

IST-Africa 2013 Final Programme

Nairobi, Kenya

29 - 31 May 2013

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Introduction

IST-Africa 2013 Conference & Exhibition takes place 29 - 31 May 2013 in Nairobi, Kenya, as part of **IST-Africa Week 2013**. An activity of **IST-Africa**, which is supported by the European Commission and African Union Commission and co-funded under the EU Framework Programme, **IST-Africa 2013** is the eighth in an Annual Conference Series bringing together senior representatives from leading public, private, education & research organisations, to discuss ICT policy, showcase research results and share knowledge.

European research activities are structured around consecutive multi-annual programmes, or so-called Framework Programmes. Horizon 2020 sets out the Priorities and thematic areas, including ICT, for 2014 - 2020. Horizon 2020 is fully open to international co-operation with the aim to jointly address major challenges where significant added value is expected to be gained from a world-wide R&D cooperation. In this context, the European Commission has co-funded **IST-Africa** since 2006, to promote African - European research cooperation and support Information Society and ICT aspects of the Africa-EU Strategic Partnership.

Hosted by the Government of Kenya through the Ministry of Education Science and Technology and Technically Co-Sponsored by IEEE, **IST-Africa 2013** focuses on the Role of ICT for Africa's Development and specifically on Applied ICT research in the areas of eHealth, Technology Enhanced Learning and ICT Skills, Digital Libraries, Open Source Software, ICT for eInclusion and eAccessibility, eInfrastructures, RFID and ICT for Networked Enterprise and eGovernment and eDemocracy. **IST-Africa 2013** will provide a collegiate setting for presentations and discussions of national & regional developments, issues of concern & good practice models, and networking with peers. **IST-Africa 2013** will also provide an opportunity to identify potential partners for future proposals under Horizon 2020, the follow on programme to FP7, which will commence from 2014.

IST-Africa directly supports Information Society, Innovation and ICT aspects of the Africa-EU Strategic Partnership, the African Ministerial Council on Science and Technology (AMCOST) and the Consolidated Plan of Action for the African Regional Action Plan on the Knowledge Economy (ARAPKE).

The goals of the **IST-Africa** Conference Series are Community Building to facilitate EU-African research cooperation and successful exploitation of research results, to stimulate take-up of RTD results by industry and the public sector, to promote knowledge sharing between commercial, government and research organisations, to exchange experiences about the current state of eAdoption at a sectoral, national or regional level, and to support International Cooperation and open up the European Research Area (ERA) to Africa.

Who will you meet?

IST-Africa 2013 Conference & Exhibition attracts policy makers, practitioners, and researchers from leading commercial, government and research organisations around the world. Unlike many research conferences, **IST-Africa** provides an opportunity to meet with senior managers, practitioners, project managers, software engineers and researchers from industry, government and research organisations. Delegates and speakers attend to share knowledge, experience and lessons learnt, and network with their peers from around the world.

IST-Africa 2013 Conference & Exhibition also provides the unique opportunity to identify partners and opportunities to co-operate in international ICT research projects co-funded by the European Commission under Horizon 2020. Much of the European research results presented in this year's conference were co-funded under the FP7 ICT Programme (2007 - 2013).

The Venue

IST-Africa 2013 Conference & Exhibition takes place in the Safari Park Hotel, Nairobi. The hotel is located on Nairobi Thika Road, 25 mins by car from the city centre and 40 mins by car from the airport.

The Programme

The 3-day programme features an invigorating mix of business and government case studies, technical and policy papers and interactive workshops. As well as opening and closing plenary sessions, delegates may participate in 44 thematically focused parallel sessions featuring different aspects of International Cooperation, eHealth, eInfrastructures, Technology Enhanced Learning and ICT Skills, Living Labs, Digital Libraries, eInclusion, Mobile Applications, ICT for Environmental Sustainability, eAgriculture and eGovernment and eDemocracy. Session Chairs will ensure active discussion and facilitate delegate participation.

In the context of focusing on the Role of ICT for Africa's Development, the Opening Plenary on Wednesday 29 May features a high level dialogue on Implementation of the 8th Africa-EU Strategic Partnership on Science, Information Society and Space. The Closing Plenary on Friday 31 May focuses on Initiatives Supporting Development of Regional S&T.

The programme is subject to change and the **IST-Africa 2013** Organising Committee reserves the right to alter the contents, venue and/or speakers. This Programme is accurate as at 28 May 2013.

Networking

Networking is a key feature of the **IST-Africa** Conference Series. Paper and workshop sessions are designed to maximise knowledge sharing by providing time for interactive discussions during the conference programme itself. Coffee breaks will take place in the Exhibition area to maximise exposure for technology demonstrations and posters and to facilitate informal one-on-one and small group discussions following paper or workshop sessions.

The Delegate Showcase on the Conference Portal allows registered delegates, speakers and exhibitors to publish their own short profile and research interests to facilitate networking before, during and after the conference. Leverage this functionality to contact potential partners in advance and arrange to meet during the conference.

Living Labs Workshop, 28 May

IST-Africa is organising the third Annual Living Lab Thematic Working Group Meeting on Tuesday 28 May 2013.

This workshop will facilitate knowledge sharing and collaboration between Innovation Stakeholders and operators of Living Labs and Innovation Spaces, building on progress achieved at previous Working Group Meetings in Dar es Salaam (2012) and Gaborone (2011). This participatory working group meeting will continue building a network of experts, public, private, education and research and societal stakeholders and entrepreneurs committed to Collaborative Innovation as a mechanism to support sustainable socio-economic development in Africa.

IST-Africa 2013 delegates are invited to pre-register for this participatory working group meeting as part of online registration.

Conference Proceedings

The **IST-Africa 2013** conference proceedings will be published on CD-ROM and on the Conference Portal. Each delegate will receive a free copy of the conference proceedings at Registration.

Following the conference, registered delegates will have access to all PowerPoint presentations, which will be published on the Conference Portal. The **IST-Africa 2013** Conference Proceedings will also be submitted for publication in IEEE Xplore.

Security, Health and Safety

Please wear your name badge for all **IST-Africa** activities, as it is your identification and allows you access to the facilities on offer. While the conference area is on a secure site and not open to the general public, it is still necessary to take care of bags, personal computers and other personal belongings.

The organisers cannot accept any responsibility for losses incurred or for personal health and safety. Delegates should ensure that they have personal health insurance and take due care when exploring

the city of Nairobi. Any special needs or requirements should be notified to the Conference Secretariat as far in advance of the event as possible.

Hotel Accommodation

Conference rates have been negotiated for delegates and accompanying persons at Safari Park Hotel (conference venue). The Safari Park is located 25 minutes drive from the city centre.

Conference hotel accommodation should be booked online on the **IST-Africa** Conference portal as part of conference registration.

Delegates are strongly recommended to book their accommodation early as it will be allocated on a first-come, first-served basis. Hotel accommodation can only be confirmed upon receipt of the associated payment. For further information, please visit:

www.IST-Africa.org/Conference2013

How to get there

Nairobi is located eight to nine hours by air from Europe with direct flights from a number of European Capitals, and just over four hours by air from Johannesburg.

