



AFRICA

# REGIONAL INITIATIVES

BUENOS AIRES ACTION PLAN **2018-2021**



## **AFRICA REGIONAL INITIATIVES**

### **BUENOS AIRES ACTION PLAN 2018 – 2021**

**Regional Initiative 1 (AFR 1)** - Building digital economies and fostering innovation in Africa

**Regional Initiative 2 (AFR 2)** - Promotion of emerging broadband technologies

**Regional Initiative 3 (AFR 3)** - Building trust and security in the use of telecommunications/information and communication technology

**Regional Initiative 4 (AFR 4)** - Strengthening human and institutional capacity building

**Regional Initiative 5 (AFR 5)** - Management and monitoring of the radio-frequency spectrum and transition to digital broadcasting

## **Foreword**

Year on year, the Regional Development Forum (RDF) serves as a platform enabling the region to present to the membership the work done over the previous year and to seek guidance on activities planned for the following year. It offers a rare opportunity for the membership to review progress, share experiences, offer advice and promote good practices.

At the World Telecommunication Development Conference held in Buenos Aires, Argentina, in October 2017 (WTDC-17), the ITU Member States adopted five regional initiatives for each region; these are considered to be the priority areas on which the Union should concentrate in each region over the next four years. For Africa, the agreed regional initiatives reflect the agreed priorities in the areas of building digital economies and fostering innovation, promotion of emerging broadband technologies, building trust and security in the use of telecommunications/information and communication technology, strengthening human and institutional capacity building, and management and monitoring of the radio-frequency spectrum and transition to digital broadcasting.

To achieve the expected results defined for these five regional initiatives, the RDF will provide stakeholders with a platform for discussing the formulation and implementation of both national and regional projects, defining the implementation framework and the scope and funding mechanisms for the projects. In this brochure, the staff of the Regional Office for Africa have identified some projects as a starting point, proposed a framework and identified some potential partners.

The implementation of regional initiatives as the priority areas for accelerating the achievement of the Sustainable Development Goals (SDG) is far too important and diverse for any single stakeholder, and it is my hope that BDT is a good rallying point for realizing the objectives of the regional initiatives. This is also a call to action for all stakeholders, including Member States, the private sector and academia, to join forces with ITU to ensure that in implementing these initiatives, ICT is the ubiquitous vehicle for achieving a better quality of life, leaving no one in Africa behind.

## **Introduction**

This publication provides a snapshot of implementation of the regional initiatives, presented to Member States during the Regional Development Forum.

It covers the initial project proposals for the implementation of the Buenos Aires Action Plan (WTDC-17).

# **Regional Initiative 1 (AFR1): Building digital economies and fostering innovation in Africa**

## ***The situation today***

Over the past decade countries in Africa have made tremendous progress in rolling out the broadband infrastructure that has significantly improved access to ICT services. Broadband penetration in Africa has reached significant levels, with mobile broadband playing a significant role. However, to reach out to the still unconnected, make better use of the infrastructure and enhance the impact of ICTs on the socio-economic development of African nations, the countries in the region are embarking on the transformation to digital economies in order to reap the full benefits of ICTs and ICT-based innovation.

## **Objective of AFR1**

To build digital economies and foster innovation in Africa. Countries in the Africa region are in need of interventions that would help them transform into digital economies. It is necessary that ITU assist Member States in the Africa region to reap the full benefits of the digital economy by addressing the emerging policy and regulatory challenges. In line with growing digital economies, information and communication technology (ICT)-based innovations, which have demonstrated their potential to contribute to the socio-economic development of countries, are also growing. ITU is called upon to support Member States in the Africa region to build more effective ICT-based innovation ecosystems.

## **Expected results**

1. Assistance in the development of national digital economy strategies focusing on enabling policies and regulations that can enhance the use of digital technologies.
2. Assistance in the development of digital inclusion strategies, policies, regulatory frameworks and guidelines specifically targeted at achieving social and financial inclusion through improving digital literacy and access.
3. Assistance in developing action plans with digital key performance indicators (KPIs) encompassing the adoption of e-applications geared to sustainable development in various aspects of African economies.
4. Assistance in the adoption and implementation of relevant standards that are targeted at addressing challenges of interoperability stemming from the disruptive and transformative spread of digital innovation.
5. Support for improving Member States' capability to create effective innovation policy interventions in all stages of innovation.
6. Help in designing models for financing the ICT ecosystem in Africa, and identification of partnership opportunities to establish sustainable innovation frameworks.

