## Strategic Framework for Comunication and Information Technology Development in Africathe Comprehensive ICT Strategy for Africa (CISA) 2015 – 2025

#### INFORMATION & DISCUSSION DOCUMENT

(prepared by AUC Information Society Division and NEPAD Agency e-Africa Programme in consultation with RECs and Specialised Agencies of the African Union)

### Background

The world of Information Society / Communication and Information Technologies IS/CIT is rapidly changing not only in Africa but globally as well. The Information Society Division (ISD) at the AUC, the e-Africa Programme within the NPCA and the ICTs, Science and Technology Division (ISTD) of UNECA have a responsibility to lead the African ICT agenda and respond to this changing environment. To do this effectively requires coordination between these key actors as well as horizontal and vertical coordination with Regional Economic Communities and Specialised Institutions (SIs) of the African Union.

There are some challenges and issues that have been identified and which need to be addressed at a continental level:

- The studies for the Programme for Infrastructure Development in Africa (PIDA) have been completed but implementation of projects has not yet gained momentum.
- The governing structure for PIDA (IAIDA) has also has been constituted and needs to be operationalized.
- The NEPAD e-Africa Programme and the ISD have been working closely to coordinate their areas of work and are leading the harmonisation process across various regional and continental institutions- a coordination mechanism among African Union CIT actors has been initiated and still needs to gain traction.
- The AUC level and limits of intervention in member states, regions and the whole continent is still not clearly defined.
- Like AUC, the NPCA is still working on how to coordinate with the Regional Economic Communities (RECs) and Specialized Institutions (SI)
- The linkages between the key actors at regional and continental levels in Africa's IS/CIT space are weak and there is no demarcation of responsibilities or distribution of roles among them
- In line with global developments, a tremendous amount of work and presence is being requested from the AU and its partners: internally, regionally and internationally.
- Responding to emerging global issues such as the uncertain future of Internet Governance after the outcomes of the World Congress on Information Technology (WCIT) during which the revisions to the International Telecommunications Regulations (ITRs) were not accepted by most of the OECD countries.

 The lack of a coordinated framework makes it difficult for AUC, NPCA, UNECA and the RECs to adequately tap into funding opportunities provided by international partners - and this is further compounded by the lack of a coherent resource mobilization strategy both individually and collectively; the result is missed opportunities and increased competition from other institutions pursuing similar lines of work (e.g. ITU, ACP, etc.)

Noting that the lack of coordination was an impediment to development, in 2012, the 4th Conference of Ministers responsible for Communication and Information Technologies (CITMC-4) requested the AUC, RECs, NPCA and UNECA to develop a coherent, unified, harmonized IS/CIT strategy for the continent. Since then, the following activities have taken place towards preparation of a harmonized strategy:

- In March 2013, representatives from AUC ISD, NEPAD e-Africa and UNECA held a brainstorming workshop to articulate a draft CIT framework. The workshop was facilitated by an external consultant and took into account the exisiting strategies of the three institutions and the various initiatives currently on-going. The workshop resulted in:
  - Analysis of IS/CIT landscape and the strengths, weaknesses, opportunities and threats
  - A proposed mission and vision statement for the CIT strategy
  - Identification of 7 strategic pillars
  - Identification of strategic objectives for each pillar
  - Roadmap and action plan for 2013
- In May 2013, the draft framework was presented to representatives from RECs and SIs at the 3<sup>rd</sup> ICT Harmonisation meeting held in Nairobi alongside IST-Africa. This resulted in a refinement of the draft.
- In June 2013 the Draft Plan/Framework was presented to the Bureau of the CITMC (Conference of Ministers responsible for Communication and Information Technology)
- In December 2013 at the 4<sup>th</sup> ICT Harmonisation Meeting it was agreed that inputs would be provided by the various stakeholders into the framework (focusing on targets and indicators and referencing current strategy documents) with a deadline of January 31 2014. Few inputs were received by the January deadline and did not address the request for targets and indicators.
- In May 2014, a facilitated workshop was held in Mauritius in parallel with the IST-Africa 2014 Conference and resulted in the elaboration of outputs, identification of domains of implementation, identification of ownership of outputs and possible funding sources.

## Situational Analysis

Strengths	Weaknesses
<ul> <li>Outsourcing capacity</li> <li>Mobile phone availability and becoming more affordable</li> <li>Sustainability of growth of Internet</li> <li>Exponential increase of international bandwidth international boundaries</li> <li>Affordability of ICT equipment</li> <li>Regional ICT operators with 'deep' pockets</li> <li>ICT policies in 43 of 54 member states</li> <li>Availability of Regional and Sub-Regional Institutions</li> <li>Investment in ICT Sector is growing</li> <li>Multiple ICT Service Providers leading to service cost reduction</li> </ul>	<ul> <li>Low cohesion, cooperation, coordination and harmonisation among regional and continental actors</li> <li>ICT not elevated as a national strategic priority</li> <li>Weakness in ICT policy processes and implementation</li> <li>Lack of adequate Infrastructure</li> <li>Lack of enforcement of Regional and Continental Agreements and Decisions 2</li> <li>Capacity Constraints – limited human resources, weak research capacity and unavailability of reliable statistics</li> </ul>
Opportunities	Threats
<ul> <li>Growing younger population with ICT savvy</li> <li>Exploitation of Natural Resources which can be exchanged for advancement in sustained ICT development</li> <li>Well educated African Diaspora</li> <li>Mobile boom which has created awareness of ICT use and advantages</li> <li>Development of value added services</li> <li>Develop of socio-economic related applications</li> <li>Time zone an opportunity for outsourcing = same time zone as Europe</li> <li>Contribution to Regional Integration, peace and security</li> <li>Use of postal networks to provide eservices</li> <li>Use of digital dividend following analogue to digital conversion</li> <li>Renewed optimism around African Renaissance</li> <li>1 Billion People Market</li> <li>Innovations to eg reach rural</li> </ul>	<ul> <li>National regulatory independence</li> <li>Growing next generation who are jobless</li> <li>Dominant telecom giants engaging in uncompetitive practices</li> <li>Migration of skilled work force since ICT is a universal language and skill</li> <li>Asian domination in equipment and provision of services</li> <li>Growing Cyber-attacks</li> <li>e-Waste</li> <li>In-fighting between major players</li> <li>ICT development not seen as a key issue and can be overtaken by other pressing issues</li> <li>Widening digital divide and rising poverty to participate</li> <li>African ownership of ICT agenda lost or diluted by external influences (what others say we should do)</li> </ul>

