Guide to Framework Programme 7 – Information and Communications Technology (ICT) Theme

DECEMBER 2009

Acknowledgement

IST-Africa ("Regional Impact of Information Society Technologies in Africa project "IST-Africa" 2008 – 2009) is funded as a Specific Support Action by the European Commission under the ICT Programme of Framework Programme 7 (FP7) – Contract No. 216634. The views expressed in this document are those of the authors and do not necessarily reflect the official European Commission's view on the subject.

IST-Africa 2008 - 2009 (Regional Impact of Information Society Technologies in Africa) is a collaborative Initiative between IIMC International Information Management Corporation Ltd (Ireland, Coordinator), Ministry of Communications, Science and Technology (Botswana), Ministry of Communications, Science and Technology (Lesotho), Commonwealth Network of Information Technology for Development (Malta), ICT Policy Implementation Technical Unit (Mozambique), Ministry of Education (Namibia), Wits Commercial Enterprise (Pty) Ltd (South Africa), COSTECH - Tanzania Commission for Science and Technology, and Uganda National Council for Science and Technology.

IST-Africa (Regional Impact of Information Society Technologies in Africa) 2010 - 2011 is a collaborative Initiative between IIMC (Ireland, Coordinator), Department of Science and Technology (South Africa), Ministry of Communications, Science and Technology (Botswana), Ministry of Communications, Science and Technology (Lesotho), Ministry of Education (Namibia), ICT Policy Implementation Technical Unit (Mozambique), National Computer Board (Mauritius), COSTECH - Tanzania Commission for Science and Technology, Uganda National Council for Science and Technology, Ministry of Higher Education, Science and Technology (Kenya), Ministere de l'Enseignement Superieur et de la Recherche Scientifique (Burundi), Ministry in President's Office in charge of Information and Communication Technology (Rwanda), Agence Nationale des Technologies de l'Information et de la Communication (Cameroon), Ministère de la Recherche Scientifique (Senegal) and Ministry of Communications and Information Technology (Egypt). IST-Africa 2010 - 2011 is supported by the European Commission under Framework Programme 7 (FP7).

Disclaimer

The information and opinions contained in this report have been compiled or arrived at by the IST-Africa Consortium in good faith from sources believed to be reliable. However, no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. The IST-Africa Consortium accepts no liability whatsoever for any direct or consequential loss arising from any use of this report or its contents.

TABLE OF CONTENTS

1. Introduction

1.1 Background

IST-Africa ("Regional Impact of Information Society Technologies in Africa ") is a multi-stakeholder initiative focused on reducing the Digital Divide in Sub-Saharan Africa through Training to Reduce the Digital Divide; Skills Transfer to Support Research Capacity Building & Awareness; and Community Building to Support EU-African Research Cooperation.

European research activities are structured around consecutive multi-annual programmes, or so-called Framework Programmes. FP7 sets out the priorities - including the ICT priority - for the period 2007-2013. The ICT priority of FP7 is fully open to international co-operation with the aim to join forces for addressing major challenges where significant added value is expected to be gained from worldwide R&D cooperation. In this context, the European Commission co-funded the IST-Africa Initiative as a Specific Support Action (IST-Africa 2008 – 2009) in order to promote research cooperation between European and African organizations under FP7-ICT, raise awareness of opportunities to participate in the FP7 ICT Research Theme in Sub-Sahara Africa and promote and support the inclusion of African research organisations as partners in FP7-ICT proposals.

The main objectives of the IST-Africa Initiative are to establish a better understanding of current exploitation of Applied ICT in Africa and opportunities for adaptation of European funded research results and international research collaboration, to establish a collaboration framework for researchers and government officials in European and African States, promote the participation of high potential African research organisations to be included as partners in FP7-ICT Proposals and to create a sustainable community with strong pan-African and international participation, focused on the economic and social impact of Applied ICT in Africa.

Based on priorities identified by the current African partners (representing Botswana, Lesotho, Mozambique, Namibia, South Africa, Tanzania and Uganda) and Kenya during 2008 and 2009 – with the support of the European Commission, IST-Africa is focusing on a limited number of complementary activities that over time will facilitate wider impact of applied ICT across Sub-Saharan Africa.

The three primary activities being carried out during 2008 - 2009 are

- To promote research cooperation between European and African organizations under FP7-ICT, and promote the inclusion of African partners in proposals addressing:
  - Challenge 1: Pervasive and Trusted Network and Service Infrastructures
  - Challenge 4: Digital Libraries and Content
  - Challenge 5: Towards sustainable and personalised healthcare

- Challenge 6: ICT for Mobility, Environmental Sustainability and Energy Efficiency
- Challenge 7: ICT for Independent Living and Inclusion
- Research Infrastructures (Capacities Programme)

- To deliver 14 FP7 Training Workshops in IST-Africa Partner Countries to raise awareness of opportunities to participate in the FP7 ICT Research Theme, provide insight into open calls, and provide necessary follow-up support and mentoring to high potential organisations
- The organisation of 2 International Conferences in Africa to facilitate EU-ACP networking, and highlight IST exploitation & international cooperation opportunities (IST-Africa 2008 Windhoek, Namibia, 07 - 09 May 2008 & IST-Africa 2009 Kampala, Uganda, 06 – 08 May 2009)

The first series of IST-Africa FP7 Training Workshops took place in Botswana, Lesotho, Mozambique, Namibia, South Africa, Tanzania and Uganda in late November and December 2007, which focused on ICT-Call 3 as an open Call for Proposals at that time. These practical training workshops provided an overview of the open action lines, examples of projects funded in the past in these thematic areas, the mechanism under which proposals are generated and submitted for consideration provided, the funding levels and how to identify potential partners to co-operate with under future Calls.

A further IST-Africa training workshop in relation to FP7 Financial Guidelines was organised by Wits Enterprise in Johannesburg in cooperation with the Department of Science and Technology South Africa and ESASTAP, in July 2008.

Follow on IST-Africa Training Workshops focused on ACP-ICT Calls and FP7-ICT-Call 4 took place in Lesotho in September 2008 and in Uganda and Namibia in March 2009.

IST-Africa FP7 Training Workshops focused on FP7-ICT-Call 5, FP7-Infrastrucutures-2010-2 and FP7-Africa-2010 are being held in Lesotho on 21 September, in Botswana on 23 September, Dar es Salaam on 28 September and Maputo on 30 September.

IST-Africa FP7 Training Workshops focused on FP7-ICT-Call 6 and FP7-Africa-2010 are being held in Burundi on Friday 30 October, in Rwanda on Tuesday 03 November and in Mauritius on 09 November.

IST-Africa 2008 took place in Windhoek, Namibia, from 07 - 09 May. Hosted by the Government of Namibia, through the Ministry of Education and supported by the European Commission, it was very successful attracting over 470 delegates from Europe and Africa. Plenary speakers included Ministers of Science and Technology from Namibia, Uganda, Tanzania and Kenya, Director Generals from DG Information Society and Media and DG Research of the European Commission and Department of Science and Technology South Africa, Directors from the African Union Commission, United Nations Economic Commission

for Africa and SADC Secretariat. A high-level Round Table on the Implementation of the Africa-EU Partnership on Science, Information Society and Space took place during the Opening Plenary session, which was highly successful. This conference facilitated researchers and government officials from Europe and Africa to share research results through the Scientific Programme and meet face to face to build functional relationships for future research co-operation and participation in future proposals submitted under FP7 and other funding mechanisms aimed at supporting EU-Africa co-operation such as the ACP-ICT Programme. As a direct result of the networking undertaken during IST-Africa 2008, the IST-Africa Consortium supported the compilation of Consortia and a number of proposals that were submitted under the ACP-ICT Call in September 2008. Africa4All is an example of a project successfully funded under the ACP-ICT Call, which will customise and deploy an Open Source Parliamentary solution in the Parliaments of Kenya, Lesotho, Namibia, Tanzania and Uganda, leveraging results developed by Gov2U within a European FP6 project.

IST-Africa 2009 took place on shores of Lake Victoria, Kampala, Uganda, from 06 – 08 May 2009. Hosted by the Government of Uganda, through the Ministry of Information and Communication Technologies, IST-Africa 2009 was a great success, attracting significant Ministerial participation and over 460 delegates from 51 countries and four continents. Many of the European presentations in this year's conference programme were funded under FP6 and FP7. In the context of focusing on the Role of ICT for Africa's Development, the Opening Plenary on Wednesday 06 May featured a high level dialogue on Implementation of the Africa-EU Partnership on Science, Information Society and Space. The Closing Plenary on Friday 08 May focused on Initiatives Supporting Development of Regional S&T. The Conference Report can be downloaded online

Following each conference all papers published in the conference proceedings are made available in the IST-Africa Paper Repository so that this is a growing resource for the community. All members of the IST-Africa community have access to the published papers and registration is free. Please note that the authors retain the Copyright for all material published. Contact details are provided for the authors so you can follow up with them directly in relation to further questions or future collaboration.

IST-Africa 2010 will take place in Durban, South Africa form 19 –21 May 2010, hosted by the Government of South Africa through the Department of Science and Technology.

1.2 Next Steps

Whether you have the opportunity to directly participate in the IST-Africa Conferences or the IST-Africa FP7 Training Workshops, there is a significant amount of information publically available on the IST-Africa portal, which will help you learn more and qualify areas of interest to your organisation.

It is necessary to document the research track record of your organisation and identify relevant thematic areas open for funding. As a result of this internal activity, you can provide an organisational research profile for publication on the IST-Africa portal. You should speak to the Dean responsible for International Relations and identify other research centres and universities that your organisation has existing bi-lateral and cooperation agreements with either in Europe or other African countries. This provides a good starting point to identify research areas where you can show a good track record and organisations that you can contact in relation to preparing joint proposals for funding collaborative international research.

The IST-Africa African partners for 2008 – 2009 currently include Ministry of Communications, Science and Technology (Botswana), Ministry of Communications, Science and Technology (Lesotho), ICT Policy Implementation Technical Unit (Mozambique), Ministry of Education (Namibia), Wits Commercial Enterprise (Pty) Ltd (South Africa), COSTECH - Tanzania Commission for Science and Technology, and Uganda National Council for Science and Technology. The IST-Africa partnership for 2010 – 2011 is expanded include national agencies in Burundi, Cameroon, Egypt, Kenya, Rwanda and Senegal thus providing IST-Africa representatives to support research cooperation with Europe in North, South, East and West Africa.

If you are interested in learning more about FP7-ICT or require support to prepare your organisational research profile for publication on the IST-Africa portal, please contact Secretariat@IST-Africa.org who will put you in contact with the IST-Africa partner who can provide you with direct support.

Funding opportunities that exist to date during early 2010 include:

- FP7-Africa-2010 Call – Opened 30 July with a closing date of 14 January 2010.
- FP7-ICT Call 6 – Opened 24 November 2009 with a closing date of 13 April 2010

Each of these funding mechanisms require a number of partners from different countries (in the case of FP7-ICT Call 6 a minimum of three European countries and then the ability to add African partners, in the case of FP7-Africa-2010, a minimum number of African and European countries) and have their own rules in relation to the types of research that can be funded. Each funding mechanism also has its own format for submitting the proposal and dedicated sections that must be completed. It is important to take the time to evaluate all aspects of the Call and prepare the correct templates prior to commencing work on the proposal.

2. Framework Programme 7

2.1 Overview

European research activities are structured around consecutive multi-annual programmes, or so-called Framework Programmes. FP7 set out the priorities - including the ICT Priority - for the period 2007 - 2013.

The Work Programme for ICT research in Framework Programme 7 (FP7) for 2007 and 2008 was published on 22 December 2006. The new ICT Priority of FP7 will cover the period 2007-2013, and is fully open to international co-operation. The goal is to join forces in addressing major challenges where significant added value is expected to be gained from worldwide R&D cooperation. All African organisations can freely participate in consortium proposals for European research funding under FP7 as long as the minimum number of European countries are also represented in the Consortium.

The Work Programme for ICT for 2009 – 2010 was published on 19 November 2008 with an update in July 2009. This work programme outlines the thematic areas open for funding for 2009 and 2010 and the timing for each Call.

FP7 is organised in four complementary programmes.

