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AU/CIT/EXP/ANNEX I (II)

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REFERENCE FRAMEWORK FOR HARMONISATION OF TELECOMMUNICATION, INFORMATION AND COMMUNICATION TECHNOLOGIES POLICIES AND REGULATION IN AFRICA

1. **REFERENCE FRAMEWORK FOR HARMONIZATION OF TELECOMMUNICATION AND ICT POLICIES AND REGULATION IN AFRICA**

To address the challenges identified in the study, it is proposed to implement a reference framework for the harmonization of policy and regulation for the Telecommunications/ICT sector, taking into account on one hand the vision and mission of the African Union and the following guiding principles on the other hand.

1.1. Guiding Principles

The referential policy and regulatory framework will comply with the following principles:

- Solidarity between African Member States and peoples;
- Cooperation between the AUC, RECs; and other African organizations;
- Partnerships between and amongst African peoples;
- Link to Poverty Reduction Strategy Programmes (PRSP), Millennium Development Goals (MDGs) and other continental development goals, such as African Regional Action Plan on the Knowledge Economy (ARAPKE);
- Goals of Connect Africa Summit (Kigali, October 2007).
- Principles of the World Summit on Information Society (WSIS);
- Finance viability, technical feasibility and political acceptability;

a. Solidarity

The solidarity principle rises from the Constitutive Act of the African Union and aim at realizing a greater unity and solidarity between the African countries and peoples ". This solidarity implies, in addition to African cardinal values, resource sharing heritage of our history which will allow Africans to enter together in modernity.

b. Cooperation

Cooperation between the African Union Commission and the other continental organizations namely the Regional Economic Communities (RECs) involved in the development and the integration of the continent is an important element of the Constitutive Act.

At regional level, the principle of cooperation, as contained in the community objectives enshrined in the Treaty, will allow for expansion and sharing RECs initiatives.

c. Partnership between stakeholders of African Telecommunication/ICT sector

A reference policy and regulatory framework must take into account interests of all stakeholders and the key actors of African Telecommunication/ICT Sector, namely,

Governments, regulators, development partners, operators, service providers, the private sector, and most importantly, the consumers.

> **d.** **Link to PRSP, MDGs, goals of WSIS and other continental development objectives (ARAPKE, Connect Africa Summit)**

The reference framework for the harmonization of policies of Telecommunications and ICT is developed in a context marked by the adoption of commitments in favor of the development subscribed on a world level and regional, such as MDGs , ARAPKE , WSIS objectives and goals of the Connect Africa Summit. Then, the content of the reference framework for the harmonization of policies should facilitating the achievement of the objectives and goals of these various commitments.

> **e.** **Financial viability, technical feasibility and political acceptability**

The reference policy and regulatory practices framework must be for Member States and Regional Economic Communities and politically acceptable in order to guarantee it success implementation. In terms of financial implication and technical feasibility it should not be a source of supplementary problems. On the contrary it must be a value added contribution to efforts that are already being undertaken at the national, regional and international levels in terms of measures taken to support the development of the Telecommunication/ICT infrastructures.

1.2. Broad Objectives

The following broad objectives have been identified and are considered the main challenges facing Africa. These broad objectives are enumerated here under;

i. Establish **harmonized policy, legal and regulatory frameworks** at the regional and continental levels to create an enabling environment that will attract investment and foster the sustainable development of competitive African Telecommunication/ICT regional markets, infrastructures, and to increase access;

ii. Develop **integrated infrastructures and access networks as** the cornerstone of the e-access, with efficient cross-border interconnectivity to provide increased access to Telecommunication/ICT services for the greatest number of populations in Africa, including the improvement of connectivity of the African continent with the other continents.

iii. Support the development of industrialization and research on sciences and technology related to Telecommunication/ICT.

iv. Develop African **human resource and increase awareness** to ensure active participation of Africa in the global information and knowledge-based economy;

v. Develop relevant and valuable **applications** to encourage the deployment and utilization of Telecommunication/ICT across all socio-economic sectors in Africa in order to improve efficiency and productivity;

vi. Promote and develop African **content** to increase global presence of African values, cultures, languages and indigenous knowledge;

vii. Mobilize financial resources by strengthening **regional cooperation** and **multi stakeholder partnerships** and promotion of **public and private partnerships**.