7. Support for capacity building, especially in the area of intellectual property protection as a fundamental pillar for innovation.
8. Assistance in the development and operationalization of frameworks for manufacturing of ICT goods in Africa resulting from innovative work.

## **Project proposals**

### **Project 1. Development of digital economies and digital inclusion in countries of the Africa region**

Objective: Assist countries in the Africa region in developing their digital economy strategies, enabling policies and regulations to facilitate ICT-based innovation and foster their socio-economic development and social inclusion.

#### ***Activities in 2019***

1. Assess the current situation in the region, review best practices, conduct comparative studies, and develop a model for the region. Analyse gaps that need to be addressed.
2. Organize at least three regional capacity-building and validation workshops. Develop/update guidelines on implementation plans to be shared during the validation workshops.

#### ***Activities in 2020 and 2021***

1. Establish guidelines to assist the membership in developing national economy strategies and policies based on validated models. Establish guidelines for adoption. Continue with the gap analysis to identify challenges and strategies for addressing them.
2. Establish guidelines for active participation in the C&I Africa Group and for follow-up on the implementation of Pillar 3 (Capacity Building) and Pillar 4 (Assistance to Developing Countries) of the ITU C&I Programme, and promote the establishment of harmonized conformity and interoperability programmes, ICT standards and regional testing activities, as well as measures to combat counterfeit and substandard devices.
3. Continuing to assist countries in need.
4. Monitoring and evaluation of the project.

#### **Estimated budget**

USD 180 400 (Year 1 USD 80 400 – Years 2 and 3 USD 100 000).

#### **Potential partners**

Beneficiary countries.

Donors to be identified.

## **Project 2. Innovation ecosystems, capacity building and manufacturing ICT goods In Africa**

Objective: To support Member States' capability to create effective innovation policy interventions at all stages of innovation, design models for financing the ICT ecosystem in Africa, develop and operationalize frameworks for manufacturing ICT goods in Africa, and identify partnership opportunities to establish sustainable innovation frameworks.

### ***Activities in 2019***

1. A study to identify ongoing initiatives in the region on innovation policy intervention, frameworks, capacity building and manufacturing policies. Organize a workshop on ITU Innovation toolkit awareness.
2. Training and capacity-building workshops on innovation policies, frameworks, intellectual property and manufacturing policies in Africa using the ITU Innovation toolkit workshops where appropriate.
3. Identifying potential partners to work with at various stages of the project, organize meetings and conferences to mobilize partnerships.
4. ITU assistance in capacity building, research and development, global patent protection, and other areas.

### ***Activities in 2020 and 2021***

1. Development of guidelines, model policies and other relevant documents that will help countries with customization and transposition into national documents. ITU assistance in capacity building, research and development and global patent protection, among other areas.
2. Assist countries requiring assistance to customize and transpose the model documents into their national documents.
3. Continuing to assist countries in need.
4. Project monitoring and evaluation

### **Estimated budget**

USD 80 400 (Year 1 USD 20 400 – Years 2 and 3 USD 60 000).

### **Potential partners**

Beneficiary countries.

Donors to be identified.

## **Project 3. Using digital health services to accelerate the attainment of health SDGs in the Africa region**

Objectives:

1. Support the implementation and upscaling of digital health solutions at national level, with an emphasis on country-prioritized solutions that contribute to universal health coverage (UHC) and Sustainable Development Goals (SDGs), ensuring that countries have appropriate frameworks in place including e-health strategies and/or e-health policies.

2. Build capacities of a new generation of African digital health leaders who will lead the process of change and transformation of public health using ICT technology in their countries.
3. Create country-level digital health common platforms as a technology infrastructure in order to support health care delivery in a consistent and efficient manner.
4. Strengthen the capacity of local stakeholders to achieve optimal and efficient use of available resources for e-health, including the development of public-private partnerships (PPPs) with telecommunication providers and non-governmental organizations (NGOs).
5. Large-scale deployment of appropriate, low-cost and high-impact evidence-based and potential game-changing innovations that address health needs.

