



International Workshop on African Research & Education Networking

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Report on
Session 3.1 (part 2) Thematic Initiatives

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This document reports on Session 3.1 (part 2) “Thematic Initiatives” of the International Workshop on African Research & Education Networking held on Tuesday 27th of September 2005 in CERN, Geneva.

The session focused on six different projects involving ICT’s at different levels in Africa. Due to each project uniqueness, it is difficult to highlight central themes and therefore a summary of each project is given. It is apparent that there are a few excellent projects in organised and funded by different organisations as well as planned in Africa.

There were no conclusions or recommendations reached which was not surprising as the goal of the “Thematic Initiatives” sessions was to allow the proponents of these initiatives to describe their respective projects and to get acquainted with the other projects in parallel fields, in order to get acquainted with them and be in a position to assess the potential for possible synergies between the various projects.

Joan Dzenowagis (WHO) & Dominique Metais (Dzenowagisj@who.int)

Connecting for Health Research in Africa

Summary:

Joan started her presentation by giving a summary of the World Health Organisation and then focused the rest of the presentation on the use of ICT in health research.

ICT is fundamental in health research as it improves the flow of information and operational efficiency. It also contributes to the reduction of costs and duplication and provides researchers with access to information, data, products and advice.

The Health InterNetwork (HIN) contributes to making ICT work for health. It is one of four major initiatives of the UN Millennium Action Plan (Sept 2000). The Health InterNetwork supports public health programs and priorities. Joan also named a few HIN's initiatives. The partnership between WHO and journal publishers was a breakthrough in making content available.

The UNDP/World Bank/WHO Special Programme for research & Training in Tropical Disease (TDR) are a joint managed funding agency with two goals namely to build research capacity and to develop new tools for disease control. TDR use ITC since the 1990's. They have incorporated email and the Internet into their program and outreach.

The WHO Global Private Network supports their work in different countries. They began in 1999 with 6 regional offices and have now approximately 40 offices and health centres. Their target is to have all countries in Africa connected by 2006. They are linked with satellite with Norway and through terrestrial links with the Geneva hub. The Services they provide include voice, video conferencing, and Internet and data access. They are part of the CERN consortium for Internet access and have started using the network of scientists (Sinet, Geant) to connect offices.

Didier Oillo, Agence Universitaire de la Francophonie (AUF)

Overview of projects funded by the AUF

Summary:

The “Agence Universitaire de la Francophonie” (AUF) has over 500 Members and 9 bureaus. Their goals are to increase connectivity capacity, to enable students and lecturers to communicate with their peers and to strengthen human skills. They also promote scientific research

The AUF does not grant degrees. They promote the use of open Software. They organise workshops as they have a bottom up approach. They do not have direct financing. Their management is decentralised and is located amongst other places in western and central Africa.

They want to recommend that ISP's must reduce their fees for Higher Education Institutions up to 70% and that efforts to enhance access and connectivity must be coordinated.

Marco Zennaro (the Abdus Salam International Centre for Theoretical Physics Trieste – Italy (mzennaro@ictp.trieste.it))

The Abdus Salam ICTP experiences in ICT development to support science in developing countries

Summary:

The ICTP has the mandate to foster growth of advanced research in physics and mathematics, especially among researchers from developing countries in addition, to create an international forum for the exchange of scientific information through courses, workshops and seminars.

ICT is a basic infrastructure necessary for the economic and social development of a country but also for its scientific and technological progress

The academic community is a fundamental starting point for these efforts to permeate to the rest of society. The underlying problem is the lack of sufficient well qualified human resources able to handle the new systems and Technologies

ICTP covers both the C (Communication) through the Aeronomy and Radio propagation Laboratory (ARPL) and the I (Information) through the Science Dissemination Unit (SDU) in ICT. Wireless connections in campus networks are important for them as it is inexpensive, easy to setup, easy to upgrade and easy to add connections.

Training is needed as it is quite different from designing a wired one. They have organised training for the last 10 years in ICT. The School on Radio Based Computer Networking for Research and Training in Developing Countries took place from 7 February - 4 March 2005. There were more than 300 applications for 40 participants. They received 162 applications from Africa. The three weeks training was held on Networking, Wireless Technologies, Antenna Theory, Antenna Building, Wireless Security, etc. Lecturers and experts from Europe and USA. (<http://wireless.ictp.trieste.it>). ICTP also launched the ITU/BDT Project-Based Advanced Training on the Use of Wireless for Campus Networking.

