Guide to ICT-related Bilateral Cooperation in IST-Africa Partner Countries

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1.   INTRODUCTION

One of the challenges facing stakeholders addressing ICT challenges in an African context is that there is no central repository of existing ICT related projects being funded in Africa. Some projects are funded by national governments (either on a bilateral or multilateral basis), others by international organisations, others by foundations and non-governmental organisations (NGOs). As a result, on occasions, there have been unfortunate situations where effort has been duplicated or results from previous projects in the same country have not been leveraged or adapted by subsequent projects. Similarly, there is often a lack of necessary dissemination of national or regional project results that could have been adapted and replicated in other African countries for wider socio-economic impact.

The purpose of this study is to provide a starting point for a central repository of ICT projects and activities across Africa. It focuses on current ICT related bilateral cooperation in Africa, particularly between the 13 African Partner Countries (Botswana, Burundi, Cameroon, Egypt, Kenya, Lesotho, Mauritius, Mozambique, Namibia, Senegal, South Africa, Tanzania and Uganda) participating in the IST-Africa Initiative and European States, but also between these 13 African States and other key stakeholders. Where appropriate, it also reflects multi-country projects where at least one of the beneficiaries is an IST-Africa Initiative Partner Country.

One of the goals is to identify potential good practices that can be adapted and replicated across Africa, to maximise the socio-economic impact of available financial and human resources.

It will focus primarily on projects funded by national governments or international institutions, either on a bi-lateral or multi-lateral basis due to the limited resources available for this task. However, where particularly successful national or regional projects funded by foundations or NGOs are brought to the attention of contributors, these will be included in the repository.

As most projects have a fixed duration, this is by its very nature a living study that will require updating on an ongoing basis. Similarly, while the national IST-Africa partners have taken care in relation to identifying relevant projects that benefit their countries, irrespective of how it was funded, we invite key stakeholders to bring other projects not reflected in this current report to our attention, so that this information can be updated accordingly.

Table 1 below provides an overview of cooperation agreements supporting ICT/Science Technology and Innovation related activities in each country. The individual country chapters provide more details on the specific projects.

Table 1: Overview of Bilateral Cooperation Agreements Supporting ICT/STI-related activities

Country	ICT/STI Initiatives being Supported	Funding Mechanism
Botswana	IST-Africa Initiative	FP7 2008 – 2013
	CAAST-Net	FP7 2011 – 2012
	Capacity-building programme and Community Development in Internet Governance and ICT Policy	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	Southern Africa Innovation Support Programme (SAIS)	MFA Finland, 2011 - 2015
Burundi	IST-Africa Initiative	FP7 2009 - 2013
Cameroon	IST-Africa Initiative	FP7 2009 – 2013
	CAAST-Net	FP7 2011 – 2012
	Integrated risk management for Africa (IRMA)	FP7 2008 – 2009
	AfricaBuild	FP7 2011 – 2014
Egypt	IST-Africa Initiative	FP7 2009 – 2013
	AfricaBuild	FP7 2011 – 2014
	Virtual Museum Transnational Network (V-MUST.NET)	FP7 2011 – 2015
	Tools and expertise for 3D Collection Formation (3D-COFORM)	FP7 2009 - 2012
	CAAST-Net	FP7 2008 – 2012
	MIRA	FP7 2008 – 2012
	EuroAfrica-P8	FP7 2012 – 2013
	Tools and expertise for 3D Collection Formation (3D-COFORM)	FP7 2011 – 2015
	Bridging Actions for GMES and AFRICA (BRAGMA)	FP7 2012 – 2013
	EumedConnect: NReNs interconnection to GEANT	ENPI (European Neighbourhood Policy Instrument) 2009 – 2011
	NATP: Support to Regulatory Reforms and Harmonization in the Mediterranean Region	ENPI 2009 – 2011
	Mediterranean Innovation and Research coordination action (MIRA)	FP7 2008 – 2012
	Trans-national cooperation among ICT national contact points (IDEALIST2011)	FP7 2008 – 2011
	JOIN - MED	FP7 2009 - 2011
Kenya	IST-Africa Initiative	FP7 2012 – 2013
	CAAST-Net	FP7 2008 – 2012
	ERA-Net Africa	FP7 2010 – 2013
	Bridging Actions for GMES and AFRICA (BRAGMA)	FP7 2012 – 2013

	TACIT: Tackling Aids and Tuberculosis through Communication and Information Technologies	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	Africa4All Parliamentary Initiative	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	Capacity-building programme and Community Development in Internet Governance and ICT Policy	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	ict@innovation	
	Empowering SHGs in Kenya and India through ICT for better education and alternative livelihood opportunities	BMZ Germany 2008 – 2010 SPIDER/SIDA, Sweden, 2007 - 2010
Lesotho	IST-Africa Initiative	FP7 2008 – 2013
	Africa4All Parliamentary Initiative	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
Mauritius	IST-Africa Initiative	FP7 2008 – 2013
	IPv6 Deployment Support (6DEPLOY-2)	FP7 2010 – 2013
	EASSy Deep-sea fibre cable East-AfricaUnderwater Telecommunication Cable	German Federal Ministry of Economic Cooperation (BMZ), AfDB, AFD, IFC
Mozambique	IST-Africa Initiative	FP7 2008 – 2013
	EO2HEAVEN	FP7 2010 – 2013
	Support Action to GMES-Africa on Earth Observation (SAGA-EO)	FP7 2010 – 2012
	Integrated risk management for Africa (IRMA)	FP7 2008 – 2009
	STIFIMO	MFA Finland 2010 – 2014
	Creating Sustainable Business in the Knowledge Economy	MFA Finland 2010 – 2012
	Southern Africa Innovation Support Programme (SAIS)	MFA Finland, 2011 - 2015
	Mobile Banking in Rural Areas	German Federal Ministry of Economic Cooperation (BMZ)
	Government Electronic Network	MFA Italy 2010 - 2013
	SISTAFE	Belgium & Norway 2010 – 2012
	ExTTI: Excellence in ICT Use for Learning Purposes	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	Through Innovation Contributions	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	ict@innovation	BMZ Germany 2008 - 2010
Namibia	IST-Africa Initiative	FP7 2008 – 2013
	Southern Africa Innovation Support Programme (SAIS)	MFA Finland, 2011 – 2015
	Africa4All Parliamentary Initiative	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	TACIT: Tackling Aids and Tuberculosis through Communication and Information Technologies	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	ict@innovation	BMZ Germany 2008 - 2010

Senegal	IST-Africa Initiative	FP7 2008 – 2013
	CAAST-Net	FP7 2008 – 2012
	EuroAfrica-P8	FP7 2012 – 2013
	Support Action to GMES-Africa on Earth Observation (SAGA-EO)	FP7 2012 – 2013
	VOIce-based Community-cEntric mobile Services for social development (VOICES)	FP7 2011 - 2013
	Integrated risk management for Africa (IRMA)	FP7 2008 – 2009
	SIST Project	France
	Community Multimedia Centres & Code Learn	Switzerland
South Africa	IST-Africa Initiative	FP7 2008 – 2013
	CAAST-Net	FP7 2008 – 2012
	EuroAfrica-P8 / EuroAfrica-ICT	FP7 2012 – 2013 / FP7 2010 - 2011
	Bridging Actions for GMES and AFRICA (BRAGMA)	FP7 2012 – 2013
	VOIce-based Community-cEntric mobile Services for social development (VOICES)	FP7 2011 – 2013
	EO2HEAVEN	FP7 2010 – 2013
	ERA-Net Africa	FP7 2010 – 2013
	Advanced Autonomous Model-Based Operation of Industrial Process Systems (AUTOPROFIT)	FP7 2010 – 2013
	Towards an open and sustainable ICT research infrastructure strategy (OSIRIS) project	FP7 2010 – 2011
	Integrated risk management for Africa (IRMA)	FP7 2008 – 2009
	Advancing ICT for DRM in Africa (AIDA)	FP7 2008 – 2010
	Shrink-Path of ultra-low power super-conducting electronics (S-PULSE)	FP7 2008 – 2010
	FLOSS INCLUDE	FP7 2008 – 2010
	DIGITALWORLD	FP7 2008 – 2009
	Global RFID interoperability forum for standards (GRIFS)	FP7 2008 – 2009
	SAFIPA & COFISA Programmes	MFA Finland 2006 – 2011
	Establishing National CSIRT Capacity for South Africa	MFA Finland 2009 – 2010
	INSPIRE Programme	MFA Finland 2008 – 2010
	Creating Sustainable Business in the Knowledge Economy	MFA Finland 2010 – 2012
	ict@innovation	BMZ Germany 2008 - 2010

Tanzania	IST-Africa Initiative	FP7 2008 – 2013
	Creating Sustainable Business in the Knowledge Economy	MFA Finland 2010 – 2012
	Information Society and ICT Sector Development Programme	MFA Finland 2009 – 2010
	TANZICT	MFA Finland 2011 – 2015
	Health Informatics Systems Programme & Masters in Health Informatics	NORAD
	TANSENE for Post Doctoral Support	SIDA & Netherlands
	ICT for Rural Development	SIDA
	ICT Leadership Projects & Educational Projects	SIDA
	NET-TEL Africa	SIDA
	Young Scientists Tanzania	Irish Aid & Pearson 2011 –
	Africa4All Parliamentary Initiative	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	ict@innovation	BMZ Germany 2008 - 2010
Uganda	IST-Africa Initiative	FP7 2008 – 2013
	CAAST-Net	FP7 2008 – 2012
	EO2HEAVEN	FP7 2010 – 2013
	EuroAfrica-ICT	FP7 2010 - 2011
	Irish-African Partnership for Research Capacity Building	Irish Aid
	NPT Project on 'Strengthening ICT Training and Research Capacity in the Four Public Universities in Uganda'	Netherlands 2007 – 2011
	Mobile Innovation and Enterprise	British Council
	Makerere University Institutional Development Programme	NORAD
	Makerere University	SIDA
	Africa4All Parliamentary Initiative	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	TACIT: Tackling Aids and Tuberculosis through Communication and Information Technologies	EDF9 (@CP-ICT capacity-building programme) 2009 – 11
	ict@innovation	BMZ Germany 2008 - 2010

2.   REPUBLIC OF BOTSWANA

2.1 Introduction

The Republic of Botswana is in Southern Africa. Botswana is bordered by Namibia on the west and north, Zambia at a narrow strip in the north, Zimbabwe on the east, and South Africa on the east and south. Botswana has an area of 581,730 sq km with an estimated population of about 2 million inhabitants (2011) and a literacy rate of 81%. 62% percent of the total population is between 16 and 64 years of age. The capital city is Gaborone has a population of about 196 000 (2009). The official language is English.

Botswana has maintained one of the world's highest economic growth rates since independence in 1966. Her economic growth is largely attributed to mining of diamonds, which collectively make up one of the world's largest diamond reserves. The revenue earned from diamonds drive Botswana's economy. However, recent economic and political changes in the region present challenges to the government to explore other means of diversifying economy as dependence on mineral wealth forms a narrow economic base and are not sustainable.

As a consequence, Botswana established a National Science and Technology Policy in 1998 through which all ICT related developments could be coordinated. The development of a national ICT framework is perceived as a shift from a factor endowments economy to an efficiency driven economy that will pave the way to an innovative driven economy. It is in this context that Botswana's first National Information and Communications Technology Policy was approved by Parliament in 2007 [Maitlamo National Policy for ICT Development 2007].

In December 2010, following the recent Parliamentary election, an ICT Committee was constituted in the National Assembly. This is a promising development for Botswana, as it provides a framework for Parliamentary oversight of National Policy in this important domain. The current Ministry of Transport and Communications will report to the ICT Committee on implementation of Maitlamo.

Botswana has a good track record of investing in infrastructure. The telecommunication system is well developed with landline and cell phone users. Further penetration of ICTs, especially in rural areas, to bridge the digital divide is necessary to continue the development and integration of Botswana into the global economy. A number of infrastructure projects, such as submarine optic fibre cables linking the west and east coasts of Africa, are ongoing to improve reliability, capacity and speed of the national network, and thereby ensure better interconnectivity with neighbouring countries.

Research and Technology Development (RTD) and Innovation policies (e.g. the Framework Programme for RTD, capacity-building under UN-Habitat, various technology platforms and

partnerships) have been developed to support research and innovation, with investments and priority areas detailed in the Botswana National Research Science and Technology Plan 2006-11. The S&T Policy was reviewed during 2011 and a new Research Science Technology and Innovation Policy has been prepared and approved by Cabinet. It is billed to be presented before Parliament in the current Parliament session (Q1 2012). Botswana emphasises ICT, Innovation, and the Information Society at large, as a key tool for achieving its development objectives.

2.2   Bilateral Cooperation with EU Member States

Botswana is a signatory to the Cotonou Partnership Agreement, and is an Observer of the TDCA (Trade Development Cooperation Agreement) EU-RSA.

Botswana is considered to be a middle-income country and as a result the level of funding available through bilateral cooperation with EU Member States has been reduced gradually over the past decade. There are currently Embassies for France, Germany and UK in Gaborone. The Swedish Embassy has recently closed.

Botswana is receiving support towards ICT-related projects through FP7, EDF9 (@CP-ICT Capacity Building Programme) and Regional projects funded by MFA Finland. The European Embassies are not directly supporting ICT-related projects at present.

2.2.1   Germany

With Botswana's change in status to a middle-income country, official German development aid to Botswana was phased out in 1992 (financial cooperation) and 2007 (Technical cooperation). Germany has continued to support Botswana through SADC (Southern Africa Development Community) and the German Development Service (DED). Support from DED is based on an agreement whereby the Government of Botswana co-funds the work of DED and its development workers on specific agreed projects in Botswana. DED's areas of activity in Botswana are currently focused on Vocational Education, Road Safety and Transport Planning as well as Natural Resource Management. While some of the vocational education projects incorporate elements of ICT, it is not their predominant focus.

The German Government through its Ministry of Education and Research (BMBF) rolled out a high intensive research project for the region (Angola, Botswana, Namibia, South Africa and Zambia). The project is aimed at emphasizing regional collaboration in and between participating countries and the focus is on climate change and its impact in the region. It is a multi million project and since its orientation is specifically on Climate Change it is housed at the Department of Meteorological Services in the Ministry of Environment, Wildlife and Tourism.

2.2.2   France

Cooperation with France is primarily related to promotion of French teaching in Botswana through a cooperation agreement between Alliance Francaise and the University of Botswana. The Embassy of France does not currently directly support ICT-related projects in Botswana.

2.2.3   United Kingdom

Cooperation with the British High Commission in Gaborone has historically been focused around governance, energy and environment. The Embassy of United Kingdom does not currently directly support ICT-related projects in Botswana.

2.3   ICT Initiatives being funded

2.3.1   Framework Programme 7

The Department of Research Science and Technology (DRST) is a beneficiary under IST-Africa[1] 2008 – 2009, IST-Africa 2010 – 2011, IST-Africa 2012 – 2013 and CAAST-Net[2] project (2011 – 2012). These support actions facilitate DRST to engage with the research community, support capacity building and encourage the research community to build international links to secure direct research funding into their institutions.

As a result of an IST-Africa Training Workshop on FP7-Africa 2010 hosted by DRST in Gaborone on 23 September 2009, the University of Botswana successfully participated in the submission of the HURAPRIM[3] proposal focused on Primary Health Care in Africa in cooperation with the University of Gent (BE), University of Oxford (UK), Medizinsche Universitaet Vienna (AT), Wits University (ZA), Mbarara University of Science and Technology (UG), Ahfad University for Women (SD) and Universtite de Bamako (ML), which commenced in March 2011. As part of its IST-Africa activities DRST circulates updates on open Calls for Proposals as they are available and encourages the research community to explore these opportunities for international research projects. Following the IST-Africa Living Lab Workshop in Gaborone in May 2011, DRST undertook a consultation with the research community to identify ideas for emerging Living Labs in Botswana and is encouraging the take-up of Living Lab concepts in Botswana.

