national government agencies and citizens alike;
- to regional centres and NMHSs to engage with DRMs to ensure cross-fertilisation of activities within and between regions, and to establish best practices

### **Recommendation #10**

#### **Sustainability of the project activities**

Noting that the intra-ACP programme on Building disaster resilience project is of limited duration, the Forum recognised the importance of building for a sustainable future, and recommended that, through the projects, infrastructure, procedures and research expertise are developed and enhanced in such a way that allows for continuation beyond the boundaries of the project. Efforts should also be made to enhance synergy among institutions working within Africa, notably at continental level between ACMAD and AUC. Efforts should also be developed by the project to ensure the establishment of an appropriate framework at national level.

The Forum called upon the countries concerned to devote adequate human and financial resources at national level to ensure sustainability after the project lifetime.

**Recommendation #11**  
**The International Charter**

The Forum recognised the importance of the Charter data and products in the event of a major disaster and welcomed EUMETSAT plans to disseminate the Charter Products on a routine basis via GEONETCast (EUMETCast-Africa). NMHSs are encouraged to promote the availability of the Disaster Charter service, and the Forum recommended NMHSs to engage with their national disaster management authorities on this aspect. EUMETSAT is invited to report on the use of the Charter data through EUMETCast in the African countries or region at the next EUMETSAT User Forum in Africa

**Recommendation #12**  
**CDSF fund for NMHS**

Further noting that the AfDB intends to issue a call for proposal under the CDSF before the end of 2014, the Forum recommended NMHSs to already initiate the preparation of “application for funding” taking into account the objective of the ClimDev programme, the CDSF Operation Procedures Manual and the template for the “application for funding” available under the website <http://www.climdev-africa.org>, as already done by Mali, Senegal and Ethiopia NMHSs.

**4. MESA project**

**Recommendation #13**  
**Training Centres WMO and MESA RICs**

The Forum recommended AUC (i) to engage with the WMO on the use of the Regional Training Centres by the MESA RICs and (ii) to establish agreement with the Training Centres as necessary.

**Recommendation #14**  
**Engaging the national level**

As reaching national level is at the core of MESA, the Forum recommended MESA, and in particular its regional THEMAs, to ensure the appropriate engagement of national institutions, starting with appropriate communication.

The Forum also recommended MESA programme to facilitate cross-fertilisation of services from one region to another.

**Recommendation #15**  
**Sustainability at national level**

The Forum also recommended national institutions (Focal points and NMHSs) to work in close collaborations, with MESA’s initial support, in order to ensure long term sustainability at national level.

**Recommendation #16**  
**MEA and MESA to reach decision makers**

Furthermore, the Forum recommended MESA to ensure that products and information be made available to and reach the decision makers in order to gain their commitment for long term sustainability. In this respect, the Forum further recommended the AU hub of the ACP programme on Capacity Building on Multilateral Environment Agreement (MEA) to coordinate with MESA, particularly for disseminating information, coordinating between focal points and raising awareness of parliamentarians on the MESA and MEAs activities.

**Recommendation #17**  
**RAIDEG involvement in PUMA upgrade**

The Forum recommended MESA to invite RAIDEG experts for the evaluation of the offers for MESA infrastructure contract which will provide the new upgraded PUMA 2015 station, and of key implementation milestones such as the Factory Acceptance Test, to ensure that the new system will match current African meteorological user requirements for data processing and visualisation.

**Recommendation #18**  
**PUMA 2010 license keys**

The Forum recommended MESA to speak with the contractor of the PUMA 2010 stations to seek replacement of broken licences keys at no cost, especially at the Training Centres, and to ensure that measures are taken for the PUMA 2015 to avoid such problems.

**Recommendation #19**  
**Activities in North Africa**

Noting the status of discussion in North Africa for a MESA-like project, initiated following the 10<sup>th</sup> EUMETSAT User Forum in Africa, the Forum recommended the NMHS of Tunisia to pursue the discussion with EU towards the inclusion of some MESA-like activities in the framework of the Regional environmental programme on water management.

The Forum also noted that a first project under the GMES&Africa initiative, which is currently being formulated by EU and AUC, covers the full continent (inc. North Africa) and recommended EU and AUC to take into account the activities formulated in the MESA-North Africa and Maghreb concept for the formulation of this first GMES&Africa project.

**5. Marines applications**

**Recommendation #20**  
**Marine Data and Capacity Development needs**

The Forum notes the critical satellite data/products and capacity development needs of the marine user community across several application areas. These needs are exacerbated by the lack of real time observation equipment in the region. The Forum recommended the WMO RAIDEG group to include a JCOMM representation or a Monitoring of Environment and Security in Africa (MESA) Marine RIC representation, so that dissemination and capacity development needs of the marine meteorological and oceanographic community are properly captured.

### **Recommendation #21**

#### **MESA Thema on marine (cross fertilisation between regional centres and beyond)**

Noting the cooperation established between the two MESA Regional Implementation Centres for marine applications (University of Ghana and Mauritius Oceanographic Institute) within MESA, the Forum recommended that these MESA RICs engage with the CSIR South Africa and other African institution to explore how knowledge sharing (cross-fertilisation) can be achieved and formalised in order to cover the entire African continent, possibly through the first GMES&Africa project under formulation.