They have published a “Radio Laboratory Handbook” on Antenna building, Antenna measurements and Cable characterization. It has been used in training in South Africa, Tanzania and Mali. (<http://wireless.ictp.it>) Training has been carried out in various Africa countries.

Marco also elaborated on a few existing as well as planned projects. The last part the presentation focused on the Open Source movement. According to Marco the Open Source movement is an extension of the scientific method and capacity building is enhanced through it. He mentioned the Ubuntu Linux project as well as the Free Open Source Software for Africa. A Workshop on Optimization Technologies for Low-Bandwidth Networks will be presented by ICTP in Trieste-Italy from 9-20 October 2006.

Joel Sor (CIRAD) Joel.sor@cirad.fr

Science and Techno System project (SIST)

Summary:

CIRAD is a French agricultural research centre working for development in developing countries and the French overseas regions. It has been launched by the French Department of Foreign Affairs based on the low research output in Africa and the lack of communication between researchers in Africa.

Their objectives:

- Improve upon and share knowledge and experiences
- Value extraction of obtained or on-going findings
- Build regional research networks
- Incorporate African research in international mainstream
- Contribute to the narrowing of the digital divide

Their constraints:

- Fast implementation
- Operational, simple and pragmatique device
- Technical, functional and financial autonomy of countries after the project
- A geometrically variable structure that is transferable to the rest of African countries

There are currently 13 countries involved and more information about their 2004 activities can be viewed at their website: www.sist-sciencedev.net

SIST is a tool to be configured which contains an outline of a Website, a meta search engine and its administrative interface as well as access to a first game of sources data from partners and a collaborative work space (a generator of mini Websites within SIST)

Dominique Hausser (<http://hausser.ch/spikini/?wiki=lesothoproject>)

PC Project in Lesotho (<http://www.lesotho.gov.ls>)

Summary:

Dominique started the presentation with an overview of Lesotho.

This project runs under the umbrella of UNCTAD and has been supported by the Lesotho government.

Lesotho have a 85% literacy rate and the ratio of computers in schools are <100 Pc's for 3000 students. There is also limited connectivity with power supply difficulties.

The objectives of the project are to move from policy to plan of actions by implementing the plan of the Lesotho government. The plan includes the implementation of 200 second hand PC's in schools and centres.

The total cost for the 220 PC's and various material equals 22 000 Euros. The training of technicians and responsible people are also included in the implementation plan.

Dominique emphasize that the success of the project depends on the will of the people running the project on a daily basis.

Silvano de Gennaro CERN (silvano.de.gennaro@cern.ch)

Informaticiens Sans Frontières (Software Without Borders) ISF, Cybervolunteers Africa@Home

Summary:

ISF was founded during WSIS in 2003. The outcome is LIFE (Linux Integrated Free Environment) which is based on Ubuntu. LIFE is an environment and not just an OS. The purpose is to humanise LINUX and therefore to increase its usability. It is based on a template or modular approach:

- Basic (beginners)
- Medium (Office)
- Advanced (Admins, students, pros)

The second programme is capacity building to supply schools, offices and cybercafés. Through LIFE and other programmes, they want to empower African Universities and they want to promote joint International research.

The project functions on the bases of on-line resource donations. They involve the African universities in the development process.

ISF supports the "Cyber Volunteers" programme, which is finally targeted to this kind of collaboration. They offer developing world university students the opportunity to join our most advanced research centres for a fellowship, and then implement the newly learnt skills by starting up new research centres back home. More information is available on their website: www.cybervolunteers.info

Questions

1. Remark about the costs of ISP's and that ISP's are depended on TELCOMS costs
2. Mentioning of 16 Universities which is developing OSS (KEWL)
3. Question about point of entry into Institutions for ICTP (AVU representative)
4. From India – how to make Scientific leaders aware that they must promote scientific research and open access between leaders in Africa
5. Question about impact of recycled computers and research done about it
6. Reports in Africa available about recycled computers recycled computers (www.catia.ws)
7. Question about woman involvement in training by WHO