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**ECONOMIC COMMISSION FOR AFRICA**

Fourth Meeting of the Committee  
on Development Information (CODI IV)

Addis Ababa, Ethiopia  
23 – 28 April 2005

**The status and impacts of development of national and regional ICT  
policies, plans and strategies**

**Report to the Fourth Meeting of the Committee on Development  
Information (CODI IV)**

## Background

It has been 9 years since the African Information Society Initiative (AISII) was established to respond to emerging needs of African member States in building an inclusive Information Society on the continent. Since the launching at the ECA Conference of Ministers in 1996, the initiative has been guiding the development of Africa's Information Society as the regional framework for action.

Since 1996, the environment surrounding Africa has changed dramatically and the speed of transformation noticeably accelerated. One of the most visible transformations has been taking place in the area of the Information Economy. ICT has proved to be a strategic tool for individuals, businesses and governments and countries that have embraced the technologies have enhanced its competitiveness in the global markets. India, for instance, is poised to enjoy the benefits of the global ICT outsourcing trends that are expected to bring 3.3 million jobs and \$136 billion in wages<sup>1</sup>. The global Business-to-Business (B2B) transaction alone was estimated to increase from \$226.2 billion in 2000 to \$3,774.8 billion in 2004<sup>2</sup>.

How to harness digital opportunities is a policy challenge that highlights and reconfirms the essential role an e-strategy plays in the Information Society. The World Summit on the Information Society (WSIS) organized in December 2003 in Geneva adopted the Declaration of Principles and Plan of Action<sup>3</sup> as a global consensus on the future of the Information Society and how to address inclusiveness and balance in the process. The Plan of Action stipulates that development of national e-strategies, including the necessary human capacity building, should be encouraged by all countries by 2005, taking into account different national circumstances. It also encourages the involvement of various stakeholders in the policy formulation and implementation processes, with special emphasis on the private sector development and poverty reduction efforts.

E-strategies continued to be the main topic of discussion as a vehicle to advance Africa's digital agenda during the Second African WSIS Regional Preparatory Conference organized from 2-4 February 2005 in Accra. The Conference served as a platform to consolidate Africa's position and prepare decision and policy makers for the second Summit scheduled in November 2005 in Tunis. The outcomes of the Conference was crystallized into the Accra Commitments<sup>4</sup> which emphasizes that African countries establish national e-strategies based on the overall social economic goals of the countries including poverty reduction programmes. These reaffirm ECA's support to member States within the framework of AISII since 1996.

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<sup>1</sup> "Off-shoring of IT Jobs Expected to Accelerate", ClickZ, 19 November 2003

<sup>2</sup> "eMarketer" 2001

<sup>3</sup> [http://www.itu.int/wsiv/documents/doc\\_multi.asp?lang=en&id=1161|1160](http://www.itu.int/wsiv/documents/doc_multi.asp?lang=en&id=1161|1160)

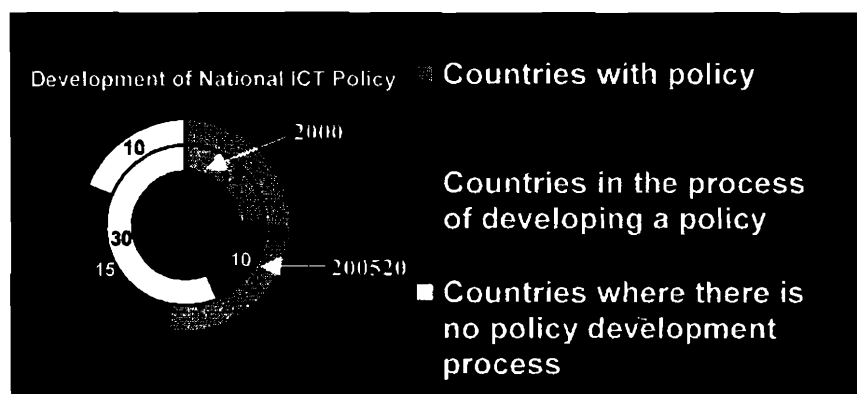
<sup>4</sup> [http://www.uneca.org/eca\\_programmes/it\\_for\\_development/events/accra/AccracommittmentsFinal.pdf](http://www.uneca.org/eca_programmes/it_for_development/events/accra/AccracommittmentsFinal.pdf)

## 1. AISI Implementation through e-strategy formulation and implementation

### 1.1 Overview

Since the last CODI meeting was organized in May 2003, the pace of ICT policy development on the continent has accelerated. In 2002, the number of countries with national ICT policies and plans recorded 16<sup>5</sup>, which jumped to 28 in 2005. Member States have completed the formulation of their national ICT policies and plans, known as National Information and Communication Infrastructure (NICI), and a dozen already moved to the policy implementation. Harmonization of ICT policies and plans at the sub-regional level has reached a new level, with the Regional Economic Communities (RECs) embarking on various initiatives, including the formulation of the Regional Information and Communication Infrastructure (RICI) policies and plans. Ghana piloted the formulation of the Village Information and Communication Infrastructure (VICI) policies and plans to translate its national vision (NICI Plan) at the community level.

More specifically, the number of member States that have successfully formulated their national ICT policies and plans has increased from 13 in 2000 to 28 in 2005. Accordingly, the number of countries without any policy developments has decreased from 30 in 2000 to 10 in 2005.



