



REGIONAL INITIATIVES

Africa

Dubai Action Plan

2015-2017

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2015





REGIONAL INITIATIVES

Regional Initiatives: Dubai Action Plan 2015-2017

Africa

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“The Dubai Action Plan sets out a road map for ITU-D’s work and a shared vision to make a tangible difference to people’s lives. Regional Initiatives guide BDT, Member States and Sector Members in implementing specific projects that focus on the priority needs of each region. I call upon all our members and partners to join forces with BDT to implement the Regional Initiatives. I thank you for your continued support.”

Mr Brahim Sanou, Director, ITU Telecommunication Development Bureau

FOREWORD

ANDREW RUGEGE, REGIONAL DIRECTOR FOR AFRICA

When Africa joined the rest of the world in Dubai last year at the World Telecommunication Development Conference (WTDC-14) and agreed on the Dubai Action Plan, perhaps the most important of its components were the five well-appointed Regional Initiatives that reflected the gaps and opportunities for Africa’s knowledge-based social and economic development. This first Regional Development Forum for Africa after WTDC-14 provides a platform for conversations around “delivering on Africa’s Regional Initiatives” — the theme of this Forum taking place in Dakar, Senegal, from 9 to 10 September 2015.

There is little more important in Africa than building the capacity to use existing technologies, build new ones and develop applications and innovative solutions to address Africa’s unique challenges. Equally important are the harmonized policies and legal and regulatory frameworks that provide an enabling environment for development. The Connect Africa initiative set the stage for a continent connected with broadband and it is up to us to enhance and extend it to all our citizens, and most importantly facilitate its use.



The migration from analogue to digital terrestrial television broadcasting brings a new lease of life not only through new innovative and competitive programming, but also the subsequent digital dividend releasing scarce frequency resources in the 700-800 MHz bands that can be reused for mobile broadband and more innovative broadcasting such as Internet protocol television (IPTV). Africa also realizes that with the increasingly fast connectivity now in the continent comes equal access to both the well and ill-intentioned particularly over the Internet. As we morph ourselves into an information society with personal, demographic, financial and other data online, the continent must be vigilant, building defences and deterrents against cyberthreats.

During the Forum, the ITU Regional Office for Africa will share the progress made in the implementation of the initiatives and solicit input on the plan going forward. One of the lessons learned is that the best delivery model is collaborative between ITU, Member States and other stakeholders because while BDT can provide seed funding and expertise, the rest is up to all of us.

Implementation of Regional Initiatives — AFRICA

Introduction

This report provides a summary of the implementation of the Regional Initiatives set out in the Hyderabad Action Plan, adopted by the World Telecommunication Development Conference in 2010 (WTDC-10) in Hyderabad, India, for the period 2011-2014. It also spotlights the Regional Initiatives of the Dubai Action Plan, adopted by the World Telecommunication Development Conference in 2014 (WTDC-14) in Dubai, United Arab Emirates, for 2015-2017.

In addition, the report presents an overview of the projects that have been implemented in Africa in relation to the WTDC-10 Regional Initiatives. It also provides a snapshot of projects being implemented in 2015-2017 as part of the efforts to deliver on the Dubai Action Plan Regional Initiatives.

A man in a dark suit, white shirt, and striped tie is sitting at a desk, smiling as he works on a laptop. The background is a bright, out-of-focus office setting. The text is overlaid on the bottom left of the image.

Regional initiative 1
**Strengthening human and
institutional capacity building**

Projects implemented in Africa

under Hyderabad WTDC-10, and projects being implemented in 2015-2017 within the scope of the Dubai Action Plan Regional Initiatives

Centre of Excellence Network for Africa (Project 7RAF08072): This project aimed to establish a sustainable network of selected training and educational institutions (hereinafter referred to as “nodes”) that provide training opportunities on topics related to telecommunications and information and communication technologies (ICTs). The project’s objective was to promote human capacity building of governmental authorities, regulators, and senior managers of operators and service providers. High-quality training courses were delivered by the following six centres of Excellence for English and French speaking countries: AFRALTI (Kenya); CMTL (Togo) COSTECH (Rwanda); CFL/TELKOM (South Africa), ESMT (Senegal) and Makerere University (Uganda). Project 7RAF08072 ended on 31 December 2014.

Centre of Excellence Network for Spanish and Portuguese speaking countries in Africa (Project 9RAF08075): The project aimed at building a dedicated centre of excellence mechanism to address the capacity needs of the Spanish and Portuguese speaking countries in Africa. This is in recognition of the unique linguistic challenges these countries encounter in assimilating new knowledge, particularly in the areas of new technologies, using a second language.

The project helped compile programmes and courses developed by ITU and its partners, as well as by the Spanish and Portuguese speaking global community. These materials are available for sharing, notably in the areas of telecommunication policy, regulation, management and new technologies and services, the ultimate aim being to set up a sound and self-sustainable capacity building environment in the Spanish and Portuguese speaking countries in Africa. Project 9RAF08075 ended on 31 December 2013.

STRENGTHENING HUMAN AND INSTITUTIONAL CAPACITY BUILDING

Strengthening Training Capacity in Wireless Networking in Africa (Project 7RAF09078): This project aimed at contributing to developing networks of expertise by transferring low-cost wireless technology know-how to African training and/or educational institutions, by mentoring students and sharing knowledge through e-learning, augmented by missions to transfer specific skills. This involved the establishment of training centres on wireless technologies at selected African training and/or educational institutions, training of trainers on related information and communication technology (ICT) curricula, provision of training materials (for example, lab bundles), and the launching of specific training opportunities. The project encouraged the participation of women and young people in the ICT sector.

Support to the Telecommunications Sector in Angola (Project 9ANG11006): Completed at the end of May 2015, this project has assisted the Government of Angola in ICT development issues, including the human capacity building programme for senior staff through short courses on management, planning and strategies.

During the period 2010-2014, more than 1950 senior managers in the Africa region benefited from face-to-face training events through the Centres of Excellence Network project – some 75 workshops were delivered at the six centres of excellence. In addition, 166 participants benefited from distance-learning courses through seven online training events organized by the Centre of Excellence nodes. The ITU Regional Office for Africa provided technical and administrative support in the implementation of Centre of Excellence Network for Africa project.

