

# IST-Africa 2014 Final Programme

*Mauritius*

06 - 09 May 2014

# ISTAfrica

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Ministry of Information and  
Communication Technology



*National Computer Board*



European  
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AFRICAN UNION



FINEAL - DEVELOPING FINISH SCIENCE,  
TECHNOLOGY AND INNOVATION COOPERATION  
BETWEEN EUROPE, AFRICA AND THE IAC REGION



**IEEE**

# Introduction

**IST-Africa 2014** Conference & Exhibition takes place 06 - 09 May 2014 in Mauritius, as part of **IST-Africa Week 2014**. 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 2014** is the ninth 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 Mauritius through the Ministry of Information Communication Technology and National Computer Board and Technically Co-Sponsored by IEEE, **IST-Africa 2014** 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, eInfrastructures, Societal Implications of Technology and eGovernment. **IST-Africa 2014** 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 2014** will also provide an opportunity to identify potential partners for future proposals under Horizon 2020, the follow on programme to FP7, which commenced in January 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 2014** 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 2014** 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 2014** Conference & Exhibition takes place in Le Méridien Ile Maurice, Pointe Aux Piments, Mauritius. The hotel is located x 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 38 thematically focused parallel sessions featuring different aspects of International Cooperation, eHealth, eInfrastructures, Technology Enhanced Learning and ICT Skills, Living Labs, Digital Libraries, Mobile Applications, ICT for Environmental Sustainability, eAgriculture, Societal Implications of Technology and eGovernment. 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 07 May features a high level dialogue on Implementation of the Information Society in Africa. The Closing Plenary on Friday 09 May focuses on Initiatives Supporting Development of Regional S&T.

The programme is subject to change and the **IST-Africa 2014** Organising Committee reserves the right to alter the contents, venue and/or speakers. This Programme is accurate as at 05 May 2014.

## 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, 06 May

IST-Africa is organising the fourth Annual Living Lab Thematic Working Group Meeting on Tuesday 06 May 2014.

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 Nairobi (2013), 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 2014** delegates are invited to pre-register for this participatory working group meeting as part of online registration.

## Conference Proceedings

The **IST-Africa 2014** 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 2014** 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

Mauritius. 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 Le Méridien Ile Maurice (conference venue). Le Méridien Ile Maurice is located 30 minutes drive from Port Louis.

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/Conference2014](http://www.IST-Africa.org/Conference2014)

## How to get there

Mauritius is an island nation in the Indian Ocean, about 2,000 kilometres off the southeast coast of the African continent.

There are direct flights to Mauritius, SSR Intl Airport (MRU) from Nairobi (Kenya), Cape Town, Durban, Johannesburg (South Africa), London (UK), Paris (France), Frankfurt (Germany), Zurich (Switzerland).

As Official Airline Carrier, Air Mauritius is offering discounts on scheduled flights to Mauritius up to 5 days prior to IST-Africa. More information is available on the conference portal.



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

## Sponsors

**IST-Africa 2014** 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 2014** is hosted by the Government of Mauritius through the Ministry of Information and Communication Technology and National Computer Board. Other Support organisations include SAP Africa, Orange and FinCEAL project.

For further information in relation to providing support, please contact the Conference Secretariat at [secretariat@IST-Africa.org](mailto:secretariat@IST-Africa.org)

## Plenary Session Speakers



Hon. Tassarajen Pillay  
Chedumbrum  
Minister of ICT Mauritius



Dan Faugoo  
Executive Director,  
NCB, Mauritius



Dr M.K. Oolun  
Executive Director,  
ICT Authority, Mauritius



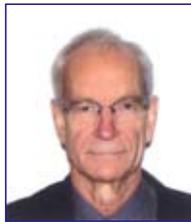
Dr A Suddhoo  
Executive Director,  
Mauritius Research Council



Prof A.K. Bakhshi  
Executive Director,  
TEC, Mauritius



Mr Moctar Yedaly  
Information Society Division  
African Union Commission



Mr Morten Møller  
DG CONNECT  
European Commission



Prof R. Mohee  
CSK, Vice-Chancellor,  
University of Mauritius



Dr H.B. Chittoo  
Director General,  
UTM, Mauritius



Prof Darelle Van Greunen  
Nelson Mandela Metropolitan  
University, South Africa

Plenary Speakers as at 05 May 2014 include:

- **Hon. Tassarajen Pillay Chedumbrum**, Minister of Information and Communication Technology, Mauritius
- **Mr Suraj Ramgolam**, Chairman, National Computer Board, Mauritius
- **Mr Dan Faugoo**, Executive Director, National Computer Board, Mauritius
- **Dr M. K Oolun**, Executive Director, ICT Authority
- **Dr A Suddhoo**, Executive Director, Mauritius Research Council
- **Prof. A.K. Bakhshi**, Executive Director, Tertiary Education Commission (TEC), Mauritius
- **Mr N. Jugmohunsing**, Assistant Permanent Secretary, Ministry of Tertiary Education, Science, Research and Technology, Mauritius
- **Mr Jean Claude de l'Estrac**, Secretary General, Indian Ocean Commission
- **Zauria Saifodine**, Director of ICT Capacity Building, Instituto Nacional de Tecnologias de Informação, e Comunicação, Mozambique
- **Mr Moctar Yedaly**, Head of Information Society Division, African Union Commission
- **Mr Morten Møller**, Programme Coordination, DG CONNECT, European Commission, Belgium
- **Prof Romeela Mohee**, CSK, Vice-Chancellor, University of Mauritius
- **Dr Hemant Chittoo**, Ag. Director General, University Technology Mauritius
- **Prof Darelle Van Greunen**, School of ICT, Nelson Mandela Metropolitan University, South Africa
- **Mr Moses Bayingana**, ICT Expert, Information Society Division, African Union Commission
- **Maryse Chung**, Mauritius Sugar Industry Research Institute
- **M. V. Ramana**, Mauritius Oceanography Institute
- **K. Poonosamy**, Managing Director, Board of Investment, Mauritius