2.3.2   Capacity-building programme and Community Development in Internet Governance and ICT Policy (ACP/EDF9)

A Programme focused on Capacity-building and Community Development in Internet Governance and ICT Policy[4] was funded under the ACP-ICT Call (ACP/EDF9). This project ran from 2009 – 2011 undertaking online training courses on Internet Governance and ICT Strategy, provide training through workshops and policy immersion fellowships.

African Target Countries: Botswana, Burundi, Congo and Kenya

Main partner: Diplo Foundation

Partner in Botswana: Botswana Information Technology Society[5]

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[1] http://www.ist-africa.org

[2] www.caast-net.org/

[3] http://www.huraprim.ugent.be/drupal/

[4] http://www.diplomacy.edu/ACP/Programme/default.asp

[5] http://www.bits.org.bw/index.htm

Funding: 960k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

2.3.3   Southern Africa Innovation Support Programme (SAIS)

SAIS[6] is focused on supporting a regional innovation system in SADC and promoting collaboration in relation to innovation systems between Botswana, Mozambique, Namibia and Zambia. The Botswana Innovation Hub (BIH) is the national partner.

Partners: Botswana Innovation Hub (BIH), Namibia Business Innovation Centre (NBIC), National Technology Business Centre, Zambia and Mozambique ICT Institute (MICTI)

Funding: 6.2 million € Ministry of Foreign Affairs Finland 2011 - 2015

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[6] www.saisprogramme.com

3.   REPUBLIC OF BURUNDI

3.1   Introduction

The Republic of Burundi is situated in Central Africa, sharing boundaries with Democratic Republic of the Congo, Rwanda and Tanzania. It is a landlocked country and has a surface area of 27,830 sq km, made up of 17 provinces. The population in 2011 is estimated at 10.2 million inhabitants (15.5 million in 1999) with literacy rate of 59.3%. The official languages are Kirundi, French and Swahili. The capital city is Bujumbura.

Burundi joined the East African Community, which improves regional trade ties. The economy is predominantly agricultural with primary exports of coffee and tea. Burundi is currently dependent on bilateral and multilateral aid.

The National ICT Policy in Burundi was formulated jointly by the Government and UNDP in October 2000 and adopted in 2004. Subsequently the Government approached UNECA to work with them to develop and fund an ICT action plan for the period 2007 – 2011. The Government of Burundi has led several activities in relation to the use of ICT in the service of the socio-economic development and the Good Governance under the responsibility of the National Committee.

The Government is convinced that ICTs are a fundamental tool of training and research in a modern Education system. In this regard, the Government of Burundi has undertaken the following actions:

➢ A National ICT Policy;

➢ An Optical Fibre Project;

➢ A Plan to provide computers in Higher Education system;

➢ A Policy for free charges when imported ICT Equipment;

➢ Development of Partnerships in ICT Networking such as participation in the IST-Africa Initiative

3.2   Bilateral Cooperation with EU Member States

Burundi is a signatory to the Cotonou Partnership Agreement. Cooperation between the European Community and Burundi will pursue its objectives, taking into account the basic principles defined in Article 2, including encouragement of "ownership" of the strategy by the countries and populations concerned, and essential elements and fundamental element as defined in Articles 9 and 11b of the Agreement.

The overall objective and main development policy of the EU is to reduce poverty through sustainable development, in accordance with international project and taking into account the

Millennium Development Goals (MDGs). Other important goals are also human rights and good governance.

There are currently three European Embassies in Burundi - Belgium, France and Germany. To date there is very limited support specifically focused on ICT-related initiatives. The sections below provide an overview of the types of support currently provided.

3.2.1   Belgium

From 2010 Belgium is focusing its support on three priority areas: Health, Education and Agriculture. Overall, the support provided by Belgium towards addressing development problems in Burundi is in the form of promoting a favourable institutional environment; improving sector governance; capacity building and training.

Belgian Cooperation is strengthening sectoral strategies defined by the Burundian government to enhance the performance of national systems. Despite a gradual reduction in the governance component of the next few years, the institution of the rule of law, strengthening Justice and the modernization of the Civil Service remains a central concern for Belgian cooperation. Technical support is provided in relation to education programmes in the Technical Schools.

3.2.2   France

Current support from the Embassy of France is primarily focused on cultural and language support (French Institute of Burundi) as well as University cooperation.

In relation to education, the French Development Agency (AFD) contributes to the Common Fund for Education (CFE), which supports investments required from pre-school to higher education, text books for school children, and the construction of 36 schools and nine colleges (2009 – 2015). The Initiative for Francophone Distance Education Masters (IFADEM), launched in 2007 by the Agence Universitaire de la Francophonie (AUF) and the International Organization of La Francophonie (OIF), is a project 75% financed by AFD aimed at strengthening the professional skills of teachers by supporting the Ministry of Basic Education in the establishment of a training programmes. During 2010 - 2012, the project involves 1,800 teachers and 750 student teachers. In support of the Government policy to provide free basic education, AFD provides assistance in the recruitment of primary teachers through the 'C2D' contract. In 2010, 1,230 additional teachers were hired and paid through this budget support. The PARES project (2007- 2012 $2 million) is focused on reform and revitalisation of higher education in Burundi through institutional support, strengthening institutional capacity of the University of Burundi and supporting teaching, learning and capacity building. France also supports the Great Lakes Inter-University Network (RIGL), chaired by the Rector of the University of Burundi, which includes 24 Universities in Burundi, Rwanda and the Democratic Republic of Congo.

3.2.3   Germany

Germany is supporting a project to interconnect the electricity grids as part of the regional initiative, through the development of electric power lines Rusizi III-Bujumbura. Germany is also supporting the sectoral programs focused on drinking water and sanitation, decentralization and poverty reduction.

3.3   ICT Initiatives being funded

3.3.1   Framework Programme 7

Ministere de l'Enseignement Superieur et de la Recherche Scientifique (MESRS), Burundi is a beneficiary under IST-Africa[7] 2010 – 2011 and IST-Africa 2012 - 2013 This participation has facilitated MESRS to host training workshops on FP7 and Living Labs in Bujumbura for the research community, support capacity building and encourage the research community to start to build international links towards securing direct research funding into their institutions. This partnership building takes time to put in place. It will also take time to build up a research culture in institutions that are primarily focused on teaching. As part of its IST-Africa activities MESRS circulates updates on open Calls for Proposals as they are available, encourages the research community to explore these opportunities for international research projects and creates awareness of research centres in Burundi during international meetings. MESRS hosted an IST-Africa Living Lab Workshop in Bujumbura (26 - 27 September 2011) and is continuing to raise awareness of the potential of Living Labs in Burundi.

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[7] http://www.ist-africa.org

4.   CAMEROON

4.1   Introduction

The Republic of Cameroon is situated in Central Africa, sharing boundaries with Nigeria to the west, Chad to the northeast, Central African Republic to the east, Congo, Gabon and Equatorial Guinea to the south with direct access to the Atlantic Ocean to the southwest. It is a unitary state, with a surface area of 475,442 square km, made up of ten regions subdivided in to fifty-eight (58) divisions and further subdivided into 375 districts currently in the process of decentralisation. The population in 2011 was estimated at 19.7 million inhabitants (15.5 million in 1999) with literacy rate of 67.9%. The official languages are English and French.

Cameroon is called Africa in miniature due to its strategic geographical location, diversified culture (over 240 tribes composed of Bantus, Semi-Bantus, Soudanians, Hamites and Semites), two main religions: Christianity and Islam, climate (tropical and humid in the south and dry in the north with two seasons) and vast equatorial forest found in most African countries. It natural resources include: Petroleum, Bauxite, iron ore, timber and hydropower.

The Government of Cameroon has recognised the importance of ICT as an enabling horizontal tool in realising projects in Education, Health, Agriculture, Economy and Energy. There is a comprehensive ICT Policy and Strategy in place and projects launched as part of the National Strategy for ICT Development addressing seven strategic pillars: (i) Building Human capacities, (ii) Improving the legal, regulatory and institutional framework, (iii) Strengthening the rule of law and sovereignty, (iv) Infrastructure development, (v) Development of social sectors through the use of ICT, (vi) Modernizing the public service and (vii) Development of an ICT industrial sector.

In the last year, as part of the efforts of the President to move Cameroon from a primarily agricultural society towards developing a framework for a knowledge based economy – and attract Foreign Inward Investment, enabling legislation has been enacted for Electronic Communications, Cyber Security and Electronic Commerce, complementing existing data protection legislation. The need to develop basic maths, science and ICT skills so that sufficient students can study science and technology at university is clearly recognized by the government and the universities.

4.2   Bilateral Cooperation with EU Member States

There are six European embassies (Germany, France, Spain, UK, Netherlands and Belgium) as well as an EU Delegation in Yaounde. France, Germany and the EU delegation are particularly active in the areas of Health, Rural Development, Governance and Environmental issues, while the UK embassy takes a particular interest in Human Rights. There are no specific ICT related

programs currently funded by either EU Member States or the European Delegation in Cameroon. Cameroon is a beneficiary in a number of FP7 projects.

4.2.1   European Union (EDF)

The European Union is active in Cameroon mostly through the European Development Fund (EDF). It operates within the framework of a bilateral agreement with Cameroon that is negotiated for five years laying out the principle areas of intervention and an overall amount of aid (National Indicative Program (NIP)). Based on the NIP, the European Union develops projects that, once approved, are turned into financial agreements. Initially, the total 9th EDF (2004 – 2009) amounted to €231 million. After a mid term review, the 9th EDF was reduced to €178 million, due to the elimination of the budget support component. The elimination followed the poor performance notably in the modernization of public financial management. Once EDF funds are committed, project management is given three years to contract for the procurement of goods and services necessary to complete the project. If projects funds are not contracted within three years, they have to be returned to the EDF. For the 9th EDF ending in 2009, 97% of the funds are expected to be contracted by 2010. According to the Head of Operations of the European Delegation, because of the relatively high number of national priorities identified by the Government of Cameroon, it was not possible to fund all of them. All current EDF funds have been committed to specific activities.

4.2.2   France (AFD)

France is active in Cameroon mostly through the Agence Française de Développement (AFD)12. AFD has two main funding mechanisms in place in Cameroon: firstly, projects funded through regular case-by-case financial agreements between the Cameroonian government (MINEPAT) and AFD; secondly, through France's debt relief commitments (C2D) to Cameroon. These commitments are supplementary to the Heavily Indebted Poor Countries (HIPC) initiative. The reimbursements of C2D funds are channelled through investments in approved projects. The main difference between those two mechanisms is the ownership structure of the funds. While in the former case AFD disburses money directly to projects, in the latter case C2D funds are transferred directly to Cameroon and rest with the Central Bank until AFD approves disbursement. In the sectors analysed for this report, only C2D payments are used as funding mechanisms.

4.2.3   Germany (GTZ and KfW)

The German Development Service (DED), the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) and the KfW Development Bank are the three pillars of German development cooperation in Cameroon. They employ a total of some 40 seconded experts, who work closely with national and international partners.

Since the beginning of 2010, DED, KfW and GTZ have occupied new joint office premises, in the so-called German House. This new joint office was officially opened on 22 March 2010 to coincide with the intergovernmental consultations held in March 2010.

The German Finance Company for Investments in Developing Countries (DEG) has wide-ranging commitments in the form of guarantees, loans and interests, especially in the agro-industry, tourism and the energy sector.

According to Cameroon's Ministry of Economy, Planification and Regional Development, on March 01, 2010, two cooperation agreements (one concerning technical cooperation, the other concerning financial cooperation) amounting to a total of 49 million euros were signed between the government of the Federal Republic of Germany and the government of the Republic of Cameroon.

With the signing of the agreement concerning technical cooperation, the Federal Republic of Germany through its Agency for Technical Cooperation (GTZ) promotes the following ongoing programs:

➢ Health programme (SWAp Health)

➢ Support and implementation of the Sector Programme Forest and Environment (PSFE)

➢ Programme for the support of decentralisation and local development projects (PADDL)

➢ Counselling and implementation of the Paris agreements (PAEDP)

With regards to research, the bilateral cooperation between Cameroon and Germany has led to a project for the creation of a social and scientific research centre in Yaounde. The project is financed by a German based organisation known as the THYSSEN FOUNDATION and is estimated to cost over FCFA 80 million (121,959.21 EUR). According to the chief technician in charge of the construction, work began at the site on January 03, 2011 and the project is in its completion phase. Upon completion, the centre will host conferences, seminars, a research library and facilitate diffusion of information between Africa and Europe.

4.3   ICT Initiatives being funded

4.3.1   Framework Programme 7

Agence Nationale des Technologies de l'Information et de la Communication, Cameroon (ANTIC) is a beneficiary under IST-Africa[8] 2010 – 2011 and IST-Africa 2012 – 2013. The Ministry of Scientific Research and Innovation is a beneficiary under CAAST-Net[9] (2008 – 2012).

Cameroon has been successful in a number of projects within Environment, Health and Social Sciences. Under the ICT theme, the Universite De Yaounde I was a beneficiary in the Integrated risk management for Africa (IRMA) project. The work started in this project in Cameroon was carried on with funding from UNESCO.

Participation in IST-Africa 2010 – 2011 facilitated ANTIC to host an IST-Africa FP7 Training Workshop in Yaounde in 21 March 2011 focused on FP7-ICT-Call 8 - 9 Calls for Proposals and undertake a consultation with the research community to map expertise. As part of its IST-Africa activities ANTIC circulates updates on open Calls for Proposals as they are available, encourages

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[8] http://www.ist-africa.org

[9] www.caast-net.org/

the research community to explore these opportunities for international research projects and promotes the research centres during international meetings. ANTIC is raising awareness of the potential of Living Labs in Cameroon.

Cameroon participated in a number of proposals submitted under the FP7-Africa-2010 Call. The Faculty of Medicine and Biomedical Sciences, Université de Yaoundé is a beneficiary in AFRICA BUILD[10] project, which commenced in August 2011. The Institute of Geological and Mining Research is a beneficiary in the WATERBIOTECH[11] project.

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[10] http://africabuild.eu/
[11] http://waterbiotech.eu/en/project.html

5.   EGYPT

5.1   Introduction

Egypt is situated in Northern Africa, bordering the Mediterranean Sea and sharing boundaries with Libya and the Gaza Strip. It has a surface area of 1,001,450 square km, made up of twenty-seven administrative divisions. The population is estimated at close to 82 million inhabitants (July 2011) with literacy rate of 71.4%[12]. The official languages are Arabic, English and French.

Egypt's ICT Strategy (2007 – 2011) was successfully implemented and a new strategy is under development.

5.2   Bilateral Cooperation with EU Member States

In recent years, Egypt has enjoyed strong bilateral relationships with a number of EU Member States, including France, Germany and the UK.

5.2.1   Cooperation with France

Ministerial Visit to France (2007)

An official delegation, led by H.E. Dr. Tarek Kamel, Minister of CIT headed to France to participate in the Franco-Egyptian Presidential Council (CPAFE) meeting in 2007 during which Dr. Kamel – along with Minister of Trade and Industry and that of Transport – held talks with French ministers, senior members of the French Enterprises Association (MEDEF) and the Paris Chamber of Commerce and Industry (CCIP) to boost bilateral commercial relations.

The delegation attended OECD's meetings of Working Party on Communications and Infrastructure Services Policy (WPCISP) and the Working Party on the Information Economy (WPIE) during 3-6 December.

Dr. Kamel also held talks with French State Minister Hervé Novelli during which a number of MoUs were signed between Egyptian and French Organizations in the ICT field. The delegation visited the Sophia Antipolis Technology Park during which a bilateral MoU was singed between the Park and both ITIDA and the Smart Village company. Another was signed between Groupe La Poste (the French Post Organization) and the Egyptian National Post Organization (ENPO). ITIDA also signed an MoU with IBM on training and human development and another with Orange on establishing a technology innovation center in the Smart Village to be specialized in technology R&D, whereas Telecom Egypt signed a contract with Alcatel- Lucent.