### ***Activities in 2018***

1. Conduct two regional digital health capacity-development workshops to train future country and WHO/ITU digital health leaders in the skill sets required to help with the deployment of large-scale digital health systems. Training will cover:
  - systems and landscape analysis;
  - digital health leadership and management skills;
  - digital health skills: solutions, interoperability, enterprise architecture, telecommunications, etc;
  - policy and regulatory expertise;
  - business and sustainability models.

### ***Activities in 2019 and 2020***

1. Conduct four or five country-specific digital health studies to ascertain functional and technical requirements and establish the necessary national digital health architecture and information infrastructure.

Country studies will design an overall National Digital Health (DH) Architecture and Information Infrastructure for the health sector based on a national (digital) health strategy or roadmap and on a “National Digital Health Interoperability Framework”.

### **Estimated budget**

USD 150 000 (Year 1 USD 50 000; Years 2 and 3 USD 100 000).

### **Potential partners**

WHO African Regional Office.

### **Beneficiary countries**

Senegal, Nigeria, Gabon, Cabo Verde, Mozambique, Lesotho.

### **Potential donors**

USAID, Digital Square, SPIDER, World Bank, AFD.

#### **Project 4. Using digital services to accelerate the attainment of food security SDGs in the Africa region**

Objectives:

1. Support the implementation and upscaling of digital solutions and innovations for agriculture at national level, with an emphasis on country-prioritized solutions that contribute to achieving food security, improved nutrition and the promotion of sustainable agriculture.
2. Ensuring that countries have in place appropriate planning frameworks, such as e-agriculture strategies and/or policies.
3. Build capacities of a new generation of African digital leaders who will lead the process of change and transformation of the agriculture sector using ICT technology.
4. Create country-level digital agriculture common platforms as a technology infrastructure in order to support the delivery of agriculture services in a consistent and efficient manner.
5. Strengthen the capacity of local stakeholders to move towards optimal and efficient use of available resources, including the development of public-private partnerships (PPPs) with telecommunication providers and non-governmental organizations (NGOs).
6. Promote the creation of an enabling environment with innovative sustainable models designed for limited-resource contexts.

#### ***Activities in 2018***

1. Conduct one regional e-agriculture strategy development workshop.

The objectives of the workshop are to:

- bring together e-agriculture policy-makers, for example . from agriculture and/or ICT ministries;
- raise awareness of the e-agriculture guide, and discuss and validate it with stakeholders in hands-on training on the use of the toolkit;
- bring together proven e-agriculture solutions that will benefit various stakeholders;
- collect and share knowledge, synergies and experiences of e-agriculture models, and cases of success or failure in the region;
- discuss the role of existing national and regional communities of practice (knowledge networks) among e-agriculture solution providers in the e-agriculture sector.

#### ***Activities in 2019 and 2020***

2. Conduct one or two regional e-agriculture strategy-development workshops.
3. Assist three or four countries in developing and implementing national e-agriculture strategies; assistance to be provided to countries to develop a “National e-Agriculture Strategy”. The Strategy will be followed by the design of the overall national Digital



Architecture and Information Infrastructure for Agriculture based on the national (digital) strategy or roadmap and on a “National Digital Agriculture Interoperability Framework”.

**Estimated budget**

USD 150 000 (Year 1 USD 50 000, Years 2 and 3 USD 100 000).

**Potential partners**

FAO African Regional Office.

**Beneficiary countries**

To be determined.

**Potential donors**

Canadian CIDA.

## **Regional Initiative 2 (AFR2): Promotion of emerging broadband technologies**

### ***The situation today***

Most countries in Africa have made tremendous strides in rolling out broadband telecommunication infrastructure through the deployment of fibre-optic and mobile technologies, but in some countries there are still significant segments of the population without access to broadband technologies and related services. In some countries with broadband availability, usage is very minimal. There is therefore a need to promote use of emerging broadband technologies for high-speed, high-quality delivery of services.

### **Objective of AFR2**

To promote emerging technologies to assist the Africa region in securing the full benefits of high-speed, high-quality broadband.