- Cooperation (Collaborative Research in nine thematic areas: including ICT)
- Ideas (Frontier Research, supporting “investigator driven” research projects)
- People (Human Potential, supporting a coherent set of Marie Curie actions)
- Capacities (Research Capacity, supporting existing and new research infrastructure, Research for and by SMEs, Regions of knowledge, Research Potential, Science in Society, Specific activities of International Co-operation)

The Cooperation Programme funds collaborative research in nine thematic areas:

(1) Health

(2) Food, Agriculture and Biotechnology

(3) Information and Communication Technologies (ICT)

(4) Nanosciences, Nanotechnologies, Materials and new Production Technologies

(5) Energy

(6) Environment (including Climate Change)

(7) Transport (including Aeronautics)

(8) Socio-Economic Sciences and the Humanities, and

(9) Security and Space.

Each area within the Work Programme outlines the types of projects of interest (some calls are only open to proposals targeting specific goals), the target countries (some calls are targeted at specific countries or regions), instruments that can be applied (some calls are only open to specific types of proposals, e.g. Small or Medium Scale Focused Research Actions (STREP), Integrated Project (IP), Network of Excellence (NoE), Coordination and Support Actions (CSA) – each with their own requirements in terms of project focus and consortium participation) and deadline for submission of full proposals (most calls except some FET calls request one stage proposals).

Organisations interested in participating in FP7 should review the Work Programme carefully and identify thematic areas that are relevant to your organisational strategic objectives and available resources. Sometimes a Specific International Cooperation Action (SICA) targeting international cooperation with Europe is announced (e.g. SICA for ICT for Environmental Disaster Reduction and Management, Objective ICT-2007.6.3 – Call 2).

2.2 Eligible Organisations

While a European Coordinator is still required for project proposals under FP7, a non-European partner can fulfil any role for which it can demonstrate the necessary expertise as long as the minimum number of European partners already exists in the Consortium.

Organisations who can participate in FP7 include:

- Participants from EU-27 Member States
- Associate Candidate Countries (Turkey, Croatia)
- Associate States (International Agreement) - Iceland, Israel, Liechtenstein, Norway, Switzerland
- Countries with whom EU Scientific Cooperation Agreements have been signed - Argentina, Australia, Brazil, Canada, China, Chile, Egypt, India, Korea, Japan, Mexico, Morocco, Kazakjstan, Russia, South Africa, Tunisia, Ukraine, USA
- International Cooperation Partner Countries (ICPC-INCO – all African Countries are included) and Third countries specifically outlined in the Work Programme description for a Specific Call

Eligible Organisations include:

- Research organisations, Universities
- High-tech Small and Medium Sized Enterprises (SMEs)
- SME Associations (Specific instruments)
- Public Administrations (ERA-NET)

- Individual researchers wishing to work in another country (Marie Curie)
- Institutions running a research facility of multi-national interest

All such organisations (including legal entities established in 3rd Countries other than ICPC-INCO (International Cooperation Partner Countries)), if essential for carrying out the proposed activities) are eligible for EU funding.

The **minimum** consortia structure is dictated by each Call but in general there is a requirement for participation of the following in relation to Collaborative research projects under FP7-ICT:

- **Three** independent legal entities from **three different** EU Member States (MS) or Associated countries (AC)
- International (intergovernmental) organisations can participate
- Participants from Third Countries & International Cooperation Partner Countries (ICPC) must be in addition to minimum EU partner participation

Collaborative projects for **Specific Cooperation Actions (SICA)** dedicated to international cooperation partner countries (ICPC) have different rules. SICA were included in Call 2, in FP7-Africa-2010 and in Call 6.

They require a minimum of 4 participants:

- 2 in two different MS or AC and
- 2 in different ICPC countries unless otherwise specified.

In the case of **FP7-Africa-2010**, the Call has specifically outlined that IP and STREP SICAs require at least 4 independent legal entities, of which, 2 must be established in different EU Member States or Associated Countries and the other 2 must be established in different International Cooperation Partner countries (ICPC) from African ACP and the following Mediterranean Partner Countries (African MPC): Algeria, Egypt, Libya, Morocco, and Tunisia.

Support actions; no specific restrictions apart from inclusion of European coordinator

2.3 Instruments

Collaborative Projects – STREP and IP

Collaborative Projects (CP) can be either ***Small or Medium Scale Focused Research Actions (STREP)*** or ***Large Scale Integrating Projects (IP)***, with the participation of research organisations, industry players and SMMEs. Public bodies (non-profit), Secondary and higher education establishments, Research organisations, non-profit & Small and

Medium sized Enterprises (SMMEs) typically can request 75% of eligible costs, with 100% possible for training and management activities. A contribution towards overhead costs is additional.

STREPs are typically focused on specific ***objective-driven*** research, 2 – 3 years in duration with 6 – 15 (minimum 3) partners and € 1 - € 4 million budget (average € 2 million), based on the experience of FP6. The types of partners include Research organisations including Universities, Industry players and SMEs (high-tech SMEs who undertake research activities or SMEs involved in demonstration activities).

Designed to produce new knowledge in a specific thematic area, STREPs have clearly defined scientific and technological objectives directed at obtaining specific results, which could be applicable in terms of development or improvement of products, processes, services or policy. STREPs have a fixed overall work plan and deliverables.

STREPs include two types of activities (or combination of both)

- Research and Technological Development – beyond state-of-the-art
- Demonstration activities to prove viability of new technologies

and

- Consortium Management activities

IPs are typically focused on producing new knowledge in a specific thematic area and achieving ambitious objectives through integration and critical mass. Project activities can include STD, demonstrations, technology transfer or take up activities, training and dissemination. IPs are typically of 3 – 5 year duration, 10 – 20 partners and an EU contribution of € 4 - € 20 million (average € 10 million), based on the experience of FP6.

EU contribution guidelines for STREPs and IPs

- 50% funding of eligible direct costs for ***Research and Development activities*** except for
  - Public bodies (non-profit), Secondary and higher education establishments, Research organisations (non-profit & Small and Medium sized Enterprises (SMMEs) – 75% of eligible costs
- 50% funding of eligible direct costs for ***demonstration activities***
- 100% funding of eligible direct costs for ***training and management***

Actual indirect eligible costs (overheads) or 60% of direct costs in case of non-profit public bodies, secondary and higher education establishments, research organisations and SMEs unable to identify real indirect costs.

Networks of Excellence

Networks of Excellence (NoE) provide support to a Joint Programme of Activities implemented by a number of research organisations integrating their activities in a given field, carried out by research teams in the framework of longer term co-operation. NoEs typically include 6 – 12 partners (primarily research organisations), of 4 - 5 years duration and an EU contribution under FP6 of €4 - €10 (average €5 m). The total budget cannot be more than a quarter of the sum of the overall budgets of the participants.

Coordination and Support Actions

Coordination and Support Actions (CSA) provide support to activities aimed at coordinating or supporting research activities and policies (networking, exchanges, trans-national access to research infrastructures, studies, conferences, etc). Neither Coordination Actions (CAs) nor Support Actions (SAs) can undertake research and technological development activities. While both CAs and SAs are eligible for 100% costs, overheads are limited to 7%.

CAs are focused on coordination of research or the creation of a network, and under FP6 typically had 13 – 26 partners, 1 – 2 years duration and an EU contribution of € 0.5 - € 2 million (average € 1 million). SAs are designed to underpin the implementation of the Programme, help prepare for future Community RTD policy activities. Activities can include conferences, studies, feasibility studies and development of research or innovation strategies. SAs are unique in that it is technically possible to submit them with only one partner – however, this partner would need to demonstrate that they have the resources and an extensive network that they can mobilise to be able to achieve the project goals with no additional partners. Under FP6, there were 1 – 15 partners, 1 – 3 years duration, and EU contribution of € 0.3 - € 3 million (average € 0.5 million).

2.4 FP6 Projects Focused on Cooperation with Sub-Saharan Africa

These are some examples of projects funded under FP6, which are focused on cooperation with Sub-Saharan Africa.

IST-Africa - Regional Impact of Information Society Technologies in Africa

IST-Africa is a multi-stakeholder initiative focused on closing the digital divide in Africa and building co-operation opportunities between African and European researchers. Funded as a Specific Support Action, the consortium of IST-Africa (2005 – 2007) consisted of partners from Ireland, Malta, Mozambique, South Africa and United Republic of Tanzania.

During the period 2005 - 2007, IST-Africa trained over 1,000 government officials and researchers in Botswana, South Africa, Mozambique and Tanzania (in key areas including eGovernment, eHealth, eLearning) and organised two very successful international research conferences in Africa: IST-Africa 2006 (304 delegates from 38 countries) hosted by the Government of South Africa through the Department of Science & Technology, and IST-Africa 2007 (over 470 delegates from 51 countries) hosted by the Government of Mozambique through the Ministry of Science & Technology.

6DISS

6DISS was a Specific Support Action (SSA), which aimed to establish and operate an information exchange programme for the optimal transfer of knowledge on Internet deployment and evolution to other research network operators, Universities, commercial organisations, ISPs, governments and regulators. It had the mandate to give practical workshops in Balkan countries, Mediterranean partner countries, Newly-Independent States (NIS), Africa, The Caribbean, The Asia-Pacific region, South and Central America. The project concluded on 30 September 2007. The tutorial materials and e-learning package can be freely downloaded.

BEANISH - Building Europe - Africa collaborative Network for IST in the Health care sector

BEANISH - Building Europe - Africa collaborative Network for IST in the Health care sector was a Specific Support Action (SSA), with partners from Norway, Sweden, Botswana, South Africa, Ethiopia, Malawi, Mozambique, Tanzania and Switzerland. The co-ordinating partner - Department of informatics University of Oslo, Norway worked with some of the African partners prior to the EU-funded project and has continued to cooperate with the African partners beyond the funding available from the European Commission.

C@R, "Collaboration@Rural: Collaborative Platform for Working & Living in Rural Areas"

C@R is an Integrated Project (IP) incorporating 33 partners, which aims to boost the introduction of Collaborative Working Environments (CWE) as key enablers catalysing rural development. A South African Living Lab is included within the project activities. C@R commenced in September 2006 and will run for 36 months.

EMPRO - European Microbicides Project

EMPRO is a European based research network investigating and developing new microbicides for the prevention of HIV infection. It is funded under the LifeSciHealth Priority

of FP6 as a STREP. It has a consortium of 24 partners consisting of academic institutions and SMEs across Europe and in Africa.

CPN AFRICA -Contact Point Network Focused on Poverty Related Diseases (PRD)

CPN-Africa is a FP6 Specific Support Action (2006 – 2010) that aims to attract Young African Scientists to participate in EU-funded Poverty Related Diseases research projects. CPN-Africa disseminates information about FP7, delivers “Research Seminars” and “Information Days” for Young African Scientists (YAS), supports networking and awareness raising and is establishing a database of African research institutions and scientists.

MOCCA

MOCCA was a European Coordination Action that aimed to facilitate collaboration between projects addressing mobile and wireless issues. MOCCA established the Think Tank on the "Needs of Emerging Markets for Mobile Communications" in September 2004 and included a wide range of experts from operators and consultancy companies in Africa, Latin America, India and China as well as experts of the European manufacturers Alcatel, Ericsson and Siemens. African Think Tank Members include Vmobile (Nigeria), Anderberg AG (South Africa) and Infotech Investment Group Limited (Tanzania).

INTERLINK - Promoting International Cooperation for Environmental Research

INT-ER-LINK is a Specific Support Action (2007 – 2009) focused on promoting international cooperation for environmental research in Africa and Newly Independent States.

The European - South African Science and Technology Advancement Programme (ESASTAP)

ESASTAP is a Specific Support Action that seeks to promote science and technology cooperation between South Africa and the European Union. It is implemented by the South African Department of Science and Technology.

START IST Project

The START IST Project aimed to define a strategic framework for the development of EU - South Africa cooperation and EU - Sub-Saharan African cooperation and provide support services to European and Sub-Saharan African organisations. The consortium consisted of a partner from France, South Africa and Senegal.

ST-EAP- Science and Technology - Europe Africa Project

ST-EAP aims to strengthen science and technology (S&T) co-operation between African scientists as well as between African and European scientists. The geographical focus of the project is on sub-Saharan Africa, with partners in South Africa and Kenya.

2.5 FP7 Projects Focused on Cooperation with Sub-Saharan Africa

These are some examples of projects funded under FP7, which are focused on cooperation with Sub-Saharan Africa.