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[12] CIA World Factbook

Meeting with Minister Nathalie Kosciusko-Morizet, Secretary of State for forward planning and the development of the Digital Economy, France during the IGF 09

The meeting involved discussion on enhanced cooperation between both governments on the internet governance: IGF, the way forward, but also the participation of Egypt to the Governmental Advisory Council of ICANN and the position of Egypt on the Affirmation of Commitments between the Department of Commerce and the board of ICANN

H.E. Nathali talked about co-operation projects in the field of ICT's under the Union for Mediterranean which HE the President of Egypt is chairing

Mrs. Morizet also mentioned the "dot med" initiative, and discussed the position of Egypt.

Meetings with French Officials on the margin of the OECD Ministerial meetings that took place in Seoul- Korea on 17-18 June 2008

H.E. Dr. Tarek Kamel met with H.E. Eric BESSON Secretary of State for Strategic Planning, Public Policy Evaluation and the Development of the Digital Economy, France.

H.E. Mr. Besson noted during the meeting that he is interested in and impressed by the Egyptian ICT Sector. Both Ministers went through shared areas of interest. The EUROMED New Partnership was discussed. It was noted then that there are no specified mechanisms for the new partnership

H.E. Dr. Tarek Kamel also met with Ms. Barbara Dalibard, Executive Vice-President for Orange Business services and CEO for Equant, France Telecom.

Twinning Project

Twinning agreement was signed between Egypt Post and French La Poste on 26th February, 2007. The purpose of this contract is the implementation of the Action entitled: Establishment of a Modern Postal Management for the Egyptian National Postal Organization [ENPO]. The implementation period is laid down as 23 months. The total cost eligible for financing is estimated at approx. €1.4 m.

The twinning project is supporting the Government of Egypt in the progressive liberalisation of the Egyptian economy and in the further modernisation and development of public services rendered to citizens. As part of developing the communications sector, the Egyptian government has announced its intention to appoint a regulator for the postal market and gradually liberalise the sector

The aim is to develop ENPO as the universal service provider. The Twinning Arrangement will enable ENPO to take a proactive part in this process and carry out its future obligations as a major stakeholder in the development of the postal sector.

5.2.2   Cooperation with Germany

There has been an ongoing dialogue with Germany in relation to develop "Government to Government" relations in the field of ICT.

H.E. the Minister met the German Ambassador accompanied by a high level delegation from the German University in Cairo (GUC), representatives of Fraunhofer institute and Digital Radio Mondiale. During the meeting H.E. the Minister encouraged the collaboration between the NTRA and Fraunhofer institute with respect to media convergence through the European Union programs, particularly for strategy and policies related to media convergence.

Ministerial Mission to Germany 25-27 February 2009

H.E. Dr. Tarek Kamel visited Germany in the first quarter of 2009 with senior officials of MCIT and Business delegation.

In coordination with the Egyptian Embassy in Berlin a number of meetings with Government officials were fixed, some visits to German companies were prepared and a business event for matchmaking between German & Egyptian Companies was organized.

H.E. Dr. Kamel witnessed the signing of three agreements between Egypt and Germany namely; a cooperation agreement between Berlin- Adlershof Technology Park and the Smart Villages Company was signed, aiming at sharing expertise in the field of technology parks and empowering Egyptian SMEs and technology incubators. Another agreement was signed between ITEC and European Information Technology Observatory Program. Also, Egypt Post signed an agreement with German OCE. Based on the agreement that is to be renewed annually, each entity will act as its counterparts' arm in its home country.

Protocol of Cooperation between MCIT and the German University in Cairo (GUC)

MCIT and GUC signed a protocol for Scientific and Technical cooperation in November 2007. Both parties agreed that GUC will provide 90 training opportunities during three years in the field of engineering, communication technology, and broadcasting. The beneficiary will be MCIT and its affiliated bodies (Telecom Egypt, NTRA, ITI and NTI).

The protocol was activated in June 2008, by conducting two training workshops on Digital radio Mondiale (DRM) and Digital Video Broadcasting - Handheld (DVB- H). The courses took place from 15-19 June 08 and 22-26 June 08 respectively. Six engineers from MCIT participated at both workshops. GUC will conduct other workshops.

Franhofer Heinrich Hertz Institute (HHI) visit to Smart Village 7-8 June 2009

Mr. Wolfgang Schlaak, Head of Department for Business Development, and Mr. Wolf Konrad, Head of International Business Development in HHI visited the Smart village from 7-8 June 2009.

They attended meetings with IR representatives from MCIT, made a smart village Tour and visited Xceed call center and CultNat.

They also had meetings with different affiliated bodies to the Ministry, ITIDA, Egypt Post, CultNat, NU and Telecom Egypt to negotiate the opportunities of cooperation between the two countries.

5.2.3   Cooperation with UK

Cooperation with UK in the ICT field has always been business oriented. Government to Government cooperation is yet to be explored.

The Egyptian-British Business Council (EBBC) holds regular meetings to explore areas of potential business cooperation between Egypt and UK. ITIDA and Telecom Egypt attended a number of these meetings.

H. E. Dr. Tarek Kamel, Minister of Communications and Information Technology of Egypt, headed the Egyptian Trade Mission to the UK in February 2006.

H. E. Dr. Kamel participated in the Euromoney Conference held in London in 2006, 2007 and 2008.

H.E. Dominic Asquith, British Ambassador to Egypt visited the Smart Village on Tuesday 24 June 2008 and met with H.E. Dr. Tarek Kamel.

After the visit an invitation was extended to Dr Tarek Kamel to attend an Invensys event in Cairo on Sunday 29 June 2008. Dr. Tarek confirmed his participation in the event. The purpose of the event was to present certificates to recent graduates of Invensys Process Systems Egypt. The event also celebrated the recent signing of the Joint Venture between the Egyptian Government and Invensys Process Systems to create the first 'Industrial Automation Engineering Centre of Excellence in Egypt'.

H. E. Dr. Kamel also participated as Speaker in the Euromoney - Egypt Conference held in Cairo in October 20-21, 2008.

Parallel to the Euromoney Conference that was held in London on March 18th, 2009 in which H.E. Dr. Kamel participated as a speaker, a meeting was held between H.E. Dr. Kamel and Lord/ Stephen Carter, Minister for Communications, Technology and broadcasting.

5.2.4   Regional & Bilateral cooperation with the European Commission

Egyptian relations with the EU are based on the Egypt-EU Association agreement and the Egypt-EU Action Plan in the European Neighbourhood Policy, which was endorsed in March 2007.

The dialogue between the two sides, with regards to Information Society, was maintained through the meetings of the subcommittee on Information society and audiovisual, research and innovation, education and culture.

At the level of Regional IS cooperation, Egypt hosted the second Euromed Ministerial Conference on Information Society in Cairo on 27th February 2008 in cooperation with the Slovenian Presidency of the EU and with the European Commission.

MCIT cares for tools and channels to enhance and strengthen cooperation between the EUROMED Partners and to giving new impulse to the EUROMED Dialogue on the Information Society.

It is worth noting that Egypt is the Arab-Med coordinator in context of the Barcelona Process and has been interfacing as such at various EUROMED cooperation instances. This has been the case in context of preparing the EUROMED IS Action Plan and MCIT has submitted a suggested contribution to that Action Plan to DG Information Society and Media in Brussels.

MCIT is also the National Contact Point under the 7th Framework Programme and the regional coordinator for the Middle East and Arab – Med countries in this regard.

Meanwhile, Egypt has participated in the Paris summit of the 'Barcelona Process: Union for the Mediterranean' (Paris, 13 July 2008) that injected a renewed political momentum into Euro–Mediterranean relations and reinforced the regional partnership.

Egypt is now a co-president of the initiative; this French-Egyptian co-presidency of the initiative creates more co-ownership at the level of the multilateral cooperation framework.

Our co-ownership in the initiative has started to be demonstrated that in regards to the Information Society part at the Marseille final declaration of Ministers of Foreign Affairs held in Marseille on 3-4 Nov '08, MCIT has contributed in shaping it to its final status through the Egyptian Ministry of Foreign affairs

Our strategy highlights the postal reform and using ICT as a catalyst for socioeconomic development and most importantly the development of the export oriented IT enabled services.

In light of our bilateral cooperation with Europe, we work on activating channels for cooperation with relevant European counterparts, where twinning is a key example of such channels. We have successfully been engaged in two Twinning projects briefly described below:

On 26th February, 2007, we signed our first twinning contract between the Egyptian National Postal Organization and the its French counterpart, "la Poste".

The contract of our second twinning project between the National Telecommunications Regulatory Authority and the consortium of its Italian and German partners was signed in September 2008. The Project has officially started in November 2008. (Project's duration is 2 years and its estimated budget is EUR 1.5 Million), An international conference entitled "The Era of Internet Broadband: Innovations of Today, Technologies of Tomorrow" was held at Ritz Carlton Hotel in Sharm El Sheikh 29 - 30 April 2009 within the framework of the Twinning Project which is currently being conducted between the NTRA, the Italian Regulator (AGCOM) and the German Regulator (BNetzA). The event presented the landscape of Internet Broadband and the related applications, services, technologies and most importantly, challenges.

On the other hand, Egypt also participates actively in different EUROMED regional programmes & projects and values the positive cooperation within the framework of NATPII (main beneficiary is the NTRA) and EUMEDCONNECT (main beneficiary is the Egyptian Universities Network-EUN) and underlines the importance of their continuation in the future.

Also on the regional level, Egypt has successfully participated in two very successful projects under FP6 Mediterranean Information Society Technologies (MED-IST) and MAP-IT!, Both projects were concerned with identifying research areas and active players in the Arab Med region, In addition MCIT is participating in a number of FP7 projects.

It is worth mentioning that the ICT sector restructuring that we are working on has a far reaching impact on the overall national economy and Egyptian populace.

MCIT hopes that the coming phase will deepen our current cooperation channels and activate them in the ICT sector as well as exploring other channels based on cost sharing.

5.3   ICT Initiatives being funded

5.3.1   Framework Programme 7

Egypt is currently involved in 77 FP7 projects across the ICT, Environment, Health, Space and Social Sciences themes. The Ministry of Communications and Information Technology is a beneficiary under IST-Africa[13] 2010 – 2011, IST-Africa 2012 – 2013 and EuroAfrica-P8[14] project (2012 - 2013). The Center for Documentation Of Cultural And Natural Heritage Cultnat is a beneficiary in Virtual Museum Transnational Network (V-MUST.NET)[15] Network of Excellence (2011 – 2015) and Tools and expertise for 3D Collection Formation (3D-COFORM)[16] Integrated Project (2008 - 2012). The Academy of Scientific Research And Technology Asrt is a beneficiary in the Trans-national Cooperation among NCPs (PEOPLENETWORK+)[17] project (2012 – 2013) and the Mediterranean innovation and research coordination action (MIRA)[18] project (2008 – 2012). The National Authority For Remote Sensing and Space Sciences is a beneficiary in the Bridging Actions for GMES and AFRICA (BRAGMA) project (2012 - 2013). The Ministry of Higher Education and Scientific Research is a beneficiary in the CAAST-Net[19] project (2011 – 2012).

MCIT was a beneficiary in Trans-national cooperation among ICT national contact points (IDEALIST2011) project (2008 – 2011) and JOIN – MED[20] project (2009 – 2011). Sakhr Software Co., The Engineering Company for Digital Systems Development and IBM World Trade Corporation Joint Stock Company were beneficiaries in the Mediterranean Arabic Language and speech technology (MEDAR) project (2008 - 2010)

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[13] http://www.ist-africa.org
[14] http://euroafrica-ict.org/
[15] http://www.v-must.net/
[16] http://www.3d-coform.eu/
[17] http://www.fp7peoplenetwork.eu/
[18] http://www.miraproject.eu/
[19] www.caast-net.org/
[20] http://www.join-med.eu/

5.3.2   EumedConnect: NReNs interconnection to GEANT

EumedConnect: NReNs interconnection to GEANT project[21] builds on the previous phase of EUMEDCONNECT, which was originally launched in 2004 to develop an inclusive Information Society in the Mediterranean partner countries. It is focused on linking Mediterranean and European partners via GEANT to provide high-capacity Internet connectivity for academic and scientific collaborations.

Countries involved: Mediterranean Partner countries, including Morocco, Algeria, Tunisia, Egypt

Main partner: DANTE

Partner in Egypt: EUN – Egyptian Universities Network

Funding: 4M€ from ENPI (European Neighbourhood and Partnership Instrument) 2009-2011

5.3.2   NATP (New Approach to Telecommunications Policy): Support to Regulatory Reforms and Harmonization in the Mediterranean Region

THE NATP projects have focused on facilitating the creation of a harmonised and investment friendly environment in the electronic communication sector. NAPT-3 builds on the work undertaken in NATP-1 in relation to policy goals and creating awareness of the benefits of liberalising the telecommunications industry and NATP-2 which focused on regulatory reform. NATP-3 is focused on exploiting international cooperation between national regulatory authorities.

Countries involved: Mediterranean Partner Countries including North Africa (Morocco, Algeria, Libya, Tunisia, Egypt)

Main partner: EMERG (Euro-Mediterranean Group of Electronic Communications Regulators)

Funding: 1M€ from ENPI (European Neighbourhood Policy Instrument) 2009-2011

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[21] http://www.eumedconnect2.net/server/show/nav.2167

6.   KENYA

6.1   Introduction

Kenya is situated in East Africa, bordering the Indian Ocean and sharing boundaries with Tanzania, Uganda, South Sudan, Ethiopia and Somalia. It has a surface area of 580,367 square km, made up of Nairobi and seven provinces. The population is estimated at close to 41 million inhabitants (July 2011) with literacy rate of 85%. The official languages are English and Kiswahili.

The enabling frameworks for Information Communication and Technology (ICT) sector are well placed in Kenya with the Development of a National ICT Policy; Implementation of the eGovernment Strategy; Development of the ICT Bill; Zero-rating of all imported ICT related equipment; and liberalization of the Telecommunications Sector.

In the Country Strategy Paper for Kenya for EDF 10, it is clear that the Government of Kenya considers ICT to be an important horizontal enabler that playing an important role in economic and social life. The promotion and popularisation of ICT, ODL at all levels of education and training and also science and technology education are included in the country's medium term policy objectives for Education.

Kenya aspires to achieve the status of a knowledge and information-based society by 2030 (Vision 2030). This aspiration is linked to the growth in the global business outsourcing industry that has opened a new window for developing countries to exploit a new growth area for ICT enabled Services (ITES) and BPOs. ICT has become a key driver of Kenya's economic growth over the last decade accounting to 13 per cent of growth in GDP.

6.2   Bilateral Cooperation with EU Member States

Kenya has bilateral cooperation agreements in relation to Science Technology and Innovation/ICT in place with France (through IRD, IFRA and CIRAD), United Kingdom (through the British Council), Spain, Netherlands, Germany and Sweden. Kenyan organisations are also beneficiaries in a number of FP7 co-funded research projects.

The table below presents current collaborations with EU Member States and European institutions.

COLLABORATIONS	LEAD MINISTRY	STATUS	THEME	COMMENT
EUROPE				
France (IRD, IFRA, CIRAD)	MOHEST	Signed: June 2009	Multi thematic	1st Conference on Biomathematics was held on 22nd -26th June 2009. Workshop on Geology (gemstones and Gemology) held in October 2011

				IRD has so far awarded two PhD scholarships to Kenyan students under this agreement. French Embassy offers 30 Msc/PhD scholarships annually
British Council (AKTP)	MOHEST	Signed, November 2009	Technology Transfer, Private Partnerships	Co-hosted Africa Knowledge transfer partnerships in February 2009
IAEA	National Council for Science and Technology (NCST)	Ongoing	Atomic Energy	
Italy (San Marco)	MOHEST	Signed March, 1995; Expired March, 2010: Review in progress	Space Science	San Marco satellite Tracking and Launching Station was established in Malindi, Kenya. Both Kenya and Italy Governments have exchanged their respective draft copies of renewal agreements and are waiting a negotiation date in order to agree one document for signature.
Germany	MOHEST	Under negotiation	Multi thematic	Existing cooperation on training of scientists in National priority sectors
Spain	MOHEST	Signed		Cooperation in Technical, Industrial, Vocational and Entrepreneurial Training
Netherlands	Government of Kenya			Through the Nuffic Fellowship Programme (NFP)
EU development Agencies	DANIDA, DAAD, SIDA, DFID, GTZ		Research components in sectoral areas	Development aid to Kenya from the EU development agencies has focused on capacity building which involves graduate training (MSC/PhD) on related aspects of S&T

Other international programmes on Environment, climate change, agriculture and Forestry are funded through UNESCO, UNEP, UNDP and FAO regional offices based in Nairobi.