### **Expected results**

1. Assistance in the development of national and regional strategic plans, focusing on enabling policies and regulations addressing high-speed, high-quality broadband networks in the region.
2. Providing support that will enable the sharing of best practices on financing models as well as the identification of partnership opportunities to enhance high-speed, high-quality broadband.
3. Assistance in promoting the harmonization of subregional broadband plans so as to ensure equitable access to high-speed, high-quality broadband for all.
4. Assistance with human capacity development resources, through training programmes, workshops and such like, to exchange expertise and to provide persons with disabilities with the platform to participate in and benefit from the emergence of new broadband technologies.
5. Provision of support that will enable the promotion, coordination and establishment of Internet exchange points (IXPs) at the national, subregional and regional levels for better bandwidth control.
6. Assistance in extending the regional and continental backbone initiative to ensure the resilience of submarine cables.

## Project proposals

### Project 1. High-speed, high-quality and cost-effective broadband connectivity and access

Objective: To assess and promote high-speed, high-quality and cost-effective broadband connectivity and access to new emerging technologies for service delivery.

#### **Activities in 2019-2021**

1. Develop model guidelines for broadband gap analysis for connectivity, usage with regard to government service delivery to the public, as well as general public usage in private enterprise (cost-effective broadband availability for use by all – assessment of intertrade in the region).
2. Identify partnership opportunities to enhance high-speed, high quality broadband and develop best practices on financing models. Organize a workshop to validate these.
3. Develop/update harmonized subregional broadband plans through RECs to ensure equitable access to high-speed, high-quality broadband for all.
4. Organize a workshop to validate and develop guidelines for adoption and implementation plans.
5. Organize a “Training for Trainers” workshop with the focus on persons living with disabilities to benefit from the emergence of new broadband technologies. Identify appropriate applications and technologies to assist and include persons living with disabilities.

#### **Estimated budget**

USD 295 000

#### **Potential partners**

Beneficiary membership.

Donors to be identified; these will include foundations with an interest in child development, as today’s children are tomorrow’s adults and should be ready for the next industrial revolution.

### Project 2. National and regional Internet exchange points to support high-speed, high-quality broadband connectivity and access

#### *The current situation*

Whereas more countries are deploying national exchange points and few regional exchange points are being developed, there is a need for those countries that have not yet developed exchange points to continue developing so that available broadband connectivity can be utilized.

Objective: To promote implementation of national and regional Internet exchange points to support high-speed, high-quality broadband connectivity and access for new emerging technologies to keep intratraffic within a country and within the region.

***Activities in 2018***

1. Setting up of an IPv6 testbed in Zimbabwe to be used as a subregional testbed for IPv4 to IPv6 migration in Southern Africa.

***Activities 2019-2021***

1. Assess available national and regional Internet exchange points, analyse existing gaps and, if necessary, adopt measures to close them.
2. Assess IPv4-IPv6 migration, review the gap if any and propose recommendations to close it. Promote awareness of IPv6 testbeds and IPv6 adoption guidelines and of the importance of exchange points, through workshops.
3. Subregional assessment of continental backbone initiatives as well as gap analysis for high-speed, high-quality broadband networks with a view to ensuring cost-effective access to new emerging broadband technologies.

**Estimated budget**

USD 120 000.

**Potential partners**

Beneficiary membership.

Donors to be identified, to include foundations with an interest in child development, as today's children are tomorrow's adults and should be ready for the next industrial revolution.

## **Regional Initiative 3 (AFR3): Building trust and security in the use of telecommunications/information and communication technology**

### ***The situation today***

Although most countries in the Africa region have already completed their CIRT readiness assessments and have established, or are in the process of establishing, their respective CIRTs and CERTs, some still require assistance in starting the process. Three cyberdrills were carried out, targeting specific groups of countries based on their official language and location.

### **Objective of AFR3**

To assist Member States in developing and implementing policies and strategies, standards and mechanisms to enhance the security of information systems and networks, ensure interoperability of digital technologies, protect data and people and guarantee digital trust. To protect information and communication technology (ICT) and its applications.