IST-Africa - Regional Impact of Information Society Technologies in Africa

IST-Africa (www.IST-Africa.org) is a multi-stakeholder initiative focused on closing the digital divide in Africa and building co-operation opportunities between African and European researchers. Funded as a Specific Support Action, the consortium of IST-Africa (2008 – 2009) consists of partners from Ireland, Malta, Botswana, Lesotho, Mozambique, Namibia, South Africa, Uganda and United Republic of Tanzania. During 2008 – 2009 IST-Africa is focused on raising wider awareness of African research capacity, promote participation of African organizations in the ICT Theme of FP7 (FP7-ICT) and identify co-operation opportunities in fields of mutual interest. The goal is to increase visibility of mutual RTD potential and network relevant European and African stakeholders.

6DEPLOY

6DEPLOY (www.6deploy.org) is a Specific Support Action funded under FP7 to support the deployment of IPv6 in e-Infrastructure environments; FP7 projects; Developing countries (Africa, Latin America, Asia and Eastern Europe) and Industrial environments in Europe

Partners offer basic training to organisations in Europe and developing countries, and support real IPv6 deployments. 6DEPLOY continues the IPv6 training activities performed in the EC project 6DISS.

AIDA - Advancing ICT for DRM in Africa

The AIDA project (www.aidaonline.info) aims at acquiring and sharing knowledge about affordable ICT (Information and Communication Technologies) solutions in Africa with the ambition to reduce the risk of natural disasters and to improve the capacity to respond to disasters. This project was funded as a SICA under FP7-ICT-Call 2. It commenced in June 2008 and will run until May 2010 with partners from Belgium, France, Germany, Luxembourg, Mali, Netherlands, Nigeria, South Africa, Switzerland and Tanzania.

BELIEF II - Bringing Europe's eLectronic Infrastructures to Expanding Frontiers

BELIEF II (www.beliefproject.org) is funded under FP7 Research Infrastructures and this phase of the project commenced in April 2008 with partners from Brazil, Greece, Italy, India, United Kingdom and South Africa.

BELIEF promotes and supports the development and the exploitation of e-Infrastructures in the world (particularly in Europe, India, Latin America and South Africa), coordinates the communication of results, fosters and supports the exchange of contacts and the flow of information between the European projects and the e-Infrastructures users.

CAAST-NET

CAAST-NET (www.caast-net.org) is an INCO-NET (2008 – 2011) funded under the FP7 Capacities programme, with the goal of promoting improved cooperation in science and technology between Europe and Sub-Saharan Africa. The CAAST-Net Consortium is made up of eighteen organisations - ten from Africa and eight from the European Union.

DigitalWorld Forum

Digital World Forum on Accessible and Inclusive ICT (www.digitalworldforum.eu) is a FP7 European project focusing on the use of ICT to leverage economic development in Africa and Latin America. Providing minimal services (health, education, business, government, etc.) to rural communities and under-privileged populations is of major importance to improve people lives, and to sustain development. Using ICTs (Information and Communication Technologies) would be the easiest and possibly only way to develop and deploy those services.

ESASTAP II - European - South Africa Science and Technology Advancement Programme

ESASTAP II (www.esastap.org.za) is a bilateral coordination project (2008 – 2011) for the enhancement of S&T cooperation delivered by South African Department of Science and Technology. It focuses on FP7 Participation, Networks and Partnerships and S&T Cooperation between Europe and South Africa.

EuroAfrica-ICT - Connecting the EU, sub-Saharan Africa and Caribbean for ICT partnerships

EuroAfrica-ICT (www.euroafrica-ict.org) aims to promote and support the development of strategic cooperation on ICT research between Europe and sub-Saharan Africa and between Europe and the Caribbean.

FlossInclude

FLOSSInclude project (www.flossinclude.org) aims to strengthen Europe's participation in international research in FLOSS and open standards, by studying what is needed to increase the deployment, development and societal impact of FLOSS in Africa, Asia & Latin America.

IRMA - Integrated Risk Management for Africa

The IRMA project (www.irma.lu) aims to demonstrate the effectiveness of ICT applications to deal with major disasters and the possibly resulting humanitarian crisis by integrating the whole disaster management chain from assessment to recovery. This will be realized by the integration of existing tools adapted to the regional specificities with new developments addressing the issue of multiple combined vulnerabilities. The general architecture of IRMA is "system of systems" based drawing from the results of the WIN and ORCHESTRA Service Oriented Architecture (SOA), it will ensure interoperability with INSPIRE and the merging UNSDI with the view to benefit from both EU and UN current and future services. This project was funded as a SICA under FP7-ICT-Call 2. It commenced in June 2008 and will run until May 2011, with partners Belgium, Cameroon, France, Luxembourg, Netherlands, Morocco, Mozambique, Senegal and South Africa. The partners from Mozambique include UTICT, Insituto Nacional de Gestao de Calamidades and Insituto Nacional de Meteorologia.

PAEPARD - Platform for African-European Partnership on Agricultural Research for Development

PAEPARD aims to mobilize African and European resources to achieve the objectives of the African Union/ NEPAD CAADP and the EU Strategy for Africa as it relates to agricultural research for development. As well as enhancing collaboration among the European and African agricultural research stakeholders, it will also increase the number and efficiency of joint research projects for African ARD aimed at achieving the MDGs, to be financed through FP7 (2007-2013), EDF10 (2008-2012) and Food Security Thematic Program (FSTP).

HEALTH NCP-NET - CA for Reinforcing the Health National Contact Points Network

HEALTH NCP-NET (www.healthncpnet.eu) is a Coordination Action (2008 – 2012) focusing on Improve Health NCP and ICPC-CP service under FP7 with a view to improving the quality of submitted proposals under the Health Theme of FP7.

INCONTACT - Trans-National Co-operation Among NCPs for International Cooperation

INCONTACT (2008 – 2010) aims to develop a platform to stimulate closer co-operation among INCO National Contact Points (NCPs), transfer experience between INCO-NCPs and from ERA-Net, and form a dynamic and active network between European INCO NCPs and 3rd country NCPs. INCONTACT held a workshop in South Africa to bring together existing NCPs in Africa and Ministries in other African countries who could become NCPs in the future.

2.6 Erasmus Mundus External Co-Operation Window

The Erasmus Mundus External Co-operation Window (EM ECW) is a co-operation and mobility scheme in the area of higher education co-operation launched by Europe Aid cooperation Office and implemented by the Executive Agency Education, Audiovisual and Culture.

The objective of the EM ECW is to achieve better understanding and mutual enrichment between the European Union and third countries co-operation in the field of higher education through promoting the exchange of persons, knowledge and skills at higher education level.

This will be achieved through the promotion of partnerships and institutional co-operation exchanges between European Higher Education Institutions and Third Country institutions and a mobility scheme addressing student and academic exchanges.

Erasmus Mundus External Cooperation Window for African, Caribbean and Pacific Group of States includes participation from International Institute for Geo-information Science and Earth Observation (ITC), The Netherlands; Université Bordeaux 1, France; Freie Universität Berlin, Germany; Universidade do Algarve, Portugal; Universidad de Deusto, Spain; Lunds Universitet, Sweden; University of Buea, Cameroon; Universidade de Cabo Verde, Cape Verde; Mekelle University, Ethiopia; Kwame Nkrumah University of Science and Technology, Ghana; Polytechnic of Namibia; National University of Rwanda; Makerere University, Uganda; Ardhi University, Tanzania; University Belize, Belize; University of The West Indies Barbados (campuses in Jamaica & Trinidad); University of

East Timor; and The University of the South Pacific, Fiji. More information is available at http://www.erasmusmundus10.net/

The fact sheet can be downloaded from

http://www.ist-africa.eu/home/files/EMECW_Africa_Lot10.pdf

Erasmus Mundus External Cooperation Window for Algeria, Morocco and Tunisia "AVERROES" includes participation from Montpellier 2 University Sciences and Technology, France; University of Liege, Belgium; University of Cadiz, Spain; University of the Balearic Islands, Spain; Aix-Marseille 2 University, France; Montpellier SupAgro, France; Montpellier 1 University, France; Paul Valéry Montpellier 3 University, France; University of Perpignan Via Domitia, France; University of Genoa, Italy; University of Catania, Italy; Abderrahmane Mira University of Bejaïa, Algeria and Mentouri University of Constantine, Algeria. More information is available at http://www.network-averroes.com/

The fact sheet can be downloaded from

http://www.ist-africa.eu/home/files/EMECW_Maghreb_AVERROES_Project.pdf

3. Identifying Relevant Research Areas

There are a number of key points that every research organisation should take into consideration when looking at any funding mechanism including FP7-ICT. Some of the main points are outlined below.

3.1 Selecting Research area

- ***Research area selected must be appropriate based on your organisations research track record and strategic goals***

Each university department and research centre has a specific research focus and track record in one or more areas. As part of the proposal submitted, each partner needs to clearly outline why their expertise is relevant to the research proposed and how they can utilise existing available resources (human resources and physical resources such as equipment, laboratories etc) to ensure successful completion of the research proposed.

It is therefore important to be quite pragmatic when assessing research that can be undertaken and how proposed research projects match open Calls. It is important to be able to justify internally why your department would participate in a proposal under a specific area. It is therefore necessary to go through the Work Programme as it is published for each year and identify in sufficient time that action lines that are relevant to your department, the deadlines and the types of instruments and therefore research activities that are required. It is then possible to focus your organisational research profile to clearly state what expertise you are bringing to bear and identify activities that can be undertaken as part of a proposal.

As part of this qualification process, it is necessary to spend time looking at examples of projects that have been previously funded in specific thematic areas of interest to your organisation to get a clear picture of the state-of-the-art at this point in time. It is also valuable to note the European partners that participated in funded projects as this allows you to identify the main international research players in a specific thematic area.

When you have identified the relevant thematic areas and research activities your organisation can undertaken, it is then necessary to read the Work Programme very carefully to determine what activities can be funded under specific Calls.

3.2 Level of funding and Effort preparing Proposal

- ***Maximum funding for most projects is 50% - 75%, need to secure co-funding internally or at national level***

Depending on the legal status of your organisation and the proposal type (i.e., instrument – IP, STREP) the maximum level of funding provided is 50% for commercial organisation and 75% of actual costs incurred for universities. It is therefore important that the research

proposed is clearly aligned with your organisational strategic path so in essence the grant is reimbursing a percentage of the time and costs associated with full time members of staff, rather than additional temporary staff with special skills required to fulfil project activities.

When each organisation submits its cost statement, it outlines the amount of time spent associated with each Work Package (based on timesheets kept for each member of the team), the results achieved, the actual man cost based on time spent and salary as per payroll and actual travel incurred in relation to agreed project activities. The Commission Services then reimburses the organisation the agreed percentage of the costs incurred based on accepting the work undertaken and submitted as deliverables.

In some countries it is possible for research organisations to get partial support towards the balance of the costs not reimbursed from the European Commission from the Department responsible for Science and Technology. This is the case in South Africa for example, where research organisations who successfully participate in Framework Programme projects can apply for partial funding from DST towards some project costs to match the funding received directly from the European Commission. In other cases the research organisation work on the basis that the European Commission reimburses 75% of costs and it covers the remaining 25% of costs as work in kind as the work is undertaken by staff who are on an existing salary and are therefore not a new expense associated with the project.

A significant advantage of participating in an international research project is the contacts that are established, the transfer of knowledge between the participating organisations and the exposure to cutting edge research that you may not be able to justify undertaking it as one organisation in isolation. This allows the organisation to build up expertise in specific areas and may also lead to opportunities to undertake short staff exchanges in different organisations to get exposure to new areas of research that are aligned with existing expertise.

- ***Expensive and time consuming to write proposal***

It is necessary to put sufficient time researching the state-of-the-art to be able to convincing state where the research proposed will advance the state-of-the-art and to contribute to relevant sections in the proposal.

While most proposals are written as a collective expertise between all the partners with different contributions being provided, it is still necessary to assign a relevant member of staff to this task to ensure that your contributions are of a good standard and are provided in a timely fashion.

It is not possible to receive reimbursement for any costs incurred preparing a proposal for submission or negotiating the proposal from the Commission Services. All costs incurred

prior to the signature and commencement of an approved project are a direct cost for the organisations involved in the submission.

It is therefore important to be selective in relation to participating in proposals that are directly aligned with your organisational strategic path so that all proposal generation is contributing towards building core organisational expertise and keeping up to date with advances in the state-of-the-art in relevant technological areas.