## 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 2014** International Programme Committee includes

- **Paul Cunningham** (Conference Chair), IIMC International Information Management Corporation Ltd, Ireland
- **Perienen Appavoo**, Open University of Mauritius
- **Dr Vinaye Armoogum**, School of Innovative Technology and Engineering, University of Technology, Mauritius
- **Sheeba Armoogum**, Faculty of Engineering, University of Mauritius
- **Dr Vandana Bassoo**, Faculty of Engineering, University of Mauritius
- **Dr Pierre Catherine**, School of Innovative Technology and Engineering, University of Technology, Mauritius
- **Laurens Cloete**, Meraka Institute, CSIR, South Africa
- **Miriam Cunningham**, IIMC International Information Management Corporation Ltd, Ireland
- **Kim Davis**, Research Council of Norway, Norway
- **Razvi Doomun**, Department of Computer Science and Engineering, University of Mauritius
- **Prof. Love Ekenberg**, DSV, University of Stockholm, Sweden
- **Ravi Foogoo**, School of Innovative Technology and Engineering, University of Technology, Mauritius
- **Dr David Gichoya**, Moi University, Kenya
- **Prof. Marlien Herselman**, Living Labs of Southern Africa Network, South Africa
- **Dr Mussawir Hosany**, Faculty of Engineering, University of Mauritius
- **Dr. Mike Joy**, University of Warwick, United Kingdom
- **Dr. Bernhard R. Katzy**, CeTIM, The Netherlands
- **Kristiina Lahde**, TANZICT Programme, Tanzania
- **Assil Lotun**, Mauritius
- **Gareth MacNaughton**, CISCO, United Kingdom
- **Dr Ayub Many**, Ministry of Health, Kenya
- **Prof. Maurice Mars**, University of KwaZulu-Natal, South Africa
- **Girish Mautadin**, Mauritius

- **Loi Namugenyi**, Uganda National Council for Science & Technology
- **Dr Sue Pendell**, Colorado State University, United States
- **Amresh Phokeer**, AFRICNIC, Mauritius
- **Sameerchand Pudaruth**, Computer Science and Engineering Department, University of Mauritius
- **Matti Sinko**, Finland
- **Bernard Stevenot**, SpaceBel, Belgium
- **Richard Stevens**, Stevens Consultants, Italy
- **Dr Geerish Suddul**, School of Innovative Technology and Engineering, University of Technology, Mauritius
- **Roopesh Sungkur**, Faculty of Engineering, University of Mauritius
- **Prof. Darelle Van Greunen**, Nelson Mandela Metropolitan University/Computer Society of South Africa

## Organising Committee

- **Miriam Cunningham**, IIMC, Ireland
- **Paul Cunningham**, IIMC, Ireland
- **Dan Faugoo**, National Computer Board, Mauritius
- **Ismael Limalia**, National Computer Board, Mauritius



National Computer Board

## Conference Secretariat

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Dublin 3, Ireland  
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[www.IST-Africa.org/Conference2014](http://www.IST-Africa.org/Conference2014)



# Wednesday, May 07, 2014

08:00

Registration

09:00 Opening Plenary 1a: [Opening Plenary](#)Moderator: [Verna Pillay, Ministry of ICT, Mauritius](#)**Welcome Address**

Dan Faugoo, Executive Director, National Computer Board, Mauritius

**European Commission Address**

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

**IOC Address**

Jean Claude de l'Estrac, Secretary General, Indian Ocean Commission

**African Union Commission Address**

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

**Official Opening Speech**

Hon. Tassarajen Pillay Chedumbrum, Minister of Information and Communication Technology

10:30

Coffee Break

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

Mr Suraj Ramgolam, Chairman, National Computer Board, Mauritius

Dr M. K Oolun, Executive Director, ICT Authority, Mauritius

Dr A Suddhoo, Executive Director, Mauritius Research Council

Mr N. Jugmohunsing, Assistant Permanent Secretary, Ministry of Tertiary Education, Science, Research and Technology, Mauritius

Prof. A.K. Bakhshi, Executive Director of Tertiary Education Commission (TEC), Mauritius

Zauria Saifodine, Director of ICT Capacity Building, Instituto Nacional de Tecnologias de Informação, e Comunicação, Mozambique

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

Prof Romeela Mohee, CSK, Vice-Chancellor, University of Mauritius

Dr Hemant Chittoo, Ag. Director General, University Technology Mauritius

Prof Darelle Van Greunen, School of ICT, Nelson Mandela Metropolitan University, South Africa

12:30

Lunch

14:00 Workshop 3a: [Horizon 2020](#)**Joint IST-Africa CAAST-Net Plus Session**Moderator: [Paul Cunningham, IIMC, Ireland](#)**IST-Africa**

Paul Cunningham, IIMC / IST-Africa, Ireland

**CAAST-Net Plus**

Melissa Plath, UniPID, University of Jyväskylä, Finland

**Introduction to Horizon 2020**

Morten Moller, Programme Coordination, DG CONNECT, European Commission

**Agriculture, Health, Environment 2014/2015 Calls in H2020**

Melissa Plath, UniPID, University of Jyväskylä, Finland

George Essegbey, CSIR, Science and Technology Policy Research Institute, Ghana

**LEIT (ICT) 2015 Calls in H2020**

Paul Cunningham, IIMC / IST-Africa, Ireland

During the coffee break participants are invited to list their institution, dept and research areas in the areas of LEIT and Societal Challenges on the flip chart

