

BEANISH: Building Europe Africa collaborative Network for applying IST in Health care Sector

At A Glance: **BEANISH**

Building Europe Africa collaborative Network for applying IST in Health care Sector

- Health Information Systems in Africa
- Open Source Software Development
- Capacity development
- Networks for research and development

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Project <http://www.ifi.uio.no/beanish/>

Partners from: Norway, Sweden, Botswana, South Africa, Ethiopia, Malawi, Mozambique, Tanzania, Geneva

Duration: January, 2005 – December, 2007

Total Cost: €1,173,856

EC Contribution requested: €800,000

Further Information

- **IST Research: SO Full Title**
DG Information Society & Media
Unit F4 New Working Environments
Tel: optional
Fax: optional
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www.cordis.lu/ist/??
- **Europe's Information Society: Thematic Portal:**
http://europa.eu.int/information_society/

The overall goal of BEANISH is to build networks of research and development between and within countries in Africa and Europe on practical applications of IST in the health sector. The concrete objectives are linked to:

(i) **Strengthening Health Information Systems in Africa.** By contributing to improve the informational basis of health care decisions, the project will support ongoing efforts to address health problems such as relating to HIV/AIDS. Developing human resources is a key issue.

(ii) **Collaborative development and application of Free and Open Source Software for Health.** Technology transfer from North to South is fraught with problems. Appropriate application of IST in Africa will depend on local participation and capacity. Each individual country in Africa may lack capacity and resources to take full advantage of IST. By joining forces between Europe and Africa through collaborative network building BEANISH aims at developing cutting edge appropriate Open Source Software for Africa.

(iii) **Sharing "best practices" and capacity across countries.** South Africa has made major achievements in developing their district based health information systems. Following a "South-South" model of technology transfer, BEANISH is "transferring" models, processes and software from South Africa to other countries in the region, as for example to Botswana. Best practices from Europe are carefully "translated" to the African context following a mutual South-North-South model.

BEANISH is a World IT Forum (WITFOR) project with partners from Norway, Sweden, South Africa, Botswana, Mozambique, Tanzania, Malawi, Ethiopia and Geneva (IFIP).

Europe has a strong research base in e-health and there can be mutual benefits arising through co-operation between Europe and Africa. However, given the contextual differences, for example related to infrastructure, economy, and culture, European solutions and know-how need to be sensitively reworked and appropriately translated to the African context. Furthermore, best practices, learning and workable ISTs need to be shared and further developed across African countries within a regional framework.

The HIV/AIDS pandemic together with the generally poor health status in Africa have emphasized the need for appropriate IST in health care for strengthening various activities such as knowledge exchange between health care managers, providers and the community, optimal allocation of resources and monitoring the roll out of the HIV/AIDS programmes.

The BEANISH initiative which is formally a WITFOR (World Information Technology Forum) project, proposed by EU-African partners and IFIP (International Federation for Information Processing) builds upon an existing global R&D network called HISP (Health Information Systems Program). This initiative seeks to involve various institutional actors (government, universities, private sector and NGOs) to strengthen and extend an existing “Europe-Africa” collaborative network to support the application and sharing of IST application development so as to support cooperation, learning and innovation in mutually beneficial ways. The WITFOR 2005 meeting will serve as an important milestone in the BEANISH project. The project focus is on organization of the WITFOR conference; strengthening of the HISP network by conducting case studies and sharing of best practices; establishing capacity building to enable sharing open source software development; and supporting e-training. The project envisages strengthening the European research and development domain within open source ISTs and global software development. The BEANISH project will help create the basis for developing an international cooperation to apply within the EU 6th or 7th Framework Program related to IST applications. A first objective is to extend BEANISH to Asia under the 6th Framework Program.

To provide the necessary support towards network building, the project seeks to create 6 areas of specific support: organization of the WITFOR conference and related activities; strengthening of the existing HISP network by conducting case studies and the documentation and sharing of best practices; establishing Botswana as a new node in the existing HISP network by establishing collaboration between South Africa and Botswana; establishing network and capacity building to enable the development and sharing of open source software; and supporting capacity building through conducting training and development and dissemination of educational courses in the application of IST in public health.

The project directly contributes to the EU priority of “To prepare for future international cooperation in IST”. More specifically, the project is directly relevant to three sets of EU priorities: eHealth; applications and services for the mobile user and worker; eInclusion.

With the objective of effectively “translating” European experiences to the African context described above, the project BEANISH takes as

the starting point the existing global R&D on HIS for developing countries under the framework of **HISP**. **HISP** was initiated in 1994 by University of Oslo researchers in collaboration with the University of Western Cape and the health authorities of South Africa. This collaboration has contributed to the development of an open source district based software application (called District Health Information Software – **DHIS**), and models and processes which have successfully been implemented as the national standard in South Africa, and these best practices are now in various stages of adaptation, testing and implementation in Mozambique, Malawi, Tanzania and Ethiopia. HISP includes the following components:

- Design, development, and sharing of the open source IST application **DHIS**.
- Training and on-site facilitation and operational support for implementation.
- A PhD program including both Informatics and Public Health students from all the above countries (except Malawi) doing research on IST in health care is run by the University of Oslo. Currently about 15 students are registered.
- A Masters program in South Africa and Mozambique with courses also in Malawi and Tanzania, and coordinated by the University of Oslo.

BEANISH is now developing a fully Open Source version of the DHIS based on JAVA frameworks. This work is carried out by the BEANISH teams in Norway, Ethiopia, South Africa, Tanzania, and Mozambique, as well as allied BEANISH teams in Vietnam and India. Vietnam and India are the key partners in building BEANISH in Asia.