1.3. Strategy to Achieve Objectives:

A. Establishment of harmonized policy and regulatory framework

1. Engage the highest level authorities to enhance the political will to foster the development and harmonization of the Telecommunication/ICT sector.
2. Develop harmonized regional and continental e-strategies.
3. Develop regulatory guidelines at regional and continental levels.
4. Establish mechanisms to encourage and strengthen stakeholder participation in the harmonization process

B. Development of Integrated Infrastructures and Access Networks

1. Promote regional and intra-continental connectivity.
2. Promote open access to infrastructure
3. Promote infrastructure sharing.
4. Promote digital broadcast infrastructures/networks.
5. Promote infrastructure/networks convergence, in particular migration to IP/NGN networks;
6. Promote appropriate and innovative technologies that can improve universal access/service and affordability.
7. Implement technologies/networks that complies to internationally accepted and widely spread standards, taking into account regional interconnectivity and interoperability.
8. Promote African participation in the development of standards at the regional and international levels.

C. Support to Industrialization, Research and Development

1. Encourage developed software and hardware in Africa;.
2. Encourage research & development and industrialization of African to develop Telecommunication/ICT systems.
3. Establish regional common research centres.

D. Development of Human Resources and Increase of Awareness

1. Promote attitudinal change and confidence for the adoption of Telecommunication/ICT in the economy as a mode of life.
2. Increase Telecommunication/ICT awareness among political leaders and policy makers at the highest level.
3. Increase the pool of African professionals in all areas of Telecommunication/ICT competencies; encourage their mobility and their retention within Africa.

4. Develop mass e-literacy and promote wide usage of Telecommunication/ICT.
5. Establish and develop centres of excellence and Telecommunication/ICT research institutions, and promote effective cooperation among them,
6. Establish and develop institutions for capacity building for Telecommunication/ICT at various levels, particularly for regulators and policy makers.

E. Development of Telecommunication/ICT applications

1. Encourage the deployment and utilization of Telecommunication/ICT across all socio-economic sectors in Africa; especially in the following priority areas, namely, e-Government, e-Education. e-Commerce, e-Health, e-Culture.
2. Build confidence in the development and use of Telecommunication/ICT applications, taking into consideration better management of the cyberspace, from the producer as well as from the consumer point of view.
3. Promote the development and use of open source software, and build applications on such platforms.

F. Development of African Content

1. Preserve the African heritage in digital format, and its relevant Intellectual property rights.
2. Encourage the creation of African content in diverse languages.
3. Promote global presence of the African heritage, cultures, and indigenous knowledge;

G. Mobilization of Financial Resources

1. Raise political awareness to consider Telecommunication/ICT as a priority sector in social economic development.
2. Allocate public resources for Telecommunication/ICT development.
3. Promote public private partnerships and other multi-stakeholders partnerships.
4. Create incentives for foreign investments and coordinate its usage,
5. Promote the development of domestic finance by providing support to local entrepreneurs and investors.
6. Develop innovative approaches for the creation and management of universal access/service funds.
7. Increase awareness, mobilization, coordination and efficiency on regional, continental and international initiatives and projects of Telecommunication/ICT development

1.4. Programme of Action

The programme of action is attached.

1.5. Priority Programmes

Among the various activities of the programme of action, it is proposed that the following activities (Table I) constitute a priority programme to be carrying out at national, regional and continental level.