14:00 Session 3c: [Technology-enhanced Learning](#)Chair: [Perienen Appavoo, Open University of Mauritius](#)**Adoption of e-Assessment in Strathmore University**

Delphine Mukandutiye, Strathmore University, Kenya

**Incorporating a Guided Problem-Solving Method into Activemath using the House Model and Logistic Regression**

Kyle Stone, Tshwane university of Technology, South Africa

**Students Experiences of Using Wiki Spaces to Support Collaborative Learning in a Blended Classroom; A Case of Kenyatta and KCA Universities in Kenya**

Rhoda Gitonga, Kenyatta University, Kenya

**Exploring Three Approaches to Offer Distance Learning Courses through a Social Network of Health Researchers in Three African Countries**

Maximo Ramirez Robles, Universidad Politécnica de Madrid, Spain

**Are Facebook "likes" Enough to Assess Student Satisfaction in Open Distance Learning (ODL)? An Incursion into Students' Experience of ODL through Online Social Networks (OSNs)**

Mrinal Sohoraye, Open University of Mauritius

14:00 Session 3d: [Mobile Applications I](#)Chair: [Sameerchand Pudaruth, University of Mauritius](#)**Connectivity within Indian Ocean Islands (Mauritius, Seychelles, Comoros, Reunion and Madagascar) – A Case for a Regional Internet Exchange**

Mahen Soobron, Ministry of ICT, Mauritius

**Towards a Collaborative Approach to Web Service Monitoring: In Appreciation of Connectivity Challenges in Africa**

Ishmael Makitla, CSIR - Meraka Institute / Nelson Mandela Metropolitan University, South Africa

Metropolitan University, South Africa

**Securing Mobile Applications in Hostile Rural Environments**

Rossouw De Bruin, University of Johannesburg, South Africa

14:00 Session 3e: [eGovernment](#)Chair: [Vyankoj Mulloo, National Computer Board, Mauritius](#)**Case Study Mauritius: Successful Implementation of Innovative Public Revenue Management Solutions**

Hannes Venter, SAP Africa, South Africa

**Next Generation Citizen Centric e-Services**

Vikas Sharma, PricewaterhouseCoopers Ltd, Mauritius

**Exploring the Success, Failure and Factors Influencing mGovernment Implementation in Developing Countries**

Olalekan Samuel Ogunleye, University, South Africa

**The e-Service Delivery in South Africa and the Contribution of Research Institutions**

Nare Mahwai, CSIR, South Africa

**State Information Protection Laws and e-Transparency**

Edison Lubua, University of KwaZulu Natal, South Africa

15:30

Coffee Break

16:00 Workshop 4a: [Horizon 2020](#)**Joint IST-Africa CAAST-Net Plus Session**Moderator: [Paul Cunningham, IIMC, Ireland](#)**Overview of Horizon 2020 Participation Rules & Instruments**

Miriam Cunningham, IIMC / IST-Africa, Ireland

**Proposal Preparation**

Paul Cunningham, IIMC / IST-Africa, Ireland

**Discussion, Q&A**

Morten Moller, Programme Coordination, DG CONNECT, European Commission

Paul Cunningham, IIMC / IST-Africa, Ireland

Melissa Plath, UniPID, University of Jyväskylä, Finland

George Essegbey, CSIR, Science and Technology Policy Research Institute, Ghana

**Brokerage Session**

Each participating organisation has a maximum of one minute to outline their research areas, track record and why delegates should meet with them during the conference to discuss collaboration.

16:00 Session 4c: [Technology Enhanced Learning in Higher Education Institutions](#)

Chair: [David Gichoya, Moi University, Kenya](#)

**Flipping an Online PhD Programme between Sudan and South Africa**  
Izzeldin Osman, Sudan university of Science and Technology, Sudan

**Use of Cloud Computing Platform for E-Learning in Institutions of Higher Learning in Kenya**

Tabitha Kihara, Moi University, Kenya

**A Cloud-based Architecture for eEducation Content Provision: The Case of Nciba Circuit of the Comfivaba District of South Africa**  
Nomusa Dlodlo, CSIR, South Africa

16:00 Session 4d: [Mobile Applications II](#)

Chair: [Vinaye Armoogum, University of Technology, Mauritius](#)

**Challenges Encountered by Older Adults while Navigating Mobile Device User Interfaces**

Margaret Ngugi, Jomo Kenyatta University of Agriculture and Technology, Kenya

**Visual Interfaces as an Approach for providing Mobile Services and Mobile content to low literate users in South Africa**

Muzi Matyila, CSIR, South Africa

**The Adoption of Mobile Technology as a Tool for Situational Crime Prevention in Kenya**

Collins Oduor, @iLabAfrica, Strathmore University, Kenya

**Integration of Mobile, Big Data, Sensors, and Social Media: Impact on Daily Life and Business**

Mario Gastaldi, Evonue Digital, Mauritius

16:00 Session 4e: [eGovernment II](#)

Chair: [Pierre Clarel Catherine, University of Technology, Mauritius](#)

**Development of a Data Model for Semantic Exploitation of Municipality Records in South Africa**

Desmond Mogotlane, Vaal University of Technology, South Africa

**Leveraging Linked Data to Enhance Programmers' Access to Government Open Data**

Isaiah Mulang', Jomo Kenyatta University of Agriculture and Technology, Kenya

**Impediments to Interagency Statistical Information Sharing amongst Government agencies in Uganda: a G2G Adoption**

Flavia Kyeyago, Uganda Bureau of Statistics, Uganda

**Towards the Development of a Citizen-Centric Framework for Evaluating the Impact of E-government: A Case Study of Developing Countries**