Delegates are advised to book flights and accommodation as early as possible.

Sponsors

IST-Africa 2013 offers a variety of Sponsorship Opportunities to enhance your organisation's image & standing with the international IST research community. Prominent notice will be given to sponsors on the conference portal, in press releases, together with other benefits and promotional opportunities.

IST-Africa 2013 is hosted by the Government of Kenya through the Ministry of Education, Science and Technology. KENET is providing the Internet connectivity during the event. SPIDER is contributing towards a dinner for delegates.

For further information, please contact the Conference Secretariat at secretariat@IST-Africa.org

Plenary Session Speakers



Prof Jacob Kaimenyi
Cabinet Secretary
MoEST, Kenya



Prof Crispus Kiamba
Permanent Secretary
MoEST, Kenya



Prof Shaukat Abdulrazak
CEO, National Council for Science
and Technology, Kenya



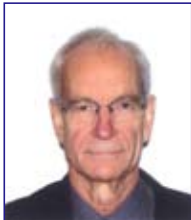
Mr. Francis Wangusi
Director General
Communications Commission of Kenya



Dr Katherine Getao
ICT Secretary, eGovernment
Directorate, Kenya



Mr Moctar Yedaly
Information Society Division
African Union Commission



Mr Morten Møller
DG CONNECT
European Commission



Prof Meoli Kashorda
Executive Director
KENET, Kenya



Prof Koi Muchira Tirima
Inoorero University / LIWA
Kenya



Mr Jerome Morrissey
CEO, GESCI, Kenya



Mr Stéphane Hogan
Science Counsellor
EU Delegation to AU

Keynote Speakers as at 28 May 2013 include:

- **Prof Jacob Kaimenyi**, Cabinet Secretary, Ministry of Education, Science and Technology, Kenya
- **Prof Crispus Kiamba**, Permanent Secretary, Ministry of Education, Science and Technology, Kenya
- **Prof Shaukat Abdulrazak**, CEO, National Council for Science and Technology, Kenya
- **Dr Katherine Getao**, ICT Secretary, eGovernment Directorate, Kenya
- **Mr Christopher Kemei**, Assistant Director, Licensing-Compliance and Standards, Communications Commission of Kenya
- **Mr Daniel Obam**, Ministry of ICT, Kenya
- **Mr Moctar Yedaly**, Head of Information Society Division, African Union Commission
- **Mr Morten Møller**, Programme Coordination, DG CONNECT, European Commission, Belgium
- **Prof Meoli Kashorda**, Executive Director, KENET, Kenya
- **Prof Koi Muchira Tirima**, Deputy Vice Chancellor-ARS, Inoorero University / LIWA, Kenya
- **Mr Jerome Morrissey**, CEO, GESCI, Kenya
- **Mr Stéphane Hogan**, Science Counsellor at the EU Delegation to the African Union, Addis Ababa
- **Mr Moses Bayingana**, ICT Expert, Information Society Division, African Union Commission
- **Mr Vincent Kaabunga**, IEEE Kenya Section, Kenya

International Programme Committee

A distinguished Programme Committee has been formed to review and provide feedback on papers and presentations, and chair sessions.

The **IST-Africa 2013** International Programme Committee includes

- **Paul Cunningham** (Conference Chair), IIMC International Information Management Corporation Ltd, Ireland
- **Professor Jørn Braa**, Department of Informatics, Oslo University, Norway
- **Dr Bruce Becker**, Meraka Institute, CSIR / South Africa National Grid, South Africa
- **Laurens Cloete**, Meraka Institute, CSIR, South Africa
- **Miriam Cunningham**, IIMC International Information Management Corporation Ltd, Ireland
- **Kim Davis**, Research Council of Norway
- **Prof. Love Ekenberg**, University of Stockholm, Sweden
- **Razvi Doomun**, University of Mauritius, Mauritius
- **Prof. Marlien Herselman**, Living Labs of Southern Africa Network, South Africa
- **Dr. Mike Joy**, University of Warwick, United Kingdom
- **Dr. Bernhard R. Katzy**, CeTIM, The Netherlands
- **Vincent Kaabunga**, IEEE Kenya Section, Kenya
- **Vasilis Koulolias**, Gov2U, Belgium
- **Kristiina Lahde**, TANZICT Programme, Tanzania
- **Ilari Lindy**, World Bank Institute, United States
- **Gareth MacNaughton**, CISCO, United Kingdom
- **Dr Ayub Many**, Ministry of Health, Kenya
- **Prof. Maurice Mars**, University of KwaZulu-Natal, South Africa
- **Dr. Raphael Mmasi**, Tanzania Commission for Science and Technology (COSTECH), Tanzania

- **Loi Mirembe Namugenyi**, Uganda National Council for Science & Technology, Uganda
- **Dr Joseph Sevilla**, @iLabAfrica, Strathmore University, Kenya
- **Matti Sinko**, Aalto University, Finland
- **Bernard Stevenot**, SpaceBel, Belgium
- **Richard Stevens**, Stevens Consultants, Italy
- **Daan du Toit**, Senior Science and Technology Representative in Europe, Department of Science and Technology, South Africa
- **Darelle Van Greunen**, Nelson Mandela Metropolitan University/Computer Society of South Africa, South Africa

Organising Committee

- **Miriam Cunningham**, IIMC, Ireland
- **Paul Cunningham**, IIMC, Ireland
- **Prof Crispus Kiamba**, Permanent Secretary, Ministry of Education, Science and Technology, Kenya
- **Dr Eric Mwangi**, Ministry of Education, Science and Technology, Kenya



Conference Secretariat

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Wednesday, May 29, 2013

08:00

Registration

09:00 Opening Plenary 1a: [Opening Plenary](#)Moderator: [Prof. Cripus Kiamba, Ministry of Education, Science and Technology, Kenya](#)**Brief Remarks**

Prof. Harry Kaane, Higher Education, Science and Technology Secretary, Kenya

Welcome Address

Prof. Crispus Kiamba, Permanent Secretary, Ministry of Education, Science and Technology, Kenya

European Commission Address

Morten Møller, Programme Coordination, DG CONNECT, European Commission, Belgium

African Union Commission Address

Moctar Yedaly, Head of Information Society Division, African Union Commission

Official Opening Speech

Prof. Jacob Kaimenyi, Cabinet Secretary, Ministry of Education, Science and Technology, Kenya

10:30

Coffee Break: Networking & Exhibition

11:00 Plenary Session 2a: [High-level Roundtable on Implementation of the Information Society in Africa](#)Moderator: [Paul Cunningham, IIMC, Ireland](#)

Panelists include:

Prof. Crispus Kiamba, Permanent Secretary, Ministry of Education, Science and Technology, Kenya**Dr Katherine Getao**, ICT Secretary, eGovernment Directorate, Kenya**Mr. Christopher Kemei**, Assistant Director, Licensing - Compliance and Standards, Communications Commission of Kenya**Mr Daniel Obam**, Ministry of ICT, Kenya**Mr Moctar Yedaly**, Head of Information Society Division, African Union Commission**Prof. Meoli Kashorda**, Executive Director, KENET, Kenya**Prof. Koi Muchira Tirima**, Deputy Vice Chancellor-ARS, Inoorero University / LIWA, Kenya**Mr Jerome Morrissey**, CEO, GESCI, Kenya