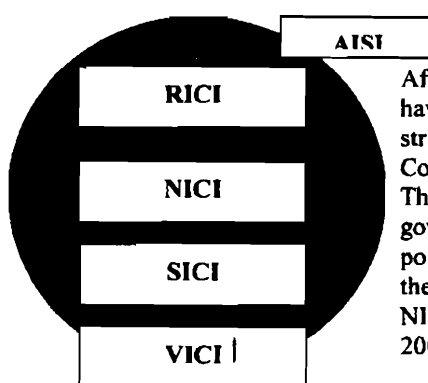
The countries are categorized into three groups: countries with an ICT policy; countries in the process of developing an ICT policy; and countries without any ICT policy as per the table below.

<sup>5</sup> <http://www.uneca.org/aisi/docs/E-Strategies.pdf>

**Table 1. African countries at various stages of ICT policies**

Year	Countries with an ICT policy	Countries in the process of developing an ICT policy	Countries where the ICT policy development process is not launched
2005 February	28 Algeria, Benin, Burkina Faso, Burundi, Cape Verde, Comoros, Côte d'Ivoire, Djibouti, Egypt, Ethiopia, Ghana, Guinea, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, South Africa, Sudan, Tanzania, Tunisia	15 Angola, Botswana, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Gabon, The Gambia, Kenya, Lesotho, Sierra Leone, Swaziland, Uganda, Zambia, Zimbabwe	10 Congo, Equatorial Guinea, Eritrea, Guinea-Bissau, Liberia, Libyan Arab Jamahiriya, Madagascar, Sao Tome and Principe, Somalia, Togo

### Sectoral Policies and Plans

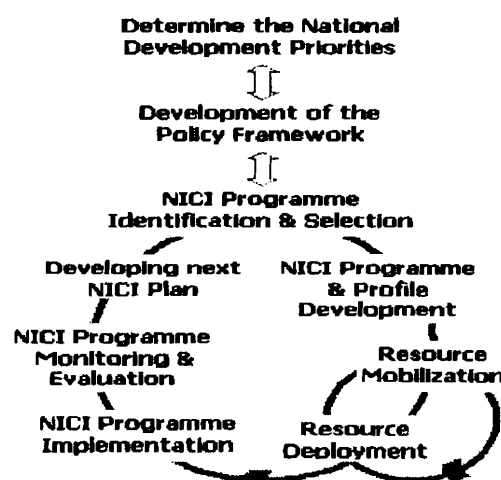


After completing the NICI policies, an increasing number of countries have been shifting their focus to the implementation of their e-strategies through the formulation of Sectoral Information and Communication Infrastructure (SICI) policies and plans. For instance, The Gambia and Rwanda have embarked on the formulation of e-government policies, while Uganda has finalized its Health ICT policy and strategy. Other countries have completed the life cycle of the first NICI policies and plan and are scaling up the efforts to update NICI policies. The countries that have started the NICI process since 2003 include Sierra Leone and Swaziland.

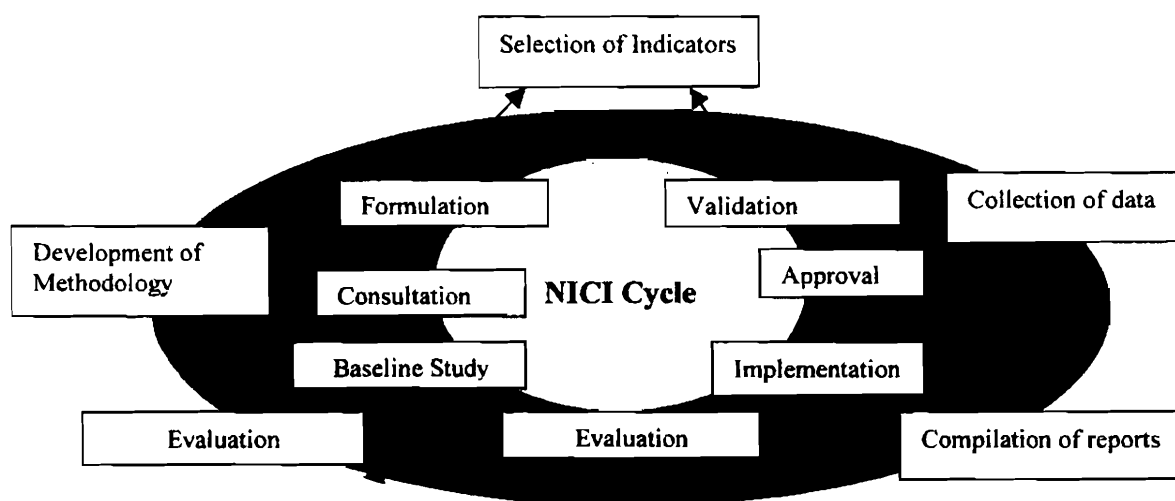
## 1.2 National Information and Communication Infrastructure (NICI)

### Methodology

The established NICI methodology has been confirmed as one of the most effective tools to initiate and develop national ICT policies and plans. The NICI review meeting organized in February 2005 (see below Section 2.8) confirmed that the methodology is comprehensive in scope and participatory in nature, which are critical components to ensure successful formulation and implementation of e-strategies. The effectiveness has been further confirmed by an increasing number of requests from member States that have started e-strategy processes and later requested ECA's support in updating and implementing their national ICT policies and plans, using the NICI methodology. Furthermore, the methodology has proven particularly useful in developing sectoral, regional and village ICT policies with the participation of a wider range of stakeholders.



The NICI methodology is a more powerful instrument when implemented in combination with the SCAN-ICT initiative, which aims to monitor the progress and achievements made in the Information Society. The NICI policy objectives could be taken into consideration when SCAN indicators are selected, while the data, information, findings and assessment of the SCAN-ICT could be based on when the effectiveness of NICI policies and plans are evaluated and updated. Responding to requests from member States, the Phase II of the SCAN-ICT initiative will commence shortly which will highlight the stronger linkage between NICI and SCAN as well as with overall development frameworks, such as MDGs and PRSP.



