

## **EUMETSAT BENEFITS FROM AND CONTRIBUTIONS TO THE VLAB**

WMO-GCMS VLab is a major conduit to enhance the use of EUMETSAT data and products outside its 31 Member and Cooperating States, including preparedness for the next generation satellites. The natural logic is that:

- The application of the satellite data contributes to the official duty mandates of the National Meteorological and Hydrological Services, i.e. greater protection of life and property;
- User training activities are required in order to fully exploit the investment in the satellite observing system;
- The training is most effectively and efficiently delivered through regional actors, who have the skill, mandate, and logistical capacity.

The principle benefits for EUMETSAT from the VLab work are:

- Working in partnership with Regional Centres of Excellence leads to training that is more relevant and efficient;
- Working with the Centres also provides a structure for channelling user feedback and innovation;
- Knowledge and experience is shared across the partnership.

**The Technical Support Officer (TSO) role is crucial, particularly in the online and distance learning elements.**

At this time, the principle contributions to the VLab are:

- Sharing knowledge and experiences, particularly in online and distance teaching – which enables greater accessibility to training;
- Active support to the Centres of Excellence in Africa and the Middle East;
- Financial support to the TSO Trust Fund.

### **Action/Recommendation proposed:**

*CGMS members are invited to take note of the report and are recommended to contribute to the VLab TSO Trust Fund, held by WMO.*

## **EUMETSAT benefits from and contributions to the VLab**

### **1 INTRODUCTION**

WMO-GCMS VLab is a major conduit to enhance the use of EUMETSAT data and products outside its 31 Member and Cooperating States, including preparedness for the next generation satellites. The natural logic is that:

- The application of the satellite data contributes to the official duty mandates of the National Meteorological and Hydrological Services, in the protection of life and property;
- User training activities are required in order to fully exploit the investment in the satellite observing system;
- The training is most effectively and efficiently delivered through regional actors, who have the skill, mandate, and logistical capacity.

The principle benefits for EUMETSAT from the VLab work are:

- Working in partnership with Regional Centres of Excellence leads to training that is more relevant and efficient;
- Working with the Centres also provides a structure for channelling user feedback and innovation;
- Knowledge and experience is shared across the partnership.

The VLab Technical Support Officer is a key resource for all VLab-related activities, including for providing an online training environment, logistical support to events, and maintenance of software and the VLab website. EUMETSAT contributes to the Trust Fund for the Technical Support Officer.

### **2 Training activities supported by EUMETSAT and benefits**

#### **2.1 Courses**

On a yearly basis EUMETSAT supports courses in the four African Centres of Excellence (CoE), i.e. Nairobi, Pretoria, Casablanca and Niamey, as well as the Muscat CoE, serving the Middle East sub-region of WMO Regional Association (RA)-II.

Each of these courses hosts up to 50 participants in an online phase and 20 participants in a classroom phase. Successful completion of the online phase is a pre-requisite to attending the classroom element. The first online courses were run in 2013, with the CoE in Nairobi, in English, and with the CoE in Niamey, in French. The online courses mean that participants are more prepared for the classroom course, and the training is accessible to more people.

These courses focus on the application of satellite data in severe weather forecasting. The introduction of the competencies, in particular aviation, has led to a greater focus on aligning the course objectives with job role requirements.

In addition the Centres of Excellence provide the platform for training events with the EUMETSAT Satellite Application Facilities (SAFs) e.g.:

- December 2014: Application of scatterometer and altimeter data for marine wind and wave forecasting with the Ocean and Sea Ice SAF, and in partnership with NOAA (NESDIS and NWS). This course falls under the JCOMM umbrella, and was hosted by the CoE Pretoria;
- June 2015: Application of gridded climate data and products for climate services. This course will be hosted by the CoE in Pretoria and is held in conjunction with the CM SAF.

In 2014 EUMETSAT co-organised the WMO Training for Trainers for RA-I. This was an extensive online training covering all the training competencies, followed up with a small face to face workshop. All the CoEs in Africa took part in this training.

## **2.2 Learning Resources**

Learning materials continue to be produced with the ASMET (African Satellite Meteorology Education and Training) cooperation project, which includes participation from all the African CoE's and draws on expertise in the COMET program. The 8<sup>th</sup> project phase will complete in September and will deliver cases on marine, aviation and land forecast applications. The 9<sup>th</sup> phase is anticipated to evaluate the impact of the previous materials and critically assess the learning needs of the region that can be supported through self paced online materials.

## **2.3 Regional Focus Discussions**

Under the Regional Focus Discussions a variety of discussion formats are employed across the regions in different languages. Muscat has hosted sessions on satellite and NWP applications in Arabic. Casablanca with Niamey hosted sessions on Aviation applications in French. Nairobi has experimented with holding text based online discussions, and Pretoria continues to host regular online weather discussions. There is still considerable scope to grow these regional discussions, which are intended to provide a continuous informal training support to operational forecasting. The role of the VLab Technical Support Officer (TSO) is crucial here.

## **2.4 Benefits**

Through the training courses EUMETSAT received direct user feedback on the EUMETSAT data, products, services and systems. In addition the CoEs are all represented in the WMO RA-I Data Experts Group which provides a more synthesised regional view.

The benefits to EUMETSAT of all these activities are:

- Users beyond Member and Cooperating Sates are more able to exploit the data in support of national needs;
- Users in the region are supported by people with a knowledge of their situation (the regionally based CoE); and through the sustained support to the CoE a regional capacity is maintained;

- Training of the users in the regions is much more accessible through the online activities. We also see the CoEs who have wider roles and responsibilities using what they learn in the online training with EUMETSAT in their other training activities;
- The training of trainers' activity has already led to a more holistic approach to training in the CoEs, in particular taking more care over course design;
- Good user feedback connections.

Overall this leads to an effectiveness and efficiency in user training and readiness that would not be possible without the VLab.

### **3 CONCLUSIONS**

The activities of the VLab in Africa and the Middle East are essential for user training in those regions. We have seen significant advance in the application of online training. There is some space to develop the regional focus discussions.

The training in the region is becoming much more aligned with the operational tasks, this has been assisted by the promulgation of the competencies, particularly for aviation.

The principle benefits for EUMETSAT from the VLab work are:

- Working in partnership with Regional Centres of Excellence leads to training that is more relevant and efficient;
- Working with the Centres also provides a structure for channelling user feedback and innovation;
- Knowledge and experience is shared across the partnership.