12:30

Lunch: Networking & Exhibition

14:00 Session 3a: [IST-Africa – Research Capacities and Priorities I](#)Chair: [Paul Cunningham, IIMC, Ireland](#)**IST-Africa Initiative**[Paul Cunningham, IIMC, Ireland](#)**ICT Initiatives and Research Capacity in Kenya**[Jacob Njagi, Ministry of Education, Science and Technology, Kenya](#)**ICT Initiatives and Research Capacity in Uganda**[Loi Namugenyi, Uganda National Council for Science and Technology](#)**ICT Initiatives and Research Capacity in Tanzania**[Faith Shimba COSTECH, Tanzania](#)**ICT Initiatives and Research Capacity in Burundi**[Augustin Nsabyumva, Ministry of Higher Education and Scientific Research, Burundi](#)**ICT Initiatives and Research Capacity in Ethiopia**[Abdissa Yilma Tiky, Ministry of Science and Technology, Ethiopia](#)14:00 Session 3a: [mLearning](#)Chair: [Njei Check, ANTIC, Cameroon](#)**Can Micro-Volunteering Help in Africa?**[Laurie Butgereit, Meraka Institute, South Africa](#)**3-Category Pedagogical Frame Work For context based Ambient Learning**[Simon Mwendia, University of Nairobi, Kenya](#)**Social Studies Teachers' Intention to Use Mobile Phone as a Support and Tutorial Tool for Teaching**[Gloria Adedoja, University of Ibadan, Nigeria](#)**Use of Swarm Intelligence to Improve Interactions in mLearning Collaborative Concept Mapping**[Stephen Njenga & Elijah Omwenga, University of Nairobi, Kenya](#)14:00 Session 3c: [eGovernment](#)Chair: [Katherine Getao, ICT Secretary, eGovernment Directorate, Kenya](#)**An Information Security Model for E-government Services Adoption in Uganda**[Gilbert Maiga, Makerere University, Uganda](#)**Bottom-Up eGovernment Environmental Factors (BUeEF): Facilitated Building and Implementation of eGovernment Systems in the SADC Region**[Jameson Mbale, University of Namibia, Namibia](#)**Factors Affecting the Use of Data Mining in Mozambique**[Constantino Sotomane, Ministry of Science and Technology, Mozambique](#)**eSecurity Solution for African ICT Developments**[Innocentia Dlamini, CSIR, South Africa](#)14:00 Session 3d: [ICT for Environmental Sustainability](#)Chair: [Richard Liahona, Ministry of Education, Science and Technology, Kenya](#)**The Potentials of ICTs in Enhancing Environmental Sustainability in Tanzania**[Resty Mushi, University of KwaZulu-Natal, South Africa](#)**ICT for Flood Risk Management Strategies A GIS-based MCDM(A) approach**[Avelino Mondlane, Stockholm University, Sweden](#)**SenseWeather: Sensor-Based Weather Monitoring System for Kenya**[Muthoni Masinde, University of Nairobi, Kenya](#)**E-infrastructure for Climate Adaptation Policies: the UNDP/AAP Activities**[Stefano Cozzini, CNR/IOM Democritos, Italy](#)14:00 Session 3e: [Cloud Computing](#)Chair: [Ashwin Seegolam, National Computer Board, Mauritius](#)**Cloud Computing for Development – Improving the Health Information System in Ghana**[Jørn Braa, University of Oslo, Norway](#)**Adoption of Cloud Computing for Digital Libraries in Public Universities: Challenges and Opportunities**[James Kimutai, Moi University, Kenya](#)**The Viability of Cloud Computing Adoption in SMME's in Namibia**[Ricardo Tjikongo, University of the Western Cape, South Africa](#)**Cloud Computing: an Emerging Trend for Small and Medium Enterprises**[Julia Korongo, Moi University, Kenya](#)**Adoption and Use of Cloud Computing in Small and Medium Enterprises in Kenya.**[Tabitha Kihara, Moi University, Kenya](#)14:00 Panel Session 3f: [The Role of Linkages in Leveraging the Information Society for Africa](#)Chair: [Koi Muchira Tirima, Inoorero University, Kenya](#)

15:30

Coffee Break: Networking & Exhibition

16:00 Session 4a: [IST-Africa – Research Capacities and Priorities II](#)Chair: [Paul Cunningham, IIMC, Ireland](#)**ICT Initiatives and Research Capacity in Tunisia**[Noureddine Hamdi, Ministry of Higher Education and Scientific Research, Tunisia](#)**ICT Initiatives and Research Capacity in Egypt**[Inas Fateem, Ministry of Communications & IT, Egypt](#)**ICT Initiatives and Research Capacity in Senegal**[Toumane Doumbouya, Ministère de l'Enseignement Supérieur et de la Recherche, Senegal](#)**ICT Initiatives and Research Capacity in Ghana**

Adelaide Asante, Ministry of Environment, Science and Technology, Ghana
ICT Initiatives and Research Capacity in Cameroon
Njei Check, National Agency for Information and Communication Technologies (ANTIC), Cameroon
ICT Initiatives and Research Capacity in Mauritius
Ashwin Seegolam National Computer Board, Mauritius

16:00 Session 4b: [Technology-Enhanced Learning](#)

Chair: [Ebony Msikawanthu, NCST, Malawi](#)

A Framework for Investigating Universities Readiness for On-line Learning: with Particular Reference to Sudanese Universities

Atika ElMubarak, Sudan University of Science and Technology, Sudan

Presenting a Framework for Using Full Decentralized Virtualization on Desktop Computers in an Educational Laboratory Environment

Frederik Hattingh, Tshwane University of Technology, South Africa

A Look into Classification: Towards Building an Indigenous Knowledge Platform for Educational Use

Mathe Maema, Rhodes University, South Africa

E-Learning Eco-system for Mobility and Effective Learning: A Case of JKUAT IT Students

John Kihoro, Jomo Kenyatta University of Agriculture & Technology, Kenya

Correlation Between Rapid Learnability and User Preference in IVR Systems for Developing Regions

Tembaletu Ndwe, Rhodes University, South Africa

16:00 Session 4c: [eGovernment](#)

Chair: [Zauria Saifodine, National Institute for ICT, Mozambique](#)

Towards an Electoral Process Reengineering Methodology

John Paul Kasse, MUBS, Uganda

Citizen-Centric Evaluation Framework for e-Government Systems in Kenya. The Case of Public Service Commission of Kenya Online Recruitment & Selection System.