A total of 1398 professionals were trained through the Centre of Excellence Network for Spanish and Portuguese speaking countries during the life span of this project. On average, 11 actions were undertaken per year, and 35 professionals were trained per training programme. Within the scope of this project, an e-learning platform and related equipment were procured and deployed in the region. The equipment was installed at the TDM Training Centre in Maputo, Mozambique, and continues to work with Portuguese and Spanish countries and its Associations such as ARCTEL to deliver online courses.



What is the situation today?

WTDC-14 approved new strategies for the ITU Centres of Excellence (CoE) Network based on six training institutions which the Africa region had selected as ITU CoE for the cycle 2015–2018: AFRALTI- Kenya; Digital Bridge Institute-Nigeria; ESMT-Senegal; ESATIC, Cote d'Ivoire; Centre for Learning, Telkom SA-South Africa; and University of Rwanda, College of Science and Technology-Rwanda. To manage and coordinate this CoE network, a Steering Committee was established with the mandate to also coordinate and oversee the business plans from each CoE and their sustainability. These CoEs will deliver training for the region in the areas of expertise in which they excel and which have been allocated to them, for example: policy and regulation (to the Digital Bridge Institute), broadband access and digital broadcasting (to ESMT), cybersecurity (to ESATIC and University of Rwanda), ICT applications and services (to CFL Telkom) and broadband access and spectrum management (to AFRALTI).

As an outcome of the Transform Africa Summit, held in Rwanda in 2013, the Smart Africa Scholarship Fund has been established to facilitate high-quality training of African professionals in the ICT sector through selected African centres of excellence in ICT.

Several initiatives in Africa are currently available for the training of professionals in the ICT sector through national universities, vocational institutions and the ITU CoE.



Objective

To provide stakeholders in Africa, on a sustainable basis, with human resources and skills needed for harmonious development of the telecommunication/ICT sector.

EXPECTED RESULTS

- 1 Enhanced skills and human capacity in the design and development of telecommunication/ICT strategies, including conformity and interoperability.
- 2 Increased local expertise through cooperation between countries.
- 3 Increased access to training resources, including training manuals, for all stakeholders in the African telecommunication/ICT sector.
- 4 Promotion of technical cooperation between telecommunication/ICT training institutions in regard to capacity and resources.
- 5 Increased availability of public access to knowledge, in particular by raising public and consumer awareness.

EXPECTED RESULTS

6

Forums for exchanging and sharing information between the various groups having a stake in the telecommunication/ICT sector in Africa, in particular young people, women and persons with disabilities and specific needs.

7

Enhanced human capacity building on legal aspects in order to address security and trust in the use of telecommunications/ICTs, particularly where cyberthreats are concerned.

8

Greater availability, development and usage of local content and languages, and corresponding webpage development.

9

Improved specialized skills development to meet the ICT needs of persons with disabilities and specific needs in order to promote ICT usage, particularly in regard to Internet applications.

10

Promotion of research and development (R&D) in African countries.

STRENGTHENING
HUMAN AND INSTITUTIONAL
CAPACITY BUILDING

PROJECT PROPOSAL

1

Smart Africa
SCHOLARSHIP
Fund



OBJECTIVE

To support the SMART Africa Alliance to provide deserving students with funds to study ICT in African centres of excellence.



Estimated budget

USD 2 million.



Potential partners

International donor agencies in education, governments and civil society.



Country or countries involved

The whole Africa region.

2015 Activities

- Mobilize funding.
- Set rules and procedures for scholarships.
- Awarding of scholarships.

2016 Activities

- Mobilize more resources and support more students.
- Devise sustainability models.

2017 Activities

- Mobilize more resources and support more students.

STRENGTHENING
HUMAN AND INSTITUTIONAL
CAPACITY BUILDING

PROJECT PROPOSAL

2

GIRLS in
ICT regional and
continental forum



OBJECTIVE

Digital inclusion with particular reference to women and girls: It is hoped that the annual Girls in ICT Day initiative can be supported by year-long activities at the national level that feed into regional competitions and end with a continental Forum for Girls, held around the April celebrations.



Estimated budget

USD 200 000.



Potential partners

ITU's Regional and Area offices in Africa hope to work with national Girls in ICT Day focal points and players in the mobile industry that have a regional presence in Africa and institutions such as USAID , UN Women, UNDP, AUC and DSTV.



Country or countries involved

All participating African countries.

2015 Activities

- Stakeholder kick-off meeting and the start of resource mobilization.

2016 Activities

- National and regional competitions.

2017 Activities

- Adding new stakeholders and consolidation of resource mobilization.

STRENGTHENING
HUMAN AND INSTITUTIONAL
CAPACITY BUILDING

PROJECT PROPOSAL 3

Capacity building for
Member States in
results-based strategic
PLANNING AND PROJECT
IDENTIFICATION



OBJECTIVE

Strengthen Member State technical capabilities in results-based strategic planning and project identification.



Estimated budget

USD 200,000.



Potential partners

- Every concerned government.
- International organizations and institutions.



Country or countries involved

All African least developed countries.

2015 Activities

- Country action framework development.
- Pilot project identification for two least developed countries (LDCs).
- Resource mobilization for the pilot project.

2016 Activities

- Pilot project implementation.
- Evaluation of the pilot project.

2017 Activities

- Project identification.
- Resource mobilization.

STRENGTHENING
HUMAN AND INSTITUTIONAL
CAPACITY BUILDING

PROJECT PROPOSAL

4

CENTRE OF EXCELLENCE
Network for Africa



OBJECTIVE

Build a self-sustaining centre of excellence network using the new strategy approved by WTDC-14 for the period 2015-2017.



Estimated budget

To be agreed in the next Centre of Excellence (CoE) Steering Committee in the fourth quarter of 2015.



Potential partners

The six selected CoEs: Digital Bridge Institute (DBI)-Nigeria; *Ecole Supérieure Multinationale des Télécommunications* (ESMT)-Senegal ; ESATIC-Côte d'Ivoire; University of Rwanda, College of Science and Technology-Rwanda; Centre for Learning, Telkom SA-South Africa; AFRALTI-Kenya; international organizations and other academic institutions.



Country or countries involved

All Sub-Saharan Africa.

2015 Activities

- Launch the new project.
- Call for submissions and selection of the CoE in accordance with the new strategy.
- Hold the Steering Committee Meetings to plan the courses and the budget.
- Deliver the planned courses as planned and agreed in the first Steering Committee.

2016 Activities

- Hold the Steering Committee Meeting.
- Deliver the agreed courses.
- Monitor project implementation.

2017 Activities

- Hold the Steering Committee Meeting.
- Deliver the agreed courses.
- Monitor and evaluate the project.