### **Expected results**

1. Ensuring that the goal of the Connect 2020 Agenda to raise cybersecurity readiness by 40 per cent is achieved by 2020.
2. Assistance to Member States in assessing and adapting legislative and regulatory frameworks, making better use of the report on the ITU Global Cybersecurity Index (GCI).
3. Encouraging the development of a global framework for collaboration and awareness at regional and subregional levels for the development of a global culture of cybersecurity and to help consumers better understand and protect against risks.
4. Assistance in educating consumers on e-commerce and mobile transactions and informing them about the financial legislation governing electronic transactions and mobile-payment systems.
5. Promoting the establishment of institutional and organizational mechanisms at the national and regional levels to facilitate the effective implementation of cybersecurity strategies.
6. Developing measures to protect consumers, children and other vulnerable persons when using ICTs.
7. Raising awareness of cyberthreats, cybersecurity measures and quality of service in the use of ICTs.
8. Adoption of measures for the protection of privacy and personal data.
9. Assistance in the establishment of appropriate structures (data centres, Internet exchange points (IXPs), etc.) for the development of cybersecurity and the fight against

cybercrime, and in promoting the setting up of computer incident response teams (CIRTs) at the national and regional levels.

10. Developing a harmonized strategy to enhance information security and combat spam and cyberthreats.

## **Project proposals**

### **Project 1. Enhance cybersecurity in the Africa region**

Objective: Create and animate the Africa Cybersecurity Working Group that will enhance awareness in the countries of the region and facilitate the establishment of national cybersecurity strategies in each country and in the region as well as CIRTs.

#### ***Activities in 2018***

1. CIRT readiness assessment workshops were conducted in two countries (Niger and Malawi) and will be conducted in another three countries (Democratic Republic of the Congo, Guinea-Bissau, and Sao Tome and Principe).
2. Cyberdrills will be conducted in Abidjan (Côte d'Ivoire).

#### ***Activities in 2019***

1. Perform cybersecurity maturity review for Member States and have the maturity review report validated.
2. Create/animate the Africa Regional Working Group on Cybersecurity to foster cybersecurity culture in the region.
3. Assist Member States in elaborating and updating cybersecurity strategies.
4. Assist countries in designing and setting up CIRTs.

#### ***Activities in 2020 and 2021***

1. Organize Africa regional working group on cybersecurity meetings.
2. Assist Member States in elaborating/updating cybersecurity strategies.
3. Assist Member States in elaborating awareness programmes.
4. Assist countries in designing and setting up CIRTs.
5. Monitoring and evaluation.

### **Project 2. Implementing ICT-based services for the development of the Africa region**

Objectives: Design and implement projects in partnership with partners from other sectors, to use ICTs to address specific needs of the various sectors.

***Activities in 2019***

1. Implement projects such as mDiabetes, mCancer and mTabagisme in African countries, making use of national e-health strategies in the framework of the ITU/WHO “Be Healthy Be Mobile” programme.
2. Organize a forum in Africa to create awareness of the potential of such new technologies, with side events such as exhibitions and training workshops for technical personnel with the aim of creating a critical mass of actors able to bring about the required change in mindset for the adoption of these technologies.

***Activities in 2020 and 2021***

1. Continue identifying and implementing projects for the use of ICTs in various sectors such as e-agriculture, e-education, SMART cities and road traffic management.
2. Organize forums and workshops to disseminate experiences and raise awareness among Member States.
3. Implement ICT-based multi-sectoral projects.
4. Organize forums and workshops.
5. Monitor and evaluate implemented projects.

# **Regional Initiative 4 (AFR4): Strengthening human and institutional capacity building**

## ***The situation today***

Countries in the region are starting to look at efficient ways of addressing the digital skills gaps that must be overcome in order to enhance their economies through the opportunities offered by ICTs.

ITU has implemented the first cycle of the new strategy for the Centre of Excellence in Africa that aims to improve delivery through public and private partnerships. Experience shows that the adoption of online courses and distance learning has encountered some challenges.