*Strengthened linkage between NICI formulation and implementation and the SCAN-ICT initiative*

### 1.3 NICI and Poverty Reduction Strategy

The Second African WSIS Preparatory Conference organized in Accra from 2-4 February 2005 dedicated a session on strengthening the linkage between ICT policies and poverty reduction efforts. This entails the mainstreaming of ICT for Development perspectives and activities in the PRSP processes and documents as well as reflecting poverty reduction and pro-poor initiatives as a key component in NICI policies and plans. More specifically, it will require an assessment of poverty from an ICT for Development perspective and alignment of ICT interventions to pro-poor growth strategies in national ICT policies and plans. At the same time, ICT should be recognized as an enabling tool to accelerate socio-economic development in the PRSP process as well as to attain MDGs.

A new group of NICI countries have established a stronger linkage with overall national socio-economic development frameworks as well as poverty reduction efforts. These countries include Comoros, The Gambia, Malawi and Niger. Specifically in Niger, HIV/AIDS and the introduction of telemedicine (as in a number of countries) was identified as one of the key areas in their national e-strategy, which is directly linked to the MDG Goal 6. Other MDGs have also been identified in the e-strategy process, in particular education.

### *Comoros*

The Government of the Union of Comoros has put in place a Poverty Reduction Strategy framework on which the NICI Plan is based. As the Government believes that ICTs are essential for the economic growth and improvement of life of the people, it has decided to embark on a deliberate information society development process supported by a national strategy and plan, taking into account the physical, economic and social context of the country.

In order to develop a draft ICT policy framework document and draft NICI plan, a series of consultation workshops were organized. All the stakeholders took part in discussions, meetings and focus groups constituted for the NICI development process. The National NICI Plan Committee, comprising of stakeholder representatives, was established to ensure better coordination and accountability in the entire process. The Committee validated all the draft documents before they were made public or adopted by Government officials. The Committee commissioned sectoral studies on the state of ICTs in relation to the country's growth and carried out an analysis of ICT penetration from a macroeconomic context and in relation to PRSP. A team of national sectoral experts was recruited to review the draft plan and ensure that PRSP concerns were incorporated in the document. The NICI policy was approved in May 2004. The government has requested ECA to assist in the NICI implementation by supporting the development of a harmonized regulatory telecommunication framework.

### *The Gambia*

The NICI process in The Gambia was initiated by the Department of State for Communication, Information and Technology (DOSCIT) and launched by Secretary of State for Communication, Information and Technology through a public announcement at an e-government workshop in Banjul on 30 April 2004. The first phase of the NICI development consultative process in The Gambia was geared towards recognising the areas where ICT would contribute to attaining the overall objective of the Vision 2020 and the four strategic issues identified in the PRSP, namely enhancing the productive capacity of the poor, enhancing access to and the performance of social services, local level capacity building and promoting participatory communications processes. An analysis of the prevailing socio economic condition in The Gambia further crystallised the challenges faced by the country in attaining those visionary goals. The e-readiness baseline survey conducted by the National e-Government Technical Committee (NATCOM) in July 2003 was another important source of information regarding the present status of the country in terms of ICT infrastructure and plans.

Consequently, the government requested ECA to support the organization of policy drafting workshops in November 2004, after which the outcome will be discussed at a validation workshop.

## *Malawi*

Malawi entered the NICI development process following the first African Development Forum (ADF '99). However, after various consultation workshops and seminars, the process did not move forward until the Department of Information Systems and Technology Management Services (DISTMS) of the Ministry of Finance was assigned to take the lead in 2001. Accordingly, an ICT policy development task force and a technical working group on ICT policy were formed.

This Policy takes into account the aspirations and provisions of key socio-economic development framework documents, including the Vision 2020 and the Malawian PRSP. Also taken into account are the provisions of the Communication Sector Policy Statement and the Malawian Science and Technology Policy Statement. Policy formulation was based on a nation-wide consultative process involving key stakeholders in the public sector, private sector and civil society reflecting the nation's commitments to pursue an ICT-led socio-economic development agenda aimed at developing the Malawian Information Society and Economy. The Policy is strategically targeted at the development of the ICT sector and industry and on the use of ICTs as a broad-based enabler of developmental goals, with emphasis on the development, deployment and exploitation of ICTs to aid the development of all other sectors of the economy.

On the development of the NICI Plan it was unanimously agreed that Malawi should not wait for the Policy to be approved by the Cabinet and the Parliament before work starts on the development of the Plan, since this approval process may take a long time. It was agreed that the Plan development process should start in March 2005 with the goal to try and complete it before the Tunis WSIS Summit in 2005.

## *Niger*

In the case of Niger, the NICI plan is integrated into the PRSP framework of the country. The ICT Vision of Niger, as adopted by the Government and the major stakeholders during the NICI consultation workshop, is as follows: *The ownership and generalization of the use of ICTs by the year 2008, will contribute to reduce poverty in a significant manner. The different components of the population will have the possibility to access knowledge, to participate in the democratic process of the country and valorize cultural and economic heritage.*

Following the adoption of the NICI Plan by the Council of Ministers in 2004, the Government issued a decree in February 2005 to create the "Haut Commissariat sur les Nouvelles Technologies de l'Information et de la Communication" to oversee the NICI implementation and coordination of ICT activities in the country. Located in the Office of the Prime Minister this office will be headed by a high official of the rank of a minister. In order to roll out NICI activities and operationalize the office, the Government of Niger has requested ECA to provide technical assistance in preparation of ICT laws and regulations and organization of a resource mobilization conference.