STRENGTHENING
HUMAN AND INSTITUTIONAL
CAPACITY BUILDING

PROJECT PROPOSAL

5

Strengthen
enabling environment
for a SUSTAINABLE DIGITAL
ECONOMY in Africa



OBJECTIVE

Strengthen the institutional and technical capabilities of the ICT policy and regulatory institutions.



Estimated budget

To be determined.



Potential partners

Member States and international development partners.



Country or countries involved

Africa region.

2015 Activities

- Assess the human capital of the policy and regulatory institutions.
- Develop appropriate human-capacity building policy.

2016 Activities

- Implementation and delivery of quality in-house training, coaching and practice.
- Monitoring and evaluation.

2017 Activities

- Monitoring and evaluation.

A man in a white shirt and blue tie is sitting in the driver's seat of a car. He is looking down at a laptop computer on his lap, which is open. He is also holding a tablet computer in his left hand. The car's interior, including the steering wheel and dashboard, is visible. The background shows a brick building and greenery outside the car window.

Regional initiative 2

Strengthening and harmonizing policy and regulatory frameworks for the integration of African telecommunication/ ICT markets

Projects implemented in Africa

under Hyderabad WTDC-10, and projects being implemented in 2015-2017 within the scope of the Dubai Action Plan Regional Initiatives

- **HIPSSA Project:** ITU in partnership with the European Union Commission designed and implemented an important project known as Harmonization of ICT Policies in Sub-Saharan Africa (HIPSSA), as part of a framework multi-regional initiative on the harmonization of policies and legislations in the African, Caribbean and Pacific Group of States (ACP) focusing on cybersecurity and ICTs. Under HIPSSA, ITU assisted members in the development of their policy and regulatory frameworks, providing platforms for enhanced information exchange and customized country assistance. A number of countries have updated and reviewed their ICT Bills and promulgated new laws. As HIPSSA was managed and executed as a full-scale project, its main achievements are outlined on the project website at <http://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/hipssa/Pages/default.aspx> . The project ended in September 2013.
- **Support to Telecommunications Sector in Angola (Project 9ANG11006):** Under this project (which was mentioned earlier), the Strategic Plan for 2013-2015 was drawn up to enable the Regulatory Authority to better respond not only to the new policies and legal framework adopted by the Angolan Government for the sector, but also to the changes that had occurred in the market.
- **National broadband plan guidelines and models:** This project aims to work with regional economic communities (RECs) and countries in the Africa region to develop national broadband plans and to harmonize them in the subregions. This will be achieved through the development of guidelines and national broadband plan models.

STRENGTHENING AND HARMONIZING POLICY AND REGULATORY FRAMEWORKS FOR THE INTEGRATION OF AFRICAN TELECOMMUNICATION/ICT MARKETS



What is the situation today?

All the countries that received assistance under the HIPSSA project are in the process of passing new ICT laws. These laws are derived from the transposition of HIPSSA Model Laws that were developed and adopted under the project.

ITU's 2014 survey shows that 39 out of 44 countries have established ICT regulatory authorities, 37 of which have the requisite legal documents for the establishment of a regulatory authority.

Improvements in the level of competition have led ICT players in the African market to be registered with either full or partial competition in most of the data, voice (fixed and mobile), Internet, international gateway markets and leased-line markets. Six out of 44 countries have full monopoly in the IDG markets, three countries have full monopoly in the Internet service market and two countries have full monopoly in the mobile markets.

Because of the great success of the project, ITU is negotiating with the European Commission for a new project that will build on the achievements of HIPSSA.

For the development of the national broadband plan guidelines and model, a questionnaire was developed and circulated to all countries and regional economic communities in Africa. Based on the information collected, the guidelines and model national broadband plan was developed for countries of the Southern African Development Community (SADC).

Of the 36 countries that responded to the ICT survey, 21 had adopted national broadband plans in Africa by 2013.



STRENGTHENING AND HARMONIZING POLICY AND REGULATORY FRAMEWORKS FOR THE INTEGRATION OF AFRICAN TELECOMMUNICATION/ICT MARKETS



Objective

To facilitate and promote the reform of Africa's national telecommunication/ICT sectors and the implementation of telecommunication/ICT strategies in order to achieve subregional and regional integration of telecommunication/ICT infrastructure, services and markets.

EXPECTED RESULTS

- 1 Implementation of the reference framework for harmonization of telecommunication/ICT regulatory policies in Africa.
- 2 Development of competitive African telecommunication/ICT markets.
- 3 Harmonized technical standards to provide increased connectivity of networks and services.
- 4 Establishment of a harmonized policy to reduce the level of intra-continental traffic routed by extra-continental transit centres.
- 5 Development of a harmonized strategy for universal access, taking into account the needs of young people, women, persons with disabilities and specific needs, and indigenous peoples.

EXPECTED RESULTS

6

Development of high-quality and affordable telecommunication/ICT services.

7

Establishment of a regional framework for cooperation (training, internships, mutual assistance) on e waste.

8

Development and harmonization of national and regional regulations on cybersecurity and ICT applications.

9

Harmonization of the quality-of-service regulatory framework at regional level to ensure consumer satisfaction.

10

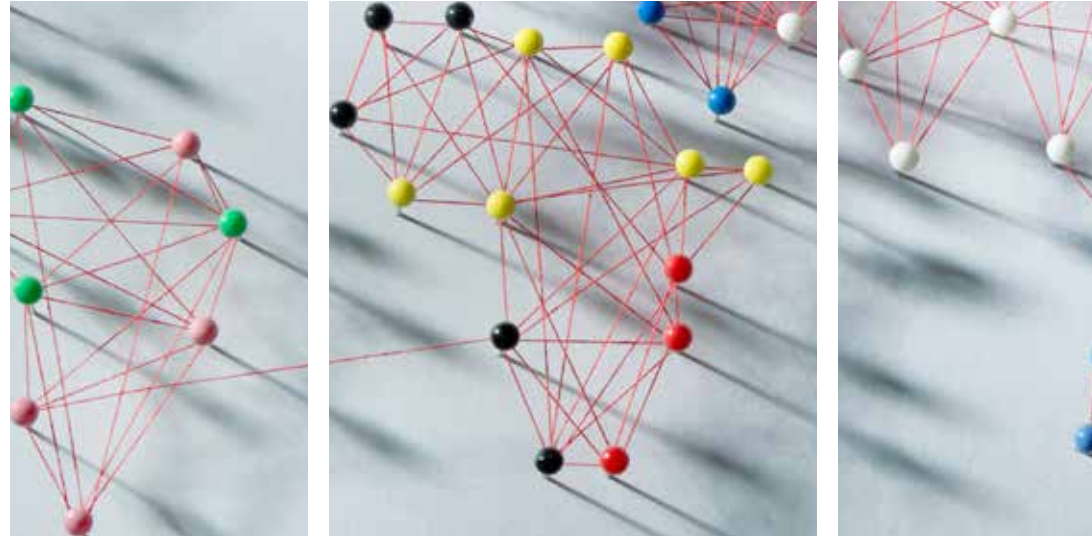
Development of a set of tools and mechanisms for measurement of a consumer satisfaction index.