Table 1: Priority programme		
Continental level	**Regional level**	**National level**
1. Development and adoption of policy and regulatory Guidelines.	1. Development and adoption of policy and regulatory regional Guidelines;	1. Formulation, adoption and implementation of national Telecommunication/ICT policies taking into account inputs from stakeholders (including consumers);
2. Supporting deployment of regional and continental broadband infrastructures/networks and promoting their interconnection;	2. Promoting interconnection of national networks;	2. Creating an enabling environment taking into account the convergence of technologies, networks and services;
3. Promoting development and interconnection of governmental Telecommunication/ICT networks;	3. Initiating and supporting fora for sharing of knowledge, resources and experience among Telecommunication/ICT-development stakeholders;	3. Deployment of Telecommunication/ICT broadband (backbone and access) infrastructures;

4. Initiating and supporting fora for sharing of knowledge, resources and experience among Telecommunication/ICT development stakeholders;	4. Providing expertise to Governments aimed at translating Regional Policy and Regulatory Guidelines into national frameworks.	4. Formulation, adoption and implementation of national e-strategies.
5. Providing expertise to RECs/Governments aimed at translating continental Policy and Regulatory Guidelines into regional/national frameworks.	5. Measuring and monitoring the development of growth of Telecommunication/ICT industry	5. Continuation of the deployment of public Telecommunication/ICT access points in rural and remote areas;
6. Measuring and monitoring the development of growth of Telecommunication/ICT industry.		6. Building Telecommunication/ICT skills and high-level institutions;
		7. Measuring and monitoring the development of growth of Telecommunication/ICT industry

1.6. Priority Studies

To support and speed up the implementation of the programme of action and in particular the priority program, the studies hereafter are proposed.

Table 2: Studies identified		
Field of Study	**Study**	**Deliverables**
A. Policy Guidelines	Develop model of policy guidelines for the continent on: ▪ Liberalization & Privatization. ▪ Creation of effective Regulatory Body. ▪ Competition ▪ Convergence. ▪ Universal access/service. ▪ Digital Migration. ▪ Process of Consensus building in international foras.	▪ Comparative analysis of Country and Regional Policies. ▪ Model Policy. ▪ Harmonization methodology. ▪ Consensus building mechanism. ▪ Digital migration strategy.
B. Model Legislation and Regulatory framework	▪ Develop model Telecom/ICT Bill of Low ▪ Develop model Telecom/ICT Regulations. ▪ Assess the need for a Continent-wide Regulatory Body.	▪ Comparative analysis of Countries and Regional Telecom Act. ▪ Model Telecommunication/ICT Bill. ▪ Model Regulatory Institutional structure. ▪ Model Telecom/ICT Regulations. ▪ Model License ▪ Recommendation on the creation of a continental Telecommunication/ICT Regulatory Body/Regulators Association.
C. Infrastructure Master Plan	▪ Development of Telecommunication/ICT Infrastructure Master Plan	▪ Analysis of current National and Regional Telecommunication/ICT infrastructure and missing links.

		▪ National Regional and Continental Master plans.
D. Capacity Building	▪ Assess the existing institutional capacity ▪ Assess professional human resource capacities and skill ▪ Develop continental policy and implement strategy on capacity building.	▪ Database of existing Capacity Building Institutions and assessment of their capabilities. ▪ GAP analysis comparing the actual use of resources with the potential resources, including the expertise of the African Diaspora. ▪ African Human Resource Capacity Building Policy and Implementation Plan.
E. Mobilization of Financial resources	▪ Identify potential sources of funds ▪ Establish Coordination mechanism for Pulling of resources and common projects including PPP.	▪ Mechanism for pulling of resources for common projects. ▪ Incentives for raising domestic and foreign investment.

2.   IMPLEMENTATION OF THE REFERENCE FRAMEWORK

The proposed reference policy and regulation framework will provide a catalytic platform that is aimed at creating a harmonized regional and continental policy and regulatory environment. The implementation requires appropriate institutional framework and mobilization of sufficient resources. Therefore, it is proposed that the African Union Commission, in coordination with the Bureau of the Conference of Ministers of CIT, shall:

- Supervise and coordinate the implementation of the policy and regulatory framework.