Joseph Ogutu, University of Nairobi, Kenya

Botswana Speaks

Vasilis Koulolias, eGovLab

The Relevance of Social Media as it Applies in South Africa to Crime Prediction

Coral Featherstone, Meraka Institute, South Africa

16:00 Session 4d: [Environmental Sustainability - Applications & Case Studies](#)

Chair: [Gatama Gichini, Ministry of Education Science and Technology, Kenya](#)

EntVenture - From Binary Trees to Kenyan Forests: an Android Game Designed by Students

Balozi Kirongo, University of Eldoret, Kenya

Towards Interoperable and Sustainable Smart Home

Andreas Pitsillides, University of Cyprus, Cyprus

ICT in Kenya and the Fast Growing Volumes of E-waste: Towards a Policy Framework for Sustainable ICT for Development.

Jecton Tocho, University of Nairobi, Kenya

The Effects of Electronic Waste on Sustainable Environment in Kenya: A Case Study of Moi University

Daniel Samoei, Moi University, Kenya

Innovative ICT Public Awareness Campaign Strategy to Communicate Environmental Sustainability in Africa

Wilson Okaka, Kyambogo University, Uganda

16:00 Workshop 4e: [African IPv6 Progress Monitoring, Cloud Computing & IXP Deployment](#)

Chair: [Latif Ladid, IPv6 Forum - SnT University of Luxembourg, Luxembourg](#)

IPv6 based Cloud Computing

Latif Ladid, IPv6 Forum - SnT University of Luxembourg, Luxembourg

Affordable Access to the Future Internet, IPv6 the Compulsory Transition for Africa

Jacques Babot, European Commission, Belgium

Deployment of IPv6 in Africa

Adiel Akplogan, AfriNIC, Mauritius

Kenya's IPv6 Case Study

Alex Gakuru, IPv6 Forum Kenya, Kenya

The African IXP Program

Michuki Mwangi, ISOC Kenya, Kenya

17:30

End of Parallel Sessions



Thursday,
May 30, 2013

DAY

09:00 Session 5a: [IST-Africa – Research Capacities and Priorities III](#)

Chair: [Paul Cunningham, IIMC Ltd, Ireland](#)

ICT Initiatives and Research Capacity in South Africa

Peacemaker Dlamini, Department of Science and Technology, South Africa

ICT Initiatives and Research Capacity in Botswana

Phodiso Phole, Ministry of Transport and Communications, Botswana

ICT Initiatives and Research Capacity in Swaziland

Moses Zungu, Ministry of ICT, Swaziland

ICT Initiatives and Research Capacity in Malawi

Ebony Msikawanthu, National Commission for Science & Technology, Malawi

ICT Initiatives and Research Capacity in Lesotho

Lieketseng Tjokotsi, Department of Science and Technology, Lesotho

ICT Initiatives and Research Capacity in Mozambique

Zauria Saifodine, National Institute for ICT, Mozambique

09:00 Session 5b: [Technology-enhanced Learning - Case Studies](#)

Chair: [Jacob Njagi, Ministry of Education, Science & Technology, Kenya](#)

Teaching and Learning Mathematics and Sciences Through Creative Computing Cycles

Vincent Ochieng, Teachers Service Commission, Kenya

Smart Running in Kenya Kenyan Runners' Improvement in Training, Informal Learning and Economic Opportunities Using Smartphones

Per-Olof Hansson, Linköping University, Sweden

Evidence Based Medicine in HIV/AIDS and Reproductive Health Research: Piloting Two Distance Learning Courses in Low-Resource Settings

Maria Zolfo, Institute of Tropical Medicine, Belgium

The Reality and Rhetoric of eLearning In Higher Education in Kenya

Harriet Kidombo, University of Nairobi, Kenya

Experiences of Designing an eLearning Training Program in a Collaborative Way

Paula Linna, Aalto University, Finland

09:00 Session 5c: [eHealth - Supporting Telemedicine](#)

Chair: [Loi Namugenyi, Uganda National Council for Science & Technology](#)

Designing a Cloud-Based Multinational Telemedicine Ecosystem for Developing Countries

Juha Puustjärvi, University of Helsinki, Finland

Managing Health Systems in a Globalized World: Telemedicine Service Improves Access to Pediatric Cardiology in Cape Verde

Luis Velez Lapao, Instituto de Medicina e Higiene Tropical, Portugal

An e-Health Tele-Media Application for Patient Management

Collins Mwesigwa, Icon Frontiers Uganda Limited, Uganda

Connecting Remote Health Centres in Africa: Assessment of the SAHEL Programme & Perspectives For The Future

Ghislain De La Sayette, Astrium, France

09:00 Session 5d: [ICT Initiatives in Kenya](#)

Chair: [Daniel Obam, Ministry of ICT, Kenya](#)

Providing ICT Infrastructure for the Public Service

Thomas Odhiambo, eGovernment Directorate, Kenya

Konza Techno City

Presenter to be confirmed

Challenges of Implementing eVoting in Africa

Dismas Ong'ondi, Independent Electoral and Boundaries Commission, Kenya

Status and Progress of eLearning and eWaste in the Environment Sector

Vicky Onderi, National Environmental Management Authority, Kenya

eAgriculture Extension in Kenya

Richard Kedemi, Kenya Agricultural Research Institute, Kenya

09:00 Session 5e: [Mobile Applications](#)

Chair: [Bruce Becker, Meraka Institute, CSIR, South Africa](#)

Study of SMS Air Interface Delay in Strong and Weak Signal Environments

Martin Saint, Carnegie Mellon University in Rwanda, Rwanda

Modulo: A Modular Sensor Network Node Optimised for Research and Product Development

Carel Kruger, CSIR, South Africa

Improving Path Loss Prediction in WCDMA Network Using Principal Component Analysis

Ashagrie Getnet, Ethio Telecom, Ethiopia

09:00 Workshop 5f: **ICT for Sustainable Agriculture in Africa**

Chair: **Walter Mayer, Progis Software GmbH, Austria**

ICT for Sustainable Agriculture in Africa

Walter Mayer, Progis Software GmbH, Austria

Vexcel Imaging / Microsoft, Image Data Collection and Mapping - Global Ortho: Rapid, High Efficiency Ortho Update Technologies

Caroline Kinuthia, Microsoft, Kenya

Opening Access to Research Data for Agricultural Development

Ajit Maru, Global Forum on Agricultural Research, Italy

Weather Index Insurance and Other Climate Related Services through Multi-purpose Monitoring Networks

Bernhard Pacher, Adcon Telemetry, Austria

10:30 **Coffee Break: Networking & Exhibition**

11:00 Workshop 6a: **Supporting Skills Development in Africa**

Chair: **Helena Tapper, GESCI, Kenya**

African Leadership in ICT (ALICT) Framework

Helena Tapper, GESCI, Kenya

African Leadership in ICT: Implementation Experience

Senthil Kumar, GESCI, Kenya

African Knowledge Exchange

Mathias Antonsson, GESCI, Kenya

11:00 Session 6b: **Technology-Enhanced Learning in HEIs**

Chair: **Koi Muchira Tirima, Inoorero University, Kenya**

Determinants of Technology Innovation Implementation Effectiveness in Higher Education Institutions

John Kandiri, Kenyatta University, Kenya

The lasting Effects of the Information Literacy Training Among Undergraduate Students: a Case Study of MUHAS