STRENGTHENING
AND HARMONIZING POLICY AND
REGULATORY FRAMEWORKS FOR
THE INTEGRATION OF AFRICAN
TELECOMMUNICATION/ICT MARKETS

PROJECT PROPOSAL

1

Harmonization
of ICT policies, LEGAL AND
REGULATORY frameworks in
Africa (HIP-Africa)



OBJECTIVE

Harmonizing legal and regulatory frameworks in telecommunication/ICT markets.



Estimated budget

EUR 10 millions.



Potential partners

European Union, regional economic communities, regional regulatory associations, national regulatory authorities, and ICT ministries.



Country or countries involved

The whole African continent.

2015 Activities

- Formulation and sourcing of funding.

2016 Activities

- Recruitment and implementation commencement.

2017 Activities

- Implementation, monitoring and evaluation.

STRENGTHENING
AND HARMONIZING POLICY AND
REGULATORY FRAMEWORKS FOR
THE INTEGRATION OF AFRICAN
TELECOMMUNICATION/ICT MARKETS

PROJECT PROPOSAL

2

Training of the JUDICIARY
ON INTERPRETATION and
enforcement of ICT laws



OBJECTIVE

Adopting a harmonized approach to ICT law interpretation and enforcement.



Estimated budget

USD 60,000 per country.



Potential partners

Regional regulatory associations and national governments.



Country or countries involved

All countries in the Africa region.

2015 Activities

- Stakeholder kick-off meeting and resource mobilization.
- Selection of ICT laws per region and per country.
- Development of training modules.

2016 Activities

- Roll-out of regional training.
- Consolidation of resource mobilization.
- Identification of countries.
- Roll out of training for requesting countries.

2017 Activities

- Resource mobilization.
- Monitoring and evaluation.

STRENGTHENING
AND HARMONIZING POLICY AND
REGULATORY FRAMEWORKS FOR
THE INTEGRATION OF AFRICAN
TELECOMMUNICATION/ICT MARKETS

PROJECT PROPOSAL 3

Strengthening every
African LDC capabilities in
TELECOMMUNICATION/ICT
STANDARDIZATION



OBJECTIVE

Strengthen or establish a national standardization secretariat or unit.



Estimated budget

To be determined.



Potential partners

- Governments
- Telecommunication/ICT administrations and institutions.
- Telecommunication/ICT operators and manufacturers.



Country or countries involved

African countries.

2015 Activities

- Organization of the national project stakeholder meeting.
- Elaboration of the project identification document.
- Resource mobilization for identified projects.

2016 Activities

- Project implementation and monitoring of the formulated projects.

2017 Activities

- Project Implementation and monitoring of the formulated projects.

STRENGTHENING
AND HARMONIZING POLICY AND
REGULATORY FRAMEWORKS FOR
THE INTEGRATION OF AFRICAN
TELECOMMUNICATION/ICT MARKETS

PROJECT PROPOSAL

4

Strengthening
every African country's
capabilities in producing
national RELIABLE
TELECOMMUNICATION/ICT
STATISTICS



OBJECTIVE

Strengthen or establish a national telecommunication/ICT statistics production unit.



Estimated budget

USD 2 million.



Potential partners

- Government, public administrations and institutions.
- Telecommunication/ICT operators/providers.
- National private sector (private companies).
- National organizations and institutions.



Country or countries involved

African countries.

2015 Activities

- Organization of a national project stakeholder meeting.
- Elaboration of the project identification document.
- Resource mobilization for the identified projects.

2016 Activities

- Implementation and monitoring of the formulated projects.

2017 Activities

- Project implementation.

STRENGTHENING
AND HARMONIZING POLICY AND
REGULATORY FRAMEWORKS FOR
THE INTEGRATION OF AFRICAN
TELECOMMUNICATION/ICT MARKETS

PROJECT PROPOSAL

5

Strengthening ECCAS
capabilities in the
harmonization of national ICT
POLICIES AND REGULATORY
FRAMEWORKS



OBJECTIVE

Assist the secretariat of the Economic Community of Central African States (ECCAS) and the Community's Member States in the transposition of national ICT regulatory frameworks.



Estimated budget

USD 750,000.



Potential partners

Governments, national regulatory authorities.



Country or countries involved

11 ECCAS Member States.

2015 Activities

- Develop ECCAS action framework and an action plan for every ECCAS Member State.

2016 Activities

- Implement country action plans (CAP).
- Monitor CAP implementation.

2017 Activities

- Implement country action plans (CAP).
- Monitor CAP implementation.

STRENGTHENING
AND HARMONIZING POLICY AND
REGULATORY FRAMEWORKS FOR
THE INTEGRATION OF AFRICAN
TELECOMMUNICATION/ICT MARKETS

PROJECT PROPOSAL

6

Strengthen
institutional capabilities
for ICT competition and
market assessment for
enhanced **QUALITY AND
AFFORDABLE ICT SERVICES**



OBJECTIVE

Assist regional economic communities and countries in Africa in developing harmonized frameworks, for competition assessment.



Estimated budget

USD 150,000.



Potential partners

Regional economic communities, governments and national regulatory authorities.



Country or countries involved

Countries in the African region.

2015 Activities

- Development and validation of model frameworks.

2016 Activities

- Resource mobilization
- Implementation of country and regional action plans.

2017 Activities

- Implementation of country and regional action plans.
- Monitoring and evaluation.

STRENGTHENING
AND HARMONIZING POLICY AND
REGULATORY FRAMEWORKS FOR
THE INTEGRATION OF AFRICAN
TELECOMMUNICATION/ICT MARKETS

PROJECT PROPOSAL

7

Harmonization of QoS
frameworks in Africa and
establish platforms
to enhance
CONSUMER SATISFACTION



OBJECTIVE

Adopting harmonized frameworks for the quality of service (QoS) and support countries in establishing platforms for consumer education.