There is also direct institutional support to programmes in Universities and Research Institutes by European Union Members States.

Kenya is receiving support towards STI and ICT-related projects through FP7 and EDF9 (@CP-ICT Capacity Building Programme)

6.3   ICT Initiatives being funded

6.3.1   Framework Programme 7

Ministry of Higher Education, Science and Technology, Kenya (MoHEST) is a beneficiary under CAAST-Net[22] (2008 – 2012), IST-Africa[23] 2010 – 2011, IST-Africa 2012 – 2013, ERA-Net Africa[24],

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[22] www.caast-net.org/

PAERIP [25] and BRAGMA. The Kenya Information and Communications Technology Board is a beneficiary in the EuroAfrica-P8[26] project (2012 - 2013). The Ministry of Environment and Mineral Resources is a beneficiary in the Crop Monitoring as an E-agriculture tool in developing countries (E-AGRI)[27] (2011 - 2014).

Participation in IST-Africa 2010 – 2011 facilitated MoHEST to host an IST-Africa FP7 Training Workshop in Nairobi in March 2011 focused on FP7-ICT-Call 8 - 9 Calls for Proposals and undertake a consultation with the research community to map expertise. As part of its IST-Africa activities MoHEST circulates updates on open Calls for Proposals as they are available, encourages the research community to explore these opportunities for international research projects and promotes the research centres during international meetings. Kenyan organisations were successful in a number of projects funded under the FP7-Africa-2010 Call. MoHEST also undertook a survey of Living Labs active/emerging in Kenya and is encouraging the take-up of Living Lab concepts in Kenya.

6.3.2   Germany

6.3.1.1 ict@innovation

ict@innovation[28] is focused on building capacities in African Small and Medium sized ICT enterprises in relation to using Free and Open Source Software (FOSS) by spreading FOSS business models for enterprises in Africa, fostering FOSS certification and supporting innovative local FOSS applications for social and economic development.

Target Countries: Eastern and Southern Africa (Kenya, Malawi, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Ethiopia, Namibia, Zambia)

Main partners: Partnership of FOSSFA (Free Software and Open Source Foundation for Africa) and InWEnt - Capacity Building International on behalf on behalf of German Federal Ministry of Economic Cooperation (BMZ), the Open Society Initiative for Southern Africa (OSISA).

Funding: 1.6m euro from German Federal Ministry of Economic Cooperation (BMZ), 2008 – 2010 first phase

6.3.3   Sweden

6.3.2.1 Empowering SHGs in Kenya and India through ICT for better education and alternative livelihood opportunities

The overall objective of this project is to empower Self Help Groups (SHGs) to identify viable livelihood opportunities in order to improve their socio-economic status whilst bringing the well being

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[23] http://www.ist-africa.org
[24] http://www.erafrica.eu/en/159.php
[25] http://www.paerip.org/
[26] http://euroafrica-ict.org/
[27] http://www.e-agri.info/index.html
[28] http://www.ict-innovation.fossfa.net/

of the environment into the equation. ICTs will provide an important tool in acquiring information and learning, but also to new market opportunities. ICT will be introduced in parallel with education to illustrate how it can improve their every day situation. This project ran from March 2007 – February 2010.

Main Partners: CORDIO East Africa - Costal Oceans Research and Development -Indian Ocean (Kenya); SDMRI -Suganthi Devadason Marine Research Institute (India); Nyköping Folkhögskola (Sweden)

Funding: SEK 2.500.000 through SPIDER Programme (Funded by SIDA)

6.3.4   TACIT[29]: Tackling Aids and Tuberculosis through Communication and Information Technologies

Target Countries: Southern and Eastern Africa, pilots in Kenya, Zambia, Uganda and Namibia

Main partner: International HIV/Aids Alliance

Funding: 960k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

6.3.5   Africa4All Parliamentary Initiative[30]

Through the IST-Africa Initiative, the Parliament of Kenya was included in the Africa4All Parliamentary Initiative, which was funded under the @CP-ICT Call.

Target Countries: Eastern and Southern Africa with pilots in Kenya, Tanzania, Uganda, Lesotho, Namibia

Main partner: Gov2u

Partner in Kenya: National Assembly of Kenya

Funding: 410k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

6.3.6   Capacity-building programme and Community Development in Internet Governance and ICT Policy (ACP/EDF9)

A Programme focused on Capacity-building and Community Development in Internet Governance and ICT Policy[31] was funded under the ACP-ICT Call (ACP/EDF9). This project, which runs from 2009 – 2011, will undertake online training courses on Internet Governance and ICT Strategy, provide training through workshops and policy immersion fellowships.

African Target Countries: Botswana, Burundi, Congo and Kenya

Main partner: Diplo Foundation

Partner in Kenya: The Multimedia University College of Kenya

Funding: 960k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

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[29] http://www.aidsalliance.org/newsdetails.aspx?id=242
[30] http://www.africa4all-project.eu/
[31] http://www.diplomacy.edu/ACP/Programme/default.asp

7.   KINGDOM OF LESOTHO

7.1   Introduction

The Kingdom of Lesotho is located in Southern Africa, an enclave of South Africa. Lesotho has an area of 30,355 km. Sixty one percent of the population of 1.9 million[32] is between 15 and 64 years of age (median 22 years). English and Sesotho are the official languages, with 85% literacy.

Key sectors in Lesotho are agricultural, followed by industry and services. Lesotho produces about 90% of its own electrical power needs. Export partners include US, Belgium and Canada.

English is the official language, with 85% literacy.

The ICT Policy was approved and adopted as a working

document in March 2005. The main driver of the ICT policy is the Ministry of Communications, Science and Technology.

In relation to Communications, according to 2005 figures, there were 48,000 fixed phone lines in use compared with 249,800 mobile phones. There were 66 Internet hosts (2007) and 51,500 Internet users (2005).

7.2   Bilateral Cooperation with EU Member States

EU bilateral cooperation with Lesotho is focused on supporting poverty reduction through economic growth and enhanced provision of basic services. Under EDF 10 (2008 – 2013), assistance will focus on Human Development and Infrastructure.

Lesotho has active cooperation agreements with Ireland, Germany and the United Kingdom. The activities of the donors is coordinated through the European Development Agencies in Lesotho (EDAL) with participation of Ireland, UK and Germany and Development Partners Consultative Form (DPCF) including UN agencies, World Bank and countries assisting Lesotho (USA, China, Libya) and the Donor Round Table. GTZ cooperates with the World Bank on Fiscal Decentralisation and Capacity Building and with EU Member States on Capacity building support to decentralisation.

Irish Aid's Programme is focused on Health (HIV/AIDS), Education (resources in primary schools and curriculum development), Water/Sanitation and Governance (Government Public Financial Management Programme, Parliamentary Reform Committee and Improvement of service delivery).

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[32] CIA Factbook

Germany is focused on Governance, agrarian reform and rural infrastructure through strengthening administration and governance at a district level, policy advice and promotion of local economic development including employment. Technical support is provided through DED and capacity building through GTZ.

The United Kingdom is focused on Governance (Government Public Financial Management Programme, Reform of the Justice sector, establishment of Revenue Authority), Health (establishment of National Aids Commission to work with UNAIDS) and Food Security. DFID works closely with Irish Aid and GTZ.

To date ICT has not been highlighted as a national priority for donor support.

7.3   ICT Initiatives being funded

7.3.1   Framework Programme 7

The Ministry of Communications, Science and Technology, Lesotho is a beneficiary under IST-Africa[33] 2008 – 2009, IST-Africa 2010 – 2011 and IST-Africa 2012 – 2013

Participation in IST-Africa 2010 – 2011 facilitated MCST-L to host an IST-Africa FP7 Training Workshop in Maseru in September 2009, focused on FP7-ICT-Call 5, FP7-Infrastrucutures-2010-2 and FP7-AFRICA-2010 Calls for Proposals. A number of proposals were submitted under FP7-Africa-2010 Call but unfortunately they were not short listed for funding. As part of its IST-Africa activities MCST-L circulates updates on open Calls for Proposals as they are available, encourages the research community to explore these opportunities for international research projects and promotes the research centres during international meetings. MCST-L also undertook a survey of Living Labs active and emerging in Lesotho. MCST-L is working with the universities to gradually encourage the institutions to gradually transform from primarily teaching institutions to research and innovation engines to drive socio-economic development.

7.3.2   Africa4All Parliamentary Initiative[34]

Through the IST-Africa Initiative, the Parliament of Lesotho was included in the Africa4All Parliamentary Initiative, which was funded under the @CP-ICT Call. This was a very important milestone for Lesotho and the Parliament benefited for this participation in terms of introducing new working methods to the MPs and support teams leveraging ICT tools.

Target Countries: Eastern and Southern Africa with pilots in Kenya, Tanzania, Uganda, Lesotho, Namibia

Main partner: Gov2u

Partner in Kenya: National Assembly of Lesotho

Funding: 410k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

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[33] http://www.ist-africa.org
[34] http://www.africa4all-project.eu/

8.   MAURITIUS

8.1   Introduction

Mauritius is an island in the Indian Ocean with a population of 1.2 million people and an income per capita of US$5,250. Since independence in 1968, it has achieved significant economic success outperforming most other countries in the region. From 1968-2004, per capita GDP growth averaged 3.8% compared to 2.3% for low- and middle-income countries overall, as the country diversified from being predominantly a sugar producer to successive stages of diversification transformed the country from a mono-crop sugar producer to focusing on textiles/clothing, tourism, financial services and ICT as mechanisms to create employment and income creation. The population is estimated at 1,3 million inhabitants (2011) with a literacy rate of 84.4%.

In terms of the ICT sector, Mauritius is ranked among the top countries in Africa, having good Internet connectivity and high telephone density. The country is currently focusing on business process outsourcing, software development and call centres that leverage Mauritius's linguistic diversity and location.

The Government commenced a ten-year reform programme in 2006 estimated to cost €4 billion to transition Mauritius from a trade dependent economy to a global competitive economy. A national ICT skilling programme was launched in 2006 and the National Strategic Plan was enacted by the Ministry of Information Technology and Telecommunications in September 2007 outlining the country's vision to realise Mauritius becoming a regional hub for ICT and Information-based Economy.

The curriculum in secondary schools places a significant emphasis on science, mathematics and ICT to foster the skills required to develop the country into a knowledge-based economy and a regional Centre of Excellence. Re-training programmes are in place for those who traditionally worked in the manufacturing and the Government has actively encouraged foreign and Mauritian ICT professions from the Diaspora to participate in the development of the ICT skills in the country.

8.2   Bilateral Cooperation with EU Member States & Other States

France and the United Kingdom have active cooperation agreements with Mauritius. General budget support for the economic reform of the Government of Mauritius is provided by the World Bank, the Agence Française de Développement (AFD), African Development Bank and the EC (EDF 10).

India is contributing funding to develop the Cyber City and IT Education projects in Mauritius.

8.3   ICT Initiatives being funded

8.3.1   Framework Programme 7

The National Computer Board is a beneficiary under IST-Africa[35] 2010 – 2011 and IST-Africa 2012 – 2013. The African Network Information Centre (Afrinic) Ltd is a beneficiary in the IPv6 Deployment Support (6DEPLOY-2)[36] project.

Participation in IST-Africa 2010 – 2011 facilitated NCB to host an IST-Africa FP7 Training Workshop in Mauritius in November 2009, focused on F7-Africa-2010 and FP7-ICT-Call 6 Calls for Proposals. As part of its IST-Africa activities NCB circulates updates on open Calls for Proposals as they are available, encourages the research community to explore these opportunities for international research projects and promotes the research centres during international meetings. NCB undertook a consultation with the research community and mapped expertise. NCB also undertook a survey of Living Labs active and emerging in Mauritius.

8.3.2   EASSy Deep-sea fibre cable East-AfricaUnderwater Telecommunication Cable

Target Countries: Mauritius, East-Africa

Main partner: KfW on behalf of German Federal Ministry of Economic Cooperation (BMZ), AfDB, AFD, IFC

Funding: Cost - 95 million euro, German contribution – 9 million euro

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[35] http://www.ist-africa.org
[36] http://www.6deploy.eu/

9.   REPUBLIC OF MOZAMBIQUE

9.1   Introduction

The Republic of Mozambique is located in Southern Africa, bordered by Malawi, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. At the east it is limited by the Mozambique Channel. Mozambique has an area of 799,380 km² and eleven provinces: Cabo Delgado, Niassa, Nampula, Tete, Zambézia, Manica, Sofala, Inhambane, Gaza, Maputo Província and Maputo-Cidade. The population is estimated at 22.9 million inhabitants (2011) with literacy rate of 47.8%. Fifty two percent of the population is aged between 15 and 64 (median 17 years)[37]. Portuguese is the official language and there are several indigenous languages as national languages. English is widely used in business and in government.

9.2   Bilateral Cooperation with EU Member States

The following EU Members States provide donor support to Mozambique: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden and United Kingdom. Mozambique also receives donor support from Canada, Japan and US.

Traditionally donor support is provided to general budgetary support focused on national development priorities including Macro-economic, Financial and Trade Policies; Good Governance, Legality & Justice, Capacity Building in Education and Health and Priority Sector (Agriculture & Rural Development, Transport Infrastructure, Energy and Water and Sanitation).

9.2.1   Finland

9.2.1.1 STIFIMO (Programme of Cooperation in Science, Technology & Innovation between Finland and Mozambique)

The main purpose of this Programme is to have an enhanced national science, technology and innovation system in place, which contributes effectively to economic growth and poverty alleviation. With an overall objective of accelerating the transformation of the social, economic, environmental and institutional dimensions of Mozambique, to be characterised by a widespread culture of innovation and strong innovation capacities, high-quality human resources, active and innovative public and private sectors with the ability to identify and resolve current and future development-related challenges coherently, and collaboratively supported by scientific and technological knowledge, in line with international good practices.

The Programme will leverage the experiences of launching Innovation Programme such as SAFIPA in South Africa.

Target Country: Mozambique

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[37] CIA Factbook

Main partners: Ministry for Foreign Affairs Finland (MFA), Ministry of Science & Technology Mozambique (MST), private sector partners

Funding: €22M, 2010-2014

9.2.1.2   CSBKE (Creating Sustainable Business in the Knowledge Economy)

Finland, Nokia, and infoDev are partners in the Creating Sustainable Businesses in the Knowledge Economy Programme, with the aim of encouraging innovation and competitiveness among SMEs in the information and communication technologies and agribusiness sectors in particular. This programme is focused on improving capacity of Sub-Saharan business incubators in mobile applications development, social networking and market deployment.

Target Countries: Southern and Eastern Africa, pilots in Tanzania, Mozambique and South Africa

Main Partners: Ministry for Foreign Affairs Finland (MFA), InfoDEV Programme, Nokia Corporation

Funding: Global programme of which €3.3 M allocated to Africa from MFA for period 2010-2012

9.2.1.3   Southern Africa Innovation Support Programme (SAIS)

SAIS[38] is focused on supporting a regional innovation system in SADC and promoting collaboration in relation to innovation systems between Botswana, Mozambique, Namibia and Zambia. The Botswana Innovation Hub (BIH) is the national partner.