- communities with advantages of cyber
- Africa as a new and prime investment destination

## Core Ideology

#### Mission/Purpose

Coordinate, promote and facilitate the development of Posts & ICT to accelerate the integration and Socio-Economic development of the Continent.

#### **Vision**

By 2025 at least half of Africa's population will have access to affordable broadband services

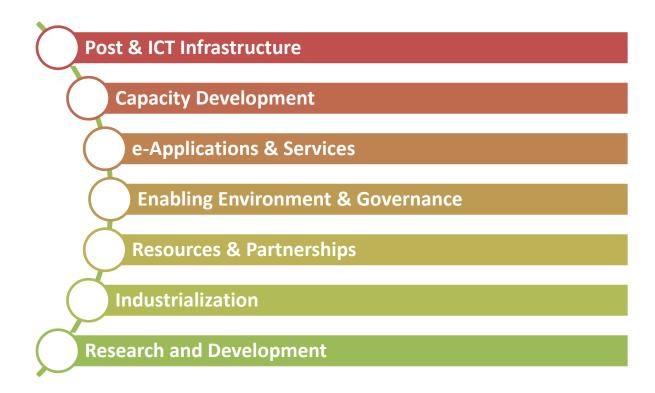
#### The African Union Vision

Build an integrated, prosperous and peaceful Africa, driven and managed by its own citizens and representing a dynamic force in the international arena

#### **Brand Promise/Commitment**

- Ensuring that each country has at least two reliable fiber connections, internationally, regionally and to its neighbours, which are competitively priced or based on open-access principles.
- Ensuring that national markets are fully competitive to allow African end users to benefit from reliable low-cost international fiber capacity
- Ensuring that the many opportunities offered by transport and energy terrestrial infrastructures are accessible for fiber optic cable deployment.
- Ensuring sufficient ownership, commitment and co-ordination from RECs and member states to encourage quick deployment of needed regional infrastructures through adoption of the required enabling environment to promote competition and open-access to the backbones.
- Ensuring that the most effective governance and ownership models are adopted to maximize the financing opportunities from both private and public sectors to promote the universal access.

## Overview of Strategic Pillars



#### 1. Post & ICT Infrastructure

Infrastructure development is one of the critical conditions for the acceleration of regional integration and economic growth. The level of Posts and ICT infrastructure development in Africa does not allow the continent to harness the opportunities offered by these sectors. Africa is faced with infrastructure deficit (e.g. inadequate broadband network development, weak inter-State broadband connectivity and Internet Networks, dilapidated postal networks, absence of IXP etc.) that constitutes obstacles to regional and continental integration. Access to infrastructure and services leading to availability of several types of digital content is a prerequisite for building an African information society.

### 2. Capacity Development

The potentials offered by Posts and ICT have not been fully used for the socio-economic development and transformation of Africa. Lack of research capacity and inappropriate Human Resource Development in the field of Posts & ICT are regarded as a major restraint in policy development. In many Member States, the lack of skills in the Posts & ICT skills has been identified as one of the most critical constraints.

### 3. e-Applications & Services

The development of e-Applications & Service on a multi-stakeholder basis and across all the socio-economic sectors is an important component of e-Strategies aiming at enhancing Service Delivery through on-line services, promoting and popularizing e-government; e-health, e-education, e-Post Service, promotion of Development of Local and Localized Content and Services. The public sector and SMEs should be able to carry out the greatest

#### 4. Enabling Environment & Governance

Africa still faces many challenges of weak and ineffective Regulatory Frameworks as well as the absence of innovative Universal Access policies. The explosion of ICT sector investment in most developing Member States correlates closely with an improved environment for private investment to take place. The contribution to the Internet Governance issues and efficient management of Scarce Resources (spectrum, DNS and Numbers) require strong regional Cooperation/Coordination and integrative structures and fora for the participation of all stakeholders in the policy making processes at national, regional and continental levels.

#### 5. Resources & Partnerships

In Africa, the level of investment in Post & ICT is still insufficient. So far, the bulk of investment within has been allocated to mobile. There is a vital need for increasing financing levels for Posts and other fields of ICT and capacity building. Strategies for mobilization and efficient use of finance should be developed for universal access/service fund mechanisms in addition to Innovative Financing Mechanisms (IFM) including developing domestic finance and pooling of resources.