Edda Lwoga, Muhimbili University of Health & Allied Sciences, Tanzania

A Study of the Sudanese Students' Use of Collaborative Tools within Moodle Learning Management System

Izzeldin Osman, Sudan university of Science and Technology, Sudan

Evaluating the Challenges of Technology Enhanced Learning in Universities in Tanzania

Neema Mduma, Tumaini University, Tanzania

Perspectives on Underutilisation of ICT in Education in Tanzania, Uganda and Kenya

Josephat O. Oroma, Tumaini University - At Iringa, Tanzania

11:00 Session 6c: **eHealth - Health Information Management Systems**

Chair: **Ayub Many, Ministry of Public Health and Sanitation, Kenya**

Open Data Kit, A Solution Implementing a Mobile Health Information System To Enhance Data Management In Public Health

Paul Macharia, National AIDS/STIs Control Programme, Kenya

Strengthening the Health Information System in Mozambique through Malaria Incidence Prediction

Orlando Zacarias, Stockholm University, Sweden

Adoption of Health Information Systems by Health Workers in Developing Countries – Contextualizing UTAUT

Josephine Karuri, University of Nairobi, Kenya

Adapting Mobile Medical Information Search to Low-Resourced Areas

Allan Hanbury, Vienna University of Technology, Austria

11:00 Workshop 6d: **AfricaConnect Extension**

Chair: **Lishan Adam, ICT in Development, Ethiopia**

Examples of Collaboration between the African and European NRENs – The Case of RENATER and SnRER

Sabine Jaume-Rajaonia, RENATER, France

AfricaConnect Extension - Preliminary Survey Results & Scenarios

Lishan Adam, ICT in Development, Ethiopia

11:00 Session 6e: **Wireless Networks**

Chair: **Vincent Kaabunga, IEEE Kenya Section, Kenya**

The Challenges of Implementing EDUROAM in Kenyan University Campus Wireless LANs

Maureen Njue, Kenya Education Network, Kenya

Wireless Sensor Networks Testbed: ASNTbed

Angeline Gcina Dlodla, CSIR, South Africa

Building a Sustainable Research & Hcd Eco-system: Case Study of Two Wireless Communication Eco Systems

Fisseha Mekuria, CSIR Meraka ICT Institute, South Africa

Content Hosting and Distribution Framework for Wireless Mesh Networks

Thomas Gone, Cape Peninsula University of Technology, Kenya

11:00 Workshop 6f: **ICT for Sustainable Agriculture in Africa**

Chair: **Walter Mayer, Progis Software GmbH, Austria**

The Importance of IT in Agriculture and Necessity of Agro-ICT Infrastructures

Lucy Muchoki, Pan African Agribusiness and Agroindustry Consortium, Kenya

Worldclass Agribusiness Practice: What is the Role of Executive Management Education?

David Mugun, Strathmore University, Kenya

Automatic Nationwide Real time Weatherstation Networks to Forecast Diseases, Pest Developments, Irrigation Management to run Risk Management Systems and Reduce Damages for Smallholder Agriculture in Africa

Gottfried Pessl, Pessl Instruments GmbH

12:30 **Lunch: Networking & Exhibition**

14:00 Panel 7a: **Senior University Leadership Roundtable on ICT Education, Research and Innovation**

Moderators: **Prof. Harry Kaane, Ministry of Education, Science and Technology & Paul Cunningham, IIMC, Ireland**

Panelists include:

Prof. Ogembo Kachienga', DVC for Research, Technical University of Kenya

Prof. Izael Da'Silva, DVC, Academic Affairs, Strathmore University

Prof. Ddembe Williams, Dean, Faculty of ICT, KCA University

Prof. William Okello-Odongo, Director, School of Computing and Informatics, University of Nairobi

Dr. Waweru Mwangi, Director, Institute for Computer Science and IT, Jomo Kenyatta University of Agriculture and Technology

Dr. Edwin Ataro, Head of Electrical and Communication Engineering Department, Moi University

Dr. Kamau Gachigi, Director, University of Nairobi Science Park

Dr. Salome Gichura, Director Higher Education, Ministry of Education, Science and Technology, Kenya

14:00 Session 7b: **Living Labs**

Chair: **Marlien Herselman, Meraka Institute, CSIR, South Africa**

Embedding Business Model for Sustainable Collaborative Innovation in African Living Labs

Vincent Grèzes, University of Applied Sciences Western Switzerland

Using Technology in Livings Labs to Transform Health, Wellness and Disease Management In South Africa

Alida Veldsman, Nelson Mandela Metropolitan University, South Africa

Virtual Buying Cooperative: a Procurement Model for Improving the Sustainability of Very Small Retailers in Emerging Economies

Mpho Raborife, SAP Research Pretoria, South Africa

Energy Management Using Living Lab In the Developing Countries

Jean Marie Vianney Bikorimana, National University of Rwanda, Rwanda

14:00 Session 7c: **eHealth - Case Studies**

Chair: **Noureddine Hamdi, Ministere de l'Enseignement Supérieur et de la Recherche Scientifique, Tunisia**

AFRICA BUILD Portal: Developing a Social Network of African Health Researchers and Educators

Victor Maojo, Universidad Politecnica de Madrid, Spain

MEDISHARE: a project based on ICT Tools for Improving the Sustainable Development of Capacity in Medical Research

Judith Torimiro, Initiative to Strengthen Health Research Capacity in Africa, Cameroon

An Open eHealth Platform for Real-Time Professional-to-Professional Collaboration

Jaume Benseny, i2CAT, Spain

AIMEP for Malaria Mapping and Infectious Disease Eradication
Kseniya Khovanova-Rubicondo, Ashburn Institute, Ukraine

Value Proposition for mHealth Monitoring Solution of Diabetes
Suzana Brown, Carnegie Mellon University in Rwanda, Rwanda

14:00 Panel Session 7d: **iMentors**

Chair: **Vasilis Koulolias, eGovLab, Sweden**

Panelists include:

Björn Pehrson, KTH, Sweden

Meoli Kashorda, KENET, Kenya

Aida Opoku-Mensah, United Nations Economic Commission for Africa

Demonstration of iMentor Platform

Louis Papaemmanuel, eGOVLAB, Belgium

14:00 Session 7e: **Mobile Applications - Leveraging SMS**

Chair: **Lieketseng Tjokotsi, Department of Science and Technology, Lesotho**

SMS-Based Systems: Towards Implementation of Mobile Discussion Groups

George Matto, Moshi University College of Cooperative and Business Studies, Tanzania

SMS Advertising in Tanzania: Factors Affecting Consumer Attitudes

Deo Sabokwigina, Iringa University College, Tanzania

Mobile Messaging for Service Integration for Marginalised Communities in Lesotho

Chabalala Chabalala, The National University of Lesotho, Lesotho

14:00 Session 7f: **eAgriculture**

Chair: **Moses Zungu, Ministry of ICT, Swaziland**

Mobile Technology in Kenyan Agriculture: Status & Opportunities
Amos Gichamba, Africa Nazarene University, Kenya