Ibrahim Otieno, University of Nairobi, Kenya

17:30 End of Parallel Sessions

19:00 Networking Reception - Supported by FinCEAL

20:00 Conference Dinner - Hosted by Ministry of ICT



Thursday,  
May 08, 2014

09:00 Session 5a: [eHealth - Health Service Delivery](#)

Chair: [Darelle Van Greunen, Nelson Mandela Metropolitan University, South Africa](#)

**Interoperability Study on eHealth Services for the Sub-Saharan Africa Region**

Ghislain De La Sayette, Astrium, France

**Scoping Global Good eHealth Platforms: Implications for Sub-Saharan Africa**

Karl Stroetmann, empirica GmbH, Germany

**Linking Risk and Resource Mapping for the Determination of Favorable Locations of Wells in GIS**

Melanie Platz, University of Koblenz Landau, Campus Landau, Germany

**Development of a Mathematical Model to Estimate Negative Impacts on Human Health with the Help of Risk Maps and Fuzzy Membership Functions**

Jörg Rapp, University of Koblenz-Landau, Campus Landau, Germany

**SmartPrescription: A Principled Approach Towards Eliminating Prescription Errors in Healthcare**

Paul Okanda, United States International University (USIU), Kenya

09:00 Workshop 5b: [IST-Africa - Research Capacities & Priorities I](#)

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

**ICT Initiatives and Research Capacity in Mauritius**

Dan Faugoo, National Computer Board, Mauritius

**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**

Vumile Dlamini, Ministry of Information and Communications Technology, Swaziland

**ICT Initiatives and Research Capacity in Namibia**

Ebenhezer Kauhonina, National Commission on Research, Science and Technology, Namibia

**ICT Initiatives and Research Capacity in Lesotho**

Lieketseng Tjokotsi, Department of Science and Technology, Lesotho

09:00 Workshop 5c: [Tablet Integration into the Classroom: A Case from the Rural Trenches](#)

Chair: [Adele Botha, Meraka Institute, South Africa](#)

**ICT4RED 12-Component Implementation Framework: A Conceptual Framework for Integrating Mobile Technology into Resource-constrained Rural Schools**

Merryl Ford, CSIR, South Africa

**Gamification beyond Badges**

Adele Botha, Meraka Institute, South Africa

Iterative Workshop to introduce the Teacher Professional Development component of the ICT for Rural Education Development (ICT4RED) initiative. One module of a 10 module course will be presented to demonstrate how we have successfully facilitated ICT tablet integration in the classroom by teachers with little to no exposure to ICTs.

09:00 Workshop 5d: [Exploiting eInfrastructure for Research and Education I](#)

Chair: [Francis Tusubira, UbuntuNet Alliance, Uganda](#)

**Session 1: REN Infrastructure Roll out in Sub-Saharan Africa**

**State of UbuntuNet**

Joe Kimaili, Technical Manager, UbuntuNet Alliance

**State of the Research and Education Network Infrastructure in the WACREN region**

Omo Oiya, WACREN, Nigeria

**Addressing the Connectivity Gaps in Sub-Saharan Africa**

Cathrin Stover, DANTE, UK

**Summing up**

09:00 Session 5e: **Cyber Security**

Chair: **Amreesh Phokeer, AFRINIC, Mauritius**

**Survey of Practical Security Frameworks for Defending SIP Based VoIP Systems against DoS/DDoS Attacks**

Sheeba Armoogum, University of Mauritius, Mauritius

**The Development of a Cyber Security Policy in Developing Regions and the Impact on Stakeholders**

Ian Ellefsen, University of Johannesburg, South Africa

**Applying Keystroke Dynamics Techniques to Facial Thermography for Verification**

George Henderson, University of Johannesburg, South Africa

**An Open Speaker Recognition Enabled Identification and Authentication System**

Michal Adamski, University of Johannesburg, South Africa

**Requirements for Secure Graphical Passwords**

Mokgadi Rasekgala, CSIR, South Africa

10:30 **Coffee Break**

11:00 Session 6a: **eHealth - Health Information Systems**

Chair: **Khadija Malima, COSTECH, Tanzania**

**A Method for Selecting E-Health Standards to Support Interoperability of Healthcare Information Systems**

Funmi Adebesein, Council for Scientific and Industrial Research, South Africa

**Health Management Information Systems (HMIS) Implementation Characteristics that Influence the Quality of Healthcare in Private Hospitals in Kenya**

Jimmy Macharia, United States International University, Kenya

**Implementing eHealth in Tanzania; Opportunities and Challenges 2009 - 2014**

Khadija Malima, COSTECH, Tanzania

**Open Source Software and Bureaucracy: A Case of Health Information System in Zanzibar**

Abubakar Bakar, The State University of Zanzibar, Tanzania

**Perception of Sudan Peritoneal Dialysis Program's Staff to Medical Electronic Records**

Rafaa Ashamalla Ghobrial Morgos, Ministry of Science & Communication, Sudan

11:00 Workshop 6b: **IST-Africa - Research Capacities & Priorities II**

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

**ICT Initiatives and Research Capacity in Malawi**

Ebony Msikawanthu, National Commission for Science and Technology, Malawi

**ICT Initiatives and Research Capacity in Mozambique**

Zauria Saifodine, National Institute for ICT, Mozambique

**ICT Initiatives and Research Capacity in Angola**

Antonio Alcochete, Ministerio da Ciencia e Tecnologia, Angola

**ICT Initiatives and Research Capacity in Tunisia**

Noureddine Hamdi, Ministère de l'Enseignement Supérieur et de la Recherche Scientifique, Tunisia