Partners: Mozambique ICT Institute (MICTI), Botswana Innovation Hub (BIH), Namibia Business Innovation Centre (NBIC) and National Technology Business Centre, Zambia

Funding: 6.2 million € Ministry of Foreign Affairs Finland 2011 - 2015

9.2.2   Germany

9.2.2.1   Mobile Banking in Rural Areas

Banco Oportunidade of Mozambique has received a 2 million Euro to co-finance a business development project to build capacity to sustainably finance agriculture, particularly targeting smallholders. Banco Oportunidade de Mocambique will finance the remaining portion of the project costs from its own funds. The partnership with development institutions and donors have helped Banco Oportunidade de Mocambique to train staff, develop new products, and establish new distribution channels through satellite branches and new mobile banks. These efforts are expected to significantly increase its planned outreach in rural areas to benefit agriculture customers.

Target Countries: Ghana, Mozambique

Main partners: KfW on behalf of German Federal Ministry of Economic Cooperation (BMZ)

Funding: €9.5 M (Ghana), €2 M (Mozambique)

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[38] www.saisprogramme.com

9.2.3   Italy

9.2.3.1 Government Electronic Network – E-Governments in the Districts

The Mozambican Government Network was established in 2004 with the support of the Italian Government and during its first phase a number of selected public institutions at central level where linked, through a communication platform that provided email services, connection to Internet a Government Portal was designed that provided Intranet facilities for public servants and information of government services, plans, acts and documents. From 2005 to 2009 the network was extended to cover all provincial capitals and from 2010 to 2013 this network will be extended to all the 128 districts. The project will also strengthen government capacity building programs and provide applications through which services will be delivered using electronic tools. The project aims to improve the organization and efficiency of the public administration

Target Countries: Mozambique

Main partners: Ministry for Foreign Affairs Italy (MFA), Ministry of Science & Technology Mozambique (MST)

Funding: 4,8M€ 2010-2013

9.2.4   Belgium / Norway

9.2.4.1 SISTAFE

The Government of Mozambique is carrying out a Public Financial Management Reform as an integral part of a wider Public Sector Reform aiming at promoting good governance. Commitment to the Public Financial Management Reform was demonstrated by the Parliament's approval of the SISTAFE law in 2002. The SISTAFE law covers the 5 functional areas: public sector budgeting, accounting, fixed asset management, treasury operations and internal control and set out a vision for Public Financial Management in line with international standards.

Norway has provided support to the SISTAFE reform since the beginning of the reform in 2002 until 2009. The implementation of the reform has led to significant improvements in public financial management as documented in the PEFA-study published in 2008. Currently, Belgian has put some money on the SISTAFE Common Fund, with the objective of introducing a modern and integrated system for budget preparation, budget execution and treasury activities in the Government of Mozambique.

Target Countries: Mozambique

Main Partners: Belgium, Norway, Ministry of Finance Mozambique (MF)

Funding: 2,5M€ 2010 – 2012

9.2.5   EU

9.2.5.1 RURAL TELECOMMUNICATIONS NETWORK IMPROVEMENT - PHASE

Rural telecommunications network improvement - phase ii; commitment 2: telvent contract- supply and installation of rural telecom networks in the Provinces of Gaza & Inhambane. Overall objective: grant access to basic telephony services to the majority of rural inhabitants. Purpose: provide rural communities of the Provinces of Gaza and Inhambane not covered under Phase I of the project, with a reliable rural telecommunication system, which will provide telephone services between districts and provincial capitals and thus access to the national network.

Target Countries: Mozambique

Main Partners: Gaza and Inhambane Provincial Governments

Funding: 1,223,087€

9.2.5.2 Co-operation Protocol between Portugal and Mozambique in the postal and telecommunications sectors

The co-operation protocol includes a number of technical missions and training in the following areas: a) Normalization, Equipment certification and ITED; b) Accounting and Financial Management, Management of Human resources and Services of Documentation and Attendance to the Public; c) Regulation of the Postal Sector and of the Telecommunications sector; d) Engineering of Telecommunications and Management of the Spectrum, Numeration and Fiscalization.

Target Countries: Mozambique

Main Partners: Ministry of Foreign Affairs Portugal and Ministry of Transport and Communication Mozambique, National Telecommunication Regulator (INCM)

Funding: €282,288

9.3   Other ICT Initiatives being funded

9.3.1   Framework Programme 7

Unidade Technica de Implementacao da Politica de Informatica (UTICT) is a beneficiary under IST-Africa[39] 2005 – 2007, IST-Africa 2008 – 2009, IST-Africa 2010 – 2011, IST-Africa 2012 – 2013 and Earth Observation and ENVironmental modelling for the mitigation of HEAlth risks (EO2HEAVEN)[40] (2010 – 2013). Instituto Nacional De Meteorologia is a beneficiary in the Support Action to GMES-Africa on Earth Observation (SAGA-EO)[41] project. Mozambique was also a beneficiary in the Integrated risk management for Africa (IRMA) project.

Participation in IST-Africa has facilitated UTICT to host IST-Africa Training Workshops in Maputo and raise awareness of the opportunities for participation in international research projects. As part

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[39] http://www.ist-africa.org

[40] http://www.eo2heaven.org/

[41] http://www.saga-eo.eu/

of its IST-Africa activities UTICT has undertaken a mapping of expertise and circulates updates on open Calls for Proposals as they are available, encourages the research community to explore these opportunities for international research projects as well as promotes the research centres during international meetings. As a result of UTICT's participation in the IST-Africa Initiative, a range of Mozambique organisations have now participated in a number of FP7 projects under the ICT, Environment and Health themes. As a result national research organisations have more experience in relation to the requirements to participate in proposals and implementing international research projects. The International Centre for Reproductive Health, Mozambique and Universidade Eduardo Mondlane were successful in a number of projects funded under the FP7-Africa-2010 Call. UTICT undertook a survey of Living Labs active/emerging in Mozambique and is encouraging the take-up of Living Lab concepts in Mozambique.

9.3.2   ExTTI: Excellence in ICT Use for Learning Purposes – Developing Competences and Establishing Best Practices

ExTTI - "Excellence in ICT use for learning purposes - developing competences and establishing best practices", is a project of institutional cooperation, financed by the European Comission´s 9th European Development Fund, within the ACP (Africa, Caribbean and Pacific) - Information and Communication Technologies Programme (@CP-ICT Programme) - ACP Science and Technology Programme.

Target Country: Mozambique

Main partners: Instituto Superior de Estatística e Gestão de Informação da Universidade Nova de Lisboa

Funding: 560k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

9.3.3   TIC (Through Innovative Contributions): Students eSkills Development Programme & Distance Learning

"ICT-Through Innovative Contributions" is a metrical action, intended to be innovative by providing a cross between education and professional training, use and access of ICT tools, the MDGs aspirations and the empowerment of the targeted audiences, in conjunction with a view to reduce poverty in specific locations in Mozambique and Cape Verde. The notion of a metric also concurs in this project for the articulation between the involved features in each country, supposing that the results of one are conditioned by the characteristic of another. Assuming ICTs as a compulsory and cross-cutting area of action and recognizing the thematic areas such as: HIV / AIDS, Food security and Hygiene, Gender Equality and Entrepreneurship. This project is a result of a partnership between the Portuguese Piaget Institute, as a coordinator, and the Universities of Piaget Mozambique and Cape Verde, through EDF (EuropeAid via the ACP group) funding.

Target Countries: Mozambique, Cape Verde

Main partner: Instituto Piaget

Funding: 780k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

9.3.4   ict@innovation

ict@innovation[42] is focused on building capacities in African Small and Medium sized ICT enterprises in relation to using Free and Open Source Software (FOSS) by spreading FOSS business models for enterprises in Africa, fostering FOSS certification and supporting innovative local FOSS applications for social and economic development.

Target Countries: Eastern and Southern Africa (Kenya, Malawi, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Ethiopia, Namibia, Zambia)

Main partners: Partnership of FOSSFA (Free Software and Open Source Foundation for Africa) and InWEnt - Capacity Building International on behalf on behalf of German Federal Ministry of Economic Cooperation (BMZ), the Open Society Initiative for Southern Africa (OSISA).

Funding: 1.6m euro from German Federal Ministry of Economic Cooperation (BMZ), 2008 – 2010 first phase

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[42] http://www.ict-innovation.fossfa.net/

10.   REPUBLIC OF NAMIBIA

10.1   Introduction

Namibia is situated in South Western Africa, bordered by the Atlantic Ocean in the west, Angola and Zambia in the north, Botswana and Zimbabwe in the east and South Africa in the South. The country has a surface area of 825,418 km² and a population of 2.14 Million (est July 2011) with literacy rates of 85%[43]. Namibia is an arid country with generally low and highly variable rainfall. Agriculture, largely subsistence, is the main economic activity for 70% of the population, contributing about 7% of GDP. Diamonds, Minerals, Fish, Livestock and Livestock by products are the country's principal exports.

According to 2010 figures, there were 152,000 fixed phone lines in use compared with 1.5 million mobile phones. There were 76,020 Internet hosts with 127,500 Internet users (2009).

10.2   Bilateral Cooperation with EU Member States

European Embassies in Namibia include Germany, France, Spain, UK, Portugal, Finland and the EU Delegation.

There is currently limited support for dedicated ICT-related initiatives. Germany has contributed towards educational programmes in Namibia. Finland has launched the Southern Africa Innovation Support Programme (SAIS) as a regional programme in Namibia, Botswana, Mozambique and Zambia for a four-year period (April 2011 – March 2015)

10.3   ICT Initiatives being funded

10.3.1 Framework Programme 7

The Ministry of Education (MoE) is a beneficiary under IST-Africa[44] 2008 – 2009, IST-Africa 2010 – 2011 and IST-Africa 2012 – 2013.

Participation in IST-Africa has facilitated MoE to host IST-Africa FP7 Training Workshops in Windhoek and raise awareness of the opportunities for participation in international research projects. As part of its IST-Africa activities MoE circulates updates on open Calls for Proposals as they are available, encourages the research community to explore these opportunities for international research projects and promotes the research centres during international meetings. MoE is working with the universities to encourage the institutions to gradually transform from

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[43] CIA World FactBook 2011

[44] http://www.ist-africa.org

primarily teaching institutions to research and innovation engines to drive socio-economic development.

10.3.2 Southern Africa Innovation Support Programme (SAIS)

SAIS[45] is focused on supporting a regional innovation system in SADC and promoting collaboration in relation to innovation systems between Botswana, Mozambique, Namibia and Zambia. The Namibia Business Innovation Centre (NBIC) is the Namibian partner and the Programme was launched in Windhoek on 13 May 2011.

Partners: Namibia Business Innovation Centre (NBIC), Botswana Innovation Hub (BIH), National Technology Business Centre, Zambia and Mozambique ICT Institute (MICTI)

Funding: 6.2 million € Ministry of Foreign Affairs Finland 2011 - 2015

10.3.2 Africa4All Parliamentary Initiative[46]

Through the IST-Africa Initiative, the Parliament of Namibia was included in the Africa4All Parliamentary Initiative, which was funded under the @CP-ICT Call. The timing of the Parliament's participation was well aligned with its goal to move towards new working methods leveraging ICT.

Target Countries: Eastern and Southern Africa with pilots in Kenya, Tanzania, Uganda, Lesotho, Namibia

Main partner: Gov2u

Partner in Namibia: National Assembly of Namibia

Funding: 410k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

10.3.4 TACIT[47]: Tackling Aids and Tuberculosis through Communication and Information Technologies

Target Countries: Southern and Eastern Africa, pilots in Kenya, Zambia, Uganda and Namibia

Main partner: International HIV/Aids Alliance

Funding: 960k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

10.3.5 ict@innovation

ict@innovation[48] is focused on building capacities in African Small and Medium sized ICT enterprises in relation to using Free and Open Source Software (FOSS) by spreading FOSS

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[45] www.saisprogramme.com
[46] http://www.africa4all-project.eu/
[47] http://www.aidsalliance.org/newsdetails.aspx?id=242

[48] http://www.ict-innovation.fossfa.net/

business models for enterprises in Africa, fostering FOSS certification and supporting innovative local FOSS applications for social and economic development.

Target Countries: Eastern and Southern Africa (Kenya, Malawi, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Ethiopia, Namibia, Zambia)

Main partners: Partnership of FOSSFA (Free Software and Open Source Foundation for Africa) and InWEnt - Capacity Building International on behalf on behalf of German Federal Ministry of Economic Cooperation (BMZ), the Open Society Initiative for Southern Africa (OSISA).

Funding: 1.6m euro from German Federal Ministry of Economic Cooperation (BMZ), 2008 – 2010 first phase

11.   SENEGAL

11.1   Introduction

Senegal is the most advanced western African country along the Atlantic Ocean, where major sea and air routes to Europe, other African countries and the Americas.

Covering an area of 196 722 km², it is bordered on the north by Mauritania, east by Mali, south by Guinea and Guinea Bissau, west of the Gambia and a coastline along the Atlantic Ocean for 500 km. Dakar (550 km²), the capital, is a peninsula in the far West.

Senegal is a flat country with sandy soil not exceeding 130m except at the south-eastern border of Republic of Guinea. Three rivers cross the country from east to west: Senegal (1700 km) north, Gambia (750 km) and Casamance (300 km) south. The population is estimated at 12.6 million inhabitants (2011) with literacy rate of 39.3%.

The official language of the Republic of Senegal is French. The national languages are Diola, Malinke, the Pular, Serer, Soninke, Wolof and other national languages to be codified.

One of the objectives clearly articulated by the Government is to make Senegal a leader in the sub-regional in the production of value-added services supported by ICT, in order to improve its position in the global economy. To achieve these objectives, Senegal has developed a multitude of programs related to Information Technology and Communication (ICT). In fact, for over two decades, state authorities have decided to firmly consider ICT as an essential part of development.

11.2   Bilateral Cooperation with EU Member States

Senegal enjoys bilateral relations with a number of European Member States, including France, Belgium, Spain, Italy and Germany, each of which has a slightly different focus to their engagement.

11.2.1 France

After more than three centuries, France and Senegal have remained very close since the independence of nations. A shared history, a tradition of cooperation in all fields, a stream of constant human and material exchanges in both directions, support this cooperation.

France supports the strategy for achieving the Millennium goals for Senegal, focusing primarily in three key sectors: education, the productive sector and infrastructure.

Development aid in favour of Senegal was € 717.03 million (1057.72 million) in total in 2008, making it one of the highest recipients from Sub-Saharan Africa (source: OECD). The World Bank and the European Union are the two major multilateral donors. France remains the biggest bilateral donor

with € 128.14 million (189.03 million) of net ODA in 2008, far ahead of the United States, Spain, the Netherlands and Germany.

11.2.1.1 SIST project[49]

This project involves the establishment of an Information System Science and Technology web platform receiving all research records, thesis and publications of Senegal.

Funding: €50,000

11.2.1.2 Démarches administratives project[50]

The main purpose of this web site is to make reliable administrative information (legal, consistent and updated) accessible to a majority of users, individuals and professionals in a simple and structured manner according to their requirements. The web site then directs users to appropriate services.

11.2.2 Belgium

The main objective of Belgian international cooperation is poverty reduction and in particular improving the well being of the rural population.

11.2.3 Switzerland

Senegal has a limited program with the Swiss Agency for Development and Cooperation (SDC). SDC has decided to withdraw from Senegal in 2010. Actions could be maintained as part of a framework for development and regional integration. In Senegal, the commitment from Switzerland has focused primarily on rural development from the late 70s, and Information Technology and Communication. The Swiss official development assistance to Senegal was between 4 and 5 million Swiss francs per year.