## 1.4 NICI Update 2003-2005

Countries that have recently formulated or been in the process of formulating their national ICT policies and plans include the following:

### *Cameroon*

Cameroon started the NICI process in 2000 with support from ECA and UNDP but the process was not completed nor did the Government adopt the policy. However, the development process did create a great deal of enthusiasm and sensitize policy makers on the need for a strategic approach to ICT in the country's development process.

In July 2003, the Cameroon Minister of Posts and Telecommunications requested ECA's support to resume the country's NICI policy development process, which subsequently led to the preparation of the NICI document, *PLAN national des infrastructures de la communication et de l'INFORMATION DU CAMEROUN 2004-2015* in May 2004. In order to solicit inputs from various stakeholders, a consultation and validation workshop is planned for April 2005 in Yaounde, after which the document will be submitted to the Cabinet for formal approval.

### *Democratic Republic of Congo (DRC)*

Following a request from the Democratic Republic of Congo (DRC), a mission was undertaken by ECA in December 2004 to discuss the development of a NICI Policy in the country. After a series of consultation workshops, the following priority actions have been identified:

- **Establishment of a NICI Committee**

Under the coordination of the Office of the President, the Committee will be composed of Government departments and representatives of all stakeholders. It will oversee the development and implementation of the policy.

- **Monitoring the development of the Presidential Intranet Initiative**

To showcase the benefits of ICT for development, an Intranet project was proposed for the Office of the President. This will demonstrate examples of ICT use to increase productivity and efficiency of the government.

- **Finalization of the telecommunication reform process**

DRC has just started reforming the Post and Telecommunication sector with the aim of separating the two functions. ECA was requested to assist the finalization of the legislation that would guide the operations of the two future entities as well as defining a development plan for the future national telecom operator.



- **Support to the Regulatory Authority for Telecommunication and Post**

Accordingly, a single regulatory agency was created in 2003 to oversee the Post and Telecommunication sector and since then has been overwhelmed by new entrants of private operators. ECA was requested to review the existing telecom laws and regulations governing relations between the Agency and the operators in order to make recommendations on a suitable telecommunication development plan for the country.

#### *Mali*

ECA started the NICI development process in May 2002 during the African Regional Conference for the World Summit on the Information Society (WSIS). Unfortunately the process was interrupted in July 2002 due to changes in political leadership and management of the NICI process at the government. The work was resumed in August 2003, carried out in cooperation with UNDP and finalized in December 2004. The ICT Policy was adopted by the Council of Ministers and a decree was passed to create the "Agence des Technologies de l'Information et de la Communication (AGETIC)", which has the mandate to implement the NICI plan. As a result of the NICI process, access to the Internet is provided free of charge to the public by SOTELMA, the national telecom operator, and at the same time all taxes and duties on ICT equipment are waived from 2005. In order to further advance the implementation, a donor conference will be organized to secure funding.

#### *Nigeria*

ECA undertook a consultation mission to the Federal Republic of Nigeria in August 2003 to discuss support for the development of the NICI Plan for the country. The mission was hosted by the Nigeria Information Technology Agency (NITDA) and consultations held with several Government institutions, civil society and private sector organizations. Accordingly, the Nigerian National Strategic Action Plan committee was established and mandated by the Federal Government to draw up an e-strategy action plan and programs in line with the national development objectives and priorities, and recommend those projects and programs whose implementation would successfully drive ICT growth in Nigeria, on a sector-by-sector basis. With financial support from ECA, a baseline study and a Strategic Plan Development Outline document were finalized in December 2004.

ECA is working with the national committee to provide Nigeria with the necessary technical expertise and experience which will be required to support the implementation of the Plan and the development of subsequent programmes and activities. The draft Implementation Plan is expected to be finalized in September 2005 and submitted for comments to various stakeholders, followed by a validation workshop in October 2005. The final Plan will be submitted to the Government in December 2005.

## *Rwanda*

Rwanda was one of the first countries to develop and implement its NICI plan in accordance with the methodology developed within the framework of AISI. The first plan implementation ends in 2005 and there is need to start the development of the NICI Plan II. In this regard, ECA agreed with Government officials to assist the development of the NICI-2010 Plan, to be preceded by a comprehensive stock-taking exercise to review the implementation of the NICI-2005 Plan along the following lines:

- Reviewing the programmes and initiatives of the 8 pillars of the NICI-2005 Plan that were either fully or partially implemented;
- Documenting those programmes and initiatives of each of the 8 pillars that were not implemented;
- Documenting the resources mobilized for the implementation of the Plan, detailing the *sources* (government, donor Source, private sector etc); what has been mobilized and deployed for each of the implemented programmes and initiatives; and as well as resource deficits;
- Analyzing the impact of the NICI-2005 Plan in terms of the stated objectives, goals and targets of the Plan;
- Documenting the challenges and the constraints faced by the various designated implementation agencies, including the Rwandan Information technology Authority (RITA) in implementing their designated components of the NICI-2005 Plan;
- Detailing the lessons learnt in terms of implementing the programmes and initiative of the NICI-2005 Plan; and
- Identifying the non-implemented programmes and initiative of the NICI-2005 Plan which could be included in the NICI-2010 Plan.

Based on the above, a comprehensive *NICI-2005 Plan Implementation Review Report* will be prepared to serve as a basis for the development of the NICI-2010 Plan. It is expected that the methodology developed for undertaking the review process and compiling the Review Report could serve as a model for other African countries in a similar exercise. The Plan is expected to be finalized by September 2005 and submitted to Government for showcasing at the Tunis Summit.