- Mobilize financial resources to support implementation activities of the reference framework.

- Organize continental meetings on Telecommunication/ICT Policy and Regulations.

- Provide a model of guidelines as indicated in the study

- Establish an African expert Telecommunication/ICT Group

- Participate in the priorities study identified above.

- Identify a Commissioner who shall serve as the focal point

Attachment – Programme of Action

BROAD OBJECTIVE	STRATEGIC OBJECTIVE	ACTION ITEMS
A. Establishment of Harmonized Policy and Regulatory Framework	1. Engage Political Authorities	• Establish ICT commission/body at the very high level of political leadership at national and continental level. • Assign a focal-point – endowed with adequate authority and resources - to enhance regional and intra-continental cooperation.
	2. Telecommunication/ICT Policies	• Develop and implement e-strategies with the participation of all stakeholders • Develop and implement cyberspace policy and legislations.
	3. Develop Regulatory Guidelines at Regional and Continental Level.	• Develop and Adopt regional guidelines on Telecommunications and ICT development and regulation, namely: Interconnection, Spectrum, Licensing, Tariffs, Universal Access /Service, Dispute Resolution, Standards and Type Approval, Consumer and environmental Issues • Develop and adopt guidelines on: cyber security, domain name management, electronic signature, etc. • Promote the adoption of fair and sustainable competition policies and guidelines at country/regional and continental level • Promote regional/continental licensing mechanisms to establish regional/continental operators' networks and service providers.
	4. Establish mechanisms to encourage and strengthen stakeholder participation in the harmonization process	• Establish regular fora of ICT stakeholders at national, regional and continental levels on specific issues of interest. • Strengthen the coordination of spectrum management, frequency planning, numbering and other scarce resources. • Strengthen regional coordination for the development of a common African positions in international fora; • Strengthen collaboration with African Institutions (ATU, Afrinic, AUB …) and regulators in charge of Telecommunications, ICT and broadcasting policies.

BROAD OBJECTIVE	STRATEGIC OBJECTIVE	ACTION ITEMS
B. Deployment of Integrated Broadband Infrastructure and Access Networks	1. Promote regional and intra-continental interconnectivity.	• Develop and implement, regional and continental infrastructure master plans taking into account convergence of technologies; • Establish and Support broadband infrastructure projects that promote regional integration. • Establish and enhance regional and continental Internet exchange points IXPs, and their interconnection • Modernize existing infrastructure, and Integrate and complement new infrastructure projects with existing infrastructures • Establish or strengthen regional and continental indicators on infrastructure and access to monitor ICT progress,
	2. Promote Open access to infrastructure	• Establish Model High Level Policy and Regulatory Framework for regional/continental Telecom/ICT Broad Band Infrastructure network based on open access non-discriminatory Principles. • Promote and foster the portability at national/regional/continental level
	3. Promote infrastructure sharing	• Ensure close collaboration and coordination with basic utilities infrastructure networks such as electricity, water pipe lines and transport networks in the rollout of Telecommunications/ICT infrastructures including broadcasting; • Encourage infrastructure and site sharing among Telecommunication/ICT Operators.
	4. Promote digital broadcast infrastructures/networks.	• Modernize the existing broadcasting infrastructures/networks, through acceleration of migration from analogue to digital broadcasting systems. • Digitize broadcasting and media production facilities.