#### 6. Industrialization

Most African States are still excluded from the computer technology, electronic communication and audio-visual markets. This is because they do not have the industry for the manufacture of ICT products. Reliable and high capacity communication systems can encourage the establishment and distribution of various economic activities such as Business Processing Outsourcing (BPO) specifically in the areas where majority of the people live as well as in rural areas.

### 7. Research and Development

Research and Development (R&D) are vital elements that determine the extent to which ICT contributes to increased productivity. To reinforce the Posts & ICT sectors in general and enhance economic growth to the widest possible extent, it is important to strengthen the area of R&D.

## Strategic Objectives & Outputs

In this section, the Strategic Pillars and associated Objectives and Outputs are listed using the following notation:

- = Strategic Pillar (Key focus area of the Strategy)
- **2** = Strategy/ies ('game plan' or approach under each Strategic Theme)
- 3 = Output which details what has to be achieved

### 1. II Post & ICT Infrastructure

### 1.1 2 Build Broadband Infrastructures

- 1.1.1 Dedicated broadband networks
- 1.1.2 Business plans for cross-border links
- 1.1.3 Intra-continental connectivity
- 1.1.4 Developed and upgraded National ICT infrastructure
  - Metropolitans Networks
  - National Backbone
  - Last mile broadband networks
- 1.1.5 Internet Exchange Point Networks
- 1.1.6 Enhanced BPO Services Infrastructure (Data Centres etc)
- 1.1.7 Roaming Facilities (e.g. clearing house)
- 1.1.8 Submarine cables & landing station access

### 1.2 2 Use ICT to modernise Postal Networks and Services

- 1.2.1 Automation in postal processes
  - Modernized postal coding and addressing system
- 1.2.2 Modernised Postal Networks
  - Postal Network
  - Financial Network
- 1.2.3 Modernised Postal Offices
- 1.2.4 Modernised Postal Services
  - e-Services
  - e-postal services

## 1.3 Promote access to ICT Broadband Infrastructure in rural and under-served areas

- 1.3.1 Partnerships to identify sustainable energy solutions
- 1.3.2 Universal access and services policies
- 1.3.3 Universal Service Access Funds
  - Sustained and applied for access in rural areas
  - Universal service projects developed and implemented
  - Community Tele-Centres

# 1.4 Promote development of Regional and Continental digital broadcasting networks and content

- 1.4.1 Regional and Continental Broadcasters
- 1.4.2 Regional and Continental Broadcast Networks
- 1.4.3 Local Content

### 1.5 2 Harmonise optimal use of digital dividend

1.5.1 Affordable Broadband

- 1.5.2 Increased Number of Transformative Services
- 1.5.3 Common Policy Framework for uses of Spectrum

### 2 Capacity Development

### 2.1 Promote Digital Literacy, e-learning and ICT for Education

- 2.1.1 ICT for Education and e-learning Policy Framework
- 2.1.2 e-Learning Capability and Capacity
- 2.1.3 Online Centres of Learning
- 2.1.4 Digital Literacy Training Programmes
  - Programmes for youth
  - Programmes for women
  - Programmes for the physically disadvantaged
- 2.1.5 Developed e-Learning Based Content

### 2.2 Promote development of specialist/expert capacity in Post & ICT

- 2.2.1 ICT and Postal Training needs identified
- 2.2.2 ICT and Postal Training programmes developed and delivered
- 2.2.3 Directory of Training Institutions in the field of Posts and ICT in Africa

# 2.3 Promote and facilitate Knowledge Development and Management

- 2.3.1 Knowledge Collection and dissemination Platform
- 2.3.2 Communities of practice and knowledge networking platforms

- 2.3.3 Integrated Portals and Platforms across Regional and continental institutions
- 2.4 Harness skills and expertise of African Diaspora in ICT development (cross-cutting across all strategic themes)
  - 2.4.1 Database of ICT Experts in the Diaspora
  - 2.4.2 Increased participation of Diaspora in Programme Development and Implementation

### 3 Le-Applications & Services

- 3.1 2 Enhance Service Delivery through on-line services
  - 3.1.1 Collaboration & Exchange of best practices in e-government; e-health and e-agriculture
  - 3.1.2 Centres/outlets for access to e-government services
  - 3.1.3 Sustainable e-Applications and Services (e-Post, e-Government, e-Health, e-Agriculture, e-Learning, e-Commerce, e-Finance)

## 3.2 Promote Development of Local and Localised Content and Services

- 3.2.1 Content and applications in local languages developed
- 3.2.2 Digitised African cultural and heritage content
- 3.2.3 Repositories and content generation hubs

### 3.3 Promote mobile value-added services and applications industry

- 3.3.1 3 "e" Services Extended to Mobile Platforms
- 3.3.2 Mobile Application Development Hubs

### 3.4 Strengthen Consumer Associations and user groups

- 3.4.1 Discussion Forums for Consumer Input & Feedback
- 3.4.2 Surveys & Research on Consumer & user trends
- 3.4.3 Public Education & Promotion Campaigns

### 4 II Enabling Environment & Governance

# 4.1 Develop an 'Outreach' Strategy for African Leadership on Information Society Development

- 4.1.1 Africa information Forums
- 4.1.2 National ICT Policy Making Prioritisation campaigns
- 4.1.3 Forums for the guidance of National ICT Policy Making

# 4.2 Enhance wide spread understanding and participation in Internet Governance global spaces

- 4.2.1 Published Internet Governance contributions for discussion & adoption
- 4.2.2 Awareness and participation campaigns for Member States
- 4.2.3 Common African positions on Internet Governance issues
- 4.2.4 Participation of RECs and Regional Internet Governance Forums in ICANN, ITU, and gIGF
- 4.2.5 Participation by all stakeholder groups in National and Regional IGFs