11.2.3.1   Community Multimedia Centres

On the occasion of World Information Summit in Geneva in 2003, SDC, UNESCO and the Heads of State of Senegal, Mali and Mozambique launched Community Multimedia Centres (CMCs, with access to the Internet) in marginalized areas of the country. These centers are designed to meet the needs of local people in terms of access and exchange information in their own language. They include a radio transmitter, computers for Internet browsing and also offer business services such as telephone, fax and email services. The first phase saw the creation of 24 CMCs in Senegal, including 20 with Swiss funds. The second phase, of which Switzerland is still a major donor, has been in operation. One of the challenges is to ensure better production and distribution of content.

11.2.3.2   CoseLearn

The CoseLearn project, funded by SDC, also emerged after the World Summit on Information at Geneva. This project involves the gradual introduction of Virtual Campus Regional involving several

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[49] www.sist.sn
[50] http://www.demarches.gouv.sn/

countries in Francophone Africa, training in a forty universities including the University Cheikh Anta Diop in Dakar, nearly 170 experts work to train specialists and to contribute to content creation, training of nearly 500 specialists in teaching and technical support and building a large catalogue of several hundred modules of courses and several projects pilots involving several thousand students. This ambitious project is under implementation with the assistance of national steering groups.

11.2.4 Spain

The Technical Office of Spanish Cooperation is present in Senegal since 2004 and serves as a regional office with expertise in the following countries: Senegal, Gambia, Guinea Bissau, Guinea Conakry, Sierra Leone, Liberia, Cote d'Ivoire, Burkina Faso and Niger.

Spanish Cooperation has worked in sectors such as education, health, vocational training, environment or gender equity.

11.2.5 Italy

The most significant initiatives underway in the country concern the areas of agriculture and rural development, food security and protection of child rights in collaboration with UN agencies.

11.2.6 Germany

Senegal is one of the major partner countries of Germany. The strategy for the reduction of poverty in Senegal is used as a starting point to guide the portfolio of activities of cooperation. At the end of intergovernmental negotiations in September 2009, three priority areas of cooperation between Senegal and Germany were selected for the period between 2009 and 2011:

➢ Sustainable economic development

➢ Support for decentralization and local development, taking into account the promotion of peace in Casamance

➢ Renewable energy and energy efficiency

11.3   Other ICT Initiatives being funded

11.3.1 Framework Programme 7

Ministère de l'Enseignement Supérieur, des Universités et des Centres Universitaires Régionaux et de la Recherche Scientifique (MESUCURRS) Senegal is a beneficiary under CAAST-Net[51] (2008 – 2012), IST-Africa[52] 2010 – 2011 and IST-Africa 2012 – 2013. Ecole Superieure Multinationale Des Telecommunications is a beneficiary in the VOIce-based Community-cEntric mobile Services for social development (VOICES) [53] project (2011 – 2013) and EuroAfrica-P8[54] project (2012 - 2013).

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[51] www.caast-net.org/

[52] http://www.ist-africa.org

[53] http://www.mvoices.eu/

Agence Nationale de la Meteorologie du Senegal is a beneficiary in the Support Action to GMES-Africa on Earth Observation (SAGA-EO)[55] project. University Cheikh Anta Diop of Dakar was involved in a successful project under FP-Africa-ICT. Centre De Suivi Ecologique was a beneficiary in the Integrated risk management for Africa (IRMA) project. Senegal research centres also have a successful track record of participation in the Environment, Health and Agriculture themes of FP7.

Participation in IST-Africa has facilitated MESUCURRS to host an IST-Africa Training Workshop in Dakar in November 2010 and raise awareness of the opportunities for participation in international research projects with the wider research community. As part of its IST-Africa activities MESUCURRS has undertaken a mapping of expertise and circulates updates on open Calls for Proposals as they are available, encourages the research community to explore these opportunities for international research projects as well as promotes the research centres during international meetings. MESUCURRS is encouraging the take-up of Living Lab concepts in Senegal.

11.3.2 Government Intranet

A Network that covers almost all the departments and wires 665 buildings (office buildings, city halls, hospitals, etc.)

Main partners: World Bank, China, Korea

Funding: 75 million US dollars

11.3.3 Hub earth station infrastructure

This new technology infrastructure is designed to provide online services, distance learning and telemedicine remote.

Main partners: India

Funding: 40 million US dollars

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[54] http://euroafrica-ict.org/
[55] http://www.saga-eo.eu/

12.   REPUBLIC OF SOUTH AFRICA

12.1   Introduction

The Republic of South Africa occupies the southernmost part of the African continent, stretching latitudinally from 22° to 35° south and longitudinally from 17° to 33°   east, flanked on the west by the Atlantic Ocean and on the east by the Indian Ocean, whose waters meet at the country's most southern tip, Cape Agulhas. The long coastline stretches 2,798 kilometres from a desert border in the north-west, down the icy and treacherous Skeleton Coast to Cape Agulhas, then up along rolling green hills and wide beaches fronting the warm Indian Ocean, to a border with subtropical Mozambique in the north east.

South Africa has common boundaries with Namibia, Botswana and Zimbabwe, while Mozambique and Swaziland lie to the north-east. Completely enclosed by South African territory in the south-east is the mountain kingdom of Lesotho.

There are nine provinces forming jurisdiction regions in South Africa, each with its own legislature, premier and executive councils. The provinces, with their own distinctive landscapes, vegetation and climate, are the Western Cape, the Eastern Cape, KwaZulu-Natal, the Northern Cape, Free State, North West, Gauteng, Mpumalanga and Limpopo.

South Africa is a middle-income emerging market with abundant natural resources, well-developed financial, legal, communications, energy and transport sectors, a stock exchange ranked among the top 20 in the world, and a modern infrastructure supporting efficient distribution of goods throughout the southern African region. Economic growth has been steady and unprecedented ranging from 2.4% in 1999, to 4.9% in 2004 and 5.1% in 2007.

South Africa has the world's 22nd largest economy by GDP (Gross Domestic Product) and the world's 32nd largest labour force. It is the economic powerhouse of the African continent, and comprising 25% of the entire GDP of Africa.

According to estimates for 2011[56], South Africa has a population of 49 million, with 65% of the population between the ages of 15 – 64 and a literacy rate of 86.4%. According to figures for 2010 there are 4.32 million fixed line phone in use, 50.3 million mobile phones, 3.75 million internet hosts and 4.42 million internet users.

The South African ICT sector is the largest on the African continent and the 20th biggest in the world. As an increasingly important contributor to South Africa's GDP, the country's ICT and

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[56] CIA World FactBook

electronics sector is both sophisticated and developing. The country has a network that is 99% digital and includes the latest in fixed-line, wireless and satellite communications, making it the most developed telecommunications network on the continent. South Africa's IT industry is characterised by technology leadership, particularly in the field of electronic banking services. South African companies are world leaders in pre-payment, revenue management and fraud prevention systems, and in the manufacture of set-top boxes, all exported successfully to the rest of the world. Several international corporates, recognised as leaders in the IT sector, operate subsidiaries from South Africa, including IBM, Unisys, Microsoft, Intel, Systems Application Protocol (SAP), Dell, Novell and Compaq.

12.2   Bilateral Cooperation with EU Member States

South Africa enjoys strong bilateral relations with a number of European countries. Finland is particularly active in supporting ICT related activities and France supports bilateral research projects.

12.2.1 Finland

12.2.1.1 SAFIPA Programme

The SAFIPA Programme[57] (South Africa – Finland Knowledge Partnership on ICT) is focused on institutional capacity building on development and deployment of ICT service applications.

Target County: South Africa

Main partners: Ministry for Foreign Affairs Finland (MFA), Department of Science & Technology South Africa (DST), CSIR/MERAKA Institute, private sector partners

Funding: 3 M€ from MFA for period 2008-2011

12.2.1.2 COFISA Programme

The COFISA Programme (Cooperation Framework on Innovation Systems between Finland and South Africa) was focused on providing support for enhancing innovation systems including the use of ICT in service delivery.

Target County: South Africa

Main partners: Ministry for Foreign Affairs Finland (MFA), Department of Science & Technology South Africa (DST), private sector partners

Funding: 3 M€ from MFA for period 2006-2010

12.2.1.3 Establishing National CSIRT Capacity for South Africa

This Programme between Finland and South Africa was focused on institutional cooperation on Information Security.

Target County: South Africa

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[57] http://safipa.com/

Main partners: Ministry for Foreign Affairs Finland (MFA), Department of Science & Technology South Africa (DST), Finnish Communications Regulatory, CSIR private sector partners

Funding: 280k € for period 2009-2010

12.2.1.4 INSPIRE (Provincial Information Society Strategies)

The INSPIRE Programme between Finland and South Africa focused on providing technical assistance to support the development and deployment of an integrated, comprehensive and feasible Provincial Information Society Strategies.

Target County: South Africa

Main partners: Ministry for Foreign Affairs Finland (MFA), PNC on ISAD, Department of Communications (DoC) South Africa, provincial governments of Northern Cape and Limpopo

Funding: 4,07 M€ for period 2008-2010

12.2.1.5 CSBKE (Creating Sustainable Business in the Knowledge Economy)

This programme is focused on improving capacity of Sub-Saharan business incubators in mobile applications development, social networking and market deployment.

Target Countries: Southern and Eastern Africa, pilots in Tanzania, Mozambique and South Africa

Main Partners: Ministry for Foreign Affairs Finland (MFA), InfoDEV Programme, Nokia Corporation

Funding: Global programme of which 3,3 M€ allocated to Africa from MFA for period 2010-2012

12.3   Other ICT Initiatives being funded

12.3.1 Framework Programme 7

South Africa has participated strongly in FP6 and FP7. There are currently 149 projects under FP7 with South African partners of which 16 projects fall under the ICT theme.

South Africa has participated in the IST-Africa Initiative[58] since 2005 initially through the Meraka Institute, Wits University and now the Department of Science and Technology (IST-Africa 2010 – 2011 and IST-Africa 2012 – 2013). DST is also a beneficiary under CAAST-Net[59] (2008 – 2012), BRAGMA (2012 – 2013) and ERA-Net Africa (2010 – 2013).

The Meraka Institute of CSIR is a beneficiary of the VOIce-based Community-cEntric mobile Services for social development (VOICES)[60] project (2011 – 2013), Earth Observation and ENVironmental modelling for the mitigation of HEAlth risks (EO2HEAVEN)[61] project (2010 – 2013) and EuroAfrica-P8[62] project (2012 - 2013). CSIR was a beneficiary in the Integrated risk management for Africa (IRMA) project (2008 – 2009), Advancing ICT for DRM in Africa (AIDA)

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[58] http://www.ist-africa.org
[59] www.caast-net.org/
[60] http://www.mvoices.eu/
[61] http://www.eo2heaven.org/
[62] http://euroafrica-ict.org/

project (2008 – 2010) and Towards an open and sustainable ICT research infrastructure strategy (OSIRIS) project (2010 - 2011), EuroAfrica-ICT project (2010 – 2011), Digital world forum on accessible and inclusive ICT (DIGITALWORLD) project (2008 - 2009).

The University of Kwazulu-Natal is also a beneficiary in the Earth Observation and ENVironmental modelling for the mitigation of HEAlth risks (EO2HEAVEN). Sasol Synfuels (Pty) is a beneficiary in the Advanced Autonomous Model-Based Operation of Industrial Process Systems (AUTOPROFIT) project (2010 - 2013). T-Systems South Africa (Pty) Ltd is a beneficiary in the MAnagement of Security information and events in Service InFrastructures (MASSIF) project (2010 - 2013).

Stellenbosch University was a beneficiary in the Shrink-Path of ultra-low power super-conducting electronics (S-PULSE) project (2008 - 2010). The University of the Western Cape was a beneficiary in the Free/Libre and open source software: International cooperation development roadmap (FLOSSINCLUDE) project (2008 - 2010). GS1 South Africa was a beneficiary in the Global RFID interoperability forum for standards (GRIFS) project (2008 - 2009)

12.3.2 ict@innovation

ict@innovation[63] is focused on building capacities in African Small and Medium sized ICT enterprises in relation to using Free and Open Source Software (FOSS) by spreading FOSS business models for enterprises in Africa, fostering FOSS certification and supporting innovative local FOSS applications for social and economic development.

Target Countries: Eastern and Southern Africa (Kenya, Malawi, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Ethiopia, Namibia, Zambia)

Main partners: Partnership of FOSSFA (Free Software and Open Source Foundation for Africa) and InWEnt - Capacity Building International on behalf on behalf of German Federal Ministry of Economic Cooperation (BMZ), the Open Society Initiative for Southern Africa (OSISA).

Funding: 1.6m euro from German Federal Ministry of Economic Cooperation (BMZ), 2008 – 2010 first phase

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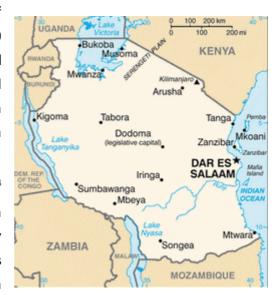[63] http://www.ict-innovation.fossfa.net/

13.   REPUBLIC OF TANZANIA

13.1   Introduction

The United Republic of Tanzania has a population of approximately 42 million inhabitants and occupies 947,300 sq km. It is the result of a political union between mainland Tanganyika and the off-shore islands of Zanzibar and Pemba. Zanzibar has its own government and its own Ministry of Education and several other ministries, which do not fall under union matters.

In Tanzania, the population in 2011 was 42.7 million[64] (42% of the population between 0-14 years, 55% between 15-64 years and 3% above 65 years of age) and a literacy rate of 69%. The country has 26 administrative regions with Dodoma as the official capital and home to Tanzanian Parliament while the government ministries and major institutions and diplomatic missions are located in Dar es Salaam. There are 120 ethnic groups on the mainland with Swahili and English being widely spoken. However, Swahili is the national language with English being used as the official primary language of commerce administration and higher education.

The Tanzanian telecom sector has two fixed-line operators TTCL and ZANTEL and six operational mobile networks (Vodacom, Airtel, Tigo, TTCL-mobile, Zantel-mobile and Sasatel). The recent introduction of the 3G wireless broadband service has greatly boosted Internet usage. Although indicators show rapid growth in the Tanzanian ICT infrastructure, communication facilities are available mainly in the urban areas leaving the rural areas where the majority of Tanzanians live being underserved.

The Tanzania Development Vision 2025 envisages a nation imbued with five main attributes: high quality livelihood; peace, stability and unity; good governance; a well educated and learning society; and a strong and competitive economy capable of producing sustainable growth and shared benefits. It is also noteworthy that Vision 2025 explicitly includes ICT by noting, "The new opportunities that ICT is opening up can be harnessed to meet the goals of the Vision".

13.2   Bilateral Cooperation with EU Member States

EU Member States actively providing donor support to Tanzania include Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Sweden and United Kingdom. Norway has a bilateral agreement with Tanzania.

ICT-related Initiatives are actively supported by Finland, Sweden and Norway.

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[64] CIA World FactBook

13.2.1 Finland

Finland is actively involved in ICT initiatives in Tanzania. A programme preparation phase was undertaken during 2009 – 2010 to prepare for the launch of TANZICT, which commenced in September 2011.

13.2.1.1 CSBKE (Creating Sustainable Business in the Knowledge Economy)

This programme is focused on improving capacity of Sub-Saharan business incubators in mobile applications development, social networking and market deployment.

Target Countries: Southern and Eastern Africa, pilots in Tanzania, Mozambique and South Africa

Main Partners: Ministry for Foreign Affairs Finland (MFA), InfoDEV Programme, Nokia Corporation

Funding: Global programme of which 3,3 M€ allocated to Africa from MFA for period 2010-2012

13.2.1.2 Information Society and ICT Sector Development Programme

This Programme is focused on providing technical assistance for the deployment of ICT policy and strategy.

Target Country: Tanzania

Main Partners: Ministry for Foreign Affairs Finland (MFA), Ministry of Communication, Science & Technology of Tanzania

Funding: 500 k€ 2009-2010 (programme preparation phase)

13.2.1.3 TANZICT[65]

This Programme is focused on strengthening the Tanzanian Information Society through enhanced capacities and undertaking a review of the Tanzania ICT Policy Framework and Implementation plan. There are three components envisaged: 1. Revision of National ICT Policy and initial implementation plan; 2. Strengthen institutional capacity of the Ministry of Communications, Science and Technology and 3. Tanzanian Innovation Programme to stimulate innovations in the ICT sector through pilots, transferring knowledge and best practices and strengthening the processes of the national innovation system.