## *Swaziland*

The Government of Swaziland requested the assistance of ECA to reinvigorate the development process of their policy and plan after initial efforts in 2001. The subsequent assistance aimed to map out a course of action and undertake a preliminary assessment of the situation and to carry out activities that would lead to the preparation of the Policy Framework. In order to ensure inclusive stakeholder participation, coordinated and sustained efforts in the formulation of an ICT Policy and Plan, the Cabinet established an inter-Ministerial Committee (ICT Task Team) to oversee the ICT Policy development process. It was proposed that the Director of the Government Computer Services chair the Committee.

The First National Workshop was held in December 2004 in Mbabane, the capital, and was attended by a cross-section of participants representing different interest groups. Leadership support was reinforced by the presence of the Minister of Tourism, Environment and Communication and several Members of Parliament. The Workshop deliberated on and endorsed the policy priority areas as significant to the attainment of national development goals.

The meeting agreed as a way forward, that the priority areas would form the basis of the NICI pillars for the Policy. A web site should be developed to broadcast these areas so as to allow for wider consultation on the pillars. Drafting of Policy statements on the proposed pillars should commence and the geoinformation sector would be incorporated into the draft Policy Framework as a priority area. It was agreed that the second workshop would be widely advertised to ensure wider stakeholder participation, consultation and outreach.

### **1.5 Sectoral Information and Communication Infrastructure (SICI) policies and plans**

After completing the NICI policies and plans, some member States have moved to the next stage of sectoral ICT policy formulation and implementation. These countries include Ghana, Rwanda and Uganda.

#### *Ghana*

Ghana requested ECA to assist the country in developing a legal framework as part of the implementation of their NICI policy and plan. This involves a review of the current legal framework in the country and assistance to the Ministry of Communications in the formulation of Ghana's ICT Bill. The Ministry of Justice will provide guidelines on cyber crime laws and guide the process of cyber law formulation as well as define guidelines on online liability and regulations in the application of e-government. Special emphasis is being placed on technical assistance in the formulation of e-commerce related legislation, especially in electronic signature, invoicing and contracts.

With this background, a consultant visited Ghana in September 2004 and met with the Minister and Deputy Minister of Communication and Technology as well as the e-commerce and e-security sub-committee members of the National NICI Implementation Committee. The Minister and Deputy Minister stressed the urgent need for a draft of cyber law and ICT legislation to preserve its lead in the ICT sector and for policy recommendations, taking into account various international legal frameworks, such as UNCITRAL, and development at the sub-regional level. This activity supports the implementation of the 3.12: *Legal, Regulatory and Institutional Provisions and Standards* of the Ghana ICT for Development Policy Document.

## *Rwanda*

The Government of Rwanda is implementing the programme and initiatives of the 'Government Administration and Service Delivery' pillar of the NICI-2005 and the initiatives under the Rwandan Electronic Government and Governance Initiative (REGGI) as per the NICI Plan. To date, numerous infrastructure projects and back office applications have been implemented. The ongoing review process of the NICI-2005 Plan will document which of those programmes and initiatives have been implemented and those which have not been implemented will be rolled into the NICI-2010 Plan which will be developed towards the end of 2005 before the Tunis Summit. Also, the Rwanda E-Government Strategy and Action Plan that has been developed and submitted to the Government will form the basis of a planned e-government workshop in June 2005 to be chaired by the President. This exercise aims to educate the civil service on e-government and prepare the ground for developing e-government programmes and initiatives of the NICI-2010.

## *Uganda*

The government of Uganda has identified ICT as a key tool for the modernization and development of the country. The Health Sector Strategic Plan (HSSP) 2000/05 and HSSP II 2005/10 have also embraced ICT as a tool for enhancing their rollout. In this context, ECA was requested to assist the Ministry of Health in the development of an e-Health strategy in Uganda within the framework of the ePolicy Resource Network (ePol-Net) supported by Industry Canada.

In consultation with the telemedicine and telehealth steering committee and the focus group, national and international consultants identified, selected and documented key policy issues to be included in order to develop the health ICT policy, from which strategies and action plans have been drawn for implementation. Relevant policies, strategies and action plans were also reviewed during the formulation of the Health Sector ICT Policy.

After extensive discussions with various stakeholders, health sector ICT policy and implementation strategies and action plans were developed. In addition, a background report on the existing situation and justification for the policy and research findings as well as a report on the field report findings on the policy process were developed.

### **1.6 Regional Information and Communication Infrastructure (RICI) policies and plans**

AISI has been implemented mainly through the development of e-strategies and policies to deploy, harness and exploit ICTs for socio-economic development at the local, national and sub-regional levels, including national spatial data. At the sub-regional and regional levels, the vision of AISI provides the framework for formulating policies and plans through Regional Economic Communities (RECs) to, among other things, harmonize and

coordinate national efforts as an integration strategy. More specifically, ECA's assistance concentrates on:

- Harmonization of national regulatory frameworks as countries deregulate and liberalize their telecommunication markets;
- Creation of a framework for the development of ICT infrastructure that can facilitate regional economic integration goals of the continent; and
- Strengthening capacity at the sub-regional level in ICT for development and building a critical mass to facilitate regional integration through ICTs.

In addition, Africa's commitment to ICT for development has been demonstrated through the NEPAD Action Plan, where ICTs has been identified as a key priority sector with projects and initiatives to speed up sub-regional and regional connectivity and inter-connectivity plans.