# 4.3 Promote the implementation of Legislation to ensure security and reliability of networks across the continent

4.3.1 Adoption and ratification of AU Cyber Security Convention

4.3.2 Transposition or domestication of the Convention

### 4.4 Develop policy frameworks at National and /or Regional Level

- 4.4.1 Policy Framework for the Management of Scarce Resources: frequencies, numbers; names (DNS) and right-of-way
- 4.4.2 3 e-Waste Policy Framework

# 4.5 Armonise Policy and Regulatory Frameworks for Post & ICT across RECs

- 4.5.1 Harmonised universal access policies
- 4.5.2 Harmonised Policies on Convergence
- 4.5.3 Continental Regulatory Forum
- 4.5.4 Leveled playing field for business/Regional Post/ICT market

### 4.6 2 Coordinate implementation of ICT Projects and Programmes

- 4.6.1 Annual coordination meetings
- 4.6.2 Preparatory meetings ahead of major events
- 4.6.3 Improved implementation of continental and regional directives at national level
- 4.6.4 Tax and custom duty incentives for ICT equipment
- 4.6.5 Promotion of growth of the Internet Economy in Africa

### 5 Resources & Partnerships

### 5.1 Promote Investment in Post & ICT

- 5.1.1 Strategies which promote and increase allocation of public resources for Post/ICT development.
- 5.1.2 Incentives for foreign investments and coordinate its usage
- 5.1.3 Development of domestic finance by providing support to local entrepreneurs and investors
- 5.1.4 Promoted public private partnerships and other multi-stakeholders partnerships
- 5.1.5 Creation of (large) regional markets to attract investment

## 5.2 Develop innovative approaches for the management of universal access/service funds

- 5.2.1 Funding to support implementation of the 'harmonisation' ICT Strategy for the African Continent
- 5.2.2 Access to ICT in rural and under-served areas

# 5.3 Increase awareness and necessity to provide adequate funding to Regional and Continental initiatives and projects in Post & ICT

- 5.3.1 Identify champions and thought-leaders
- 5.3.2 Provision of Clear Strategy, Goals & Outcomes

# 5.4 Implement Innovative Fund Raising Strategies for the funding of ICT related activities

- 5.4.1 Operational African ICT Development Fund
- 5.4.2 Engage Private Sector in the Information Society Partnership for Africa's Development (ISPAD)

### 6 Industrialization

# 6.1 Promote establishment of ICT assembling and manufacturing plants

- 6.1.1 Tax & Customs Incentives for ICT Manufacturing Industries
- 6.1.2 Grants & Funding for Establishment of ICT Manufacturing Facilities

## 6.2 Promote design, development and production of software and hardware in Africa

- 6.2.1 African Intellectual Property and local industries protected from external competition
- 6.2.2 Local consumption of local products "best buy Africa"
- 6.2.3 Development of Solutions to Local Technical Requirements
- 6.2.4 Facilitate the creation of Technological Parks and Incubators
  - TechnoPark & IncubatorHub Friendly Policies & Incentives
  - Integration of TechnoParks & IncubatorHubs with Learning Institutions
  - Development Programs for Fast-Tracking of Innovative ICT Related SMEs
  - Funding Models which incorporate and foster Private Enterprise & Government collaboration

### 6.3 Promote business process outsourcing (BPO) in Africa

6.3.1 Nearshore ((neighbouring countries or intra-continental) Information Technology Enabled Service and Business Process Outsourcing Agreements

### 7 Research and Development

- 7.1 Z Establish regional ICT research centres
  - 7.1.1 Centres of Excellence in the field of Post & ICT
  - 7.1.2 ICT Research Centres
    - Research and Development capacity in Research and academic institutions
    - Increased research and development capacity in Post & ICT sectors

- 7.1.3 Networked ICT Centres of Excellence , ICT Research Centres and universities
- 7.1.4 Partnering with the private sector for the sustainability of centres of excellence
- 7.1.5 AU research fellowships

### 7.2 Promote Evidence/research-Based Decision Making

- 7.2.1 3 ICT Development Indicators
- 7.2.2 M&E frameworks
- 7.2.3 Impact Evaluation Studies

## Implementation - Domains and Ownership

For each Output in the Strategy, the domain of implementation (national, regional or continental), the owner of the output and key role players as well as proposed sources of funding have been elaborated. These are presented in the sections that follow using two approaches: the first according the Strategic Pillars and the second according to the domain of implementation.