- ***Need to identify European partners that you wish to work with in the long term to justify investment building a relationship***

As part of the initial research undertaken to determine types of project submitted in the past, it is a good idea to identify European partners who are working in a specific area that you believe is important to the fulfilment of your organisational strategic goals. This can be done through desk research, introductions from the Dean of your organisation to European research centres with whom bilateral or cooperation agreements are already in place or through participation in the IST-Africa conferences where you can listen to presenters and meet face to face and discuss cooperation opportunities.

3.3 Relevance of Proposal Submitted

- ***Proposals submitted must be relevant to the action lines open within specific calls***

Each Call and sub-action line outlines the specific areas of research that can be funded. It is then up to each Consortia to be innovative in relation to the proposals generated and activities proposed, bearing in mind the current state-of-the-art and projects that have previously been funded.

It is necessary to show a full awareness of the state-of-the-art and illustrate how the proposed project activities and results will go beyond the state-of-the-art as well as addressing specific research challenges in the domain selected.

When the Consortium has a draft proposal created, it is a good idea for the European Coordinator to contact the relevant unit in the European Commission and discuss the proposed project in general terms to receive any informal feedback possible prior to fine-tuning the proposal.

- ***The role of each partner must be clearly articulated and illustrate how their experience is relevant and complementary***

As part of the criteria when evaluating all proposals, it is necessary for the Consortium to illustrate the specific expertise of each participating partner and how they as a group are complementary. There is no advantage in having a number of partners with the same skill

set. The Consortium needs to be balanced in terms of geographic coverage bearing in mind the minimum requirements for eligibility and expertise. It needs to be clear why each partner is involved in each Work Package and task and that as a collective grouping the partners have the capability to successfully deliver the research project.

- ***Irrelevant proposals will not be evaluated***

Proposals that are not aligned with the Call under which it is submitted or does not have the minimum requirements for eligibility of the partners will not be evaluated. It is also necessary to ensure that the instrument selected (IP, STREP, CSA, NoE) is open under the Specific Call and that the activities proposed to be undertaken in the project are appropriate for that instrument. The evaluators will review the proposal under the Action line and as the instrument under which the Consortium choose to submit it. It is therefore necessary for all partners to check that these basic administrative issues are addressed early in the project generation.

4. Action Lines open under FP7-ICT Call 4 (FP7-ICT-2009-4)

Call 4 of FP7-ICT was published on 19 November 2008 with a closing date of **01 April 2009** (17:00 CET). All necessary documents can be downloaded for the Call 4 page on CORDIS:

- Work Programme
- Guidelines for Applicants (specific guidelines for each instrument)

Please find below the extract from the FP-ICT 2009 – 2010 Work Programme outlining the Challenges, objectives and specific instruments open under Call 4. It is necessary to read the Work Programme in detail to receive descriptions of the specific objectives and the research areas being funded.

4.1 Challenges and Objectives Open under Call 4

Challenge	Objectives	Funding schemes[1]
Challenge 1: Pervasive and Trusted Network and Service Infrastructures	ICT 2009.1.1 The Network of the Future	CP
	ICT 2009.1.5 Networked Media & 3D Internet	CP, NoE, CSA
Challenge 2: Cognitive systems, interaction, robotics	ICT 2009.2.1 Cognitive Systems and Robotics	CP, NoE, CSA (CA only)
	ICT 2009.2.2. Language-Based Interaction	CP, NoE
Challenge 3: Components, systems, engineering	ICT 2009.3.2 Design of Semiconductor Components and Electronic-based Miniaturised Systems	CP, CSA
	ICT 2009.3.3 Flexible, Organic and Large Area Electronics	CP, NoE, CSA
	ICT 2009.3.4 Embedded Systems Design	CP, CSA
	ICT 2009.3.6 Computing Systems	CP (STREP only), CSA
	ICT 2009.3.8 Organic Photonics and other Disruptive Photonics Technologies	CP (STREP only), NoE
Challenge 5: Towards sustainable and personalised healthcare	ICT 2009.5.1 Personal Health Systems	CP, CSA (SA only)
	ICT 2009.5.2 ICT for Patient Safety	CP, CSA
	ICT 2009.5.4: International Cooperation on Virtual	CP (STREP only)

[1] Each proposal must indicate the type of funding scheme used (IP or STREP for CP, where applicable; CA or SA for CSA, where applicable)

	Physiological Human	
Challenge 6: ICT for mobility, environmental sustainability and energy efficiency	ICT 2009.6.1 ICT for Safety and Energy Efficiency in Mobility	CP, CSA
	ICT 2009.6.3 ICT for Energy Efficiency	CP (STREP only), CSA (CA only)
	ICT 2009.6.4 ICT for Environmental Services & Climate Change Adaptation	CP (STREP only), CSA
	ICT 2009.6.5: Novel ICT solutions for Smart Electricity Distribution Networks (Joint call ICT-Energy)	CP (STREP only)
Challenge 7: ICT for independent living, inclusion and participatory governance	ICT 2009.7.1 ICT and Ageing	CP, CSA
	ICT 2009.7.2 Accessible and Assistive ICT	CP, CSA
	ICT 2009.7.3 ICT for Governance and Policy Modelling	CP (STREP only), CSA (SA only)
Future and emerging technologies	ICT 2009.8.0 FET-Open (Batch 5&6)	CP (STREP only), CSA
	ICT 2009.8.1,2,3 FET-Proactive	CP
Horizontal support actions	ICT 2009.9.1 International Cooperation	CSA (SA only)
	ICT 2009.9.2 Supplements to support International Cooperation between ongoing projects	NA
	ICT 2009.9.3 Other Horizontal Actions	CSA
	ICT 2009.9.4: Strengthening cooperation in ICT R&D in an enlarged Europe	CSA

5. Action Lines open under FP7-ICT Call 5 (FP7-ICT-2009-5)

Based on the updated Work Programme published for 2009 – 2010, Call 5 was published on 30 July 2009 with a closing date of **26 October 2009** (17:00 CET). The Call Documentation including Guide for Applicants can be downloaded from the Call page on CORDIS.

Please find below the extract from the updated FP-ICT 2009 – 2010 Work Programme outlining the Challenges, objectives and specific instruments open under Call 5. It is necessary to read the Work Programme in detail to receive descriptions of the specific objectives and the research areas being funded.

5.1 Challenges and Objectives Open under Call 5

Challenge	Objectives	Funding schemes[2]
Challenge 1: Pervasive and Trusted Network and Service Infrastructures	ICT 2009.1.1 The Network of the Future (Call 5)	CP, CSA
	ICT 2009.1.2 Internet of Services, Software & virtualisation	CP, CSA
	ICT 2009.1.3 Internet of Things and enterprise environments	CP, CSA
	ICT 2009.1.4 Trustworthy ICT	CP, NoE, CSA
	ICT 2009.1.6 Future Internet Experimental Facility and Experimentally-driven Research	CP, CSA
Challenge 3: Components, systems, engineering	ICT 2009.3.1 Nanoelectronics Technology	CP, NoE, CSA
	ICT 2009.3.5 Engineering of Networked Monitoring and Control Systems	CP, NoE, CSA
	ICT 2009.3.7 Photonics	CP, CSA, ERA-NET Plus
	ICT 2009.3.9 Microsystems and Smart Miniaturised Systems	CP, CSA
Challenge 4: Digital Libraries and Content	ICT 2009.4.2 Technology-Enhanced Learning	CP, NoE, CSA
	ICT 2009.4.3 Intelligent information management	CP, NoE, CSA
Future and emerging technologies	ICT 2009.8.4,5,6, 9, 10 FET-Proactive	
Horizontal Support Actions	ICT 2009.9.2 Supplements to support International Cooperation between ongoing projects	CP

[2] Each proposal must indicate the type of funding scheme used (IP or STREP for CP, where applicable; CA or SA for CSA, where applicable)

6. Action Lines open under FP7-Infrastructures-2010-2

The ICT-based e-Infrastructures Call opened on 30 July and closed on **24 November 2009**.

Please find below the extract from the eInfrastructures 2010 Work Programme outlining the Challenges, objectives and specific instruments open in relation to ICT-based eInfrastructure under this Call. It is necessary to read the Work Programme in detail to receive descriptions of the specific objectives and the research areas being funded.

This Call supports a number of interrelated topics designed to foster the emergence of a new research environment in which 'virtual communities' of scientists and engineers are empowered to share and exploit the collective power of the European ecosystem of scientific and engineering facilities. Such topics in 2010 include the deployment of sustainable service provisioning schemes of core e-Science distributed computing infrastructures; further development, deployment and evolution of software and simulation infrastructures and services; and expansion of e-Infrastructures to address the specific needs of new scientific and engineering communities (including in the area of social sciences and humanities). Activities related to socio-economic impact assessment and evaluation should be also foreseen where appropriate. Projects must implement (i) Networking Activities, (ii) Service Activities and (iii) Joint Research Activities in a closely coordinated manner following the Integrated Infrastructures Initiative model.

6.1 Topics Open under 1.1.2 of Call 7 ICT-based eInfrastructures

Topics open under 1.1.2 of Call 7 ICT-based eInfrastructures are:

- INFRA-2010-1.2.1: Distributed computing infrastructure (DCI)
- INFRA-2010-1.2.2: Simulation software and services
- INFRA-2010-1.2.3: Virtual Research Communities

The funding mechanism is a Combination of Collaborative projects and Coordination and Support Actions (CPCSA). This instrument requires a minimum of at least 3 independent legal entities, each of which is established in a EU Member State or Associated Country, and no two of which are established in the same Member State or Associated Country. Relevant participants from Third Countries & International Cooperation Partner Countries (ICPC) can be included in addition to minimum EU partner participation.

7. Action Lines open under FP7-Africa 2010

7.1 Overview of FP7-Africa-2010

DG Research published the FP7-AFRICA-2010 Call on 30 July with a closing date of **14 January 2010**.

Please download the Call Documentation and Guide for Applicants from http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.cooperationDetailsCallPage&call_id=268

The aim of this Call is to address some of the Science & Technology objectives of the "Africa - EU Strategic Partnership" putting emphasis on 'Water and Food Security' and 'Better Health for Africa' through three themes in the Cooperation Work Programme 2010:

- Theme 1: Health
- Theme 2 – Food, Agriculture and Fisheries and Biotechnology
- Theme 6 – Environment (including Climate Change).

It is focused on a holistic approach involving various scientific and technological research fields such as food, agriculture, health, land and water resources including their interaction with climate change and integrating broader socio-economic factors such as migration and resettlement, urbanisation, health care systems and programme interventions.

7.2 Open Day, Brussels, 18 September

An Open Day to provide more information on the Call and address specific questions was held in Brussels on 18 September. Click here to download the brochure for more information.

7.3 Instruments

Most of the open Action Lines will be fulfilled through large scale Integrating Projects (IP) and Small or Medium Scale Focused Research Actions (STREP) for Specific Cooperation Actions (SICA) dedicated to international collaboration partner countries. The Minimum requirements in relation to the Consortium structure for a SICA is at least 4 independent legal entities, of which, 2 must be established in different EU Member States or Associated Countries and the other 2 must be established in different International Cooperation Partner countries (ICPC) from African ACP and the following Mediterranean Partner Countries (African MPC): Algeria, Egypt, Libya, Morocco, and Tunisia.

This instrument provides a good opportunity for relevant European and African organisations to cooperate in Research projects focused on addressing issues in Africa. It is necessary to identify relevant partners who bring specialist and complimentary expertise as soon as possible to ensure adequate time to prepare a high quality proposal.

For more information on Integrated Projects (IPs) and Small or Medium Scale Focused Research Actions (STREP), please refer to FP7 Guide – Instruments.

7.4 Topics open for Proposals under Theme 1, 2 and 6

The table below provides an Extract from the Work Programme outlining the topics open for proposals by Theme under FP7-AFRICA-2010. When submitting a proposal, it is necessary to outline the relevant Topic Code.