Estimated budget

USD 250,000.



Potential partners

National governments, telecommunication/ ICT operators.



Country or countries involved

Regional economic communities and countries in Africa.

2015 Activities

- Development and validation of frameworks and guidelines.
- Set up platform for consumer education.

2016 Activities

- Develop tools and mechanisms for measurement of a consumer satisfaction index.
- Implementation of country/regional action plans.

2017 Activities

- Implementation of country and regional action plans.

STRENGTHENING
AND HARMONIZING POLICY AND
REGULATORY FRAMEWORKS FOR
THE INTEGRATION OF AFRICAN
TELECOMMUNICATION/ICT MARKETS

PROJECT PROPOSAL

8

E-WASTE
Strategy
for Africa



OBJECTIVE

To develop an E-waste strategy for Africa, taking into account the various national and regional e-waste strategies being developed by African countries, United Nations agencies and other international development organizations.



Estimated budget

To be determined.



Potential partners

Regional regulatory associations, regional economic communities, African Union Commission, international development agencies.



Country or countries involved

African countries.

2015 Activities

- Data collection and inventory of e-waste strategies, comparative analysis and identification of areas of harmonization.
- Project formulation.

2016 Activities

- Preparation of guidelines and model strategy.
- Validation and adoption of the guidelines and model strategy.
- Transposition at country level and implementation.

2017 Activities

- Transposition at country level and implementation.
- Monitoring and evaluation.

A woman with dark hair, wearing a vibrant red dress with yellow and white circular patterns, is sitting on a concrete ledge. She is holding a white tablet computer and looking towards the camera. The background shows a building with wooden shutters and a wall with some faint text.

Regional initiative 3

Development of
broadband access and
adoption of broadband

Projects implemented in Africa

under Hyderabad WTDC-10, and projects being implemented in 2015-2017 within the scope of the Dubai Action Plan Regional Initiatives

- **Interactive maps:** In order to give the membership a global overview of broadband infrastructure development in Africa, broadband interactive maps for African countries were designed taking into account the following seven indicators: optical fibre cable length, nodes location, type of equipment for transmission network, network capacity per channel, number of optical fibres within the cable and operational status of the transmission network. The digital interactive maps are now available to the ITU membership (TIES account credentials are required).
- **Connect Africa/Transform Africa:** The ITU Regional Office for Africa has continued to hold regular Connect Africa Summit follow-up meetings involving key partners such as regional economic communities, the African Union Commission (AUC), the United Nations Economic Commission for Africa (UNECA), the African Development Bank, and the World Bank. In this framework, an assessment study on the achievement of the goals of the Summit was undertaken with funding support from the African Development Bank. In addition to the Connect series, as a follow up to Connect Africa 2007, the Transform Africa Summit was organized in Rwanda in October 2013. This high-level forum was attended by seven Heads of States and senior international public and private-sector participants and set a new agenda for Africa to leapfrog development challenges through the use and uptake of broadband and related services. The summit endorsed the “Connect to Transform: Connect Africa Manifesto”.

- **Broadband Wireless Network in Africa (Project 7RAF08073):** This project aimed at assisting African countries in deploying wireless broadband infrastructure ; developing ICT applications; training local experts to operate deployed wireless communication networks; developing national ICT broadband network plans for beneficiary countries, allowing them to deliver free or low-cost digital access for schools and hospitals, and for underserved populations in rural and remote areas; and developing an impact assessment report.
- **Wireless Broadband Access Master Plan for Africa (Project 9RAF11085):** The project aims at facilitating deployment of wireless broadband access in developing and least developed countries. ITU, in close collaboration with the Government of the Republic of Korea, intends to implement a project on master plan for wireless broadband access in the Africa region.

Under this project, the following outputs will be delivered:

1. Survey results on the status of broadband connectivity in general and wireless broadband access in Africa region.
2. Collected information on development of appropriate policies, regulations and capacity building, including licensing, and planning for deploying wireless broadband access networks, from Guidelines and Recommendations developed by ITU.
3. Wireless broadband access master plans for at least two (and up to four) selected countries in the Africa region within the limits of the budget.
4. Enhanced skills through training to devise the wireless broadband master plan.



What is the situation today?

Under the Wireless Broadband Access Master Plan for Africa project:

One country per subregion has been selected through a recommendation of the Regional Office for Africa and consultation with the Korean Government (Southern: Malawi, Central Africa: Congo Brazzaville, East Africa: South Sudan, West Africa: Guinea Bissau).

Assessment of the status of broadband connectivity was done for Malawi and Congo Brazzaville in 2014.

Within the scope of the Broadband Wireless Network in Africa project, the following countries were assisted in the development of their wireless broadband infrastructure, capacity building and applications: Burkina Faso, Burundi, Mali, Rwanda, Swaziland and Lesotho.

In general, all countries are at different levels of development. For instance, in Southern Africa some countries are at the planning stage of their broadband wireless network, while others have started deployment. Meanwhile, the secretariat of the Southern Africa Development Community (SADC) is mobilizing the economic grouping to universalize broadband connectivity. In particular, the SADC secretariat has called for assistance to look at strategies that would accelerate the provision of universal service or access to ICTs, more especially to broadband services. In response to this call, the ITU Area Office for Southern Africa is developing a project to help SADC move ahead with the harmonized approach, following the proposed guidelines for broadband plans developed for it late last year.

Africa's share of international Internet bandwidth is estimated to have remained at less than 1 per cent by the end of 2014, with only 8074 bit/s per users compared to the global average of 52000 bit/s per users and Europe at 160 000 bit/s per users. Some 30 per cent of the population still lies out of reach (i.e. more than 50 km away) from a fibre transmission network and only 22 per cent live within a range of 10 km. Only 11 per cent of households in Africa had Internet, compared to the world average of 43.6 per cent, and only 19 per cent of individuals used the Internet. Bringing transmission networks closer to the population and investing in last-mile access will foster Internet connectivity and broadband uptake.

From the questionnaire circulated to all countries in Africa on the status of their national broadband plans, of the 21 that responded, nine have national broadband policy, but only four had national broadband plans. Some countries have national broadband projects to implement national policies.



Objective

To assist Member States in the development of broadband infrastructure and access thereto in urban and rural areas, with particular emphasis on subregional and continental interconnection.