### **Domains and Ownership of Outputs for each Strategic Pillar**

#### **Posts & ICT Infrastructure**

Strategic Goal/Theme	Strategy	Output	Domain	Owner	Role Players	Funding
	Build Broadband Infrastructures	Dedicated broadband networks	National	RECs	Member States/PPP	Member States
		Business plans for cross-border links	Regional	RECs	Regulators/Operators	RECs/PIDA (AfDB)
		Intra-continental connectivity	Continental	NPCA	AUC/RECs/Regulators/Operators	AfDB
		Developed and upgraded National ICT infrastructure	National	Member State	Member States/Regulators/PPP	Member States/Operators
		Internet Exchange Point Networks	Continental	AUC	AUC/RECs/NPCA/Member States	ITF/Member States/Operators
		Enhanced BPO Services Infrastructure (Data Centres etc)	National	RECs	RECs/Member States/Operators	Member States/Operators
		Roaming Facilities (e.g. clearing house)	Regional	RECs	RECs/Member States/Operators	Member States/Operators
		Submarine cables & landing station access	Regional	RECs	RECs/Member States/Operators	Member States/Operators
	Use ICT to modernise Postal Networks and	Automation in postal processes	National	Member State	Member States/Operators	Member States/Operators
	Services	Modernised Postal Networks	National	Member State	Member States/Operators	Member States/Operators
Post & ICT		Modernised Postal Offices	National	Member State	Member States/Operators	Member States/Operators
Infrastructure		Modernised Postal Services	National	Member State	Member States/Operators	Member States/Operators
mirastractare	Promote access to ICT Broadband Infrastructure in rural and under-served	Partnerships to identify sustainable energy solutions	National	Member State	Member States/Operators/PPP	Member States/Operators/PPP
	areas	Universal access and services policies	Regional	RECs	RECs/Member States	RECs/Member States
		Universal Service Access Funds	National	Member State	Member States/Operators	Member State
	Promote development of Regional and	Regional and Continental Broadcasters	Continental	AUC	AUC/RECs/Member States/Operators	Member States/PPP
	Continental digital broadcasting networks and content	Regional and Continental Broadcast Networks	Continental	AUC	AUC/RECs/Member States/Operators	Member States/PPP
		Local Content	National	Member State	Member State/Content Providers	PPP/Private Sector
	Harmonise optimal use of digital dividend	Affordable Broadband	Regional	RECs	RECs/Member States/Operators	Member States/PPP
		Increased Number of Transformative Services	Regional	RECs	RECs/Member States/Operators	Member States/PPP
		Common Policy Framework for uses of Spectrum	Regional	RECs	RECs/Member States/Operators	Member States/PPP

### **Capacity Development**

Strategic Goal/Theme	Strategy	Output	Domain	Owner	Role Players	Funding
	Promote Digital Literacy, e-learnig and ICT for Education	ICT for Education and e-learning Policy Framework	National	Member State	Member States/Operators	Member States/PPP
		e-Learnining Capability and capacity	National	Member State	Member States/Operators	Member States/PPP
		Online Centres of Learning	National	Member State	Member States/Operators	Member States/PPP
		Digital Literacy Training Programmes	National	Member State	Member States/Operators	Member States/PPP
		Developed eLearning Based Content	National	Member State	Member States/Operators	Member States/PPP
	Promote development of specialist/expert	ICT and Postal Training needs identified	National	Member State	Member States/Operators	Member States/PPP
	capacity in Post & ICT	ICT and Postal Training programmes developed and delivered	National	Member State	Member States/Operators	Member States/PPP
Capacity		Make a list of Training Institutions in the field of Post and ICT in the continent	Regional	RECs	RECs/Member States	Member States/Dev Partners
Development	Promote and facilitate Knowledge Development and Management	Knowledge Collection and dissemination Platform	National	Member State	Member States/Operators	Member States/PPP
		Communities of practice and knowledge networking platforms	National	Member State	Member States/Operators	Member States/PPP
		Integrated Portals and Platforms across Regional and continental institutions	Regional	RECs	RECs/Member States	Member States/Dev Partners
	Harness skills and expertise of African	Database of ICT Experts in the Diaspora	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Increased participation of Diaspora in Programme Development and	Continental	AUC	AUC/RECs/Member States/Operators	Member States/Dev Partners
		Implementation				

### e-Applications and Services

Strategic Goal/Theme	Strategy	Output	Domain	Owner	Role Players	Funding
	Enhance Service Delivery through on-line	Collaboration & Exchange of best practices in	Regional	RECs	RECs/Member States	Member States/Dev Partners
	services	e-government; e-health and e-agriculture				
		ePost Services	Regional	RECs	RECs/Member States	Member States/Dev Partners
		eGovernment Services	National	Member State	Member States/Operators	Member States/PPP
		Centres/outlets for access to e-government services	National	Member State	Member States/Operators	Member States/PPP
		eHealth Service	National	Member State	Member States/Operators	Member States/PPP
		eAgriculture Service	National	Member State	Member States/Operators	Member States/PPP
		eLearning Service	National	Member State	Member States/Operators	Member States/PPP
		eCommerce Service	National	Member State	Member States/Operators	Member States/PPP
e-Applications &		E-Financial Service	National	Member State	Member States/Operators	Member States/PPP
Services	Promote Development of Local and Localised Content and Services	Content and applications in local languages developed	National	Member State	Member States/Operators	Member States/PPP
		Digitised African cultural and heritage content	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Repositories and content generation hubs	Regional	RECs	RECs/Member States	Member States/Dev Partners
	Promote mobile value-added services and	"e" Services Extended to Mobile Platforms	National	Member State	Member States/Operators	Member States/PPP
	applications industry	Mobile Application Development Hubs	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
S	Strengthen Consumer Associations and	Discussion Forums for Consumer Input &	National	Member State	Member States/Operators	Member States/PPP
	user groups	Feedback				
		Surveys & Research on Consumer & user trends	National	Member State	Member States/Operators	Member States/PPP
		Public Education & Promotion Campaigns	National	Member State	Member States/Operators	Member States/PPP