**ICT Initiatives and Research Capacity in Egypt**

Haitham Hamza, Information Technology Industry Development Agency (ITIDA), Egypt

**ICT Initiatives and Research Capacity in Senegal**

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

11:00 Session 6c: **Technology Enhanced Learning**

Chair: **Love Ekenberg, Stockholm University, Sweden**

**m-Learning System Enhancing Mathematical Concepts (m-LSEMC): A Case Study of University of Namibia and Rhodes**

Jameson Mbale, University of Namibia, Namibia

**Study Examining Whether the Computer Science Curriculum at the Sudanese High Secondary Schools is Adequate to Qualify the Students to be Computer Literate**

Atika ElMubarak, Sudan University of Science and Technology, Sudan

**Translation between English and Mauritian Creole: A Statistical Machine Translation Approach**

Anerav Sukhoo, Central Information Systems Division, Mauritius

**Made in Africa: African Digital Creativity**

Alfredo M. Ronchi, Politecnico di Milano, Italy

11:00 Workshop 6d: **Exploiting eInfrastructure for Research and Education II**

Chair: **Omo Oiya, WACREN, Nigeria**

**Session 2: Panel Discussion on Enabling Communities of Practice**

**Digital Learning Resources**

Bakary Diallo, African Virtual University, Nairobi

**SKA**

Leon Staphorst, SANREN, South Africa

**Grid-Computing**

Bruce Becker, SAGRID, South Africa

11:00 Session 6e: **Security, Authentication & Biometrics**

Chair: **Razvi Doomun, University of Mauritius**

**Information Security Initiatives and Challenges in Mauritius**

Kaleem Usmani, CERT-MU, National Computer Board, Mauritius

**The Poor Man's Biometric: Identifying Cost-Effective Biometric System Criteria for SMME's**

Dustin van der Haar, University of Johannesburg, South Africa

**Choice of Biometrics**

Bibi Nazmeen Boodoo-Jahangeer, University of Mauritius

**Hand Biometrics for Security**

Maleika Heenaye-Mamode Khan & Naushad Mamode Khan, University of Mauritius

**Streamlined Approach to Online Banking Authentication in South Africa and Europe**

Frans Blauw, University of Johannesburg, South Africa

**Online Social Networks to Online Social Malworks - the Evolution of an Industry**

Candice Louw, University of Johannesburg, South Africa

12:30 **Lunch**

14:00 Session 7a: **eHealth**

Chair: **Sejojo Phaaroo, Health Research and Laboratory Services, Lesotho**

**A Secure Data Access Model for the Mauritian Healthcare Service**

Oveeyen Moonian, University of Mauritius

**A Framework for Implementing Cloud Computing for Record Sharing and Accessing in the Ghanaian Healthcare Sector**

Nana Assyne, Ghana Institute of Management and Public Administration (GIMPA), Ghana

**An Integrative ICT Platform for eHealth**

Ronell Alberts, CSIR, South Africa

**Compiling a Prioritized List of Health Data Quality Challenges in Public Healthcare Systems**

Marna Botha, CSIR, South Africa

**Implementing Modular Interactive Tiles for Rehabilitation in Tanzania - A Pilot Study**

Henrik Hautop Lund, Technical University of Denmark, Denmark

14:00 Workshop 7b: **IST-Africa - Research Capacities & Priorities III**

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

**ICT Initiatives and Research Capacity in Cameroon**

National Agency for Information and Communication Technologies (ANTIC), Cameroon

**ICT Initiatives and Research Capacity in Kenya**

Jacob Njagih, Ministry of Education, Science and Technology, Kenya

**ICT Initiatives and Research Capacity in Uganda**

Loi Namugenyi, Uganda National Council for Science & Technology

**ICT Initiatives and Research Capacity in Burundi**

Tatien Masharabu, Ministry of Higher Education and Scientific Research, Burundi

**ICT Initiatives and Research Capacity in Tanzania**

Khadija Malima, Tanzania Commission for Science and Technology

**ICT Initiatives and Research Capacity in Ethiopia**

Leulseged Alemie, Ministry of Communications and Information Technology, Ethiopia

14:00 Session 7c: [eSkills](#)

Chair: [Vandana Bassoo, University of Mauritius](#)

**Uncovering the Competency Gap of Students Employed in Business Process Analyst Roles – An Employer Perspective**

Lisa Seymour, University of Cape Town, South Africa

**Streamlining Knowledge and Skills Sharing in Africa**

Bishoy Louis, Information Technology Institute, Egypt

**A Conceptual Framework of 21st Century Employability Skills & Competencies in Hospitality Industry of Kenya: Case of Waiters & Stewards**

Anuradha Khoda, University of Nairobi, Kenya

14:00 Workshop 7d: [IPv6 Based IoT/M2M, Cloud Computing and ISP/University/NREN Deployment](#)

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

**IPv6 based M2M/Internet of Things (IoT)**

Latif Ladid, President IPv6 Forum, Luxembourg

**Impact of IPv6 and IoT on Africa**

Adiel A. Akplogan, AFRINIC, Mauritius

**Deployment of IPv6 at the University of Mauritius**

Aatish Chiniah, University of Technology, Mauritius

14:00 Session 7e: [Societal Implications of Technology](#)

Chair: [Haitham Hamza, ITIDA, Egypt](#)