Startup Business Models and Challenges of East African mAgriculture Innovations

Angela Crandall, iHub Research, Kenya

Mobile Applications for Value Chain Marketing in Agriculture

Simon Gitonga, Egerton University, Kenya

The Diffusion of Mobile Agricultural Information Services in Ghana: a Case Study

Jenny de Boer, TNO, Netherlands

Bridging the IT Divide - Case Study on the Botswana Livestock Industry

Dominic Ferguson, Consult IT (Pty) Ltd, Botswana

15:30 **Coffee Break: Networking & Exhibition**

16:00 Panel 8a: **Roundtable on Supporting Entrepreneurship in East Africa**

Chair: **Paul Cunningham, IIMC Ltd, Ireland**

Panelists include:

Mary Kiguru, Kenya Methodist University, Kenya

Catherinerose Barretto, KINU, Tanzania

Rachel Gichinga, iHub, Kenya

Martin Tubula, Inoorero University, Kenya

Sam Gichuru, Nailab, Kenya

Simon Stumpf, Ashoka East Africa, Kenya

Emmanuel Kweyu, @iLabAfrica, Strathmore University, Kenya

16:00 Session 8b: **Living Labs to Support Skills Development**

Chair: **Darelle Van Greunen, NMMU, South Africa**

Utilising Living Lab Principles to Model and Create a Collaborative Education Environment – The CAT Schools Programme
Ulza Wassermann, Tshwane University of Technology, South Africa

Developing Educational Assessment Tools for ICT Education – a South African Living Lab Approach

Paul Johannes Retief, Tshwane University of Technology, South Africa

E-Skills Training on Communal, Fixed Infrastructure as an Activator of Personal Use of Mobile Internet

Sibukele Gumbo, University of Fort Hare, South Africa

Maputo Living Lab Summer School of ICTs: an Experience Report

Pietro Benedetto Molini, Fondazione Bruno Kessler, Italy

Improving Student Achievement in Science and Maths -- A Living Lab Approach

Lebohang Kompi, Lesotho National Commission for UNESCO

16:00 Session 8c: **eHealth**

Chair: **Ayub Many, Ministry of Public Health and Sanitation, Kenya**

Free and Open Source Software for Development of Sustainable M-Health Systems in Kenya

Stephen Ondimu, JKUAT, Kenya

Adaptive GUIs Tailored to Different User Groups for Public Health Service Delivery via Fuzzy Logic Membership Functions
Melanie Platz, University of Koblenz Landau, Germany

Description of Availability of Medical Care with Fuzzy Logic for Logistic Optimization of Medical Resources

Matthias Groessler, University of Koblenz-Landau, Germany

Digital Analysis of Malaria Infected Blood Smears via Mobile Devices
Dirk Elias, Fraunhofer Portugal Research Center for Assistive Information and Communication Solutions, Portugal

An Enhanced Entity-Attribute-Value Data Model for Representing High Dimensional and Sparse Healthcare Data

Augustus Kamau, JKUAT, Kenya

16:00 Session 8d: **Exploiting the Potential of e-Infrastructures to Boost RTDI in Africa**

Chair: **Karin Valin, Sigma Orionis, France**

eI4Africa: Overview

Karine Valin, Sigma Orionis, France

The eI4Africa Science Gateway, its Applications and How people/organisations can Contribute to it

Roberto Barbera, University of Catania, Italy

The eI4Africa Demonstrator Projects

Bjorn Pehrson, KTH, Sweden

The Knowledge Base of Open Access Document Repositories (OADRs) and How African Libraries can Contribute to it

Roberto Barbera, University of Catania, INFN, Italy

Links between eI4Africa, AfricaConnect & CHAIN-REDS in the Region

Margaret Ngwira, UbuntuNet Alliance, Malawi

Prospects for Extending Distributed Computing Infrastructure in Africa

Bruce Becker, Meraka Institute, CSIR, South Africa

Discussion on Futures Thinking Research Priorities in the ICT Infrastructure Focus Area

Barend Taute, CSIR, South Africa

16:00 Session 8e: **Mobile Applications**

Chair: **Inas Fateem, Ministry of Communications & IT, Egypt**

The Role of Mobile Applications in Social and Economic Development in East Africa

Salesio Kiura, Kenya Methodist University, Kenya

Towards a Demand-side Smart Domestic Electrical Energy Management System

Nomusa Dlodlo, CSIR, South Africa

Leveraging Participation in Entrepreneurship through Mobile Technology

Leah Mutanu, United States International University, Kenya

16:00 Session 8f: **eAgriculture II**

Chair: **Eric Mwangi, Ministry of Education, Science & Technology, Kenya**

The Role of ICT in Exchange of Agricultural Information and Knowledge in Kenya: the Case of Kenya Agricultural Research Institute (KARI)

Boniface Akuku, Kenya Agricultural Research Institute, Kenya

ICT Adoption Model for Rural Agricultural Communities in Kenya

Dan Orwa, University of Nairobi, Kenya

A System Dynamics Analysis of Seed Banking Effectiveness for the Prosperity of Smallholder Farmers

Benedict Oyo, Gulu University, Uganda

ICT Solution Architecture for Agriculture

Fredrick Awuor, Kisii University College, Kenya

Poultry Contractual Farming Decision Support System

Thambo Nyati, National University of Science and Technology, Zimbabwe

17:30

End of Parallel Sessions



Friday,
May 31, 2013

09:00 Workshop 9a: **Mutually Beneficial Africa-EU ICT Research**

Chair: **Karin Valin, Sigma Orionis, France**

Strengthening ICT Research and Policy links under the 8th Africa-EU Strategic Partnership

Karine Valin, Sigma Orionis, France

ICT Research and Innovation for Socio-economic Impact - Focus Areas and Futures Thinking

Barend Taute, CSIR, South Africa

Lessons from Innovation Success Stories

Eunice Kariuki, Kenya ICT Board, Kenya

Innovation Policy Considerations in Africa

Inas Fateem, Ministry of Communications and IT, Egypt

Practical Research Collaboration - Demonstrator Projects

Bjorn Pehrson, KTH, Sweden

09:00 Session 9b: **Transformation of Research Results into Local Innovation**

Chair: **Marlien Herselman, Meraka Institute, CSIR, South Africa**

Authentic Assessment of Programming Skills in Kenyan Universities

Joseph Sevilla, Strathmore University, Kenya

Defining the African Tech-Innovation System & Innovation Index

Chrisostom Mwairumba, iHub Research, Kenya

Assessment of Business Process Outsourcing (BPO) in Nairobi County, Kenya: A Case of Selected Organizations

Peter Wanderi, Kenyatta University, Kenya

A Three Level Research Gateway for African Renewable Energy Collaboration

Kim Jansson, VTT, Finland

Utilization of Knowledge Management Tools in Software Development

Samuel Kamunya, JKUAT, Kenya

09:00 Session 9c: **Leveraging Open Source Software**

Chair: **Moses Rugutt, Ministry of Education, Science and Technology, Kenya**

Managing Open Source, Open Access Digital Libraries: Case of Pwani University Library, Kenya

Wanyenda Chilimo-Muoki, Pwani University, Kenya

Motivation for the Adoption of Open Source Software in Kenya Academic Libraries

Michael Maua, Pwani University, Kenya

Open Source Software Adoption in Mauritius

Aneerav Sukhoo, Central Informatics Bureau, Mauritius

Surveying National Systems of Innovation (NSI) Using Free Open Source Software (FOSS): The Case of Ghana

Ritin Koria, UNIDO, Austria

Adoption and Diffusion of Open Source Software in Tanzania: A Way Forward.