### **Enabling Environment and Governance**

Strategic Goal/Theme	Strategy	Output	Domain	Owner	Role Players	Funding
	Develop an 'Outreach' Strategy for African	Africa information Forums	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Leadership on Information Society	National ICT Policy Making Prioritisation	Regional	RECs	RECs/Member States	Member States/Dev Partners
	Development	campaigns				
		Forums for the guidance of National ICT Policy Making	National	Member State	Member States/Operators	Member States/PPP
	Enhance wide spread understanding and	Published Internet Governance	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	participation in Internet Governance in	contributions for discussion & adoption				
	•	Awareness and Participation Campaigns for Member States	Regional	RECs	RECs/Member States	Member States/Dev Partners
		Common African positions on Internet Governance Issues	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Participation of RECs and Regional Internet Governance Forums in ICANN, ITU, and gIGF	Regional	RECs	RECs/Member States	Member States/Dev Partners
Fachling		All stakeholders' participation in National and Regional IGFs	Regional	RECs	RECs/Member States	Member States/Dev Partners
Enabling Environment &	Promote the implementation of Legislation	Adoption and ratification of AU Cyber	National	Member State	Member States/Operators	Member States/PPP
Governance	to ensure security and reliability of	Security Convention				
Governance		Transposition or domestication of the Convention	National	Member State	Member States/Operators	Member States/PPP
	Develop policy frameworks at National and	Policy Framework for the Management of	Regional	RECs	RECs/Member States	Member States/Dev Partners
	/or Regional Level	Scarce Resources: frequencies; name ccTLD				
		and right-of-way				
		E-Waste Policy Framework	Regional	RECs	RECs/Member States	Member States/Dev Partners
	, ,	Harmonised universal access policies	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Frameworks for Post & ICT across RECs	Harmonised Policies on Convergence	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Continental Regulatory Forum	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Leveled playing field for business/Regional Post/ICT market	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Coordinate implementation of ICT Projects	Annual coordination meetings	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	and Programmes	Preparatory meetings ahead of major events	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Improved implementation of continental and regional directives at national level	Regional	RECs	RECs/Member States	Member States/Dev Partners

### **Resources and Partnerships**

Strategic Goal/Theme	Strategy	Output	Domain	Owner	Role Players	Funding
	Promote Investment in Post & ICT	Strategies which promote and increase allocation of public resources for Post/ICT development.	Regional	RECs	RECs/Member States	Member States/Dev Partners
		Incentives for foreign investments and coordinate its usage	Regional	RECs	RECs/Member States	Member States/Dev Partners
		Development of domestic finance by providing support to local entrepreneurs and investors		Member State	Member States/Operators	Member States/PPP
		Promoted public private partnerships and other multi-stakeholders partnerships	Regional	RECs	RECs/Member States	Member States/Dev Partners
Mobilization of Financial Resources		Creation of (large) regional markets to attract investment	Regional	RECs	RECs/Member States	Member States/Dev Partners
& Partnerships	Develop innovative approaches for the management of universal access/service funds	Funding to support implementation of the 'harmonisation' ICT Strategy for the African Continent	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Access to ICT in rural and under-served areas	Regional	RECs	RECs/Member States	Member States/Dev Partners
	Increase awareness and necessity to	Identify champions and thought-leaders	Continental	AUC		Member States/Dev Partners
	provide adequate funding to Regional and Continental initiatives and projects in Post	0,7	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Implement Innovative Fund Raising	Operational African ICT Development Fund	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Strategies for the funding of ICT related activities	Engage Private Sector in the Information Society Partnership for Africa's Development (ISPAD)		NPCA	AUC/NPCA/Member States	Member States/Dev Partners

#### Industrialisation

Strategic Goal/Theme	Strategy	Output	Domain	Owner	Role Players	Funding
	Promote establishment of ICT assembling and manufacturing plants	Tax & Customs Incentives for ICT Manufacturing Industries	Regional	RECs	RECs/Member States	Member States/Dev Partners
		Grants & Funding for Establishment of ICT Manufacturing Facilities	Regional	RECs	RECs/Member States	Member States/Dev Partners
Industrialization	Promote design, development and production of software and hardware in Africa	African Intellectual Property and local industries protected from external competition	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Local consumption of local products - "best buy Africa"	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Facilitate the creation of Technological Parks and Incubators	Regional	RECs	RECs/Member States	Member States/Dev Partners
	Promote business process outsourcing (BPO) in Africa	Nearshore ITES-BPO Agreements	Regional	RECs	RECs/Member States	Member States/Dev Partners

### **Research and Development**

Strategic Goal/Theme	Strategy	Output	Domain	Owner	Role Players	Funding
	Establish Regional ICT Research Centres	Centres of Excellence	Regional	RECs	RECs/Member States	Member States/Dev Partners
		ICT Research Centres	Regional	RECs	RECs/Member States	Member States/Dev Partners
		Networked ICT Centres of Excellence, ICT	Regional	RECs	RECs/Member States	Member States/Dev Partners
		Research Centres and Universities				
Research and		Partnering with the Private Sector for the	Regional	RECs	RECs/Member States	Member States/Dev Partners
Development		sustainability of centres of excellence				
Development		AU Research Fellowships	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Promote Evidence/Research Based	ICT Developmen Indicators	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Decision Making					
		Monitoring & Evaluation Frameworks	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Impact Evaluation Studies	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners

# Outputs for each Strategic Pillar according to Domain of Implementation

### **Continental Domain**

Strategic Goal/Theme	Strategy	Output	Domain	Owner	Role Players	Funding
		Intra-continental connectivity	Continental	NPCA	AUC/RECs/Regulators/Operators	AfDB
		Internet Exchange Point Networks	Continental	AUC	AUC/RECs/NPCA/Member States	ITF/Member States/Operator
Post & ICT Infrastructure	Promote development of Regional and Continental digital broadcasting networks and content	Regional and Continental Broadcasters	Continental	AUC	AUC/RECs/Member States/Operators	Member States/PPP
		Regional and Continental Broadcast Networks	Continental	AUC	AUC/RECs/Member States/Operators	Member States/PPP
Capacity Development	Harness skills and expertise of African Diaspora in ICT development (cross-cutting across all strategic themes)	Database of ICT Experts in the Diaspora	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
Development		Increased participation of Diaspora in Programme Development and	Continental	AUC	AUC/RECs/Member States/Operators	Member States/Dev Partners
e-Applications &		Digitised African cultural and heritage	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
Services		Mobile Application Development Hubs	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Develop an 'Outreach' Strategy for African	Africa information Forums	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Enhance wide spread understanding and	Published Internet Governance	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Common African positions on Internet	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Harmonise Policy and Regulatory	Harmonised universal access policies	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
Enabling Environment &		Harmonised Policies on Convergence	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Continental Regulatory Forum	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Leveled playing field for business/Regional	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Coordinate implementation of ICT Projects	Annual coordination meetings	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Preparatory meetings ahead of major events	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Develop innovative approaches for the	Funding to support implementation of the	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
	Increase awareness and necessity to provide		Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
Mobilization of	, , , , , , , , , , , , , , , , , , , ,	Provision of Clear Strategy, Goals & Outcomes	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
nancial Resources & Partnerships	Implement Innovative Fund Raising Strategies for the funding of ICT related	Operational African ICT Development Fund	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Engage Private Sector in the Information Society Partnership for Africa's Development (ISPAD)	Continental	NPCA	AUC/NPCA/Member States	Member States/Dev Partners
Industrialization	Promote design, development and production of software and hardware in Africa	African Intellectual Property and local industries protected from external competition	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Local consumption of local products - "best buy Africa"	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		AU Research Fellowships	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
Research and Development	Promote Evidence/Research Based Decision Making	ICT Developmen Indicators	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Monitoring & Evaluation Frameworks	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners
		Impact Evaluation Studies	Continental	AUC	AUC/NPCA/Member States	Member States/Dev Partners

#### Regional Domain

Strategic Goal/Theme	Strategy	Output	Domain	Owner	Role Players	Funding
Codi, meme	Build Broadband Infrastructures	Business plans for cross-border links	Regional	RECs	Regulators/Operators	RECs/PIDA (AfDB)
		Roaming Facilities (e.g. clearing house)	Regional	RECs	RECs/Member States/Operators	Member States/Operators
		Submarine cables & landing station access	Regional	RECs	RECs/Member States/Operators	Member States/Operators
Post & ICT Infrastructure	Promote access to ICT Broadband Infrastructure in rural and under-served areas	Universal access and services policies	Regional	RECs	RECs/Member States	RECs/Member States
	Harmonise optimal use of digital dividend	Affordable Broadband	Regional	RECs	RECs/Member States/Operators	Member States/PPP
		Increased Number of Transformative Services	Regional	RECs	RECs/Member States/Operators	Member States/PPP
		Common Policy Framework for uses of Spectrum	Regional	RECs	RECs/Member States/Operators	Member States/PPP
Capacity	Promote development of specialist/expert capacity in Post & ICT	Make a list of Training Institutions in the field of Post and ICT in the continent	Regional	RECs	RECs/Member States	Member States/Dev Partne
Development	Promote and facilitate Knowledge Development and Management	Integrated Portals and Platforms across Regional and continental institutions	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Enhance Service Delivery through on-line services		Regional	RECs	RECs/Member States	Member States/Dev Partne
Applications & Services		agriculture ePost Services	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Promote Development of Local and	Repositories and content generation hubs	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Localised Content and Services		ŭ			
	Develop an 'Outreach' Strategy for African Leadership on Information Society Development	National ICT Policy Making Prioritisation campaigns	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Enhance wide spread understanding and participation in Internet Governance in other global spaces	Awareness and Participation Campaigns for Member States	Regional	RECs	RECs/Member States	Member States/Dev Partne
		Participation of RECs and Regional Internet	_	RECs	RECs/Member States	Member States/Dev Partne
Enabling nvironment & Governance		All stakeholders' participation in National and Regional IGFs	Regional	RECs	RECs/Member States	Member States/Dev Partne
Covernance	Develop policy frameworks at National and	Policy Framework for the Management of	Regional	RECs	RECs/Member States	Member States/Dev Partne
	/or Regional Level	E-Waste Policy Framework	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Coordinate implementation of ICT Projects and Programmes	Improved implementation of continental and regional directives at national level	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Promote Investment in Post & ICT	Strategies which promote and increase allocation of public resources for Post/ICT development.	Regional	RECs	RECs/Member States	Member States/Dev Partne
		Incentives for foreign investments and coordinate its usage	Regional	RECs	RECs/Member States	Member States/Dev Partne
Mobilization of ancial Resources & Partnerships		Promoted public private partnerships and other multi-stakeholders partnerships	Regional	RECs	RECs/Member States	Member States/Dev Partne
		Creation of (large) regional markets to attract investment	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Develop innovative approaches for the management of universal access/service funds	Access to ICT in rural and under-served areas	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Promote establishment of ICT assembling	Tax & Customs Incentives for ICT	Regional	RECs	RECs/Member States	Member States/Dev Partne
Industrialization	and manufacturing plants	Grants & Funding for Establishment of ICT Manufacturing Facilities	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Promote design, development and production of software and hardware in	Facilitate the creation of Technological Parks and Incubators	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Africa Promote business process outsourcing (BPO) in Africa	Nearshore ITES-BPO Agreements	Regional	RECs	RECs/Member States	Member States/Dev Partne
	Establish Regional ICT Research Centres	Centres of Excellence	Regional	RECs	RECs/Member States	Member States/Dev Partne
Research and		ICT Research Centres	Regional	RECs	RECs/Member States	Member States/Dev Partne
Development		Networked ICT Centres of Excellence, ICT Research Centres and Universities	Regional	RECs	RECs/Member States	Member States/Dev Partne
			Regional	RECs	RECs/Member States	Member States/Dev Partne