Target Country: Tanzania

Main Partners: Ministry for Foreign Affairs Finland (MFA), Ministry of Communication, Science & Technology of Tanzania, COSTECH

Funding: 5 million euro. Commenced in September 2011 for 4 year period.

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[65] http://tanzict.or.tz/

13.2.2 Norway

13.2.1   *Health Informatics Systems Programme*

In order to strengthen the collection and handling of health information and improving health services management, the Ministry of Health and Social welfare, the University of Dar es Salaam and the University of Oslo, implemented and rolled out of DHIS throughout the health sector including all facilities, districts and regions

Target Country: Tanzania

Main Partners: University of Dar es Salaam, School of Informatics and Communication Technologies in cooperation with University of Oslo

Funding: Embassy of Norway in Tanzania, University of Oslo

13.2.2   *Masters Programme in Health Informatics*

In an effort to build capacity of health managers and health professional in ICT the University of Dar es Salaam School of Informatics, School of Public Health and Social Science MUHAS and the University of Oslo is offering a Masters Programme in Health Informatics already underway to carter for lower level cadre.

Target Country: Tanzania

Main Partners: University of Dar es Salaam, School of Informatics and Communication Technologies, Muhimbili University of Health and Allied Sciences (MUHAS) School of Public Health in cooperation with University of Oslo

Funding: NORAD

13.2.3 Sweden

Swedish International Development Agency (SIDA) is funding a number of ICT-related initiatives that are being implemented by COSTECH, Ministry of Education and Vocational Training, Ministry of Communications, Science and Technology Open University of Tanzania, Dar es Salaam Institute of Technology and Tanzania Communication Regulatory Authority.

As a result of the government decision to invest in research, COSTECH has been able to attract external funding of research for development. Tanzania, Sweden and the Netherlands have agreed to set a "Common Fund" named "TASENE" for post doctoral support for scientists from Tanzania, Sweden and Netherlands. The fund has already attracted a total of Euro 1,800 millions in equal contributions as a pilot project. A joint first call for competitive research projects was made in June 2011, which allows the scientists and researchers from the three countries to jointly apply for grants.

Funding: Tanzania, Sweden and Netherlands

13.2.3.1   TANSENE for Post Doctoral Support

As a result of the government decision to invest in research, COSTECH has been able to attract external funding of research for development. Tanzania, Sweden and the Netherlands have agreed to set a "Common Fund" named "TASENE" for post doctoral support for scientists from Tanzania, Sweden and Netherlands. The fund has already attracted a total of Euro 1,800 millions in equal contributions as a pilot project. A joint first call for competitive research projects was made in June 2011, which allows the scientists and researchers from the three countries to jointly apply for grants.

Funding: Tanzania, Sweden and Netherlands

13.2.3.2   ICT for Rural Development

ICT4RD[66] is a research and development project in the area of broadband connectivity to rural of Tanzania, utilizing available infrastructures mainly fibre optic and outdoor wireless. Its focus is improving services by making information easily available and accessible in the areas for education, health and local government management.

The main objective of the project is the establishment of sustainable broadband markets in rural areas offering connectivity, system integration and capacity building programmes, including project management skills, technology and entrepreneurship; in close cooperation with partners already working with healthcare, school, local administration and small and medium enterprises

The project has deployed Health Management Information System (HMIS) to health centres and district hospitals, which allows easy collection and analysis of information.

Other services deployed include an eLearning system in the secondary schools and hospitals. The eLearning supports guided learning and individual learning, teachers are using the platform to create and store content for students. Using the content on the server (repository), teachers, students as well as hospital staff use the platform for self-learning.

Target Country: Tanzania

Main Partners: Tanzania Commission for Science and Technology (COSTECH)

Funding: Swedish International Development Agency (SIDA)

13.2.3.3   ICT Leadership Project

Following the adoption of the National ICT policy in 2003 it was realised that in order to implement ICT effectively participation of top leadership involvement is required for effective adoption of ICT. The project aimed at creating sensitization and awareness among decision makers at various levels enabling them to integrated ICT into the poverty reduction strategy.

Target Country: Tanzania

Main Partners: Tanzania Commission for Science and Technology (COSTECH)

Funding: Swedish International Development Agency (SIDA)

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[66] http://www.ict4rd.ne.tz/

13.2.3.4   ICT in Teacher Training Colleges

This project was implemented by the Ministry of Education and Vocational Training, with support from SIDA. It involved providing computer labs and broadband Internet connectivity to all Teacher Training Colleges, training of tutors in computer skills and offering computer training to all teacher trainees. The project was very successful. After the initial funding from SIDA the government has streamlined it and is being developed into a Teacher Professional Development Framework

Target Country: Tanzania

Main Partners: Ministry of Education and Vocational Training

Funding: Swedish International Development Agency (SIDA)

13.2.3.5   ICT Pilot in Secondary Schools

This project intends to pilot the use of ICT in teaching and learning in secondary schools. Due to resource constraints 200 secondary schools will be used for piloting of ICT application

Target Country: Tanzania

Main Partners: Ministry of Education and Vocational Training

Funding: Swedish International Development Agency (SIDA)

13.2.3.6   ICT Consultancy to Ministry of Education and Vocational Training

The Ministry of Education and Vocational Training is in the preparation of the strategic plan and implementation plan on Information and Communication Technology (ICT) Policy for Basic Education. The ICT policy for Basic Education was adopted in 2007, an implementation plan is required to guide the implementation of the policy.

Target Country: Tanzania

Main Partners: Ministry of Education and Vocational Training

Funding: Swedish International Development Agency (SIDA)

13.2.3.7   Mainstreaming of ICT

The project provides an opportunity to document and show how Tanzania is successfully supporting its national development, poverty reduction, and reform efforts through ICT. The project focuses on high-level negotiations aimed at getting ICT champions in each priority sector.

Target Country: Tanzania

Main Partners: Ministry of Communication Science and Technology

Funding: Swedish International Development Agency (SIDA)

13.2.3.8   Integrating ICT into OUT activities (Institutional Capacity Building)

The Open University of Tanzania (OUT) is a distance learning institution whereby educational delivery is attained through various means of communication such as broadcasting, telecasting,

Information and Communication Technologies (ICT), correspondence enhanced face to face, seminars, contact programmes

OUT is increasingly using e-Learning as a mode of delivery through the Learning Management system Moodle. It has recently received funding from SPIDER for the establishment of Tanzania's first e-learning center, which will be located at the Headquarters of OUT in Dar es Salaam. The E-learning Centre will focus initially on the building the capacity of the staff and then students from OUT and other universities and colleges. SIDA will also support the capacity-building work of the E-learning Centre.

Target Country: Tanzania

Main Partners: Open University of Tanzania

Funding: Swedish International Development Agency (SIDA)

13.2.3.9   Training of IT Technicians

In order to meet the market demand for IT professionals, the Dar es Salaam Institute of Technology developed a special course for training IT technicians. This is a one-year course imparting skills in Computer maintenance.

Target Country: Tanzania

Main Partners: Dar es Salaam Institute of Technology

Funding: Swedish International Development Agency (SIDA)

13.2.3.10   NET-TEL Africa[67] – Regulatory Support for ICT across Africa

The project aims at strengthening and supporting the country's policy and regulatory environment in addition to promoting reform within the sector as a way of capitalizing on the benefits of increased access to international bandwidth.

Target Country: Tanzania

Main Partners: Tanzania Communication Regulatory Authority

Funding: Swedish International Development Agency (SIDA)

13.2.3.11   Training in IT - Student or staff exchange programme

The University of Eastern Finland, Technical University of Denmark, University of London and Helsinki University are cooperating with Tumaini University in relation to exchange of personnel and training in IT.

Target Country: Tanzania

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[67] http://www.nettelafrica.or.tz/

Main Partners: Tumaini University with support from University of Eastern Finland (Prof. Matti Tedre), Technical University of Denmark (Prof. Henrik Lund), University of London / Royal Holloway (Prof. Tim Unwin) & Helsinki University (Dr. Tomi Pasanen)

13.3 Other ICT Initiatives being funded

13.3.1 Framework Programme 7

Tanzania Commission for Science and Technology (COSTECH) is a beneficiary under IST-Africa[68] 2005 – 2007, IST-Africa 2008 – 2009, IST-Africa 2010 – 2011 and IST-Africa 2012 – 2013.

The research and ICT environment in Tanzania has changed rapidly over the past seven years. Participation in IST-Africa has facilitated COSTECH to host IST-Africa Training Workshops in Dar es Salaam and raise awareness of the opportunities for participation in international research projects. COSTECH has been working with the universities to encourage the institutions to gradually transform from primarily teaching institutions to research and innovation engines to drive socio-economic development As part of its IST-Africa activities COSTECH has undertaken a mapping of expertise and circulates updates on open Calls for Proposals as they are available, encourages the research community to explore these opportunities for international research projects as well as promotes the research centres during international meetings. As a result of an IST-Africa Training Workshop on FP7-Africa-2010 in Dar es Salaam in September 2009, there was a strong participation of Tanzanian institutions in proposals submitted. The following institutions are now involved in funded projects under the FP7-Africa-2010 Call - Sokoine University of Agriculture (WHaTeR project, Sunray project), Ifakara Health Institute Trust (AvecNet project, EQUIP project, ETATMBA project) African Malaria Network Trust (AvecNet project) National Institute For Medical Research (AvecNet project), Muhimbili University Of Health And Allied Sciences (APARET project, ARCADE HSSR project), University of Dar es Salaam (CHEPSAA project, PERFORM project) and The Eastern and Southern Africa Small Scale Farmers' Forum (INSARD project). COSTECH undertook a survey of Living Labs active/emerging in Tanzania, hosted an IST-Africa Living Lab Workshop in Dar es Salaam (29 – 30 September 2011) and is encouraging the take-up of Living Lab concepts in Tanzania.

13.3.2 ict@innovation

ict@innovation[69] is focused on building capacities in African Small and Medium sized ICT enterprises in relation to using Free and Open Source Software (FOSS) by spreading FOSS business models for enterprises in Africa, fostering FOSS certification and supporting innovative local FOSS applications for social and economic development.

Target Countries: Eastern and Southern Africa (Kenya, Malawi, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Ethiopia, Namibia, Zambia)

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[68] http://www.ist-africa.org
[69] http://www.ict-innovation.fossfa.net/

Main partners: Partnership of FOSSFA (Free Software and Open Source Foundation for Africa) and InWEnt - Capacity Building International on behalf on behalf of German Federal Ministry of Economic Cooperation (BMZ), the Open Society Initiative for Southern Africa (OSISA).

Funding: 1.6m euro from German Federal Ministry of Economic Cooperation (BMZ), 2008 – 2010 first phase

13.3.3   Young Scientists Tanzania

The Irish Government through Irish Aid is replicating the BT Young Scientists and Technology Exhibitions in Tanzania. Young Scientists Tanzania[70] was launched by Hon. Prof. Makame Mbarawa, Minister of Communication, Science and Technology during the National Science Week in November 2011. The first Exhibition is planned to take place in Dar es Salaam in October 2012. A delegation from Tanzania visited the BT Young Scientist Exhibition in Dublin in January 2012 to experience the event first hand.

Main partners: Ministry of Education and Vocational Training, COSTECH

Funding: Irish Aid and Pearsons

13.3.4 Africa4All Parliamentary Initiative[71]

Through the IST-Africa Initiative, the Parliament of Tanzania was included in the Africa4All Parliamentary Initiative, which was funded under the @CP-ICT Call.

Target Countries: Eastern and Southern Africa with pilots in Kenya, Tanzania, Uganda, Lesotho, Namibia

Main partner: Gov2u

Partner in Kenya: National Assembly of Tanzania

Funding: 410k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

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[70] http://www.cdpc.ie/young-scientist/
[71] http://www.africa4all-project.eu/

14.   REPUBLIC OF UGANDA

14.1   Introduction

The Republic of Uganda is located in East Africa, bordered by Democratic Republic of the Congo, Kenya, Rwanda, Sudan and Tanzania. Uganda has an area of 241,038 km² and 112 administrative districts. Forty eight percent of the population of 34.6 million is aged between 15 and 64 (median 15 years)[72]. English is the official language with literacy of 67%.

Uganda has substantial natural resources, including fertile soils, regular rainfall, and sizable mineral deposits of copper, cobalt, gold, and other minerals. Agriculture is the most important sector of the economy, employing over 80% of the work force.

Uganda is striving to meet the Information and Communications Technology (ICT) development objectives laid out in the World Summit on the Information Society (WSIS) Plan of Action.

The Information and Communications Technology (ICT) sector is now regarded as a vital pillar for the social economic development of the country as indicated in the current National Development Plan (2010). The ICT sector is divided into three areas namely; Policy, Regulatory and Operational with the Ministry of ICT as the lead agency.

The telecommunications sub-sector, formerly dominated by a single national operator, has been progressively liberalised over the last 10 years. Infrastructure capacity is rapidly improving. Most national and regional transmission links are digital. Optical fiber links connect major economic centres, with expansion in progress. There is extensive use of microwave in the backbone infrastructure and Vsat Services. International gateways are satellite based but connection to the world fiber optic network is eminent. This dynamism is a result of a good legal and regulatory framework, a stable macro economic environment and economic reforms pursued since the early 1990s.

The Government of Uganda has recognized the critical importance of ICT in national development, and has initiated a policy framework to implement these technologies throughout the country. Several policies, statutes, and other initiatives have been developed. The most recent of these include: (i) A National ICT Policy was approved in 2003 with the aim of promoting the development of ICT infrastructure in the country, with the Ministry of Works Housing, and Communications as the primary coordinating agency within the Government; (ii) A Draft broadcasting policy is in place; (iii)

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[72] CIA Factbook

The Uganda Communications Commission is implementing a Rural Development Policy; (iv) The new Communications Policy (Draft) seeks to connect all schools, sub-counties, urban centers, health centers and public libraries by 2010; (v) The Government is promoting Public-Private Partnerships to build the requisite backbone infrastructure.

14.2   Bilateral Cooperation with EU Member States

The EU has long been a development partner of Uganda, having helped with programmes to improve road networks, increase agriculture productivity, and promote democracy and good governance and by working for peace and stability in the country and surrounding region. The EU's strategy, which provides 439 M€ for the period 2008-2013, continues to promote these areas but focuses on transport infrastructure and road sector reforms, rural development and agricultural recovery and budget support.

The European Union is bound to Uganda through the Contonou Partnership agreement. The EU's assistance to Uganda – provided under National indicative programmes - supports the country's poverty eradication plan, through general and sector budget support, project approach and regional support programmes.

A number of EU Member States provide bilateral support to Uganda: Belgium, Denmark, Germany, France, Ireland, Italy, Austria, Netherlands, Sweden and UK. Norway also has a bilateral agreement.

Belgium has historically focused on supporting interventions in the areas of decentralization, health, environment, education, private sector development and good governance. France has focused on water and sanitation, rural development and civil society with projects managed by AFD. Italy has focused on health, water, education and training and agriculture.

Denmark is supporting ICT initiatives through the encouragement of partnerships between Ugandan and Danish companies interesting in outsourcing activities.

14.2.1 Germany

Germany has supported infrastructure for ICT Initiatives as part of its focused on Education and Capacity Building.

14.2.1.1   *PCs for Vocational Training Centres*

Target Country: Uganda

Main partner: KfW on behalf of German Federal Ministry of Economic Cooperation (BMZ)

Funding: 2M€ from ICT Component

14.3.2 Ireland

Ireland has focused on education, health, governance, agriculture and HIV/AIDs.