Theme 1: Health

Theme Activity	Topic Code	Funding Scheme	Funding available & No. of proposals
Activity 1.2 Translating research for human health	HEALTH.2010.2.3.2-4: Controlling malaria by hitting the vector: New or Improved – Vector Control Tools	IP SICA (Specific Cooperation Actions) dedicated to ICPC countries	Min. EC contribution /proposal: € 6,000,000 Max. EC contribution /proposal: € 12,000,000 Only up to 1 proposal can be selected under this topic
Activity 1.2 Translating research for human health	HEALTH.2010.2.4.1-4: Infectious agents and cancer in Africa	STREP SICA	Max. EC contribution /proposal € 3,000,000 One or more proposals can be selected for this topic.
Activity 1.3 International public health and health systems	HEALTH.2010.3.4-1: Develop and assess key interventions and policies to address the human resource crisis in the health sector	STREP SICA	Max. EC contribution /proposal: €3,000,000 One or more proposals can be selected for this topic
Activity 1.3 International public health and health systems	HEALTH.2010.3.4-2: Feasibility and community effectiveness of innovative intervention packages for maternal and newborn health in Africa	STREP SICA	Max. EC contribution /proposal: € 3,000,000 One or more proposals can be selected for this topic

Activity 1.3 International public health and health systems	HEALTH.2010.3.4-3: Building sustainable capacity for research for health in Africa	Coordination Action	Max. EC contribution /proposal: € 2,000,000 One or more proposals can be selected for this topic
Activity 1.3 International public health and health systems	HEALTH.2010.3.4-4: Assessment of migrants' health, disease patterns and impact on health systems	Coordination Action	Max. EC contribution /proposal: € 2,000,000 Only up to one proposal can be selected for this topic

Theme 2: Food, Agriculture and Fisheries and Biotechnology

Theme Activity	Topic Code	Funding Scheme	Funding available & No. of proposals
Activity 2.1: Sustainable production and management of biological resources from land, forest and aquatic environment	KBBE-2010.1.-2-03: Sustainable water resources management (WRM) and Soil fertility conservation for food production in Africa - SICA (Africa)	IP SICA	Max. EC contribution /proposal: €4,000,000 Maximum of one proposal can be selected for this topic
Activity 2.2 Fork to farm: Food (including seafood), health and well being	KBBE.2010.2.2-03: Identifying research needs on malnutrition in Africa – (Mandatory Africa)	Support Action	Max. EC contribution /proposal: € 1,000,000 Maximum one proposal can be selected for this topic
Activity 2.3 Life sciences, biotechnology and biochemistry for sustainable non-food products and processes	KBBE.2010.3.5-02: Coping with water scarcity in developing countries: Role of biotechnology in water treatment – Mandatory ICPC (Africa)	Coordination action	Max. EC contribution /proposal: € 1,000,000 Maximum one proposal can be selected for this topic
Activity 2.4 Other Activities	KBBE.2010.4-02: Networking of nongovernmental organisations involved in agricultural research for development	Coordination action	Max. EC contribution /proposal: € 500,000 Maximum one proposal can be selected for this topic

Theme 6: Environment, including Climate Change

Theme Activity	Topic Code	Funding Scheme	Funding available & No. of proposals
Activity 6.1 Climate Change, pollution and risks	ENV.2010.1.2.1-1: The effect of environmental change on the occurrence and distribution of water related vector-borne diseases in Africa	STREP SICA	Max. EC contribution /proposal: € 3,500,000 Maximum of one proposal can be selected for this topic
Activity 6.1 Climate Change, pollution and risks	ENV.2010.1.3.3-1: Early warning and forecasting systems to predict climate related drought vulnerability and risks in Africa	STREP SICA	Max. EC contribution /proposal: €3,500,000 Maximum of one proposal can be selected for this topic
Activity 6.2 Sustainable management of resources	ENV.2010.2.1.1-1: Integrated management of water and natural resources in Africa	STREP SICA	Max. EC contribution /proposal: € 3,500,000 Maximum of one proposal can be selected for this topic
Activity 6.3 Environmental technologies	ENV.2010.3.1.1-3: Decentralised water supply and sanitation technologies and systems for small communities and peri-urban areas	STREP SICA	Max. EC contribution /proposal: € 2,000,000 Maximum of two proposals can be selected for this topic
Activity 6.3 Environmental technologies	ENV.2010.3.1.1-4: Water harvesting technologies in Africa	STREP SICA	Max. EC contribution /proposal: € 2,000,000 Maximum of two proposals can be selected for this topic

8. Action Lines open under FP7-ICT Call 6 (FP7-ICT-2009-6)

FP7-ICT-Call 6 was published on 24 November 2009 with a closing date of **13 April 2010** (17:00 CET). The Guide for Applicants can be downloaded from the CORDIS site.

Please find below the extract from the FP-ICT 2009 – 2010 Work Programme outlining the Challenges, objectives and specific instruments open under Call 6. It is necessary to read the Work Programme in detail to receive descriptions of the specific objectives and the research areas being funded.

8.1 Challenges and Objectives Open under Call 6

Challenge	Objectives	Funding schemes[3]
Challenge 2: Cognitive systems, interaction, robotics	ICT 2009.2.1 Cognitive Systems and Robotics	CP, CSA (CA only)
Challenge 4: Digital Libraries and Content	ICT 2009.4.1 Digital Libraries and Digital Preservation	CP, NoE, CSA
Challenge 5: Towards sustainable and personalised healthcare	ICT 2009.5.3 Virtual Physiological Human	CP, CSA
Challenge 6: ICT for mobility, environmental sustainability and energy efficiency	ICT 2009.6.2 ICT for Mobility of the Future	CP, CSA
Future and emerging technologies	ICT 2009.8.7,8,9,10 FET-Proactive	CP, CSA
Horizontal support actions	ICT 2009.9.1 International Cooperation	CP (STREP/SICA only)
	ICT 2009.9.2 Supplements to support International Cooperation between ongoing projects	NA

[3] Each proposal must indicate the type of funding scheme used (IP or STREP for CP, where applicable; CA or SA for CSA, where applicable)

9. Resources to help prepare for Call 4, Call 5 & Call 6

There are a lot of resources available to help you research areas of interest. The descriptions provided in each section outlined below are extracted from the Work Programme. It is necessary to read the Work Programme in detail prior to commencing work on a project proposal. The resources listed under each thematic area allows you to research the state-of-the-art and projects previously funded under earlier calls of FP7 and under FP6.

9.1. ICT 2009.1.1 The Network of the Future (Call 4 & Call 5)

In the previous call for Network of the Future under Call 1 of FP7 (Work Programme 2007 – 2008), 46 proposals were funded out of 173 proposals received, with funding of ~200 million euro in three areas – Radio Access and Spectrum; Converged and Optical Network and Future Internet Technologies.

Under the Work Programme for 2009 – 2010 there is ~190 million euro of funding split between Call 4 (~110 million funding) and Call 5 (~80 million funding).

It is envisaged that the projects launched in 2009 – 2010 should have an impact in 2015 – 2020 with a focus on Research with Industrial Output (pre-competitive). The research challenges should be to encourage firms to explore more innovation options and focused on higher-risk ICT collaborative research. There are three technological and socio-economic areas that should be impacted on:

- Future Internet
- Alternative paths to ICT Components and Systems
- ICT for Sustainable Development

Target Outcomes for Objective 1.1 Network of the Future

- ***Spectrum-efficient radio access to Future Networks (Call 4)***
  - Next-generation mobile radio technologies
  - Cognitive radio and network technologies
  - Novel radio network architectures
- ***Converged infrastructures in support of Future Networks (Call 4)***
  - Ultra high capacity optical transport/access networks
  - Converged service capability across heterogeneous access
- ***Future Internet Architectures and Network Technologies (Call 5)***
  - Novel Internet architectures and technologies
  - Flexible and cognitive network management and operation frameworks

- ***Coordination/ Support actions and Networks of Excellence (Call 5)***

For more information on each area, please visit

http://cordis.europa.eu/fp7/ict/future-networks/target-outcomes_en.html

Expected Impact

- Strengthened positioning of European industry in the field of Future Internet technologies and reinforced European leadership in mobile and wireless broadband systems optical networks cognitive network management technologies
- Increased economic efficiency of access/transport infrastructures (cost/bit)
- Global standards, interoperability and European IPRs reflecting federated and coherent roadmaps
- Wider market opportunities from new classes of applications taking advantage of convergence
- Accelerated uptake of the next generation of network and service infrastructures

Resources for Objective 1.1 The Network of the Future

Future Networks Website - http://cordis.europa.eu/fp7/ict/future-networks

Future Networks - FP7 Project Portfolio

FP6-IST PROJECTS & CLUSTER RESULTS - Network & Communication Technologies

These publications provide description of each project funded under FP6 and FP7, a list of the partners involved in each project and project website. This is very valuable information to get an overall idea of the types of project funded in past and the state-of-the-art in these areas.

9.2 ICT 2009.1.5 Networked Media & 3D Internet (Call 4)

Some drivers for the Future Internet of creative media include

- Content-centric networks
- Collaborative user-generated content
- Innovative 3D applications (gaming, virtual worlds…)
- New requirements for information, representation, filtering, aggregation and networking
- Novel search tools
- Identity management, ownership and trading of digital objects, right to use

Target Outcomes for Objective 1.5

a) Content aware networks and network aware applications

b) 3D Media Internet

c) Networked search and retrieval

d) Immersive media experiences beyond HDTV and electronic cinema

e) Networks of Excellence

to consolidate or establish European leadership in the fields covered in a).

For b) Support to integration of foundational research capacities to establish forward-looking 3D and Media Internet research agendas. Support to promotion of multidisciplinary education and sharing of research facilities. For d) Integration of industry and academia research capacities to establish advanced research agendas in the field and support the sharing of research facilities.

f) Support measures

i) For a), b) Support to collaboration including with national initiatives and/or third countries, dissemination, research roadmaps, policy and socio-economic aspects, organisation of scientific and/or policy events.

ii) For c) support to co-ordination of activities at EU level in the domain of multimedia search, co-operation with third countries, research roadmaps and organisation of events of policy or research nature.

For more information, please go to http://cordis.europa.eu/fp7/ict/netmedia/mission_en.html

Expected Impact

- Reinforced positioning of industry in Europe in networking and delivery of multimedia content and services, in 3D media Internet technologies, and in networked search. Strengthened European industry in multimedia experiences beyond HDTV and in electronic cinema.
- Wider uptake of networked and collaborative platforms based on a '3D media Internet'.
- Global standards and European IPRs reflecting federated and coherent roadmaps.
- Wider market opportunities, including for content-related SMEs, arising from innovative business and societal applications (e.g. games, entertainment, or education, culture, and service creations) based on novel networked media technologies and systems

Resources for Objective 1.5 Networked Media & 3D Internet

Networked Media Systems Website - http://cordis.europa.eu/fp7/ict/netmedia/home_en.html

Overview of Projects funded to date under FP7 - http://cordis.europa.eu/fp7/ict/netmedia/projects_en.html

Networked Media Current Research, Results and Future Trends, October 2008

9.3 ICT 2009.1.2 Internet of Services, Software & Virtualisation (Call 5)

Under Call 1 of FP7 (Work Programme 2007 – 2008) for Objective 1.2, 27 proposals (6 Ips, 1 NoE, 18 STREPs and 3 CSA) were funded out of 186 proposals received, with funding of ~120 million euro in areas of Service front-ends, Service Architectures, Virtualised Infrastructures and Service/Software Engineering.

There are two main research lines under Call 5:

a) Service Platforms for the Future Internet focused on providing a basis for the creation of an innovative market of services to provide new experiences for users; and

b) Highly Innovative Service/Software Engineering, which should result in new technologies and research areas to support a reliable and dynamic innovative services market.

Target Outcomes for Objective 1.2

- Service Front Ends
- Architectures and Components
- Virtualisation
- Highly innovative Service Engineering
- Verification and
- Open Source Software

Expected Impact

- To provide a contribution to Future Internet/Convergence
- Technological advances in software/service engineering
- More competitive environment for service providers including SMEs
- Massive update of high-added value services, Service Front-ends and online communities
- Strengthened European software and services industry

Resources for Objective 1.2 Internet of Services, Software & Virtualisation

Internet of Services Call 5 ftp://ftp.cordis.europa.eu/pub/fp7/ict/docs/ssai/internet-of-services-web_en.pdf

Achievements in Software and Grid technologies - IST FP6 projects 2002-2006

Overview of Projects funded to date under FP7 –

http://cordis.europa.eu/fp7/ict/ssai/projects_en.html

Software & Services FP7 Project Portfolio. FP7-ICT-2007-1 - Objective 1.2

9.4 ICT 2009.1.3 Internet of Things and Enterprise Environments (Call 5)

Under FP7 Call 1 Objective 1.3 was originally focused on RFID and Networked Enterprises – under Call 5 the focus has moved from RFID to the "Internet of Things". Ten projects were funded under Call 1.