**Beyond Access: ICT Use in Business by Micro, Small and Medium-sized Enterprises in Ghana and Zambia**

Victor Konde, United Nations Economic Commission for Africa, Zambia

**Social Services on Wheels: A Sustainable Model to Improve Access in Unreached Communities**

Jecinta Kamau, Kyushu University, Japan

**User Willingness to accept Friend Requests on SNS: A Facebook Experiment**

Frederik Hattingsh, Tshwane University of Technology, South Africa

**The Impact of Science, Technology and Innovation to the Informal Sector in Uganda**

Aminah Bukenya, UNCST, Uganda

15:30

Coffee Break

16:00 Session 8a: [eHealth](#)

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

**Predicting Adoption of Mobile Health Technology in Resource Constrained Environments**

Gilbert Maiga, Makerere University, Uganda

**A Review of Factors Influencing eHealth Adoption In Kenya: Barriers And Facilitators**

Jasper Ondulo, Jaramogi Oginga Odinga University Science and Technology, Kenya

**Leveraging Health through the Enhancement of Information Access Using Mobile and Service Oriented Technology**

Silvester Namuye, USIU, Kenya

**Social Simulation for Optimization of Emergency Health Services Policy**

Mateus Calado, Universidade Agostinho Neto, Angola

**Giving Hope to Refractory Epileptic Patients**

Antonio Dourado, University of Coimbra, Portugal

16:00 Workshop 8b: [ICT Initiatives in Mauritius](#)

Chair: [Suraj Ramgolam, Chairman, National Computer Board, Mauritius](#)

**e-Government initiatives in Mauritius**

Rajnish Hawabhai, Central Informatics Bureau, Mauritius

**eFiling of Tax Returns in Mauritius**

Soobhash Sonah, Mauritius Revenue Authority

**Rethinking the Education System of Mauritius: Integrating ICT Tools**

Ricaud Auckbar, Ministry of Education, Mauritius

**Capability of the Mauritian ICT industry to Export in the Region**

Neemalen Gopal, Mauritius IT Industry Association, Mauritius

**Establishing A Digital Cadastre - The LAVIMS Project**

Navinchandra Luchoo, MHL / LAVIMS, Mauritius

16:00 Session 8c: [Digital Libraries & Digital Preservation](#)

Chair: [Ebony Msikawanthu, National Commission for Science and Technology, Malawi](#)

**Direct Desktop-Repository Deposits with SWORD**

Gontlafetse Mosweunyane, University of Botswana

**An Overview of Digital Library Projects in Kenyan Universities**

Elyjoy Micheni, The Technical University of Kenya

**Data Structures for Information Retrieval**

Denis Nkweteyim, University of Buea, Cameroon

**A Case for Understanding User Experience Challenges confronting Indigenous Knowledge Recorders in Rural Communities in South Africa**

Gugu Khalala, CSIR, South Africa

16:00 Session 8d: [eInfrastructures](#)

Chair: [Njei Check, ANTIC, Cameroon](#)

**Experience and feedbacks from the sustainability for the Virtual Atomic and Molecular Data Centre E-infrastructure**

Carlo Maria Zwölf, Observatoire de Paris, France

**Perun - Modern Approach for User Identity and Service Management**

Michal Procházka, CESNET, Czech Republic

**The Role of Governments in IPv6 Transition**

Jiri Prusa, CZ.NIC Association, Czech Republic

**Using iMENTORS and Open aid Data to Enhance Coherence of International Aid**

Louis Papaemmanuel, eGovLab, Stockholm University, Sweden

16:00 Session 8e: [Societal Implications of Technology](#)

Chair: [Lieketseng Tjokotsi, Department of Science and Technology, Lesotho](#)

**Raising Girls' Voices with SenseMaker**

Rebecca Smith, GirlHub, United Kingdom

**Transforming Fragmented Industry into Sustainable Businesses with SMAC Technologies**

Subhas Thecka, Charles Telfair Institute, Mauritius

**The Potential Value of Mobile Microwork Services in Developing Nations: Research Opportunities and Challenges**

Jabu Mtsweni, University of South Africa, South Africa

17:30

End of Parallel Sessions



Friday,  
May 09, 2014

09:00 Session 9a: [Cloud Computing](#)

Chair: [David Gichoya, Moi University, Kenya](#)

**A Business Model for a South African Government Public Cloud Platform**

Promise Mvelase, CSIR, South Africa

**Cloud Computing Can Re-Shape Uganda**

Collins Mwesigwa, Icon Frontiers Uganda Limited, Uganda

**Presenting a Framework Utilising the Cloud to Facilitate Asset Management**

Willem J.J. Thompson, Tshwane University of Technology, South Africa

09:00 Workshop 9b: **Living Labs in Tanzania**

Chair: **Kristiina Lahde, TanzICT Programme, Tanzania**

**Tanzanian Living Labs - Background**  
Kristiina Lahde, TanzICT Programme, Tanzania

**Rapid Growth in a New Living Lab**  
Novat Karol, Elimu Living Lab, Tanzania

**The Challenges of Community-driven Innovation in a University-led Living Lab**

Joshua Jacob Mushi, Arusha EcoLab /NM-AIST, Tanzania

**GROW Leadership Academy - Experience and Social Franchising with RLabs South Africa**

Yusuf Ssessanga, Rlabs-Iringa, Tanzania

**Lessons from Tanzanian Living Labs - the First Years**  
Simon Flamand, TANZICT, Tanzania

09:00 Session 9c: **Open Source & Open Data Applications**

Chair: **Roopesh Kevin Sungkur, University of Mauritius**

**Efficiency and Effectiveness of National Systems of Innovation: The Importance of ICT, the Cases of Ghana and Kenya**  
Liliana Andriano, UNIDO, Austria