14.2.1.1   *Irish-African Partnership for Research Capacity Building*

The Irish-African Partnership for Research Capacity Building (2008-2011) brings together all nine Irish Universities and four Universities in Uganda, Tanzania, Mozambique and Malawi in a unique, high-level partnership to develop a coordinated approach to Research Capacity Building (RCB) in higher education institutions. The IAPRCB aims:

1. To build the capacity for development research in Irish and Northern Irish universities

2. To build the capacity for research in the four African universities in health and education, and the cross-cutting themes of ICT and gender.

The Partnership is funded as a pilot project under the Programme of Strategic Cooperation between Irish Aid and Higher Education and Research Institutes (2007-2011). It is organised under the umbrella of Universities Ireland, which also provides some matching funding.

The administrative leader of the Partnership is the Centre for Cross Border Studies, with offices in Armagh and at Dublin City University.

Target Countries: Uganda, Tanzania, Mozambique and Malawi

Partners: Participating higher education institutions: University of Dublin/Trinity College, Queen's University Belfast, Dublin City University, University of Limerick/Mary Immaculate College, University College Dublin, University of Ulster, National University of Ireland Galway, National University of Ireland Maynooth, University College Cork, Makerere University (Uganda), University of Dar-es-Salaam, Universidade Eduardo Mondlane (Mozambique), University of Malawi, Centre for Cross Border Studies

Funding: Pilot project, Irish Aid with matching funding from Irish Universities

14.2.3 Netherlands

Netherlands has focused on education, decentralization and governance.

14.2.3.1   NPT Project on 'Strengthening ICT Training and Research Capacity in the Four Public Universities in Uganda'

The initial Nuffic project completed in 2008 and focused on addressing Information and Communication Technology (ICT) capacity building in the four Public Universities in Uganda. The target group was the staff and students in the Ugandan institutions and mid-career ICT professionals. The project provided expertise from the Netherlands to support curriculum development and implementation, development of research capacity and to advise in the establishment of a Centre of Excellence for ICT Training and Research. 38 members of staff from the four universities were trained and a few are in the final stages of their studies in the Netherlands (NL) and in Uganda (UG). This grant provided funding of 3.4 million euro.

A follow on project proposal was approved, which is focused on strengthening the Capacity of Makerere University Faculty of Computing and IT, the Institute of Computer Science at Mbarara

University of Science and Technology, the Departments of Computer Science at Kyambogo and Gulu Universities to develop, implement and manage relevant educational and research programmes for poverty alleviation, rural and economic development.

The target group is University staff and students in the above institutions and ICT Policy makers.

Main partners: The lead institution in Uganda is Makerere University with Mbarara University of Science and Technology, Gulu University and Kyambogo University as partners; and the lead institution in the Netherlands is the University of Groningen with Radboud University Nijmegen (RUN) and Eindhoven University of Technology (TUE) as the consortium partners.

Funding and Duration: The project will be implemented in a period of four years and it commenced on 1st June 2007 with a maximum Nuffic grant of 5.7 million euro. The southern partners are to contribute to the project in form of financial and material inputs such as complementary funding and equipment, physical infrastructure and human resource. Thus it is expected that at completion, the total cost of the project will be 6.2 million euro.

More information is available at http://cit.mak.ac.ug/projects.php

14.2.3.4 NPT Project on 'Strengthening the Institutional Capacity of Uganda's Technical Colleges

As a result of the initial Nuffic project with the four universities, a project was subsequently awarded by Nuffic to the four technical colleges in Uganda: Uganda Technical College (UTC) Bushenyi; UTC Elgon; UTC Kichwamba and UTC Lira to building institutional capacity.

Main partners: The Lead institution in the Netherlands was Hanze University Groningen. Co-partners in Uganda were Makerere University and Kyambogo University.

Funding and Duration: This project ran form 2006 – 2009 with a Nuffic grant of 1.99 million euro.

14.2.4 United Kingdom

The UK has focused on governance, health, education and water and sanitation.

14.2.4.1 Mobile Innovation and Enterprise

The *Mobile Innovation and Enterprise project* aimed to respond to the fast growing mobile market in the country in particular and in the region in general. The project proposal sought to blend teaching on mobile computing and innovation with experiences of entrepreneurship and user-centered design hoping to develop a cohort of young minds who have the skills to lead Ugandan innovation in mobile sector. Specific key expected outputs of the project include:

1. A cohort of students with skills in mobile computing, user-centered design, entrepreneurship and innovation.

2. A structure for continuing the training to develop more students in future years.

3. A group of staff at Makerere who can lead skills development in mobile computing, user-centered design, entrepreneurship and innovation.

4. A new set of relationships between Makerere and local and international businesses, non-governmental organizations and community organizations.

5. A business plan to develop a mobile business incubation centre at Makerere where graduates will work with local and international businesses to develop innovative mobile phone business concepts and spin outs.

Main Partners: Faculty of Computing and IT at Makerere University and the Faculty of Arts, Computing, Engineering & Sciences at Sheffield Hallam University, UK. Private sector partners include Orange Labs and DMark Mobile, Ugandan a premier telecom value added service provider

Funding: Grant from British Council's competitive Educational Partnership in Africa Programme

14.2.5 Norway

Norway through the Norwegian Agency for Development Cooperation (Norad) has provided significant support to the ICT Department in Makerere University providing a new ICT building and the provision of administrative software systems for Finance, Academic Records and Human Resources.

14.2.5.1 Makerere University Institutional Development Program

Norwegian Support to Makerere University dates back to the 1960s (with Department of Botany in the Faculty of Science and Department of Forestry by then under the Faculty of Agriculture and Forestry). After a 15-year period (1970-1985) of political instability, support was renewed in mid 1990s to the then Department of Forestry under the Faculty Agriculture. This support resulted into the development of a fully-fledged Faculty of Forestry and Nature Conservation at Makerere. The support helped to resource the new Faculty in terms of building, equipment and human resource development.

In 2000, this support expanded in scope to cover the entire University's Institutional Development Programme for an initial 5 years. The support agreement was signed on 28 June 2000 with a total grant of 110m NOK. A new bilateral frame agreement between Government of Uganda and Government of the Royal Kingdom of Norway for continued support was signed on 27th October, 2005 for four (4) years (2005/06 – 2008/09) worth 60m NOK (approx.US$9m). Priority areas for continued Norwegian support were discussed and agreed upon between Makerere University and the Norwegian Embassy in Uganda. These priorities are still in line with the University's current strategic plan 2000/01-2006/07 and the Government over-aching policy of Poverty Eradication Action Plan (PEAP).

Norwegian support over this period was initially channeled through the Norwegian Agency for International Development (NORAD). The support has introduced important interventions aimed at relating higher education to the needs of society by supporting the development of human resources in various fields and increasing the practical orientation of the graduates. Through

synergies with other partners, the support has enhanced the University's delivery capacity and also facilitated innovations and quick response to the changing needs of society.

The support has greatly helped in expanding physical infrastructure which in turn has facilitated the university to cope with increased demand for higher education; development of the human resource in various fields; contribution to ICT-enabled operations in administration and Library service delivery; enhanced capacity for gender mainstreaming; refurbishment of laboratories with specialized scientific equipment; strengthened research and research coordination: publication, outreach activities, institutional collaboration, partnerships and networking.

Main objectives in relation to the different Program components

A: Good governance and Gender Mainstreaming To promote research, design curriculum and engage institutions for good governance with gender equality starting with Makerere University itself.

B: Food, Nutrition and Value Addition To promote scientific research, design curriculum and engage both public and private sector to enhance food production, nutrition and value addition.

C: Strengthening University Management To improve efficiency and effectiveness through strengthening the planning, development and human resource management functions at Makerere University.

D: Development of infrastructure and ICT To expand space, ICT infrastructure to support the University's teaching, research and outreach function in critical areas for national development

More information is available at
http://www.norway.go.ug/Embassy/Development/makerereuninstiutionaldevprog/

14.2.6 Sweden

Sweden is supporting ICT initiatives through projects supported by SIDA and the SPIDER Programme.

SIDA is supporting Makerere University to incorporate ICT in all its functions; to provide Internet connectivity to research groups supported by SIDA long-term research co-operation; to build technical and managerial capacity in information technology at all levels; and to integrate ICT in the main library operations.

To a large extent the goals of this project have been met, and in cases where they are not yet completed, plans have been adjusted to address the needs in the next project phases.

DICTS: The Directorate for ICT Support has been created and is functioning relatively well. The unit has been quite well accepted on campus, and their leadership role is appreciated. As is typical with this type of operation, they are somewhat short staffed (a combination of requiring specialized skills and lack of sufficient budget).

Makerere-net: The campus network was designed, installed and is functioning as per expectations. The actual connection to the Internet is funded by the University and not SIDA. The connection speed has increased in recent years and months, and the per-unit cost of this bandwidth has dropped (in December 2004, the unit cost was reduced by a factor of four from $8000 per million bits per second (mbps) to $2000, while the total bandwidth increased from 3.75 to 22 mbps), but the unit cost is still 10–20 times that paid in developed countries. The current speed is much appreciated compared to the previous situation, but is still not considered adequate by users.

Research Local Area Networks: These networks were all installed and are operational, much to the delight of their users.

E-mail and web infrastructure: The core web services applications (e-mail, web servers, network infrastructure) are in place and operational. Most staff members and many students have access to Makereree-mail addresses, although there is still heavy use of non-Makerere addresses (such as Yahoo). The Makerere web site is active, but still needs additional coverage, particularly at the faculty and department level.

End User Training: The original plan was to provide basic computer training for all academic staff, administrative staff and students within one year, and that the majority of the training would be computer-based (no instructor). This plan was overly ambitious and the target was not met. The training program was re-aligned to include classroom instruction. To date, about half of the staff have been trained. As of the 2004/5 academic year, all entering students must complete a basic ICT training course. Staff training is continuing, and is expected to take several more years to complete.

Library Automation: A library management system was selected, installed and is now online. The conversion of the card catalogue has taken longer than expected, and that project is ongoing. The other functionality of the system, including all of the internal library functions, is slowly being implemented.

Access to Electronic Journals: Prior to this project, only paper journals were available. Due to the price and delivery problems, their use was limited. The e-journal project has made nearly 8,000 journals in a wide range of disciplines available, and this has virtually revolutionized Makerere's ability to produce world-class research.

Doctoral Training: This aspect of the project was subject to many delays and has only recently gotten underway in a substantive way. The delays were largely due to the inability of Makerere to release staff from their regular duties. The ability to release staff is still an ongoing problem. For a number of reasons, it appears that these doctoral programs will not result in increased research capacity, but rather on sustaining and improving the level of ICT-based services at Makerere.

14.3   Other ICT Initiatives being funded

14.3.1 Framework Programme 7

Uganda National Commission for Science and Technology (UNCST) is a beneficiary under CAAST-Net[73] (2008 – 2012), IST-Africa[74] 2008 – 2009, IST-Africa 2010 – 2011 and IST-Africa 2012 – 2013. Makerere University is a beneficiary under Earth Observation and ENVironmental modelling for the mitigation of HEAlth risks (EO2HEAVEN)[75] project (2010 – 2013) and EuroAfrica-ICT[76] project (2010 - 2011).

Participation in IST-Africa has facilitated UNCST to host IST-Africa FP7 Training Workshops in Kampala and raise awareness of the opportunities for participation in international research projects. UNCST has been working with the universities to encourage the institutions to gradually transform from primarily teaching institutions to research and innovation engines to drive socio-economic development As part of its IST-Africa activities UNCST has undertaken a mapping of expertise and circulates updates on open Calls for Proposals as they are available, encourages the research community to explore these opportunities for international research projects as well as promotes the research centres during international meetings.

Uganda has gradually increased its participation in FP7 and there are now Ugandan institutions involved in 36 FP7 projects across the ICT, Health, Environment and Marie Curie Themes. As a result of an IST-Africa Training Workshop on FP7-Africa-2010 in Kampala in September 2009, there was a strong participation of Ugandan institutions in proposals submitted. The following institutions are now involved in funded projects under the FP7-Africa-2010 Call - Mountains of the Moon University (AFROMAISON project), Vector Control Division - Ministry of Health (HEALTHY FUTURES), Network for Water and Sanitation (WASHtech project), African Field Epidemiology Network (APARET project) and Makerere University (APARET project, ARCADE HSSR project, EQUIP project, MUTHI project, PERFORM project, Sunray project). UNCST undertook a survey of Living Labs active/emerging in Uganda, hosted an IST-Africa Living Lab Workshop in Kampala (06 – 07 October 2011) and is encouraging the take-up of Living Lab concepts in Tanzania.

14.3.2 Africa4All Parliamentary Initiative

Target Countries: Eastern and Southern Africa with pilots in Kenya, Tanzania, Uganda, Lesotho, Namibia

Main partner: Gov2u

Partner in Kenya: National Assembly of Tanzania

Funding: 410k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

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[73] www.caast-net.org/
[74] http://www.ist-africa.org
[75] http://www.eo2heaven.org/
[76] http://euroafrica-ict.org/

14.3.3 TACIT: Tackling Aids and Tuberculosis through Communication and Information Technologies

Target Countries: Southern and Eastern Africa, pilots in Kenya, Zambia, Uganda and Namibia

Main partner: International HIV/Aids Alliance

Funding: 960k€ from EDF9 (@CP-ICT capacity-building programme) 2009-2011

14.3.4 ict@innovation

ict@innovation[77] is focused on building capacities in African Small and Medium sized ICT enterprises in relation to using Free and Open Source Software (FOSS) by spreading FOSS business models for enterprises in Africa, fostering FOSS certification and supporting innovative local FOSS applications for social and economic development.

Target Countries: Eastern and Southern Africa (Kenya, Malawi, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Ethiopia, Namibia, Zambia)

Main partners: Partnership of FOSSFA (Free Software and Open Source Foundation for Africa) and InWEnt - Capacity Building International on behalf on behalf of German Federal Ministry of Economic Cooperation (BMZ), the Open Society Initiative for Southern Africa (OSISA).

Funding: 1.6m euro from German Federal Ministry of Economic Cooperation (BMZ), 2008 – 2010 first phase

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[77] http://www.ict-innovation.fossfa.net/

15. CONCLUSION

This study provides a starting point for a central repository of ICT projects and activities currently being supported through cooperation agreements in the thirteen African States that were partners in IST-Africa 2010 – 2011 (Botswana, Burundi, Cameroon, Egypt, Kenya, Lesotho, Mauritius, Mozambique, Namibia, Senegal, South Africa, Tanzania and Uganda).

One of the goals is to identify potential good practices that can be adapted and replicated across Africa, to maximise the socio-economic impact of available financial and human resources.

It is clear that as well as existing bilateral agreements in place between European countries (Finland, Norway, Sweden, Germany, Italy, Belgium, France and Switzerland), there are a healthy number of cross-border projects from whom lessons learnt and results to date could be usefully applied in other African countries. It is hoped that lessons learnt from the more successful and impactful projects can be adapted and replicated to maximise pan-African impact.

The number of African participations in FP7-ICT and STI related Calls is also gradually increasing, as there is greater visibility of the potential of African research organisations and as the African governments promote the strategic value of linking with European research organisations to address global challenges.

It is equally clear that the number of ICT related projects being supported at a national level is substantially lower than is desirable, considering the strong horizontal enabling role that ICT has to offer to a variety of thematic areas including education, healthcare, public service delivery and infrastructure. In part, this may be due to higher priority given by many African governments to other areas of their economies requiring third party involvement. However, through the IST-Africa Initiative, there is increasing awareness of the strategic importance that investment in ICT and Science, Technology & Innovation (STI) can make in supporting capacity building and sustainable economic development.

As most projects have a fixed duration, this is by its very nature a living study that will require updating on an ongoing basis. Similarly, while the national IST-Africa partners have taken care in relation to identifying relevant projects that benefit their countries, irrespective of how it was funded, we invite key stakeholders to bring other projects not reflected in this current report to our attention, so that this information can be updated accordingly. This study will be extended during 2012 to include Malawi, Zambia, Ghana, Tunisia and Ethiopia.