### *COMESA*

The COMESA e-strategy study was undertaken from July to Sept 2004 in response to a request for ECA's technical assistance to develop an e-strategy for the COMESA member States within the framework of ePol-NET (led by Industry Canada and CePRC<sup>6</sup>) and Finnish support. The main objectives of the development of an e-strategy at COMESA included the promotion of ICT usage for regional economic integration, enhancement of connectivity and access to ICT services among and within the member States and development of applications and content for the sub-region, while encouraging public-private partnerships. The e-strategy is expected to cover all major aspects of e-applications including e-government, e-commerce, e-education, e-health, e-agriculture etc. It aims to address policy, legislation, regulation, resources and other issues referred to in the COMESA ICT Policy and Model ICT Bill.

The COMESA e-strategy study recommended the following areas as major policy and strategy issues for the sub-region:

- **Infrastructure** – Development of nation-wide backbone, universal access and rural telephony networks;
- **Human Resources** – University education research and technology support networks, Schoolnet, and introduction of ICTs at secondary level;
- **Industry** – Support for industry growth/incubation – incentives e.g. tax holidays, simplified business registration and taxation processing; and
- **Regulation** – Liberalizing ICT sectors with due data security mechanisms in place.

The findings of the study will form the basis to formulate the sub-regional ICT policy that is expected to start after the finalization of the study in March 2005.

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<sup>6</sup> Canadian e-Policy Resource Centre at <http://www.epolafrica.org/>

## *EAC*

ECA is also supporting the East African Community (EAC) to develop a sub-regional e-government framework for its partner states (Kenya, Uganda and Tanzania). Through the support of ePol-NET and Finland, ECA's support started with the organisation of the East African Regional e-government Strategy workshop in Dar es Salaam, Tanzania from 17-19 November 2004 to draw up an action plan. The meeting agreed that the exercise should consolidate the existing consensus in East Africa regarding the strategic e-government priorities.

Based on the outcomes, EAC convened the first meeting of the Regional E-government Interim Working Group (IWG) at Arusha, Tanzania on 24-25 February 2005 to finalise the detailed work plan. The partner States are expected to organize focus groups meetings with stakeholders from government ministries and agencies, private sector, civil society and academia to provide country specific input to the proposed framework.

Furthermore, it is proposed to establish a regional e-government observatory to provide a valuable insight on the implementation of various e-government strategies, initiatives and projects in East Africa. In particular, the proposed observatory will help senior decision-makers in the public, private and civil society sectors to closely follow up ongoing e-government developments. The Observatory will showcase various activities and organize an E-government Awareness Program (e-GAP) in the sub-region.

## *ECOWAS*

Supported by the Government of Finland, ECA was requested to assist ECOWAS by undertaking a study with a view to proposing a harmonized legal framework for e-commerce among ECOWAS countries. The study will be based on the ECOWAS Mid-term Strategic Plan and its plan of action, which will be formulated at a later stage.

A harmonized legal framework for e-commerce among ECOWAS member States will create an enabling environment to facilitate intra-sub-regional commercial activities by simplifying procedures and processes, while attracting foreign direct investments into the sub-region. It will also assist member States that have not yet developed such a framework. From in September 2004, a consultant met with ICT policy makers from ECOWAS (Secretariat and ICT Task Force), UEMOA, Niger, Ghana, and Nigeria to conduct a situational assessment and research on global best practices regarding process and substantive legislation.

Further, consultations were organized at the ECOWAS Secretariat in December 2004 on the most efficacious way to implement such new legislation on a community-wide basis, given the opportunity presented by the fact that no member States have yet enacted e-commerce laws. In addition, draft e-commerce legislation being developed for Ghana, the ECOWAS member State furthest along in developing ICT policy, will be used as a substantive model for the entire region.

### **1.7 ePol-NET - epolicy resource network**

One of the initiatives launched to assist member States in the policy formulation and implementation is ePol-NET, supported by Industry Canada. It originates from the Digital Opportunities Task Force (DOT) Plan of Action, endorsed at the G8 Summit in Genoa in 2001, which made a commitment to establish a Global e-Policy Resource Network (ePol-NET<sup>7</sup>) in support of national e-strategies for development around the world. Supported by the Government of Canada (led by Industry Canada and the Canadian e-Policy Resource Centre - CePRC), ECA set up the regional node of ePol-NET to address policy issues, regulations and strategies in areas such as e-commerce, legal and policy frameworks, telecommunications policy and regulation, Internet governance, e-government and connectivity strategies. The first phase of the project assisted the formulation of the Uganda Health ICT policy, COMESA and EAC sub-regional ICT policies and plans. In addition, various online resources, such as African Governments on the Internet and resources on e-Government<sup>8</sup>, as part of AISI outreach activities were launched.

### **1.8 Village Information and Communication Infrastructure (VICI) policies and plans**

Furthermore, in support of the NICI process, one of ECA's partners, Open Society for West Africa (OSIWA) commissioned a Village Information and Communication Infrastructure (VICI) Plan through the University of Ghana as part of the baseline study for the NICI in Ghana. This process involved the development of research instruments and a methodology for assessing the ICTs needs and potential of a village in the Eastern region of Ghana as a pilot for the implementation of the VICI. Some of the objectives include:

- Determining the policy gaps between ICTs and socio-economic development at the district or village level;
- Identifying how ICT can support socio-economic development at the grassroots level through the Ghana NICI policy process;
- Defining how policy can be implemented at a decentralized level;
- Providing opportunity for developing ICT initiatives at the village level; and
- Supporting the democratization of the information society in Ghana in general.