### **National Domain**

Strategic Goal/Theme	Strategy	Output	Domain	Owner	Role Players	Funding
	Build Broadband Infrastructures	Dedicated broadband networks	National	RECs	Member States/PPP	Member States
		Developed and upgraded National ICT infrastructure	National	Member State	Member States/Regulators/PPP	Member States/Operators
		Enhanced BPO Services Infrastructure (Data Centres etc)	National	RECs	RECs/Member States/Operators	Member States/Operators
	Use ICT to modernise Postal Networks and Services	Automation in postal processes	National	Member State	Member States/Operators	Member States/Operators
Post & ICT		Modernised Postal Networks Modernised Postal Offices	National National	Member State Member State	Member States/Operators Member States/Operators	Member States/Operators Member States/Operators
Infrastructure		Modernised Postal Services	National	Member State	Member States/Operators	Member States/Operators
	Promote access to ICT Broadband Infrastructure in rural and under-served areas	Partnerships to identify sustainable energy solutions	National	Member State	Member States/Operators/PPP	Member States/Operators/F
		Universal Service Access Funds	National	Member State	Member States/Operators	Member State
		Local Content	National	Member State	Member State/Content Providers	PPP/Private Sector
	Promote Digital Literacy, e-learnig and ICT for Education	ICT for Education and e-learning Policy Framework	National	Member State	Member States/Operators	Member States/PPP
		e-Learnining Capability and capacity	National	Member State	Member States/Operators	Member States/PPP
		Online Centres of Learning	National	Member State	Member States/Operators	Member States/PPP
Capacity		Digital Literacy Training Programmes	National	Member State	Member States/Operators	Member States/PPP
Development		Developed eLearning Based Content	National	Member State	Member States/Operators	Member States/PPP
	Promote development of specialist/expert capacity in Post & ICT	ICT and Postal Training needs identified	National	Member State	Member States/Operators	Member States/PPP
	Dayward and facilitate Manual alan	ICT and Postal Training programmes developed and delivered Knowledge Collection and dissemination	National National	Member State	Member States/Operators  Member States/Operators	Member States/PPP
	Promote and facilitate Knowledge Development and Management	Platform		Member State		Member States/PPP
	Enhance Service Delivery through on-line	Communities of practice and knowledge eGovernment Services	National National	Member State Member State	Member States/Operators  Member States/Operators	Member States/PPP Member States/PPP
	services	Centres/outlets for access to e-	National	Member State	Member States/Operators	Member States/PPP
		government services			N. J. S. J. 10	14 1 51 1 1000
		eHealth Service	National	Member State	Member States/Operators	Member States/PPP
		eAgriculture Service	National	Member State	Member States/Operators	Member States/PPP
		eLearning Service	National	Member State	Member States/Operators	Member States/PPP
-Applications &		eCommerce Service	National	Member State	Member States/Operators	Member States/PPP
Services		E-Financial Service	National	Member State	Member States/Operators	Member States/PPP
	Promote Development of Local and Localised Content and Services	Content and applications in local languages developed		Member State	Member States/Operators	Member States/PPP
	Promote mobile value-added services and applications industry	"e" Services Extended to Mobile Platforms		Member State	Member States/Operators	Member States/PPP
	Strengthen Consumer Associations and user groups	Feedback	National	Member State	Member States/Operators	Member States/PPP
		Surveys & Research on Consumer & user trends	National	Member State	Member States/Operators	Member States/PPP
		Public Education & Promotion Campaigns	National	Member State	Member States/Operators	Member States/PPP
Enabling Environment & Governance	Develop an 'Outreach' Strategy for African Leadership on Information Society	Forums for the guidance of National ICT Policy Making	National	Member State	Member States/Operators	Member States/PPP
	Promote the implementation of Legislation to ensure security and reliability of	Adoption and ratification of AU Cyber Security Convention	National	Member State	Member States/Operators	Member States/PPP
	networks across the continent	Transposition or domestication of the Convention	National	Member State	Member States/Operators	Member States/PPP
Mobilization of ancial Resources & Partnerships	Promote Investment in Post & ICT	Development of domestic finance by providing support to local entrepreneurs and investors	National	Member State	Member States/Operators	Member States/PPP

## Roadmap to Finalising the Strategy

- Finalise Strategy Framework
- Present Strategy Framework to 1<sup>st</sup> Ordinary Session of African Union Specialized Technical Committee on Communication and Information Technologies (STC-CICT)
- Hold open consultations with sectoral stakeholders
- Elaborate targets and performance measures for each strategic output
- Identify Priority Programmes and Projects (Flagships), associated champions and lead institutions
- Identify Quick wins and Low-hanging fruits
- Elaborate implementation and performance management structure for delivery
- Quantify the resources requirements for implementation of the strategy focusing on quick-wins and priority programmes
- Develop a communications and outreach plan to promote the strategy