

# CONCLUSIONS OF THE “INTERNET AND GRIDS IN AFRICA” WORKSHOP

## Preamble

At the invitation of the Sharing Knowledge Foundation, a colloquium was held in Montpellier from 10<sup>th</sup> to 12<sup>th</sup> December 2007 which highlighted the existence of an African scientific community with recognised technical ability and a strong commitment to Education, Training and Research.

The participants to the colloquium, scientists, industrialists, members of NGO, originating from 14 countries, having observed the weakness of internet networks in Africa, have agreed on the text of a Vision Statement and on 4 Recommendations. They will share the task of submitting these conclusions to the different decision making bodies, political as well as professional, African or International. They will report on the reactions to and results of their contacts.

## VISION STATEMENT

The development of the African continent has to involve Science, Technology, Education and Innovation. The contribution of Africa in these fields is well below its considerable human potential, combining youth, plenty of talented individuals and a hunger for knowledge. If there is a lack of immediate action to rectify this, this lack will, in the long term, compromise the progress of all of Humanity.

**The internet in its most advanced forms, such as Grids, is the tool of choice for the development of the centres of excellence which are emerging on the African continent and for their integration into the international arena.**

For the entire population, a number of studies show the clear correlation between the Human Development Index (HDI) and the penetration of the Internet in each country.

**Developing the Internet in Africa to bring it to the level of the other regions of the world, both for the general population and for the most advanced University, Research and Learning centres, must be considered as one of the most urgent priorities.**

## RECOMMENDATION 1 – DEVELOP INFRASTRUCTURES

ENCOURAGE:

- Regulations which are favourable for the development of new information technology infrastructures.
- The exchange of best practices between the national regulators in order to improve the regulation everywhere.
- The development of Education and Research networks which have their own infrastructure.
- The use of e-government infrastructures, as is already underway in some countries.
- Exchange points (national, between African countries and with the rest of the world).

USE existing or future structures (electricity pylons, railways, pipelines, roads) as a support for the fibre optic network.

More extensive coverage could be provided by wireless technologies (WiMax).

SUPPORT quantitative performance indicators for existing installations and their evolution over time, in particular through the international PINGER collaboration.

ENGAGE political decision makers to encourage the use of the Internet and the development of digital literacy, and create the motivation to facilitate, for example, increased competition, regulations, and taxes which encourage the development of the internet and if possible, facilitate the availability of financing.

## RECOMMENDATION 2 – DEVELOP SCIENTIFIC COLLABORATIONS USING ICT

HAVING OBSERVED :

The isolation of African researchers, the majority of whom carry out their research in Northern countries;

That regional communities in Africa are either inexistent or struggle to function correctly as a result of the lack of means;

The difficulties African researchers have in achieving efficient participation in international projects due to the inadequacy of the infrastructure and poor financial resources;

CONSIDERING:

The need to network African scientific communities;

The existence of needs which have already been identified in Africa in the fields of human and animal health, the environment and natural disasters;

The need to put in place ICT resources to facilitate the operation of these scientific networks;

WE RECOMMEND:

- That the creation of Thematic Scientific Communities be effective at a regional and continental level;
- That a pilot programme for Grids is implemented at a regional level in order to offer African scientists the technical resources needed to fulfil their research programmes;
- The strong involvement of the political authorities to support the financing of this pilot project.

### **RECOMMENDATION 3 – ON THE ADAPTATION TO AFRICAN REALITIES**

GIVEN THAT :

The youth of the population is a strength;

The price of ICT is very high in comparison with the resources of the population;

Rurality remains an important characteristic of Africa;

The content and services available on the Internet are little adapted to the culture of the African populations;

The number of mobile telephones is growing very rapidly;

WE RECOMMEND

That good quality local experts be trained for the implementation of ICTs;

That mediation be promoted for the training of the public;

That ICTs should be adapted to provide support for research and innovation at a regional level, taking into account African cultural specificities and the tools available (mobile phones...);

That the public be offered ICT at an affordable price, in line with the world wide trend, based in particular on the measures included in recommendation 1.

### **RECOMMENDATION 4 – ON SHARED SCIENTIFIC INFORMATION SYSTEMS**

CONSIDERING the power of ICT to transcend space and time and create a framework for cooperation at a national, regional and international level, and with the Diaspora;

GIVEN

- Their serious lack of development in Africa
- The weak extent of scientific exchanges between African countries;

WE RECOMMEND the creation of a regulatory framework which is favourable to the development of ICT and the implementation of shared Scientific Information Systems.

### **RECOMMENDATIONS COMMITTEE**

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Form the recommendations committee and will provide feedback on progress and results.