

## **FEAST workshop 25/02/2010: Summary of statements / Future Prospects round table:**

Sub-Saharan Africa is one of the major regions in the world that is not yet connected to GÉANT, with the exception of South Africa. The FEAST study has explored during the last year the feasibility for the AfricaConnect initiative and a roadmap for its implementation. AfricaConnect will develop a regional backbone connecting regional National and Regional Research and Education Networks (NRENs) to each other and to GÉANT.

The main conclusion of the workshop is that **there is a window of opportunity that cannot be missed**. AfricaConnect has the potential to become a real success with major impact in the region, but will require a **strong political will** and a **determined collaboration** of all stakeholders. A **focused and fast action delivering tangible results** can (a) act as a catalyst for other countries and NRENs to get ready and (b) federate other initiatives and efforts around AfricaConnect to multiply its impact. The message is "Let's not lose the momentum and let's be practical!"

A summary of statements in the final round table is presented here:

- The ambitious goals of AfricaConnect should be balanced with a pragmatic approach that delivers rapid and concrete results in view of the limited resources available and the degree of readiness of National Research and Education Networks (NRENs) in the region. As identified by FEAST, several countries meet the sufficient conditions to connect their NRENs with each other and with GEANT,
- The FEAST study concentrated on infrastructure aspects, but applications will be of increasing importance. Researchers collaborate in R&D in a concrete domain, and eventually a virtual research community forms and grows. Moreover, Research and Education networks worldwide are being used not only for the "traditional" e-health/learning/government applications but also for public services like civil protection, agriculture (crop and plague control), climatology, weather monitoring, etc. An interesting area to investigate in the near future is what kind of applications can benefit from the deployment of the regional African network.
- There are several challenges that need to be tackled:
  - How to increase the technical capability of universities and research centres to make possible the cooperation and to build research communities, as the different sub-regions and countries are not at the same level of development.
  - The need to support the emerging NRENs (e.g. in WACREN).
  - Low awareness of managers in education and research institutions and in public authorities in general of the need for a high-quality e-Infrastructure. The message "no high quality research and education are possible without a high-quality network connecting to the world" is not well understood.
  - Inexistent or scarce national infrastructure deployment and problems for cross-border cable connectivity.
  - Changes in the telecommunication market: from a *high price-low volume* to a *low price-high volume* business model; decreasing prices due to market opening and increasing competition; accompanying regulatory measures, etc.

- It should be clear that AfricaConnect cannot solve all these problems given its limited scope and resources. Success of the initiative depends on fast delivery of results with NRENs that are ready to get connected, while disseminating and raising awareness activities are foreseen in areas that have not yet reached a sufficient degree of readiness. AfricaConnect will support in this way the capacity building of not yet ready NRENs so they can prepare and motivate further financial support for an eventual second phase.
- The role of the African Union is key in effectively contributing to provide the necessary institutional support for raising awareness in public authorities of these challenges and to help emerging NRENs to get ready, with the support of actors like the Association of African Universities. It is essential that national policies consider the importance of developing research and education network connectivity, and that this importance is reflected in terms of budget allocation.
- AfricaConnect has to be considered in the bigger picture of the partnership between the EU and the African Union, which also involves EU Member States and African governments, and has to be supported by the fruitful bilateral cooperation established between the European Union Commission and the African Union Commission in this context. Moreover, AfricaConnect should link with current and future interventions (e.g. regulatory environment, harmonization of ICT policies in sub-Saharan Africa (HIPSSA), national and regional development funding, etc.) in order to maximise the synergy of these interventions.
- Many questions remain open for both the procurement and implementation/operation phases, for example, what cost model is adapted to the local characteristics, the acceptable use policy for the network, local networking price and accessibility issues, etc..
- Other identified expected benefits of AfricaConnect are the following:
  - The creation of a strong local engineering community capable to sustain and manage the network deployed by AfricaConnect.
  - The increasing pressure for better infrastructures from researchers and students that will be used to the resources available in the research and educational network and will therefore demand to have the same means when entering the labour market.
  - Better collaboration and integration of ongoing educational and research efforts, contribution to the rationalisation of interventions and harmonisation of policies at national and regional level.
  - Increase of the level of collaboration of regional NRENs, much in the same way that ALICE increased cooperation in the Latin America region.
- Several important supporting actions are already in place by European NRENs, such as twinning with African NRENs and exchange of experts programmes (e.g. Germany MoU with Ubuntunet, ongoing collaboration of Portuguese authorities). Active European NRENs are most welcome to act as ambassadors to other European NRENs in order to stimulate similar initiatives and contribute to the success of AfricaConnect.