BROAD OBJECTIVE	STRATEGIC OBJECTIVE	ACTION ITEMS
	5. Promote infrastructure/services convergence, in particular migration to IP/NGN networks.	• Promote implementation of converged infrastructures based on IP/Next Generation Networks (NGN).
	6. Promote appropriate and innovative technologies that can improve universal access/service and affordability.	• Adopt technologically neutral approach as an incentive to support universal access/service and its affordability
	7. Promote technologies that comply with internationally accepted and widely spread standards, taking into account regional interconnectivity and interoperability.	• Establish African Technology Watch Forum to track the development of technologies to provide advice on policies that can enhance Telecom/CT connectivity in Africa, and monitor conformance to standards to assure universality and interoperability of networks.
	8. Promote African participation in the development of standards at the regional and international levels.	• Encourage the effective coordination and participation of African Experts in International Standardization Bodies, particularly memberships in working groups • Establish regional and continental working groups on standardization.
C. **Encourage Industrialization and R&D**	1. Promote local development of software and hardware	• Create incentives for local assembly of ICT equipment Create repair and maintenance centres for Telecom/ICT

BROAD OBJECTIVE	STRATEGIC OBJECTIVE	ACTION ITEMS
	2. Promote research & development and technology transfer.	• Create repair and maintenance centers for telecommunications and ICT
D. Development of Human Resources and Increase Awareness	1. Promote attitudinal change and confidence for the adoption of Telecom/ICT in the economy as a mode of life:	• Implement public campaigns to promote attitudinal change for the adoption of Telecom/ICT in the economy as a mode of life; • Increase commitment to the development of enabling policy environment legal and regulatory frameworks for the knowledge-based economy; • Increase commitment for the financing levels of Telecom/CT capacity-building programs, materials, tools, educational funding, and specialized training initiatives, especially for regulators and other public sector employees and organizations;
	2. Increase Telecom/ICT awareness among political leadership and policy makers at the highest level:	• Implement high level awareness and/or training program for political leaders at the highest level to enable them provide effective leadership in Telecommunication/ICT development; • Implement high level training program for Telecommunications/ICT policymakers and regulators;
	3. Increase the pool of African Telecom/ICT professionals in all areas and competencies, encourage their mobility and their retention within Africa:	• Develop an African human resource development policy for the Telecom/ICT sector; • Identify training needs and activate coordination between the Ministries concerned with capacity building to harmonize educational needs on Telecom/ICT;

BROAD OBJECTIVE	STRATEGIC OBJECTIVE	ACTION ITEMS
	4. Develop mass e-literacy and promote wide Telecom/ICT usage:	• Create regional database of training and ICT educational and research institutions, as well as ICT experts; and disseminate and promote this information for better utilization of available resources. • Develop Telecom/ICT skills for civil servants through intensive end users training schemes; • Introduce Telecom/ICT curricula in schools and universities with special attention to the education of youth, the disabled, girls and women; • Promote Telecom/ICT initiatives with gender perspective; and promote ICT usage for disadvantaged groups, especially between the girl child and women. • Encourage the usage of ICT by establishing community access centers through public existing facilities such as post offices, schools, libraries, etc. and to increase access to education and learning. • Develop databases at the national, regional and continental levels to monitor the implementation of Telecom/ICT policies, legislation and regulation
	5. Establish and develop Telecom/ICT centers of excellence research and research institutions, and promote effective cooperation among them,	• Strengthen existing centers of excellence and other high level ICT-related training institutions to provide for the deficit of professionals and to produce professionals in the development, application and diffusion of Telecom/ICT systems;

BROAD OBJECTIVE	STRATEGIC OBJECTIVE	ACTION ITEMS
	6. Establish and develop Telecom/ICT institutions for capacity building at various levels, particularly for regulators and policy makers.	• Review efficiency of available facilities and create training networks to increase the training capacities; • Support key research institutions, universities and other educational institutions through cheaper and faster internet access and partnerships with more advanced counterparts; • Increase research capacity in Telecom/ICT policies, legislation and regulation, including research on Internet governance policies; • Establish research institution at the national, regional and continental levels to provide expertise in the development of Telecom/ICT policies, legislation and regulation; • Identify and establish a network of African capacity building institutions that offer Telecom/ICT- related curricula to maximize the utilization of available resources.
E. Development of Telecom/ICT Applications	1. Encourage the deployment and utilization of Telecommunications/ICT across all socio-economic sectors in Africa ;	• Improve access of rural communities to Telecom/ICT services and e-applications to assist in development; • Develop e-government applications to allow easy access to all government services; • Develop e-Health and Telemedicine initiatives and applications to improve access to health services, in particular in rural areas; • Develop e-environment awareness programs to protect the continent environment from misuse (e.g. harmful chemicals and nuclear waste disposals), and to preserve natural resources. • Provide access to public information and to the cultural, historic, scientific and educational heritage of Africa, including its preservation on digital media.