## **Objective of AFR4**

To strengthen human and institutional capacity building in the Africa region. Countries in the Africa region are in dire need of human and institutional capacity-building interventions that would help them transform society as a whole in preparation for the emerging digital socio-economic environment. The Africa region therefore seeks ITU's assistance in enhancing the region's capacity to effect this transformation. Although some training institutions in Africa that provide information and communication technology (ICT)-related training and capacity building to the membership already exist, there may be a need to enhance their capacities.

## **Expected results**

- 1) Assistance in undertaking a comprehensive assessment of the institutional and human capacity development environment in the Africa region.
- 2) Assistance in the establishment of a long-term and responsive regional institutional and human capacity development strategy that takes into account relevant Sustainable Development Goals (SDGs) in respect of such areas as inclusiveness, emerging ICT issues, etc.
- 3) Possible assistance to enhance various institutional and human capacity development aspects, including:
  - a) enhancing the existing centres of excellence and other capacity-building centres in the region;
  - b) developing Member States' capability to promote accessibility in order to ensure improved specialized skills development to meet the ICT needs of persons with disabilities and thus enhance their use of Internet applications.
- 4) Continued provision of and increased access to training resources within ITU for Member States in the Africa region.



## Project proposals

### Project 1. Training for the judiciary

Objective: Provide training for the judiciary in each African country to ensure a harmonized approach to the interpretation, application and enforcement of sector laws at national level in accordance with international practice.

#### **Activities in 2019**

1. Assessment of the results of the training for the judiciary provided in Kenya with a view to scaling up to the rest of the Africa region. Review and improvement of the training modules.
2. Deliver training in at least two countries.

#### **Activities in 2020 and 2021**

1. Deliver training for at least two more countries.
2. Monitoring and evaluation.

### Project 2. Development of digital skills in Africa

Objective: To bring about a shift from traditional methods of teaching in schools, universities and training institutions, to more smart learning based on online courses and distance learning using the latest software and modern telecommunication/ICT techniques to provide access to a range of academic information, resources and subject matter. Help the centre of excellence selected for the cycle to provide more high-quality online courses.

#### **Activities in 2019**

1. Conduct a study on the status and future plans of countries in the region regarding smart learning, national strategies and digital skills literacy programmes.
2. Develop and validate guidelines on adopting national strategies for smart learning, digital skills and building capacities of high-level executives in selected countries.
3. Provide technical assistance to the Centre of Excellence to enhance capacity to deliver more courses on line and attract more participants from the region and beyond.

#### **Activities in 2020 and 2021**

1. Provide countries with technical assistance in order to develop their national strategies for smart learning and digital skills development using the guidelines.
2. Provide support to the Centre of Excellence to enhance the relevant delivery goals.

### Project 3. African “Girls can Code” Initiative

Objective: Organize camps to spark the interest of African girls aged between 17 and 20 years in ICTs as a career path, introducing them to coding, gender mainstreaming and confidence building. The initiative also aims to mainstream ICT and gender into national curricula in the education

system, and to maintain an online platform where participating girls can continue to access training modules and interact with mentors and access a database of tech clubs, companies and organizations to which they can apply for internships to help confirm their career choices in this field.

***Activities in 2018***

1. Implementation of the initiative is a joint effort between UN Women and ITU, and the first camp is scheduled for August 2018 in Addis Ababa, Ethiopia.

***Activities in 2019***

1. Second International camp for the entire continent in another African country.
2. Development of an online platform for initiative activities.
3. Mainstreaming of ICT and gender in national curricula in Africa.
4. Continental and national media campaigns on the initiative.

***Activities in 2020 and 2021***

1. Two more camps for the entire continent, additional camps in Ethiopia subject to the availability of funds, an online platform fully operational, and national curricula developed in 16 African countries.

# **Regional Initiative 5 (AFR5): Management and monitoring of the radio-frequency spectrum and transition to digital broadcasting**

## ***The situation today***

Almost all of the countries concerned use specific software and computerized tools for spectrum management. On the other hand, we note a lack of appropriate means for monitoring, and only 30 per cent of these countries are fully equipped with appropriate measurement tools.

Only 15 out of 44 sub-Saharan countries have achieved their digital broadcasting migration. Nine countries have planned to achieve their analogue switch-off (ASO) by the end of 2018, and 20 others before 2020, even if national strategies have been adopted and roadmaps defined.