Target Outcomes for Objective 1.3

- Architectures and Technologies for the Internet of Things
  - Open protocols enabling novel Internet-based applications, aggregation of virtual and physical worlds, event processing of tags, sensors, actuators, object or location-centric applications and business processes
  - Technologies for distributed intelligence
  - Architectural models
- Future Internet based Enterprise Systems
  - Software platforms for innovative networked businesses

Expected Impact

- Strengthened competitiveness in all sectors of the economy
- More automated processes
- New classes of applications
- More generic and open architectures and
- Dynamic and composite business models

Resources for Objective 1.3 Internet of Things

Overview of Projects funded to date under FP7 –

http://cordis.europa.eu/fp7/ict/enet/projects_en.html

The 2007-2008 Report on Networked Enterprise and RFID

9.5 ICT 2009.1.4 Trustworthy ICT (Call 5)

Under the 2007 – 2008 Work Programme of FP7 33 projects were funded in the Security area (Objective 1.4). Research covers a broad range of topics such as security of the Internet and mobile communication networks, data and privacy protection schemes in the digital world, privacy protective identity management schemes, security of electronic services, and protection of critical information infrastructures against malfunctions or attacks.

The priority areas identified for the 2009 – 2010 Work Programme include:

- Trustworthy Network Infrastructures
- Trustworthy Service Infrastructures
- Technology and Tools for Trustworthy ICT

Resources for Objective 1.4

Overview of Projects funded to date under FP7 –

http://cordis.europa.eu/fp7/ict/security/projects_en.html

Secure, dependable and trusted Infrastructure FP7 Projects

Critical Infrastructure Protection FP7 Projects

ICT Security Research in FP7 Brochure

9.6 ICT 2009.4.2 Technology-Enhanced Learning (Call 5)

The research focus in the area of Technology-Enhanced Learning continues to evolve. Under the 2007 – 2008 Work Programme the research objectives were focused on responsive environments and adaptive and intuitive learning systems. Six projects were funded under Call 1 and commenced in February and March 2008 (5 STREPs and 1 IP). A further seven projects were funded under Call 3 and started in January 2009.

Technology Enhanced Learning is focused on creating a body of evidence that outlines which approach works under what circumstances for better system engineering, pedagogical practices and organisational approaches to learning.

The key elements outlined in the 2009 – 2010 Work Programme includes:

- The Classroom of tomorrow – large-scale pilots for the design of the future classroom
- Embedded learning experiences in organisational processes and practices
- Combining creative, cognitive and computational processes for workplace learning
- Adaptive and intuitive systems
- Learning applications and cognitive tutors
- Focuses interdisciplinary networks

The main drivers for these thematic areas are a requirement to meet the demands of education in the 21st century, which is envisaged to require personalisation, new skills, assessment and leveraging the information society as well as a requirement to create innovative ways to encourage students to be interested in subjects such as math and science. It is also necessary to recognise the requirement to create innovative solutions to increase learning, innovation, creativity and productivity in the work place.

Expected Outcome/Impact

- Innovation in learning and teaching leading to more flexible learning environments supporting better education, competency development and employability
- Reinforcing the links between individual and organisational learning – embedding learning experiences, combining creative, cognitive and computational processes
- Innovative adaptive and intuitive systems for learning including new forms of assessing learning outcomes – may include serious games and immersive environments, collaborative learning
- Revolutionary learning appliances and advanced cognitive tutors – addressing specific social and learning problems, science, technology and maths or specific tasks that impose high cognitive demands
- Focused interdisciplinary networks on specific emerging trends (e.g. serious games/mobility and learning), linking a limited set of established excellences and learning labs and including appropriate mechanisms for cross-fertilisation between disciplines

Resources for Objective 4.2

Overview of Projects funded to date under FP7 –

http://cordis.europa.eu/fp7/ict/telearn-digicult/telearn-projects-fp7_en.html

Technology-enhanced learning in FP7 – Projects funded under Call 1

Technology –enhanced learning in FP6

Information Day

There is an information day scheduled in Luxembourg on 24 March 2009 in relation to Objective 4.2 under Call 5.

9.7 ICT 2009.4.3 Intelligent Information Management (Call 5)

Call 1 of FP7 attracted 148 proposals requesting a total grant of around 473 Meuro against a published budget of 51 Meuro. Fifteen proposals were retained for negotiation. Most proposals were focused on advanced knowledge management systems for enterprises and other organisations. Semantic foundations and personalised distribution and presentation of content were addressed by a smaller number of focused projects. Call 3 of FP7 attracted 252 proposals requesting a total grant of 817 Meuro against a published budget of 50 Meuro. Thirteen proposals were retained for negotiation.

This area is primarily focused on media and organisational content with commercial (creative industries) or competitive (enterprises) value and addresses content form creation to consumption.

Key themes outlined in 2009 – 2010 Work Programme include:

- Capturing tractable information (using robust technologies to acquire, analyse and categorise extremely large, evolving and incomplete amounts of information)
- Delivering pertinent information (usable and customisable systems to improve the efficiency of information lifecycle)
- Collaboration and decision support tools (dependable problem solving and decision support systems for critical, information bound domains)
- Personal sphere (intuitive systems that help individuals secure, manage, visualise and interpret their personal information)

It is important that the research proposes has a clear purpose and is problem and objective driven. It should be centred around users, data and flows of content and should include a meaningful demonstrator for field validation and assessment.

Resources for Objective 4.3

Overview of Projects funded to date under FP7 –

http://cordis.europa.eu/fp7/ict/content-knowledge/projects_en.html

9.8 ICT 2009.2.1 Cognitive Systems and Robotics (Call 6)

The overall aims of Objective 2.1 are:

- To develop (further) and validate the scientific foundations, engineering principles and approaches required to build systems with the above described capabilities; here, robotic systems, operating in loosely structured dynamic environments, are of particular interest;
- To open up new ways to closer co-operation between academic and industrial researchers in the field of robotics;
- To build a strong basis for research on ways of reaching the long term goals inherent in this objective and to provide the means for carrying out that research;
- To foster, monitor and co-ordinate at EU-level, pertinent efforts of relevant R&D communities

Call 6 addresses target outcomes (a), (c), (e), and (h) of Objective 2.1

(a) New approaches towards understanding and solving key issues related to the engineering of artificial cognitive systems. Instrument: **STREP** (Small or mediumscale focused research projects)

(b) New ways of designing and implementing complete robotic systems. Instrument: **IP** (Large-scale integrating projects)

(e) A framework to facilitate cross-fertilisation between academic and industrial research efforts in robotics. Instrument: **IP** (Large-scale integrating projects)

(h) Co-ordinated co-operation and communication within a multidisciplinary artificial cognitive systems research community in Europe. Instrument: **CA** (Coordination or networking actions)

The target outcomes and expected impacts for each action line are available in the Work Programme.

An Information Day on Objective 1.2 Call 6 will be held in Luxembourg on 14 January 2010. More information is available at
http://cordis.europa.eu/fp7/ict/cognition/calls-ict-call6_en.html

Resources for Objective 4.3

A comprehensive Questions and Answers document on Call 6 of Objective 2.1 can be downloaded from
ftp://ftp.cordis.europa.eu/pub/fp7/ict/docs/cognition/call6-ch-2-1-qa_en.pdf

Overview of Projects funded to date under FP7 –

http://cordis.europa.eu/fp7/ict/cognition/projects_en.html

9.9 ICT 2009.4.1 Digital Libraries and Digital Preservation (Call 6)

Objective 4.1 is focused on four complimentary areas: Digital preservation research, Digital Libraries research, Research capacity building through interdisciplinary research networks and Uptake of research results to encourage deployment and validation and demonstration centres. Since this is a research programme, the work should be problem oriented and required research to generate new knowledge.

The **target outcomes** are listed below:

a) Scalable systems and services for ***preserving digital content***: handling the whole workflow for different types of digital resources, guaranteeing their long term integrity and authenticity. Research should demonstrate the feasibility of systems and services proposed and assess their use by organisations in large scale testbeds (e.g. science, business and financial records, public records, multimedia/audiovisual and performing arts).

Instrument: **Integrated Project (IP)**

b) Advanced ***preservation*** scenarios: methods, models and tools for managing digital memory, focusing on challenging preservation problems, which cannot be adequately handled by current models. These should result in:

- b1/ Methods and tools for preserving complex objects, addressing the life-cycle of composite digital information instances (e.g. multiple embedded structures, actionable objects, distributed and interlinked resources and ontologies, transient information and ephemeral data).

  Instrument: **STREP**

- b2/ Intelligent digital curation and preservation systems able to learn, reason and act autonomously, integrating tools and methods to support the complex decision making processes for appraisal, selection and management of diverse collections of digital resources. The system should ensure that the representation of the objects and their embedded semantic knowledge in order to support their future re-use. Appropriate verification scenarios should be an integral component of the work.

  Instrument: **Integrated Project (IP)**

c) Innovative solutions for assembling ***multimedia digital libraries for collaborative use*** in specific contexts and communities, enhancing scholarly understanding and experiences of digital cultural heritage. This includes work on the dynamic aggregation of cross-media resources across existing institutional digital libraries and repositories. Research should address scalability, interoperability and distributed architectures, aggregation and semantic search tools. Validation should address researchers and cultural heritage professionals but be open to wider audiences.

Instrument: **Integrated Project (IP)**

d) ***Adaptive cultural experiences*** exploring the potential of ICT for creating ***personalised*** views of various forms of cultural expression, reflecting individual narrative tendencies (i.e. adapt to the background and cognitive context of the user) and offering meaningful guidance about the interpretation of cultural works.

Instrument: **STREP**

e) Interdisciplinary research networks bridging technological domains (e.g. computing models, knowledge representation, visualisation and graphics), information and archival sciences, and social and cognitive sciences to advance the state-of-the-art in well identified and focused application areas (e.g. digital preservation).

Instrument: **Network of Excellence (NoE)**

f) Promoting the ***uptake of EC-funded research*** enabling the deployment of new ICT-based cultural and memory preservation services, leveraging the impact of associated national initiatives; roadmapping and identification of future 'Grand Challenges'; establishment of a pan-European network of 'living memory centres' for validations, demonstrations and showcases.

Instrument: **CSA**

Expected Impacts

- Significant advances in the ability to offer easily customisable access services to scientific and cultural digital resources, improving their use, experiencing and understandings;
- Reinforced capacity for organisations to preserve digital content in a more effective and cost-efficient manner, safeguarding the authenticity and integrity of these records;
- Significant reduction in the loss of irreplaceable information and new opportunities for its re-use, contributing to efficient knowledge production;
- Leading edge research in Europe strengthened through restructuring of the digital libraries and digital preservation research landscape. Leveraged impact of research results.

Indicative budget distribution

- IP/STREP: EUR 56 million with a minimum of 50% to IPs and a minimum of 30% to STREPs

- NoE and CSA: EUR 13 million

Resources for Objective 4.1

An Information Day was held in Luxembourg on 09 October and all presentations can be downloaded from http://cordis.europa.eu/fp7/ict/telearn-digicult/call6-infoday_en.html

A very useful background document on Digital Libaries and Digital Preservation for Call 6 which provides an overview of the research priorities and previous work undertaken can be downloaded from ftp://ftp.cordis.europa.eu/pub/fp7/ict/docs/digicult/background-call6_en.pdf

Overview of projects funded under first two Calls of FP7 and under FP6

http://cordis.europa.eu/fp7/ict/telearn-digicult/digicult-projects_en.html

9.9 ICT 2009.5.3 Virtual Physiological Human (Call 6)

Target outcomes

Proposals are expected to address **one** of the following target outcomes:

a) Development of ***patient-specific computer based models*** and ***simulation of the physiology of human organs and pathologies***. The models should be multiscale by integrating relevant aspects of anatomy and physiology across different levels (from molecular and cellular to tissue and organ levels). The emphasis should be on the integration of existing models rather than on development of new models. The use and benefits of the models must be demonstrated for a specific clinical need covering prediction of disease, prediction of treatment outcome and/or early diagnosis. Any organ or pathology could be targeted as clinical application. Access to existing computing facilities external to the consortium could be supported.