### **Recommendation #22**

#### **Maritime institution and NMHS coordination on real time data and products**

The Forum noted the applicability of near real time meteorological data across maritime application areas and also the potential to develop real time maritime safety and surveillance products from these data. The Forum therefore recommended NMHSs of coastal countries to engage with their national and regional maritime organisations to discuss this potential in order to meet the needs of the maritime community.

The Forum encouraged South Africa Marine Safety Agency (SAMSA) to support the other countries within the region and the continent, through capacity building activities possibly under on-going project (such as MESA) and recommended JCOMM to report on this at the next Forum.

### **Recommendation #23**

#### **STCW training content review**

The Forum noted the meteorological requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), and kindly requested EUMETSAT and the training centres to review the content of the STCW training courses, within the scope of the competencies described in the STCW Convention (1995) Chapter II, Section A-II/2, and propose additions to the STCW training providers based on satellite related systems, data and products available through national and regional institutions, EUMETSAT and other providers.

## **6. Training and resarch activities**

### **Recommendation #24**

#### **Training needs**

The Forum requested Training Centres (WMO RTC and the Centre of Excellence in Morocco) to address the training needs identified at the Forum, which includes training of trainers. The Forum requested centres to report progress at the next Forum. Furthermore, the Forum encouraged PRs and institutional directors to directly communicate their needs to the Training Centres.

**Recommendation #25**  
**Internet for training**

The Forum recommended that NMHSs ensure adequate internet bandwidth and staff time to allow their staff to appropriately follow and complete online training courses.

This will enable the Service to make full use of the available capacity building initiatives.

**Recommendation #26**  
**Training Centre Cooperation and Coordination across regions**

The Forum noted the cooperation established between the Training Centres and recommended WMO CGMS Vlab to further enhance cooperation across regional economic groupings in Africa.

**Recommendation #27**  
**Training in French**

The Forum noted the very strong need for training provided in French in certain countries to BIP-M and BIP-MT levels and recommended relevant PRs and francophone training centres, with guidance from the WMO secretariat, to explore ways forward.

**Recommendation #28**  
**Information on training opportunities**

The Forum noted the range of available training opportunities. The Forum recommended Training Centres (WMO RTC and the Centre of excellence in Morocco), with the support of the MESA programme, to better make available information (e.g. on AUC website) on what training is available from them, RICs and other partners, in a coordinated manner, and to propagate this information to NMHSs and other potential participants.

**Recommendation #29**  
**Develop research capacities**

The Forum, noting the research skills gaps in the region, invited AUC to make accessible information on the support available to develop the capacity of researchers in meteorology and wider environmental field.

**Recommendation #30**  
**Cooperation with research projects**

Noting the presentations of the various projects from European institutions in Africa (e.g., TAMSAT, AGRICAB, SAFs, etc), the Forum encouraged them to strengthen collaboration and coordination among themselves and recommended NMHSs, RAIDEG and other relevant regional and national institutions to engage with these projects to establish partnerships and exploit the various data and information they provide.

The Forum recommended NMHSs and other users to respond to the next call for contributions that will be issued for the next EUMETSAT User Forum in Africa in order to present their collaborations with these projects.

**7. Space and Earth observation**



**Recommendation #31**  
**Coordination and collaboration**

The Forum welcomed the coordination at AU level of policies and initiatives related to Space initiated by various African ministerial conferences (Conference for Ministers in charge of Communication and Information Technologies – CITMC, AMCOMET, African Ministerial Conference on Science and Technology – AMCOST). In particular, the Forum recommended AMCOMET Task Force on the African Regional Space Programme to continue collaborating with the AU Space Working Group in the development of the African Space Strategy, and to ensure consistency with the Integrated African Strategy on Meteorology (Weather and Climate Services).

**Recommendation #32**  
**User needs assessment**

The Forum highlighted the importance of conducting regular user needs assessments and dialogues with data providers, and welcomed the process established under RAIDEG for meteorological applications, as a potential example for other user communities. In this respect, the Forum recommended RAIDEG to continue to assess and evaluate requirements for meteorological satellite data sets and products, and to report these requirements to the AMCOMET Task Force on the African Regional Space Programme.

**Recommendation #33**  
**Data from EO initiatives in Africa**

Welcoming the various on-going projects and initiatives (e.g., AfriGEOSS, MESA GMES&Africa) aiming at promoting the use of Earth Observation in Africa for several socio-economic sectors, the Forum recommended the main stakeholders of these initiatives, in particular the African GEO members and participating organisations, the GEO Secretariat and AUC departments (Rural Economy and Agriculture – REA and Human Resources Science and Technology – HRST):

- to promote, through these initiatives and projects, an open and free access to all relevant EO datasets;
- to coordinate data access and sharing at continental level, including harmonization of data format and protocol for data exchange, as well as exploring technical means for access and sharing;
- to focus capacity building effort on datasets available openly and freely to Africa;
- to coordinate their efforts in order to come-up with a unique African EO portal, which would, at least, catalogue all EO data available from and to Africa, planning also interoperability with other existing EO portal available across the globe.

**Recommendation #34**  
**Near real time Copernicus data for Africa**

The Forum noted that the issue of near-real time physical access to Copernicus data and products (core services and Sentinel satellite data) was often raised in the presentations (marine and land applications). The Forum recommended AUC to coordinate and federate (possibly through the MESA project and GMES&Africa initiatives) specific African users requirements (by applications and with list of priorities), and to pursue its engagement with the EU to come up with concrete solutions for the near-real time access to some prioritised sets of Copernicus data and products.