The findings revealed the current ICT usage by villagers and information needs of villagers in order to accelerate socio-economic activities at the village level. Accordingly, the village ICT plan was formulated, after consultations with various key stakeholders.<sup>9</sup>

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<sup>7</sup> ePol-Net is an initiative of the Canadian and Irish governments in partnership with Italy, France, Japan and Britain, all contributing towards the nodes of expertise to ePol-NET. The Network is also supported by a range of established international organizations such as the Organization for Economic Cooperation and Development (OECD), the United Nations Development Programme (UNDP), the United Nations Conference on Trade and Development (UNCTAD), the Commonwealth Telecommunications Organization (CTO), and the International Telecommunication Union (ITU).

<sup>8</sup> <http://www.epolafrica.org/documents.htm>

<sup>9</sup> <http://www.uneca.org/aisi/nici/Documents/VICIGHana.pdf>

### **1.9 NICI Concluding Workshops in February 2004**

ECA organized a *NICI Concluding Workshop* from 19 to 20 February 2004 with the aim of sharing experiences and extracting lessons learned and best practices among European Union supported NICI countries. This workshop was preceded by the *SCAN-ICT Concluding Workshop*, which examined the established methodology and outcomes of the country reports and recommended a stronger linkage with the NICI and SICI processes.

The meeting highlighted the importance of inclusiveness, coordination and partnerships in the national ICT policy and plans development process and assessed the achievements and progress made in the 4 NICI countries (Cameroon, Ghana, Mali and Niger) as well as 3 sectoral reports (Ethiopia, The Gambia and Rwanda). The event re-affirmed the effectiveness of the established NICI participatory methodology and approach. One of the key success factors was identified as sensitization and awareness raising among key Information Society actors, such as parliamentarians, legal experts, magistrates, civil society and the private sector. Their active participation and involvement could expedite the creation of an enabling environment, such as tax incentives for ICT entrepreneurs, favorable intellectual property right regimes and building human capacity in the strategy implementation process. Throughout the meeting, NICI focal points also reiterated the importance of establishing an institutional mechanism for coordination and efficient implementation of strategies.

### **1.10 SCAN-ICT**

In order to take stock and share experiences, *the SCAN Concluding Workshop* was organized in Addis Ababa, Ethiopia, from 17 to 18 February 2004. Attended by the SCAN country teams, representatives of national statistical offices and NICI focal points, the workshop offered a unique opportunity to assess the effectiveness of the established methodological framework and evaluate the country reports and overall results of the initiative. Unlike other e-readiness instruments, the meeting unanimously agreed that SCAN-ICT should reflect the core values of Information Society with special emphasis on social indicators for the purpose of discerning the impacts of ICTs on various socio-economic sectors. The process also produced a unique set of data, which had not been available previously. In addition, the country teams expressed strong ownership of the initiative, in contrast to other initiatives, which are sometimes perceived as foreign initiatives.

In order to build on the phase I experience and latest developments regarding the need to harmonize Information Society indicators and approaches, ECA, together with the International Telecommunications Union (ITU), organized a 4-day workshop in Gaborone, Botswana, in October 2004. The purpose of the workshop was to build statistical capacity among national statistics officers and to develop expertise to collect and disseminate ICT statistics in the region. The workshop also represented an important step towards the implementation of the goals and objectives articulated in the WSIS Plan of Action. It calls for the development of comparable statistical indicators to monitor



progress towards achieving international development goals. Based on the discussions at the national, regional and international levels, the second phase of the SCAN-ICT project will commence later this year.

### **1.11 Study on Regional Telecommunication Regulation**

In support of NICI formulation and implementation and as part of regional SCAN-ICT initiative, ECA compiled a study on the status of regional telecommunication regulations. This study aims to produce a pan-African assessment of the impact of liberalization on the development and operations of regulatory frameworks in Africa. More specifically, the study provides an overview of the state of telecommunication regulatory policies in Africa in relation to current trends and developments at the national, sub-regional and global levels and assesses the role of major actors in this field.

One of the unique features of the report is the use of the SWOT (Strength, Weaknesses, Opportunities and Threat) tool and PEST (Political, Economic, Social and Technological) analyses for the review and evaluation of: the role of the regional economic communities, such as COMESA, SADC, ECOWAS, UEMOA, CEMAC and UMA in the area of telecommunications policies and regulation in member States; development of regional ICT infrastructure; and telecom policy harmonization. In addition, the report extends its evaluation to the role of various regional organizations, such as ITU, ATU, ECA, CTO, African Connection, e-Africa Commission and RASCOM. Based on the analyses, the report identified major policy and regulatory impediments for the development of sound telecommunication regulation in Africa and how it should address the emerging issues of Internet Governance Coordination and exponential growth of VoIP and convergence.

## **2. Multi-stakeholder partnerships**

Implementing AISI at the national, sub-regional and regional levels requires effective multi-stakeholder partnerships, as no one sector on its own can overcome the challenges of harnessing information for socio-economic development. To achieve this, all the stakeholders should be encouraged to participate in the process of NICI policy formulation, from the baseline study to the evaluation of the activities undertaken within the plan framework. To sustain this participatory approach, ECA has started promoting the creation of sustainable institutional frameworks conducive to their enhanced involvement in the formulation, implementation and evaluation of NICI activities.

Subsequently, capacity building activities and establishment of various stakeholder networks have been undertaken as follows:

- The Africa Civil Society Network in the Information Society (ACSIS) has been officially launched and their action plan adopted with a view to ensuring social acceptance of the Information Society and mainstream ICTs in MDGs and PRSP.