EXPECTED RESULTS

- 1 National telecommunication/ICT master plans to meet the requirements of developing countries.
- 2 Improved broadband backbone infrastructure and access to affordable telecommunication/ICT services in urban and rural areas.
- 3 Guidelines on rural connectivity, including policy, appropriate technologies and power supply issues, and best practices.
- 4 Enhanced human capacities in the area of broadband communication networks.
- 5 Interconnection of countries by means of high-capacity links, including access to undersea cables for landlocked countries, as part of the follow-up to the Connect Africa summit.

EXPECTED RESULTS

6

Development of mechanisms and tools to facilitate the use of ICTs by persons with disabilities and specific needs.

7

Ease of access to submarine cables for all countries, and especially landlocked countries, on fair terms.

8

Promoting the establishment of national and regional Internet exchange points (IXPs).

9

Promoting the development of local content and localized access.

10

Promoting IPv4 to IPv6 migration.

DEVELOPMENT OF
BROADBAND ACCESS
AND ADOPTION OF BROADBAND

PROJECT PROPOSAL

1

Universalizing
BROADBAND
in Africa



OBJECTIVE

To assist Member States in the development of broadband infrastructure and access thereto in urban and rural areas, with particular emphasis on subregional and continental interconnection.



Estimated budget

USD 200,000 for SADC.



Potential partners

DFID for Southern Africa, SADC Member States, Africa.



Country or countries involved

Africa region.

2015 Activities

- Assist regional economic communities with guiding principles to achieve cost-effective broadband applications and services.
- To nurture growth and acceleration in penetration of broadband.

2016 Activities

- Development of broadband-enabled applications and services, as well as building human resources capacity to have ICT skills and technological capabilities.

2017 Activities

- Assist African countries.
- Customize guiding principles.

DEVELOPMENT OF
BROADBAND ACCESS
AND ADOPTION OF BROADBAND

PROJECT PROPOSAL

2

Development of
NATIONAL
BROADBAND PLAN
guidelines and model



OBJECTIVE

Assist regional economic communities and countries in the Africa region to develop harmonized national broadband plans.



Estimated budget

USD 200,000.



Potential partners

Regional economic communities and African countries.



Country or countries involved

Countries in the Africa region.

2015 Activities

- Development and validation of guidelines and model national broadband plan for the SADC countries.
- Direct assistance to countries transposing the model.

2016 Activities

- Development and validation of guidelines and model national broadband plan for the Economic Community for West African States (ECOWAS) or for ECCAS.
- Direct assistance to countries transposing the model.

2017 Activities

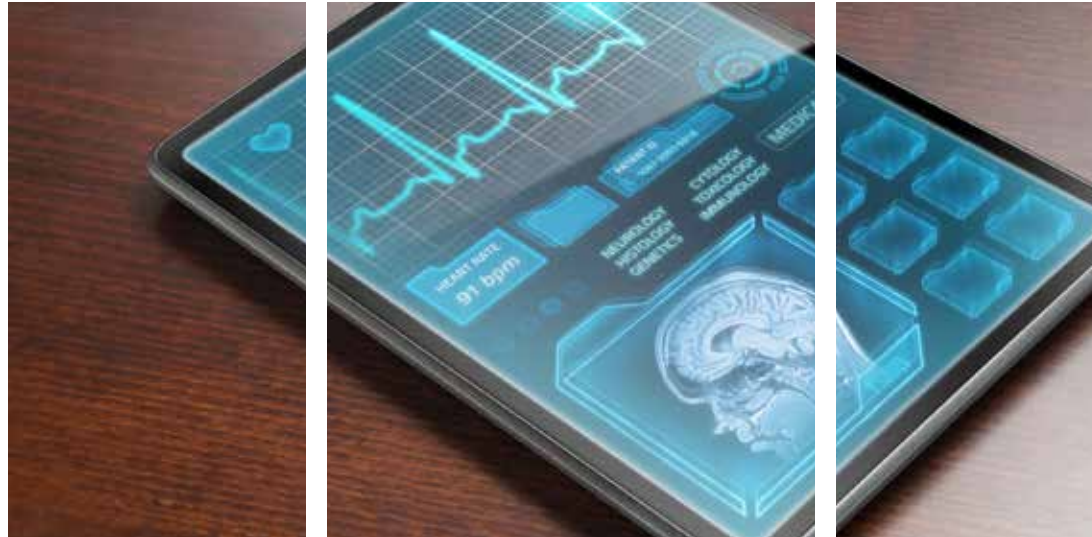
- Assistance to countries requesting support.

DEVELOPMENT OF
BROADBAND ACCESS
AND ADOPTION OF BROADBAND

PROJECT PROPOSAL

3

Connectivity
FOR TELEMEDICINE
in Africa



OBJECTIVE

This project aims at providing connectivity between hospitals in Zimbabwe with ICTs in order to improve medical service delivery in a country where professional medical brain drain is a critical factor.



Estimated budget

USD 276,000 for Zimbabwe.



Potential partners

African countries, UNDP-Zimbabwe, other UN agencies (WHO, UNFPA, UNESCO and UNICEF).



Country or countries involved

African countries.

2015 Activities

- Audit of infrastructure and facilities related to telemedicine in the hub and selected hospitals to be connected.
- Assistance to the Ministry of ICTs Postal and Courier Services in the development of regulations/procedures and sector policy for the health sector.

2016 Activities

- Connectivity of at least 4 provincial hospitals to the referral hub.
- Enhanced skills in telemedicine through training.

DEVELOPMENT OF
BROADBAND ACCESS
AND ADOPTION OF BROADBAND

PROJECT PROPOSAL

4

ITU/McCaw
BROADBAND WIRELESS
network project
for Africa



OBJECTIVE

Deploy broadband wireless Internet access infrastructure for countries and develop ICT applications.



Estimated budget

USD 850,000 per country.



Potential partners

Craig and Susan McCaw Foundation and beneficiary countries.



Country or countries involved

Burkina Faso, Burundi, Djibouti, Mali, Rwanda, Lesotho, Swaziland.

2015 Activities

- Continuation of the implementation process in Burkina Faso and Lesotho; launching of implementation in Rwanda and Swaziland.

2016 Activities

- Continuation and fine-tuning of the implementation process in Rwanda and Swaziland. Research of additional funding for new beneficiary countries' recruitment.

2017 Activities

- Research of additional funding for new beneficiary countries' recruitment.