Instrument: **Integrated Project (IP)**. The objective is to support at least 1 IP under a).

b) Development of ICT tools, services and specialised infrastructure for the biomedical researchers to support at least two of the following three activities: i) to share data and knowledge needed for a new integrative research approach in medicine (biomedical informatics), ii) to share or jointly develop multiscale models and simulators, iii) to create collaborative environments supporting this highly multidisciplinary field. When necessary, computing power and data management could be sought through access to existing advanced grid infrastructures as well as high performance computing resources such as the emerging petascale computing facilities. New tools, services and applications will also be evaluated on their effectiveness and their ability to interface with existing medical research infrastructures. Their targeted services will facilitate the clinical use of computer based organ and disease models as well as biomedical data. These tools and services will complement and be compatible with existing methods and standards (terminologies, ontologies, mark-up

languages) like those used by the Network of Excellence –VPH NoE (FP7-ICT-call 2). International Cooperation in this field is encouraged.

Instrument: **Integrated Project (IP)**. The objective is to support at least 1 IP under b).

c) **Support action** on evaluation and assessment of VPH projects. Assessment proposals will address at least the following three aspects: i) the optimal use and contribution to the shared tools and infrastructure, ii) the clinical achievements, iii) the market potential or penetration. The proposed methodology should take into account existing international efforts and promote global validation framework.

d) **Coordination/Support action** to develop an observatory on the achievements and evolution of the broader Biomedical Informatics field which builds on synergies between bioinformatics, medical informatics, and neuroinformatics. The action should incorporate intensive dissemination and training components and facilitate communication between projects, including VPH projects and those funded beyond the ICT priority, so that a productive, open European environment for cross collaboration among the different fields involved can be sustained over time. In that respect, the action should take advantage of the achievements of previous Networks of Excellence and other projects funded under FP6.

Expected Impact

- More predictive, individualised, effective and safer healthcare.
- Accelerated developments of medical knowledge discovery and management, development of devices and procedures using in-silico environments.
- Improved interoperability of biomedical information and knowledge.
- Increased acceptance and use of realistic and validated models that allow researchers from different disciplines to exploit, share resources and develop new knowledge.
- Reinforced leadership of European industry and strengthened multidisciplinary research excellence in supporting innovative medical care.

Indicative budget distribution

a) and b) IP/STREP – EUR 61 million19; with a minimum of 30% to STREPs and with more than 50% to IPs, including at least one IP under a) and at least one IP under b)

c) and d) CSA EUR 2 million [1 CSA per area with a maximum EC funding of EUR 1 million]

Resources for Objective 5.3

Overview of Virtual Physiological Health Project Portfolio (October 2008)

http://ec.europa.eu/information_society/activities/health/docs/projects/fp7/binder-fp7vph-projects.pdf

Virtual Physiological Human FP7 Projects

http://ec.europa.eu/information_society/activities/health/research/fp7vph/index_en.htm

A Roadmap to the Virtual Physiological Human (2007)

http://ec.europa.eu/information_society/activities/health/docs/projects/vph/step-vph_roadmap.pdf

10. Preparing a Budget

The budget for any research project is based on actual costs that are economic and required to fulfil the project objectives. It is necessary to firstly identify the amount of person time required to fulfil each task within each Work Package and then determine the most relevant and appropriate partners to fulfil these tasks in an efficient way.

There are three main direct cost categories:

a) Personnel costs

b) Travel costs

c) Equipment costs (if relevant)

10.1 Eligible Costs

Eligible costs are actual costs with no profit or mark-up, which are incurred during the project duration and are used solely to achieve the project objectives. All eligible costs, including personnel costs and travel costs, are determined according to the usual accounting and management principles/practices of the organisation involved, and must also be consistent with the principles of economy, efficiency and effectiveness.

All eligible costs are recorded in the financial accounts and are exclusive of non-eligible costs including VAT.

10.2 Personnel Costs

Personnel costs are based on the payroll of the organisation and the costs charged to the project budget cannot include any mark-up or charge out fee. All personnel costs incurred during the life of the project are based on timesheets in alignment with the work agreed in the Description of Work.

The personnel working on the project must be directly hired by the organisation (beneficiary) involved as a partner in the project on either a full time or temporary basis, working under the direct supervision of the beneficiary, and remunerated in accordance with normal practises of that beneficiary organisation.

It is necessary to clearly show in the Work Plan and proposal description that all time proposed to fulfil tasks is required.

10.3 Travel Costs

When preparing the proposal, it is necessary to carefully work out all travel required during the project duration – travel related to project activities, project meetings, review meetings with the Commission Services, dissemination activities (presenting at relevant conferences and workshops organised by other relevant projects) etc.

Each partner should have a clear travel budget outlining the costs required for flights, accommodation, conference registration fees if required and subsistence. All costs incurred must be aligned with normal practises for that organisation. All proposed travel costs should be explained in the project – Section 2.4 Resources to be committed.

10.4 Equipment Costs

There is an expectation that all partners will use existing equipment as much as possible. However, if there is a requirement for a specific additional piece of equipment to achieve the goals of the project activities, it is necessary to explain this in the proposal.

Equipment costs are reimbursed on a depreciation basis over a three-year period. This is determined based on the length of time the equipment is used during the overall project duration. For example, equipment used from the beginning to the end of a three-year project can be depreciated entirely over that period of time. If however, a piece of equipment is only used for the last year of a project, the maximum depreciation allowed is 33%.

10.5 Indirect Costs

Indirect costs are eligible overheads costs (e.g. pro-rata cost of office used by personnel involved in the project, equipment already in place, electricity, telecommunications costs etc) that are directly attributed to the project activities.

The reimbursement level of indirect costs depends on the instrument selected (Collaborative Projects – Integrated Project or STREP or Support Action) and the accounting system that the beneficiary has in place.

In the event that the beneficiary has an analytical accounting system that allows them to identify indirect costs that are directly attributed to project activities, it is then possible to charge actual indirect costs to the project for Integrated Projects or STREPs.

In other cases where such an analytical system is not in place, the beneficiary can choose to charge a flat rate of 20% of its actual direct eligible costs for Integrated Project or STREPs.

In the case of Coordination and Support Actions, a flat rate of 7% of indirect costs is reimbursed for all organisations.

Indirect costs cannot be charged on any subcontracting.

10.6 Reimbursement of Direct Costs

All projects are funded under a grant agreement.

The level of reimbursement depends on the instrument selected (Collaborative projects – Integrated Project or STREP or Coordination Action), the specific activity and the type of organisation.

In the case of Integrated Projects and STREPs

- Research and Development activities are reimbursed at 75% reimbursement for Public bodies (non-profit), Secondary and higher education establishments, Research organisations (non-profit & Small and Medium sized Enterprises (SMMEs)
- Research and Development activities are reimbursed at 50% of eligible direct costs for Research and Development activities for large Industrial organisations
- Demonstration activities are reimbursed at 50% of eligible direct costs
- Training and project management are reimbursed at 50% of eligible direct costs
- Consortium Management Costs are reimbursed up to 100% of eligible direct costs

In the case of Coordination and Support Actions

- Coordination and Support Actions are reimbursed up to 100% of eligible direct costs
- Consortium Management Costs are reimbursed up to 100% of eligible direct costs

Resources for Financial Management

Guidelines to Financial Issues related to FP7 Indirect Actions

ftp://ftp.cordis.europa.eu/pub/fp7/docs/financialguide_en.pdf

11. Frequently Asked Questions

During the IST-Africa FP7 Training Workshops in Lesotho, South Africa, Namibia, Botswana, Mozambique, Tanzania and Uganda that were delivered during November and December 2007, participants asked questions that are relevant to the wider research community. Please find below the questions asked during these workshops and the responses provided.

11.1 Consortium-related questions

Q1. How do you identify European partners?

A. Each university department should meet with the head of their International Relations department and their Rector and determine which European organisations already have cooperation agreements in place. It is advisable to review the research interests of these organisations and identify which universities and departments are undertaking complementary research. You then must contact these departments providing an overview of the type of research you are doing, capacity and track record and request that they engage in a dialogue to determine areas for research cooperation and knowledge exchange.

The material you prepare for this dialogue can also be used to contact organisations that you identify after reading the project descriptions for FP6 or current FP7 projects. It is necessary to have a clear message and be proactive in relation to building functional partnerships.

Participating in the IST-Africa Conferences provide a practical way to identify relevant European organisations that you can meet with face to face and discuss possibilities. It is necessary to continue to follow up following the meeting to kick start a sustainable dialogue.

You can also look at relevant papers in the IST-Africa paper repository and start to engage with authors by sending them your organisational profile outlining research areas of interest.

Q2. How is the coordinator of a proposal selected?

A. The coordinator may be the originator of the research idea or may be an organisation that all partners agree has the necessary human and financial capacity to undertake this important and demanding role. In a technical project, there may be two coordinating organisations – one taking responsibility for Administrative and Financial Coordination and the other taking responsibility for Technical Coordination. It is necessary for the Administrative and Financial Coordinator to be a legal organisation in Europe.

Q3. What types of European organisations can we partner with?

A. Eligible Organisations include research organisations, Universities; high-tech Small and Medium Sized Enterprises (SMEs), NGOs and multinationals.

Q4. Can commercial organisations participate?

A. Yes, both SMEs and larger commercial organisations have the same right to participate as research organisations and universities. All commercial organisations must evaluate participation in a research project as an investment in the future. It is necessary to look carefully at the lifecycle for commercialisation, taking account of the fact that project funding may stop once a product or service being developed is commercialised, or imcome generated during the lifetime of the research project may be subtracted from the grant funding providing by the European Commission under FP7. Commercialisation is only supposed to commence following completion of the research project, as the expected output from a STREP or IP is a prototype, which can then be commercialised. Funding towards market development costs (other than allowed under demonstration activities) is not allowed.

Q5. If a partner fails to deliver or complete work assigned, what happens?

A. Each partner is responsible for the work they agreed to undertake under the Technical Annex. They are expected to produce quality deliverables fit for purpose. The contract with the Commission Services has specific clauses to deal with the possibility that a partner may need to be removed. The Consortium Agreement may also contain specific clauses in relation to timeframes for delivery of materials and actions to be taken in the case of poor performance by an individual consortium partner. From a financial perspective, the defaulting partner must return all advance payments received to date. As this will pose serious consequences for most organisations, it is important that work under a research project is treated as seriously as a commercial project being paid for by a client.

Q6. How do organisations who have not participated in FP4, FP5, FP6 or FP7 have the opportunity to have meaningful participation in FP7?

A. Each Framework Programme has different drivers, changes in focus and different priorities for International cooperation. Under FP7 there is a general acceptance that ICPC countries (including African countries) can fully participate and receive funding. There are now opportunities for serious international cooperation with Africa that did not exist in the past due to changing political agendas, and the success of initial projects funded under FP6. It is necessary for each organisation who wishes to participate to identify the correct thematic areas where they have necessary competence and a clear track record, and build functional partnership with European organisations who are interested in cooperating on a project that addresses mutual interests and the thematic areas open under a specific Call.

Q7. What type of information should be included in organisational profile?

A. The organisational profile should be a focused document of 1 – 2 pages in length. It should provide a brief organisational introduction outlining number of students, number of years in existence, departments and research focus. It is important to outline the specific

activities undertaken by your department, expertise, track record outlining examples of national, regional, multinational projects undertaken in past five years and 3 – 4 short CVs (maximum few lines) of relevant staff members. This should whet the appetite to learn more.

Q8. How does an organisation illustrate their track record?

A. When preparing your organisational profile, it is necessary to highlight the research focus of your department, successful participation in nationally funded research, multinational projects with donor support and the expertise of individual researchers. This is important both to provide this necessary information to prospective partner organisations but also for inclusion in the organisational profile included in proposal submitted for funding.

Q9. What are the minimum numbers of European partners required in each proposal?

A. The minimum consortia structure is dictated by each Call but in general there is a requirement for participation of the following:

- Three independent legal entities from three different EU Member States (MS) or Associated countries (AC)
- International (intergovernmental) organisations can participate
- Participants from Third Countries & International Cooperation Partner Countries (ICPC) must be in addition to minimum EU partner participation

This is designed to encourage the sharing of knowledge and experience and foster cooperation across borders, a key justification for European funded research.

Q10. How can an African university prepare for participation in a FP7 proposal?

A. It is necessary to align opportunities with available expertise and resources. The Work Programme determines the thematic areas and focus for research projects on a two yearly basis. It outlines what thematic areas are open, when the Call closes, the detail of the types of areas that can be funded and the instruments available for funding.