BROAD OBJECTIVE	STRATEGIC OBJECTIVE	ACTION ITEMS
	2. Build confidence in the development and use of ICT applications, taking into account better management of the cyberspace, from the producer as well as from the consumer points of view.	• Adopt policy on electronic transactions by adopting policies including issues related to privacy, data protection, authentification, intellectual property, copyright, computer crime and security. • Establish consumers associations to defend consumers' rights.
	3. Promote the development and use of open source software, and build applications on such platforms.	• Develop user-friendly and affordable software platforms, browsers and interactive applications, and diverse, locally produced multimedia content. • Promote the development and use of open-source and free software.
F. Development of African Content	1. Preserve the African heritage in a digital format, and its relevant Intellectual property right.	• Develop content and access for e-learning to reduce illiteracy and create equal opportunity for education, taking into consideration cultural heritage of Africa;
	2. Encourage the creation of African content in diverse languages.	• Develop content relevant to the needs of the developing world, including material in indigenous languages, information accessible to non-literate audiences

BROAD OBJECTIVE	STRATEGIC OBJECTIVE	ACTION ITEMS
	3. Promote global presence of the African heritage cultures, and indigenous knowledge;	• Promote and develop specific African content to preserve and increase global presence of the African values, cultures, languages and indigenous knowledge; • Promote awareness of producers by regional distribution channels for their production
G. Mobilisation of Financial Resources	2. Raise political awareness to consider ICT as a priority sector in social economic development.	• Correlate the direct and indirect benefit factors of the Telecom/ICT sector to the national GDP to encourage governments to promote the Telecom/ICT sector
	3. Allocate public resources for Telecom/ICT development.	• Advice governments to contribute in investments directed to Telecom/ICT enhancement in Backbones and Rural Areas.
	4. Promote public private partnerships and other multi-stakeholders partnerships.	• Work with development finance institutions and donor governments, in the continent or internationally, to mobilize sustainable financing, especially through multilateral processes, with a view to securing grant and concessional finance to mitigate medium-term risks; • Promote the participation in the Digital Solidarity Fund. • Promotion of PPP on national and regional basis.
	5. Create incentives for foreign investments and coordinate its usage	• Develop financial and infrastructure risk management plans. • Address key issues such as: incentives for investors: e.g. low interest rates, risk guaranties, risk reduction and mitigation, financing risky and less profitable projects; financing strategic infrastructures like regional IXPs, submarine cable projects, ... etc; • Awareness and mobilization of African Diaspora to finance regional Telecom/ICT projects.

BROAD OBJECTIVE	STRATEGIC OBJECTIVE	ACTION ITEMS
	6. Promote the development of domestic finance by providing support to local entrepreneurs and investors.	• Promote micro-financing mechanisms to incorporate small, medium and domestic investor in the Telecom/ICT development process. • Establish Telecom/ICT business incubators.
	7. Develop innovative approaches for the creation and management of universal access/service funds.	• Conduct studies and implement pilot projects.
	8. Increase awareness, mobilization, coordination and efficiency on regional continental and international initiatives and projects for Telecom/ICT development	• Set sound procedures to mobilize and coordinate the use of domestic and foreign direct resources for regional Telecommunications and infrastructures projects;