DEVELOPMENT OF
BROADBAND ACCESS
AND ADOPTION OF BROADBAND

PROJECT PROPOSAL

5

Strengthening
country institutional,
REGULATORY AND
TECHNICAL capabilities for
sustainable broadband
development



OBJECTIVE

Provide to African countries a national broadband development strategy and improve its technical knowledge and know-how for ICT policy/strategy development and implementation.



Estimated budget

USD 184,375 for Burundi.



Potential partners

National key stakeholders (governments, regulatory authorities, telecom operators).



Country or countries involved

African countries.

2015 Activities

- Broadband policy and strategy development.
- Regulatory framework development.

2016 Activities

- Project closing.

2017 Activities

- Project evaluation.

DEVELOPMENT OF
BROADBAND ACCESS
AND ADOPTION OF BROADBAND

PROJECT PROPOSAL

6

Development of
E-HEALTH
in Africa



OBJECTIVE

To enable countries to develop a national programme that will deliver a successful national e-health strategy based on the use of WHO/ITU National eHealth Strategy Toolkit.



Estimated budget

USD 500,000.



Potential partners

WHO and Member States (MICT, MOH).



Country or countries involved

All Member States in the Africa region.

2015 Activities

- Organize workshops to guide Member State participants on the effective use of the toolkit in developing a national e-health strategy.

2016 Activities

- Support national dialogue among stakeholders in the development of their national strategy.

2017 Activities

- Monitor and evaluate the outcome.



Regional initiative 4
**Spectrum management and
transition to digital broadcasting**

Projects implemented in Africa

under Hyderabad WTDC-10, and projects being implemented in 2015-2017 within the scope of the Dubai Action Plan Regional Initiatives

One project has been focused on formalizing a framework agreement on a harmonized calculation method to be used by all African countries in their cross border frequency coordination. The project is known as HCM4A (the agreement on harmonized calculation method for Africa).



HCM4A was finalized and adopted under the HIPSSA project. ITU has since received indications of intention to sign this agreement from most African countries.

Many African countries, particularly the least developed ones, need assistance in spectrum management as highlighted in Resolution 9 (Rev. Dubai, 2014).

What is the situation today?



Objective

To assist Member States in the transition to digital broadcasting and spectrum management.

EXPECTED RESULTS

1

Support for the elaboration of spectrum-management plans at the national, regional and global levels, including the transition to digital broadcasting.

2

Assistance in using the tools to support the developing countries in improving the international coordination of terrestrial services in border areas.

3

Capacity building in spectrum management and digital broadcasting technologies.

4

Elaboration of studies, benchmarks and guidelines on the economic and policy aspects of the assignment and use of the radio-frequency spectrum, taking into account Resolution 9 (Rev. Hyderabad 2010) of the World Telecommunication Development Conference.

5

Assistance to countries in fostering people-inclusive strategies in digital broadcasting, to include the availability of universal broadcasting receivers for commercial use at affordable prices.

6

Assistance to Member States in meeting the deadline for the analogue-to-digital switchover.

SPECTRUM MANAGEMENT
AND TRANSITION
TO DIGITAL BROADCASTING

PROJECT PROPOSAL

1

ANALOGUE to
DIGITAL transition



OBJECTIVE

To develop road maps to assist African countries in successfully switching from analogue to digital terrestrial television broadcasting.



Estimated budget

A component under the HIP-AFRICA PROJECT, with a total of about EUR 10 million.



Potential partners

European Union Commission and African Union Commission.



Country or countries involved

The whole African continent.

2015 Activities

- Formulation and sourcing of funding.

2016 Activities

- Recruitment and implementation.

2017 Activities

- Project implementation.

SPECTRUM MANAGEMENT
AND TRANSITION
TO DIGITAL BROADCASTING

PROJECT PROPOSAL

2

HCM4A



OBJECTIVE

A harmonized calculation method for frequency interference in Africa



Estimated budget

USD 150,000.



Potential partners

International partners such as the European Union, the African Union Commission, the African Telecommunications Union and regional regulatory associations.



Country or countries involved

All African countries signatory to the Agreement.

2015 Activities

- Setting up of an administrative body for HCM4A.
- Actual signing of HCM4A following all the indications of interest to sign received from African countries.

2016 Activities

- Installation of a server.
- Update of all bilateral and multilateral agreements in the database.
- Development of a software tool for Africa using the HCM4 Europe tool as a template.

2017 Activities

- Training of the administrative body and proper staffing and training on HCM4A implementation using SMD4 and other spectrum monitoring tools at national levels.



Regional initiative 5

Building confidence and security in the use of telecommunications/ICTs

Projects implemented in Africa

under Hyderabad WTDC-10, and projects being implemented in 2015-2017 within the scope of the Dubai Action Plan Regional Initiatives

ITU has been conducting projects in the Africa region to support the establishment of national computer incident response teams (CIRTs).

CIRT assessment: The ITU Regional Office for Africa performed CIRT assessment for ten countries between 2011 and 2014. The main objectives of CIRT assessment are to assist countries in assessing their readiness to establish a national computer incident response team. The national CIRT will provide the capability to identify, respond to and manage cyberthreats, while at the same time enhancing the country's cybersecurity posture. The final outcome and deliverable of this mission will be reports containing key issues, key findings, as well as analysis and recommendations.

CIRT implementation: The main objective of this project was to assist countries to establish their national computer incident response teams, to serve as trusted, central coordination points of contact for cybersecurity, aimed at identifying, defending, responding to and managing cyberthreats.

ITU assisted a number of countries in building and deploying the technical capabilities and related training necessary to establish their national CIRTs. This is expected to lead to the development of national cybersecurity capacity and to enhancing regional and international collaboration.

CIRT implementation has been carried for the following seven countries: Burkina Faso, Côte d'Ivoire, Ghana, Kenya, Uganda, Tanzania and Zambia and is ongoing for Burundi.

Enhancing Cybersecurity in Least Developed Countries: The project aims to support least developed countries in strengthening their cybersecurity capabilities to better respond to cyberthreats and thus ensure enhanced protection of their national infrastructure, including critical information infrastructure. This will not only make the Internet safer by protecting Internet users, but will also serve national priorities and maximize socio-economic benefits in line with the objectives of the World Summit on the Information Society (WSIS) and the Millennium Development Goals (MDGs). Sierra Leone, Gambia and Guinea have been selected as beneficiary countries for the first phases of the project.