**Ambient Intelligence Framework for Web Services aimed at Elderly Users**

Maria Panou, Centre for Research and Technology Hellas, Greece

**SmartTouristData Approach for connecting local and global tourist information systems**

Premysl Vohnout, Czech Centre for Science and Society, Czech Republic

**SDI4Apps**

Zbynek Krivanek, Ceske centrum pro Vedu a Spolecnost, Czech Republic

09:00 Workshop 9d: **NCP Training (Closed meeting)**

09:00 Session 9e **eAgriculture**

Chair: **R.K. Ramnauth, Food and Agricultural Research and Extension Institute (FAREI), Mauritius**

**Cattle Monitoring System Using Wireless Sensor Network in Order to Prevent Cattle Rustling**

Patrick Nkwari, University of Johannesburg, South Africa

**PotatoSense: A Wireless Sensor Network System for Precision Agriculture**

Kavi Kumar Khedo, University of Mauritius, Mauritius

**A Prototype Mobile Monitoring System for Hydroponic Agriculture**

Loic Ndambe, Nelson Mandela Metropolitan University, South Africa

**FOODIE – Open Data for Agriculture**

Karel Charvat, Help service remote sensing s.r.o., Czech Republic

10:30 **Coffee Break**

11:00 Session 10a: **ICT Regulatory Frameworks**

Chair: **Peacemaker Dlamini, DST, South Africa**

**Understanding the Maturity of EU Code of Conduct on Data Centres: A Mauritian Case Study Explained**

Ashwin Seegolam, National Computer Board, Mauritius

**The Institutionalisation of Political and Corporate Governance of Information and Communication Technology in the Public Service of South Africa, a Developing Country**

Tersia van der Walt, University of Johannesburg, South Africa

**The Importance of ICT Policy in Achieving the Health Millennium Development Goals (MDGs) in Tanzania**

Manoj Maharaj, University of KwaZulu-Natal, South Africa

11:00 Session 10b: **Innovation Leveraging Living Labs**

Chair: **Darelle Van Greunen, Nelson Mandela Metropolitan University, South Africa**

**A Model for the Transformation of the Mauritian Classroom based on the Living Lab Concept**

Mohammad Issack Santally, University of Mauritius

**Co-Constructive ePower Loop – Citizen Driven Innovation in Region Västerbotten, Northern Sweden**

Olov Forsgren, Stockholm University, Sweden

**A Proposed Living Lab Methodological Framework for Namibia**

Nobert Jere, Polytechnic of Namibia, Namibia

**User Experience of Pervasive Healthcare applications used by Community Healthcare Workers in the Eastern Cape, South Africa**

Alida Veldsman, Nelson Mandela Metropolitan University, South Africa

**Factors Impacting Tablet PC Usage in Low-income**

**Communities: A Case Study of South Africa**

Darelle Van Greunen, Nelson Mandela Metropolitan University, South Africa

11:00 Workshop 10c: **Cooperation with Finnish Institutions: Highlighting Expertise and Partnership Opportunities**

Chair: **Eva Kagiri, UniPID, Finland**

**Strengthening Cooperation on Science, Technology and Innovation between Finland, Africa and Europe**

Eva Kagiri, UniPID, Finland

**Living Labs – UFISA Project**

Minna Fred, University of Helsinki, Finland

**EnhANCE - A Partnership for Positioning African Universities to Spearhead Development of Local Mobile and Wireless Networks**

Edward Mutafungwa, Aalto University, Finland

**CIER Project - Converged Infrastructure for Emerging Regions**

Juha Zidbeck, VTT – Technical Research Centre of Finland

Networking Session with Finnish Partners - 12 representatives from different Finnish Institutions will give 2 min pitches highlighting their areas of expertise and what kind of partners they are looking for. Participants will then get an opportunity to have one-on-one meetings with the representatives and discuss collaboration opportunities

11:00 Workshop 10d **NCP Training (Closed meeting)**

11:00 Session 10e: **Environmental Sustainability**

Chair: **Ravi Foogooa, University of Technology, Mauritius**

**CrowdSourced Weather Reports: An Implementation of the  $\mu$  Model for Spotting Weather Information in Twitter**

Laurie Butgereit, Nelson Mandela Metropolitan University, South Africa

**A Wireless Sensor Network Framework for Large-Scale Industrial Water Pollution Monitoring**

Yohannes Derbew, Moha Soft Drink Industries (PEPSI), Ethiopia

**A Self Green ICT Maturity Assessment Tool for SMEs**

Ravi Foogooa, University of Technology, Mauritius

**Experience in implementing multi-country Energy Information Systems in West Africa and MENA regions**

Mohamad Mahgoub Hamid, RCREEE - Regional Center for Renewable Energy and Energy Efficiency, Egypt

12:30 **Lunch**

13:30 **Closing Plenary 11**

Chair: **Vishnou Gondeea, Permanent Secretary, Ministry of Information and Communication Technology, Mauritius**

**African Internet Exchange System (AXIS)**

Moses Bayingana, African Union Commission, Ethiopia

**Land Use Mapping using Satellite imagery - the Mauritian Experience**

Maryse Chung, Mauritius Sugarcane Industry Research Institute

**Prospects of Oceanography - Mauritius**

M. V. Ramana, Mauritius Oceanography Institute

**New Economic Growth Engines of the Mauritius Economy**

K. Poonosamy, Managing Director, Board of Investment, Mauritius

Best Paper Award

## Registration Information

It is necessary for all **IST-Africa 2014** delegates to register online. Each delegate should be registered separately.