George S. Oreku, TIRDO, Tanzania

09:00 Session 9d: **ICT Regulatory Frameworks**

Chair: **Peacemaker Dlamini, Department of Science & Technology, South Africa**

Regulatory Convergence of ICT Sectors in the East African Community (EAC): Challenges for the Current Legislative and Regulatory Frameworks and Lessons from the European Union Experience

Joseph Nyaga, InterDisciplinary Centre for Law and ICT (ICRI), Belgium

Spectrum Award Procedure in the Era of Convergence: A Key Towards Promoting Emerging Mobile Services

Mahen Soobron, Ministry of ICT, Mauritius

Broadband ICT Policies in Southern Africa: Initiatives and Dynamic Spectrum Regulation

Thomas Olwal, Meraka Institute, South Africa

Policy-Based Radios for Spectrum Sharing

Malcolm Brew, Mawingu, Kenya

Assessing the Implications of SIM Card Registration Policy in the SADC Region

Mbuyu Sumbwanyambe, University of Johannesburg, South Africa

09:00 Session 9e: **Use of ICT in HEIs and Schools**

Chair: **George Ombakho, Ministry of Education Science and Technology Kenya**

Analysis of the Effect of Wireless Campus Networks on Internet Usage in Kenyan Universities

Eric Sifuna, Kenya Education Network (KENET) & Elijah Omwenga, University of Nairobi, Kenya

Understanding the Implementation of Online Assessment in Public Universities in Kenya

Robert Omulami Manaka & Elijah Omwenga, University of Nairobi, Kenya

Information Security Management Systems in Public Universities in Kenya: A Gap Analysis between Common Practices and Industry Best Practices

Philip Mutisya Kitheka, Technical University of Kenya & Elijah Omwenga, University of Nairobi, Kenya

ICT Adoption Framework in Rural Secondary Schools: Case of Meru, Kenya

Dorothy Bundi, Kenya Methodist University, Kenya

Strategies for Wider Use and Access of Digital Libraries in Secondary Schools in Developing Countries: A Case Study of Uganda

Gideon Wananda, University of Nairobi, Kenya

10:30

Coffee Break: Networking & Exhibition

11:00 Session 10a: **Strengthening Democracy in East Africa through ICTs - Challenges and Opportunities**

Chair: **David Isaksson, Swedish Program for ICT in Developing Regions**

CIPEA: ICTs for Participatory Civic Engagement

Ashnah Kalemera, CIPEA, Uganda

KHRC: How can We Fight Impunity?

Grace Were, Kenya Human Rights Commission, Kenya

CHRAGG: New Technology for Reporting Human Rights Abuse

Wilfred Warrioba, Commission for Human Rights & Good Governance, Tanzania

ToroDev: ICT4D tools as a Leapfrogging Process for Gender Equality

Johnstone Baguma, Toro Development Network (ToroDev), Uganda

Wougnet: Empowering Women in Democratic Processes through ICT

Goretti Zavuga, Women of Uganda Network, Uganda

iHub, Mobile Technology in Water Governance

Anne Salim, iHub Research, Kenya

TI: ICT for Better Health Service Delivery

Simon Peter Ogwang, Transparency International Uganda, Uganda

11:00 Session 10b: **eInclusion**

Chair: **Enock Mpenzwa, Ministry of Communications, Science and Technology, Tanzania**

Auto-Configuration Through Cloud: Initial Case Studies for Universal and Personalised Access for All

Evangelos Bekiaris, Centre for Research and Technology Hellas, Greece

Making ICT Accessible for the Deaf

Darelle Van Greunen, Nelson Mandela Metropolitan University, South Africa

Evidence of Dyslexia in Special School in South Africa and A Proposal of Assistive Technology

Mpia Ndombo, Tshwane University of Technology, South Africa

ICTs and Survival Tactics for the Day-Labour Workers: Implications for Design

Christopher Chepken, University of Nairobi, Kenya

11:00 Session 10c: **Digital Libraries**

Chair: **Toumane Doumbouya, Ministère de l'Enseignement Supérieur et de la Recherche, Senegal**

i4Life: Cataloguing the World's Biodiversity

Alastair Culham, University of Reading, United Kingdom

Towards Digital Libraries in Kenyan Universities: Concretizing the Prospects

Joseph Kavulya, Catholic University of Eastern Africa, Kenya

The Development of a Community-generated Digital Library: the Case of the Ulwazi Programme

Niall McNulty, McNulty Consulting, South Africa

The Role of ICT in Appreciating Tri-axis Efforts of Research, Publications and Library Services in Higher Education
Richard Omollo, Jaramogi Oginga Odinga University of Science and Technology, Kenya

Developing Digital Content and Services: Experiences from the Library of the University of Eastern Africa, Baraton, Kenya
Margaret Adeogun, University of Eastern Africa, Kenya

11:00 Session 10d: **Probe-IT: The Internet of Things in Africa**

Chair: **Sofiene Sghaier, CERT, Tunisia**

Current IoT landscape in Africa

Hend Ben Hajji, CERT, Tunisia

IoT Demos from South Africa

Louis Coetzee, Meraka Institute, CSIR, South Africa

Birds of a Feather

11:00 Session 10e: **mBanking**

Chair: **Phodiso Phole, Ministry of Transport and Communications, Botswana**

Organizing Innovation to Deliver Financial Services to the Base of the Pyramid

Bineke Posthumus, TNO, Netherlands

ICT and Financial Inclusion: Adoption of Mobile Phone Banking Among Small Business Owners at Iringa, Tanzania

Hosea Mpagole, Iringa University College, Tanzania

Mobile Banking Influence on Wealth Creation and Poverty Reduction for the Unbanked

Jimmy Macharia, USIU, Kenya

Artificial Neural Network Based Expert System: A Case Study of Kenya Commercial Bank.

Jane Juma, Great Lakes University of Kisumu, Kenya

12:30 **Lunch: Networking & Exhibition**

13:30 Closing Plenary 11: **Closing Plenary**

Moderator: **Prof. Harry Kaane, Higher Education Science and Technology Secretary, Kenya**

Horizon 2020

Stephane Hogan, Science Counsellor at the EU Delegation to the African Union, Ethiopia

African Internet Exchange System (AXIS) & AfricaConnect

Moses Bayingana, ICT Expert, Information Society Division, African Union Commission

IEEE's Information Society Activities in Africa

Vincent Kaabunga, IEEE Kenya Section, Kenya

Future of Innovation and ICT Research in Kenya

Prof. Shaukat Abdulrazak, National Council for Science and Technology, Kenya

Awards and Formal Closing of IST-Africa 2013

Registration Information

It is necessary for all **IST-Africa 2013** delegates to register online. Each delegate should be registered separately.