- Collaboration with the Government of Tunisia is under way in the area of nurturing ICT innovations. The Africa Innovation Task Force has been established and will promote knowledge sharing on incubation and technopole initiatives among member States.
- The Africa ICT4D Youth Network has been launched and their action plan adopted. Sub-regional representatives have been elected and will work for the establishment of national ICT4D Youth Networks which will be involved in the NICI formulation to ensure the mainstreaming of Youth causes and their involvement in the implementation of information for development activities;
- Media ICT4D Network focal points have been appointed, to work towards the establishment of National Media ICT4D Networks to encourage media involvement in awareness raising, capacity building and stimulating national debates on Information Society issues.
- In collaboration with the Division for the Advancement of Women (DAW) of the United Nations, a series of sub-regional workshops for national machineries were organized for the purpose of building their ICT capacity and improving information management and dissemination to promote gender equality. Subsequent to the workshops in Namibia, Senegal and Ethiopia, online discussion lists were set up, followed by the launching of a website at the regional level later this year.

### 3. Policy Process - Lessons Learned

Overall, the NICI process requires a great deal of investment in time and resources if these policies are to benefit the countries and their people. Some lessons learnt identified during the implementation of various NICI and SICI processes include:

- **Political stability.** To embark and complete the NICI process there is need for political stability as well as commitment. Even a change in government can lead to the stalling of the process. This happened in Mali leading to the slowing down of the NICI process but was eventually stepped up once the new officials took over.
- **Political will.** Furthermore, political will is very much needed for advancing the policy and its objectives within a given country. This includes the commitment of the top leadership within countries as well as the key ministry and agency leading the process. Experience shows that once there is high political will, the NICI process is given a tremendous boost as exemplified by Niger and Ghana.
- **Participatory approach.** The success of the formulation process is just as important as the implementation phase. A participatory approach where various and diverse groups are consulted enriches the policy itself and further validates what the government is doing. It also serves as a mechanism for generating and stimulating debate on Information Society issues that helps to raise greater awareness from the country's perspective.

- ***Enhanced participation of the Private Sector.*** The role of the private sector has been too limited so far and could be considerably improved at various levels. Considering their role in innovating ICT applications, services and products, creating employment opportunities and eventually driving the economic growth, private sector companies should be at the forefront of advancing Africa's Information Society.
- ***Gender sensitive policies and plans.*** The participation of women's organizations in the NICI processes as well as Information Society initiatives remain painfully minimal. The above mentioned DAW meetings confirmed that gender focal points and national machineries in many countries have been excluded from the ICT policy processes and not fully aware of the implications to their work. The findings of the SCAN-ICT country reports indicate that women are a minority in the ICT community as professionals and at a disadvantage in terms of access to computer facilities and information. These figures should prompt actions on the part of ICT policy makers as well as national machineries so as to build an inclusive and gender sensitive Information Society.
- ***Human and Institutional strengthening.*** Human and institutional capacity development remains a challenge for most countries as they implement their NICI plans. This includes the lack of expertise in policy analysis (defining and implementing national policies, participating in global decision making, etc.); inadequacy in information management, policy and regulatory framework development and enforcement of regulation by institutions; fragmentation of ICT related programmes at the national level due to competition among agencies and institutions; lack of negotiation skills particularly at the international levels; and lack of reliable and sustainable institutional capacities resilient to the changes of government and global needs.
- ***More focus on regional dimension.*** Based on the findings of the regional regulatory study it is clear that the regional dimension has become significant particularly in the development of infrastructure, harmonization of regulations and mobilisation of resources in building an Information Society in Africa. Consequently, work with Regional Economic Communities (RECs) should be stepped up and NICI countries should become champions at the sub-regional level for greater harmonisation of regulatory and legal frameworks to create better investment opportunities in this sector.

In particular, the factors for regional cooperation in ICTs should include increasing need for economies of scale (one country cannot do it alone); leveraging regional cooperation and integration by harmonizing policies, tariffs and resource plans, and providing a common and strong African voice at global decision making to influence global rule of the game on behalf of the communities on the ground.

- ***Stronger linkages among NICI, SCAN and PRSP.*** One of the emerging trends in development discourse is the convergence among e-strategies, measuring progress of the Information Society and poverty reduction efforts in the information age. NICI

and SCAN should be considered as a framework to accelerate poverty reduction efforts with the introduction of targeted ICT initiatives and applications for the poor and facilitate overall socio-economic growth led by ICT industrialization. At the same time, PRSP should reflect the ICT initiatives and interventions as part and parcel of the poverty reduction strategy.

- ***National budget allocated for ICT policy implementation.*** Finally, government commitments should be translated into the sustained allocation of national budgets for the implementation of ICT policies and initiatives. Various stakeholders should also be aware of the allocation details and any increase or decrease.

#### **4. Conclusion**

Since the last CODI meeting in May 2003, significant progress has been made in advancing Africa's Information Society. The number of member States with NICI policies and plans has doubled since 2000 and accordingly the number of countries without any ICT policy or plan has reduced from 30 in 2000 to 10 in 2005. A number of countries articulated their plans of developing the Information Economy by stimulating business and commerce through applying ICTs. Awareness among various stakeholders has been enhanced dramatically, as symbolized in the active participation of African civil society and the media in the preparation processes of WSIS.

However, in order to build an inclusive and balanced Information Society, as the WSIS Declaration of Principle envisages, much more need to be done. A sustainable Information Society is only possible with vibrant private sector engagements in the Information Economy and pro-poor economic policies that take into account fair and equitable distribution of digital opportunities and benefits. The global networked markets offer unparalleled opportunities to Africa. It is the responsibility of all actors to ensure that the e-strategies that are put in place create an enabling environment to harness such opportunities and accelerate socio-economic development.