The migration-specific database does not reflect the real situation on the ground, as some countries appear reluctant to update the database.

## **Objective of AFR5**

To assist Member States in ensuring the transition to digital broadcasting and efficient and economical management of the radio spectrum and orbital resources.

## **Expected results**

- 1) Assistance in the implementation of a post-migration action plan that supports the development of new services offering the best technical and economic conditions in terms of accessibility; in the definition of conditions for the allocation and use of the "digital dividend" to support the development of broadband services; and in capacity building, including sharing knowledge and experiences in satellite service regulation, with emphasis on satellite filing and coordination.
- 2) Assistance in elaborating financing models to ensure the necessary investments for the transition from analogue to digital.
- 3) Assistance to countries for the establishment of a sustainable ecosystem for the production and monetization of local content and channels.
- 4) Support for the development of spectrum-management plans at national, regional and global levels, including for the transition to digital broadcasting.
- 5) Assistance in the use of tools to help developing countries improve international frequency coordination of terrestrial services in border areas.
- 6) Conducting studies and developing comparative criteria and guidelines on the political and economic aspects of the assignment and use of the radio spectrum, taking into account WTDC Resolution 9 (Rev. Buenos Aires, 2017).

## Project proposals

### Project 1. Optimization of spectrum use

Objective: Assist countries in the Africa region in optimizing their spectrum management and income from spectrum fees, by developing dynamic national frequency allocation tables (NFATs) enabling all the new services to avoid harmful interference.

#### **Activities in 2019**

1. National training in SMS4DC for the Democratic Republic of the Congo.
2. Roadmap evaluation for DTT in the Democratic Republic of the Congo.
3. National training on the use of SMS4DC for Chad.
4. Workshop on cross-border spectrum clearance for the Telecommunication Regulators' Association for Central Africa (ARTAC).
5. Roadmap for the DTT in the Central African Republic.
6. Follow-up on DTT in Sao Tome and Principe.
7. Regional Radiocommunication Seminar for Africa.

#### **Activities in 2020 and 2021**

1. Continuation of ad hoc assistance provided at the request of countries.
2. Follow-up of WRC-19 outcomes implementation among countries.
3. Entry into force of the Harmonized Calculation Method for Africa (HCM4A) Framework Agreement.
4. Follow-up on analogue switch-off/digital switchover for countries achieving their migration to DTT.
5. Assessment, evaluation and consideration of the use of remaining UHF bands.
6. Global reporting on the analogue switch-off in sub-Saharan Africa.
7. Spectrum clearance for new mobile broadband services.
8. Regional Radiocommunication Seminar for Africa and preparation for WRC-19.

#### **Estimated budget**

USD 80 000 - (Year 1 USD 30 000 – Years 2 and 3 USD 50 000).

#### **Potential partners**

Beneficiary countries: beneficiary membership.

Donors to be identified: Regional development banks, African Development Bank, World Bank, Islamic Development Bank, manufacturers.

### Project 2. Publication of a spectrum monitoring booklet in French and English

Objective: The aim of the project is to facilitate spectrum monitoring for African countries in a way that complements the Handbook on Spectrum Management.

**Activities in 2019**

- Collection of needs among countries, questionnaire for use in designing a booklet.
- Data analysis and collection of materials.
- Tutorial organized for the region (five days) with fellowships.

**Activities in 2020 and 2021**

- Drafting and publication of the Booklet in two languages.
- Other activities, depending on WRC-19 outcomes.

**Estimated budget**

USD 90 000 - (Year 1 USD 50 000 – Years 2 and 3 USD 40 000).

**Potential partners**

Beneficiary countries.

Donors to be identified.

**Project 3. Evaluation and impact analysis of the transition to DTT**

Objective: Undertake a final review and report on DTT migration and assistance to least developed countries (LDCs) in the digital switchover.

**Activities in 2019**

Assistance to requesting countries for their digital switchover.

Annual regional workshop on the digital dividend.

**Activities in 2020 and 2021**

Publication of the final country report on DTT migration.

**Estimated budget**

USD 140 000 - (Year 1 USD 40 000 – Years 2 and 3 USD 100 000).

**Potential partners**

Beneficiary countries.

Donors to be identified.