## Conference Fees

### Authors Fees (Due by 24 March)

- Authors - African States €100
- Authors - EU New Member States, EU Candidate & 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 - Early Bird up to 24 March

- Delegate Early Bird - African States €200
- Delegate Early Bird - EU New Member States, EU Candidate Countries and Developing Countries €300
- Delegate Early Bird - All countries except above €400

### Delegates' Fees - Full Fee from 25 March

- Delegate Full Price - African States €250
- Delegate Full Price - EU New Member States, EU Candidate & 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

## Terms & Conditions

1. All authors who are presenting a paper at **IST-Africa 2014** must complete their payment registration by **24 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 2014 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.
11. Letters of invitation can only be issued following delegate registration online and receipt of payment.
12. The registration desk will open on Tuesday 06 May from 16:00 to 19:00 and will remain open during normal conference hours from 08:00 on Wednesday.

## Major Places of Interest

While in Mauritius, delegates should visit Grand Bay, Balaclava Ruins (North) Flacq Market, Ile aux Cerfs (East), Vieux Grand Port, Ile aux Aigrettes, Mahebourg, Domaine du Chasseur (South-East) Martello Tower, Chamaret, Salt Pans, Casela (West) and Ganga Talao, Grand Bassin and Black River Gorges (Inland).

## Climate

Mauritius has a moderate climate during May with average temperatures of 20 - 25 degrees Celsius during the day. Rains are possible during May and delegates should bring rain wear.

## Visa Information

Conference delegates should contact the Mauritian Embassy in your Country of Residence six to eight weeks prior to travelling, to determine if you require a visa, can secure a visa on arrival or must apply for a visa in advance.

African countries whose nationals do not require a visa for Mauritius include: Angola, Botswana, Burundi, Egypt, Gabon, Gambia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe.

European countries whose nationals do not require a visa for Mauritius include: Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovenia, Slovakia, Spain, Switzerland, Turkey, UK

If you are travelling through other countries to get to Mauritius, it is necessary to check if you require transit visas.

The **IST-Africa 2014** Organising Committee can only issue Letters of Invitation for visa purposes to delegates after payment for their conference registration has been received.

## Vaccinations

Proof of Yellow Fever vaccine (Yellow Book) is required for those arriving from a yellow-fever-infected area in Africa

While no specific vaccinations are required for Mauritius except for delegates coming from Yellow Fever areas, conference delegates travelling to Africa for the first time are recommended to have up to date Tetanus, Hepatitis A and Typhoid vaccines.

Please engage with your personal physician or travel health clinic four to six weeks prior to travelling. If you are travelling through another country on the way to Mauritius, please check if you require any vaccinations for that country.

## IST-Africa Initiative

Supported by the European Commission (EC) and African Union Commission (AUC), and Co-Funded under FP7 (Contract 611795), **IST-Africa** facilitates and supports:

- International Innovation, Research and Policy Cooperation
- Knowledge Sharing and Skills Transfer between IST-Africa Partners
- Collaborative Innovation, Entrepreneurship & Adoption of Living Labs
- Africa – EU Strategic Partnership (Information Society, ICT, Innovation)

**IST-Africa** Activities include:

- Annual IST-Africa Week Hosted by IST-Africa Partner Governments
- Analysis of African Adoption, Implementation, Policy and Research Priorities
- Analysis of African Innovation Spaces, Living Labs and Research Capacity of HEIs
- Horizon 2020 and Living Labs Training Workshops in IST-Africa Partner Countries to Support Research
- Capacity Building and Accelerate Information Society Development and ICT Adoption across Africa
- Participation in Information Society, ICT and Innovation related International Cooperation (including
- Africa - EU Strategic Partnership, EU - AUC Living Labs Taskforce for Africa, CODIST - UNECA and WSIS)
- Horizon 2020 Help Desk supporting African - European Research Collaboration

**IST-Africa** is a collaborative initiative between IIMC International Information Management Corporation Limited (Ireland, Coordinator), Ministerio da Ciencia e Tecnologia (Angola), 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), Ministère de l'Enseignement Supérieur et de la Recherche Scientifique (Tunisia) and Ministry of Communications and Information Technology (Egypt).

## Horizon 2020

Horizon 2020 commenced in January 2014 as the new Framework Programme to implement the Innovation Union with research and innovation funds of €80 billion from 2014 - 2020.

Horizon 2020 addresses all research and innovation funding that was previously provided through the Framework Programmes for Research and Technical Development (e.g. FP7), Competitiveness and Innovation Programme (CIP) and European Institute of Innovation and Technology.

Three main priorities include:

- Excellence Science – Research Infrastructures, Marie Curie (Mobility Grants), Future and Emerging Technologies
- Leadership in Enabling and Industrial Technologies (LEIT) – Components & Systems, Advanced Computing, Future Internet, Content Technologies and Information Management, Robotics, Micro and Nano-electronics and photonics
- Societal Challenges – Health, Food Security & Agriculture, Energy, Transport, Climate action and Environment, Innovation and Reflective Societies and Secure Societies

The Work Programmes for each thematic area were published on 11 December 2013.

ICT is a horizontal activity that is included across a number of Work Programmes within LEIT and within Societal Challenges.

The IST-Africa Guide to 2014 Calls for Proposals within Horizon 2020 provides an overview of Calls, themes and deadlines within the Marie Curie, eInfrastructures, Leadership in Enabling and Industrial Technologies (LEIT - Components and Systems, Advanced Computing, Future Internet, Content Technologies and Information Management, Robotics and Key enabling Technologies (Micro-nano-electronics and photonics)) and each of the Societal Challenges (Health, Food Security and Agriculture, Energy, Transport, Environment, Inclusive and Reflective Societies, Secure Societies) Work Programmes.

Please visit

[www.ist-africa.org/home/default.asp?page=horizon2020](http://www.ist-africa.org/home/default.asp?page=horizon2020)

to download the individual Work Programmes and IST-Africa Guide to 2014 Calls for Proposals