Conference Fees

Authors Fees (Due by 08 March)

- Authors - African States **€100**
- Authors - EU New Member States, EU Candidate Countries and Developing Countries **€200**
- Authors - All countries except above **€300**

Please note that the author fee is only available to accepted presenters in the Programme (**one presenter per paper**). Co-authors who wish to participate should register as Delegates.

Delegates' Fees - Full Fee from 17 March

- Delegate Full Price - African States **€250**
- Delegate Full Price - EU New Member States, EU Candidate Countries and Developing Countries **€400**
- Delegate Full Price - All countries except above **€500**

The Conference Fee includes:

- Entrance to all plenary and parallel sessions
- Documentation with proceedings on CD-Rom
- Three luncheons and refreshments at morning and afternoon breaks
- Cyber Café facilities

Terms & Conditions

1. All authors who are presenting a paper at **IST-Africa 2013** must complete their payment registration by **08 March** at the latest, prior to publication of the Final Programme.
2. In the case where a paper is jointly authored, the presenter of the paper is considered to be the author/presenter from a payment registration point of view. All co-authors are considered to be delegates.
3. Each presenter will present one paper in the Programme.
4. Delegates' fees must be paid before admission to the Conference.
5. IEEE Members are entitled to apply for a 10% discount on the appropriate fee. Please provide Membership No. as part of online registration and fax a copy of valid Membership card to +353-1-8170606.
6. There are **no refunds for cancellations** but substitutions may be made at any time prior to the event by contacting the Conference Secretariat.
7. Each individual must be registered separately on the IST-Africa Conference portal.
8. Payment may be made by bank transfer or credit card (with some restrictions). Payments made by bank transfer must be **net of any bank charges** and the payment instruction should refer to "IST-Africa 2013 Conference", your name, organisation and invoice number (if relevant).
9. Receipts are automatically issued electronically upon receipt of payment. If your organisation requires an invoice to process payment registration by bank transfer, please contact the Conference Secretariat.
10. Conference registration or hotel accommodation is not confirmed until full payment is received.

Major Places of Interest

Nairobi is the capital of Kenya with over 3 million people. The conference is located outside the city centre. It is necessary to take care when visiting Nairobi city centre as in any large city.

While in Nairobi, delegates should visit the National Museum, National Park, Bomas of Kenya and the City Market.

Climate

Nairobi has a moderate climate average temperatures of 22 degrees Celsius. It is cooler in the evening. Rains are possible during May and delegates should bring rain wear.

Visa Information

Conference delegates should contact the Kenyan Embassy in your country of residence six to eight weeks prior to travelling to determine if it is necessary for you to apply for a visa in advance. For some countries it is possible to secure a visa at the airport in Nairobi upon arrival but there may be long queues. A single entry visa for most countries is \$50.

The countries whose nationals require visa for Kenya are: Albania; Algeria; Andorra; Angola; Argentina; Australia; Austria; Bahrain; Bangladesh; Belarus; Belgium; Benin; Bhutan; Bolivia; Bosnia-Herzegovina; Brazil; Bulgaria; Burkina Faso; Cambodia; Canada; Cape Verde; Central African Rep.; Chad; Chile (Nationalist); China (China Peoples Republic); Columbia; Comoros; Congo Brazzaville; Costa Rica; Cote d' Ivoire/ Ivory Coast; Croatia; Cuba; Czech Republic; Denmark; Djibouti; Dominican Rep; DRC; East Timor; Egypt; El Salvador; Ecuador; Equatorial Guinea; Estonia; Finland; France; French Guyana; Gabon; Georgia; Germany; Greece; Greenland; Guatemala; Guinea; Guinea Bissau; Haiti; Holders of Hong Kong Special Administrative Region (HKSAR); Honduras; Hungary; Iceland; India; Indonesia; Iran; Ireland; Israel; Italy; Japan; Jordan; Kampuchea Kazakhstan; Kirghistan; Korea (South); Kuwait; Laos; Latvia; Liberia; Liechtenstein; Lithuania; Luxembourg; Macedonia Madagascar; Malagasy; Malta; Mauritania; Mexico; Moldavia; Monaco; Mongolia; Morocco; Mozambique; Myanmar (formally Burma); Nepal; Netherlands; Nicaragua; Niger; Nigeria; Norway; Oman; Pakistan; Palau Pacific Isles; Panama; Paraguay; Peru; Philippines; Poland; Portugal; Qatar; Reunion; Romania; Russia; Salvador; Sao Tome and Principe; Saudi Arabia; Serbia and Montenegro; Slovakia; Slovenia; Spain; Sri Lanka; St.Christopher Cape; Sudan; Surinam; Sweden; Switzerland; Taiwan; Thailand; Togo; Tunisia; Turkey; Turkmenistan; U.S.A.; Ukraine; United Arab Emirates; United Kingdom; Uruguay; Uzbekistan; Vatican City; Venezuela; Vietnam; Yemen; Yugoslavia and also Former States of Yugoslavia.

If you are travelling through other countries to get to Kenya, it is necessary to check if you also require

transit visas.

The **IST-Africa 2013** Organising Committee can only issue Letters of Invitation for visa purposes to delegates after payment for their conference registration has been received.

Vaccinations

Conference delegates travelling to Africa for the first time are recommended to have up to date Tetanus, Hepatitis A and Typhoid vaccines.

It is necessary to have proof of Yellow Fever vaccine (Yellow Book). It is a good idea to check with your personal physician or travel health clinic four to six weeks prior to travelling, outlining where in Kenya you intend to visit.

IST-Africa Initiative

Regional Impact of Information Society Technologies in Africa ("**IST-Africa**") is a multi-stakeholder initiative focused on raising wider awareness of African research capacity, strengthening the research dimension of Information Society policy dialogues between the European Commission and African countries and key regional organisations, analysing African research priorities, Supporting the 8th Africa-EU Partnership, promoting participation of African organizations in the ICT Theme of FP7 and identifying co-operation opportunities in fields of mutual interest. The **IST-Africa Initiative** is supported by the European Commission under FP7-ICT.

IST-Africa is a collaborative initiative between IIMC International Information Management Corporation Limited (Ireland, Coordinator), Department of Science and Technology (South Africa), Ministry of Infrastructure, 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), Ministry of Information Communication Technology (Swaziland), National Commission for Science and Technology (Malawi), COSTECH - Tanzania Commission for Science and Technology, Uganda National Council for Science and Technology, Ministry of Higher Education, Science and Technology (Kenya), Ministère de l'Enseignement Supérieur et de la Recherche Scientifique (Burundi), Ministry of Science and Technology (Ethiopia), Agence Nationale des Technologies de l'Information et de la Communication (Cameroon), Ministère de l'Enseignement Supérieur, des Universités et de la Recherche (Senegal), Ministry of Environment, Science and Technology (Ghana), Ministère de l'Enseignement Supérieur et de la Recherche Scientifique (Tunisia) and Ministry of Communications and Information Technology (Egypt).