The purpose of the first cyberdrill, held in Zambia from 29 September to 1 October 2014 and organized by ITU-IMPACT and partners and hosted by ZICTA, was to enhance the communication and incident response capabilities of the participating teams as well as to ensure a continued collective effort in mitigating cyberthreats among the region's national computer incident response teams.

The cyberdrill exercise was structured around various scenarios involving the most common types of cyberattacks, while the sharing sessions provide a platform for cooperation and discussions on cybersecurity.

Africa's first cyberdrill was attended by more than 16 countries and more than 13 teams, enhancing their communication and capabilities to mitigate cyberthreats.

Capacity building has been performed for Sierra Leone within the scope of the Enhancing Cybersecurity in Least Developed Countries project. Capacity building for Guinea, and CIRT implementation for Gambia, are planned under this project.





CIRT assessments have been performed for more than 24 countries in Africa (Botswana, Burkina Faso, Burundi, Cameroon, Chad, Côte d'Ivoire, Djibouti, Democratic Republic of the Congo, Gabon, Gambia, Ghana, Kenya, Lesotho, Liberia, Mauritania, Niger, Nigeria, Senegal, Swaziland, Tanzania, Togo, Uganda, Zambia, and Zimbabwe).

In many African countries, ITU has to facilitate the creation of national computer incident response teams and cooperation between them in line with Resolution 69 (Rev. Dubai, 2014).

What is the situation today?



Objective

To assist Member States in defining and implementing appropriate strategies for the protection of ICT infrastructure and building confidence in the use of ICTs and applications.

EXPECTED RESULTS

- 1 Enhanced coordination and sustained national and regional approaches to cybersecurity.
- 2 Support for institutional and organizational mechanisms at national and regional levels to effectively implement cybersecurity strategies.
- 3 Development of appropriate measures to protect consumers, children and other vulnerable persons in the use of ICTs.
- 4 Creating awareness of cyberthreats, cybersecurity measures and quality of service in the use of ICTs.
- 5 Adoption of measures for privacy and personal data protection.
- 6 Promoting the development of national and regional computer incident response teams (CIRTs).
- 7 Development of a harmonized strategy to strengthen information security and combat spam and cyberthreats.

BUILDING
CONFIDENCE AND SECURITY
IN THE USE OF
TELECOMMUNICATIONS/ICTS

PROJECT PROPOSAL

1

Strengthening
the capabilities of
African countries in
implementing the CHILD
ONLINE PROTECTION (COP)
Guidelines, including national
action plan elaboration and
national project formulation



OBJECTIVE

Formulate, in every concerned African LDC, at least one priority project per COP pillar.



Estimated budget

USD 450,00 for 15 least developed countries.



Potential partners

- Government and public administrations and institutions.
- Telecommunication/ICT public operators and providers.
- National and international organizations and institutions.
- National private sector.



Country or countries involved

15 LDCs.

2015 Activities

- Organization of national stakeholder meetings.
- Development of national strategic and/or priority action plans.
- Elaboration of priority project identification documents.
- Resource mobilization for these identified priority projects.

2016 Activities

- Organization of national stakeholder meetings.
- Development of national strategic and/or priority action plans.
- Elaboration of priority project identification documents.
- Resource mobilization for these identified priority projects.
- Implementation and monitoring of formulated projects.

2017 Activities

- Elaboration of priority project identification documents.
- Resource mobilization for these identified priority projects.
- Implementation and monitoring of formulated projects.

BUILDING
CONFIDENCE AND SECURITY
IN THE USE OF
TELECOMMUNICATIONS/ICTS

PROJECT PROPOSAL

2

Enhancing
CYBERSECURITY in
African countries



OBJECTIVE

Supporting African countries in strengthening their cybersecurity capabilities to better respond to cyberthreats to ensure enhanced protection of their national infrastructure, including critical information infrastructure, thereby making the Internet safer and protecting Internet users, to serve national priorities and maximize socio-economic benefits in line with the objectives of the World Summit on the Information Society (WSIS) and the Millennium Development Goals (MDGs).



Estimated budget

USD 100,000 for Gambia and Guinea.



Potential partners

Concerned countries and international development agencies.



Country or countries involved

Gambia and Guinea.

2015 Activities

- CIRT implementation for Gambia.
- Capacity building for Guinea.
- Project formulation for other countries.

2016 Activities

- Project implementation and new project formulation.

2017 Activities

- Project implementation and new project formulation.

BUILDING
CONFIDENCE AND SECURITY
IN THE USE OF
TELECOMMUNICATIONS/ICTS

PROJECT PROPOSAL

2 BIS

Enhancing
CYBERSECURITY in
African countries



OBJECTIVE

Enhance the communication and incident response capabilities of the participating teams as well as ensure a continued collective effort in mitigating cyberthreats among the region's national computer incident response teams (CIRTs).



Estimated budget

USD 60,000/year
(ITU to contribute USD 25,000).



Potential partners

- IMPACT
- ABI RESEARCH
- NUIX



Country or countries involved

All participating African countries.

2015 Activities

- Build and develop the national capacity of the partner countries in order to facilitate further development within the area of national critical information infrastructure protection.
- Build capacity to protect against cyberthreats/ cybercrime, in collaboration with one another.
- Enhance the national expertise in cybersecurity and reduce the human capacity gap in this area.

2016 Activities

- Build and develop the national capacity of the partner countries in order to facilitate further development within the area of national critical information infrastructure protection.
- Build capacity to protect against cyberthreats/ cybercrime, in collaboration with one another.
- Enhance the national expertise in cybersecurity and reduce the human capacity gap in this area.

2017 Activities

- Build and develop the national capacity of the partner countries in order to facilitate further development within the area of national critical information infrastructure protection.
- Build capacity to protect against cyberthreats/ cybercrime, in collaboration with one another.
- Enhance the national expertise in cybersecurity and reduce the human capacity gap in in this area.

BUILDING
CONFIDENCE AND SECURITY
IN THE USE OF
TELECOMMUNICATIONS/ICTS

PROJECT PROPOSAL

3

Harmonization of
legal frameworks on
CYBERSECURITY
in Africa



OBJECTIVE

To harmonize ICT cyberlaws in the Africa region.



Estimated budget

USD 3 million (component of HIP-Africa project)



Potential partners

European Union, African Union, regional economic communities, regional regulatory associations and national regulatory authorities.



Country or countries involved

All countries in the Africa region.

2015 Activities

- Project formulation and sourcing for funding.

2016 Activities

- Implementation and monitoring.

2017 Activities

- Implementation and monitoring.



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