Having identified research areas that are relevant to your department, it is then necessary to undertake an internal audit, to identify research capacity and track record, build capacity in specific areas of expertise and develop a strategic research road map. Having determined relevant Calls and associated timing, it is necessary to read project descriptions for projects funded under this area in the past to get a feel for the types of research challenges already funded and the current state-of-the-art. Having identified specific prospective partners in specific thematic areas, it is necessary to contact them providing an organisational profile and strategic plan for the coming years and propose a cooperation agreement.

11.2 Legal-related Questions

Q11. How are copyright and IPR issues managed?

A. Copyright and IPR issues must be addressed in the Consortium agreement. It is necessary to clearly articulate what is fore-ground knowledge, what access rights are provided during the project and following completion of the project, how will knowledge created during the project be disseminated and maintained, etc. It is also important to address how patents will be dealt with and which partners enjoy exploitation rights.

Q12. How do we determine what should be in a Consortium Agreement?

A. Each project has a detailed contract with the Commission Services which deals with most legal issues. All partners are bound by the clauses in the main contract and Annexes. The Consortium Agreement should deal with other main issues depending on the focus of the research – i.e. outlining IPR issues, listing foreground and pre-existing knowledge, outlining access rights, any issues related to disbursal of advance payments, what happens in the case of a defaulting partner, exploitation rights etc. The coordinating partner would normally provide a draft Consortium agreement for other partners to comment on. The IPR Help Desk provides links to some sample consortium agreements for different instruments.

Q13. What is the standard procedure for publication of results?

A. As part of the Consortium Agreement and Technical Annex it is necessary for the Consortium to agree dissemination channels and publication procedures. It is important to ensure that project partners know you intend to publish a paper based on project results and that there is general agreement in relation to what results are available for publication at specific timelines during the project. It is necessary to acknowledge the funding mechanism in all papers published and the co-ordinator must report to the Commission Services each year on all publications in journals, peer-reviewed conferences and magazines

11.3 Proposal creation-related Questions

Q14. What support is available to write proposals?

A. Under the IST-Africa project (2008 – 2009) funded under FP7, the national IST-Africa partners have time allocated to help national organisations prepare organisational profile and coach them on preparing their parts of the proposal. It is necessary to contact your national organisation and request their support. Each organisation interested in participating needs to be proactive and research the Work Programme, projects funded in the area in the past, the current state-of-the-art and start preparing the content related to their proposed activities. The national partner can then provide assistance to focus this material.

Q15. How are preparatory activities funded?

It is necessary to cover your own costs related to identifying partners, research areas, proposal writing and contract negotiation from internal or national funding. It is not possible to get reimbursement of any costs incurred prior to the commencement of the project.

Q16. How do we identify relevant research areas for co-operation?

A. It is necessary to read through the Work Programme in detail. The Work Programme determines the thematic areas and focus for research projects on a two yearly basis. It outlines what thematic areas are open, when the Call closes, the detail of the types of areas that can be funded and the instruments available for funding.

Having identified research areas that are relevant to your department, it is then necessary to make a time line, outlining which Call this area is open under and deadlines. It is then necessary to read project descriptions for projects funded under this area in the past to get a feel for the types of research challenges already funded and the current state-of-the-art. It is then necessary to determine a strategic plan for the types of research that you wish to under take for the next three years to be able to communicate this to prospective partners.

Q17. How do we determine the appropriate technology selection?

A. Each proposal needs to justify the technology selection proposed. The technology choice must be appropriate to the environment within which the project is working and must be innovative. It is important to illustrate how the technology selected deals with software architecture, security, data workflow, content storage, interoperability etc. In relation to the exploitation plan – how will the prototype be taken up, what type of licensing is proposed? Since there are a variety of technical options available, it is important to justify the approach proposed. As part of a STREP or IP, it is also possible that the initial approach may be re-evaluated based on the current state-of-the-art at the time that the project commences.

Q18. How do you decide which instrument you wish to use?

A. The Work Programme outlines the instruments that are open under each thematic area. The activities foreseen in the project will determine the relevant instrument.

Collaborative Projects (CP) can be either Small or Medium Scale Focused Research Actions (STREP) or Large Scale Integrating Projects (IP).

STREPs are typically focused on specific objective-driven research and 2 – 3 years in duration. Designed to produce new knowledge in a specific thematic area, STREPs have clearly defined scientific and technological objectives directed at obtaining specific results, which could be applicable in terms of development or improvement of products, processes, services or policy.

IPs are typically focused on producing new knowledge in a specific thematic area and achieving ambitious objectives through integration and critical mass. Project activities can include STD, demonstrations, technology transfer or take up activities, training and dissemination. IPs are typically of 3 – 5 year duration with 10 – 20 partners.

Networks of Excellence (NoE) provide support to a Joint Programme of Activities implemented by a number of research organisations integrating their activities in a given field, carried out by research teams in the framework of longer term co-operation.

Coordination and Support Actions (CSA) provide support to activities aimed at coordinating or supporting research activities and policies (networking, exchanges, trans-national access to research infrastructures, studies, conferences, etc). Neither Coordination Actions (CAs) nor Support Actions (SAs) can undertake research and technological development activities.

Q19. In Africa research infrastructure and limited bandwidth is an issue. Can this research area be addressed as part of a proposal?

A. It is possible to design the proposal to include a specific Work Package or part of a Work Package to address issues such as adapting the user interface to address limited bandwidth issues.

Q20. Development of local content is a major issue in Africa. Can this be addressed as part of a proposal?

A. Within a specific proposal it is necessary to illustrate how local content is required to test the application/prototype within a specific user group or community. In this context it may be possible to agree to allocate a small part of the budget to creating new content. This must be included in the Technical Annex and agreed during project negotiation.

Q21. Within an IP, is it possible for African participants to focus on addressing local requirements and needs?

A. The role and activities of each partner is agreed as part of writing the proposal. There are examples in other funded projects whereby both African and European partners tested the prototype being developed within a local environment such as in the C@R - Collaboration@Rural: Collaborative Platform for Working & Living in Rural Areas project.

In this type of case it is necessary for the partners to identify environments at a national or local level within which user requirements can be gathered and the initial prototype being developed can be tested. The results of these pilots should then feed back into the final prototype being developed.

Q22. *Where do we find material to write the Impact Section of Part B?*

A. The Impact section needs to illustrate how the work proposed is aligned with European and African policies and will have a socio-economic benefit for the community at

large. There is a wide variety of Policy documents available on the Cordis website www.cordis.lu

All Consortium partners will contribute to the Impact section and the coordinator will then edit it to provide a coherent message.

It may be necessary to ask the Ministry of Science and Technology or National Council for Science & Technology to provide national policy documents, if these are not available online.

As part of the IST-Africa Initiative activities, the national partners are compiling a Guide to Research Capacity which provides an overview of national ICT strategy, infrastructure etc. for partner countries. This may be helpful in finding references to compile this section.

The IST-Africa Paper repository provides access to all papers published for the past conferences since 2006. These scientific papers can help put your work into a wider context and the references sections can also provide helpful links to further reading.

Q23. Who is going to write the proposal?

A. All proposals are written as a consortium activity with each partner providing relevant sections. The coordinator normally provides the proposal template and agreed with the partners which section each organisation is going to contribute to and the deadlines for submission of contributions. The coordinator then ensures that the final proposal is a coherent document that is easy to read and assimilate during the evaluation process. It is the responsibility of the European partners (especially the Co-ordinator) to engage directly with the Commission Services to determine that the proposal is relevant to the Call and to get any feedback in sufficient time to be able to adapt the proposal submitted.

Q24. How are experts selected to review proposals?

A. The Commission Services publishes an open call for experts which is open to participation from relevant experts with necessary expertise from any part of the world. Experts submit their CV outlining the research areas that they are involved in and further background information. When a Call is published, each specific Unit searches the database of experts for individuals with skills that are appropriate for a specific call. Selected individuals are then invited to participate on an individual contract for a specific evaluation.

Q25. How does participation in FP7 support capacity building and alignment with the National Strategic Programme?

A. It is necessary for the Ministry in each country to identify a small group of high potential organisations who have the relevant capacity and track record of national, regional and multinational projects and encourage them to participate in FP7. The national IST-Africa partner can assist these organisations to prepare high quality organisational profiles and promote them to international partners through the IST-Africa portal and through

engagement at relevant conferences and workshop including the IST-Africa Conferences which are focused on building a community of European and African researchers.

To support capacity development in other organisations, it is necessary to provide access to research results, start to build capacity through national programmes and encourage them to build a track record of successful participation in national and regional projects.

Q26. How can African research organisations compete with projects who hire consultants to write proposals and have representation in Brussels?

A. The main challenges for all African and European research organisations is to identify the correct partners for each proposal. Since FP7 is highly competitive, the consortium needs to demonstrate that they have the necessary credibility, expertise, track record and complementary skills to achieve the project goals. Research organisations in Africa need to focus on developing functional partnerships with European organisations where there is a long term strategic benefit that goes beyond one specific proposal.

Participation at IST-Africa training workshops and conference in Africa, and dissemination and awareness raising workshops in Europe will be very helpful in this regard, as they provide opportunities to meet the "right people" and demonstrate expertise by presenting papers, asking insightful questions and demonstrating existing project results.

Q27. Please provide some examples of projects funded under FP6 or FP7 with African participation

A. Projects with African participation started to be funded during FP6. Examples include IST-Africa, BEANISH, C@R - Collaboration@Rural: Collaborative Platform for Working & Living in Rural Areas, EMPRO - European Microbicides Project, MOCCA, EPOCH - Excellence in Processing Open Cultural Heritage, FLOSSWorld - Free/Libre/Open Source Software, ESASTAP - The European - South African Science and Technology Advancement Programme, START, ST-EAP - Science and Technology - Europe Africa Project and INTERLINK - Promoting International Cooperation for Environmental Research.

Examples of FP7 projects include IST-Africa, ESASTAP II, CAAST-NET, Digital World Forum, FlossInclude, EuroAfrica-ICT, HEALTH NCP-NET, INCONTACT, IRMA and AIDA - Advancing ICT for DRM in Africa.

Q28. If a proposal is not short listed for funding, is it possible to resubmit it to another Call to improve quality?

A. Each call has a specific focus. It is necessary for each proposal to clearly address the focus of the Call under which it has been submitted. It is also critical to ensure that the proposal is submitted to be evaluated under the correct Call.

Under FP7, there is no mechanism to resubmit proposals, unless the proposal is very well aligned with a subsequent open call. For this reason, it is important to ensure that proposals submitted are of high quality and have a clear focus to ensure the best chance of success.

11.4 Budget-related Questions

Q29. In terms of managing the budget, how is this executed?

A. Each partner has a predefined maximum budget based on expected effort in certain area, travel budget and overheads. The Technical Annex (TA) outlines the expected effort for each partner and the deliverables due.

At the start of the project the Commission Service provided an advance payment. The coordinator provides an advance payment from these funds to each partner based on the agreed budget in the TA and any conditions agreed in the Consortium Agreement. Each partner is responsible for funds received as an Advance Payment and must be in a position to return these funds if the work is not completed or considered to not meet the required standard for acceptance. As each reimbursement form is processed and deliverables provided, the Commission Services provides further advance payments. All funds are considered Advance Payments until the project is completed and all deliverables accepted.

Q30. What contribution is provided by Commission Services?

A. Eligible costs are considered to be the salary of staff working on the project (salary as included in organisational accounts including pension and social contributions) and travel costs incurred in relation to project activities where a travel budget has been agreed. An agreed level of overheads is also reimbursed.

Q31. Is there funding available for training?

A. Within a research project or support action there may be limited activities that include training. This needs to be clearly justified in the proposal and the funding proposed should be balanced with other project activities. For general staff training, there are more appropriate funding mechanisms available at a national, bi-lateral or multilateral level.

Q32. Can we hire a consultant to write our part of the proposal and charge these costs to the project budget?

A. It is better if the department involved writes the technical specifications internally as ultimately you need to be in a position to undertake the research proposed. All proposal writing is undertaken as a consortium activity whereby all partners contribute relevant sections and the coordinator ensures that the final proposal is a coherent document that is easy to read and assimilate.

No costs incurred in relation to the preparation of the proposal can be charged to the project budget. The only costs allowable are those undertaken after the contract is signed and the project activities have commenced.

Q33. How are preparatory activities funded?

It is necessary for you and your partners to cover all costs related to identifying partners, research areas, proposal writing and contract negotiation from internal or national funding. It is not possible to get reimbursement of any costs incurred prior to project commencement.

.

