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TRAINING COURSE FOR THE IMPLEMENTATION OF THE NICI PLAN



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1. Introduction

In May 1995, the Ministers' Conference of the Economic Commission for Africa (ECA) adopted a resolution entitled "Creating an Information Authority for Africa", aimed at preparing a road map for an information society. A plan of action known as the African Information Society Initiative (AISI) was adopted by the ECA Ministers' Conference and the Summit of the African Heads of State and Government.

Identifying a sustainable information society in Africa is the main focus of the AISI. AISI plans to hasten regional cooperation between the African countries by causing them to exchange information on their successful experiences and to support regional development in the field of information and communication technology (ICT).

According to its vision, AISI intends "to support and accelerate socio-economic development in the region". AISI is committed to development and puts emphasis on priority strategies, programmes and plans that can promote sustainable development in the African countries. This vision led to the process of developing national policies in the field of ICT, hereinafter referred to as the National Information and Communication Infrastructure (NICI). The NICI plan must be supported by the national development priorities, namely health, education, creation of employment, food security, proper land utilization, water, debt management, industrial development, trade and tourism.

The NICI plan is made up of:

- An instrument for the implementation of the global objectives of AISI of developing the infrastructure, human resources and contents at national level;
- Africa's response for facilitating its integration in the digital world and in the globalisation process; and
- An exercise aimed at developing national policies, strategies, and plans in the field of ICT, which are supposed to serve as the road map for the countries' participation in the economy of knowledge.

2. Objectives

The preparation of the NICI plan should ensure a sustainable, continuous and coherent national effort for the integration of ICT in support to the national development objectives and strategies. This strategy takes into account the overall social and economic development programme of each government.

The overall objective of the NICI plan is to contribute to the fight against poverty and to the promotion of sustainable development through the progressive promotion of the understanding of the role of ICT in the strategies and plans of action in the fight against poverty and for sustainable development, in order to contribute to the achievement of the Millennium Development Goals (MDG).

It proposes specific objectives to be achieved after resolving problems and the development of potentialities that may be summarised as follows:

- Building an information society based on learning and knowledge;
- Developing education and training;
- Developing a strong and competitive private sector;
- Becoming a medium term technological destination.

3. Guiding principles

The guiding principles that should steer the success of the NICI process may be summarised as follows:

- Support and commitment of high level political decision makers to the process, without which no implementation of any single programme would take place. The success of the process is, to a large extent, attributed to the role played by the main leadership.
- Defining a clearly spelt-out and shared vision. This vision must have the ambition to lead to the construction of a modern society that is open for each country on its sub-regional and international environment and fully in phase with the major positive developments that condition the future of humanity. This vision must also fully encompass the social, economic and technological aspects of its development. The effect of this vision will be to mobilise energies and to lead to action and, in so doing, will bring about coherence and facilitate decision-making and making of choices.
- Appropriation and commitment by the government vis-à-vis the national vision and the missions, and corresponding strategies defined for contributing to the achievement of the vision and the corresponding missions are a determining factor.
- The goodwill and support of the population and its commitment in favour of the vision and the defined missions, and their achievement are equally as crucial.

- A strategic government ministry that will play the role of national leader on behalf of the government.
- Political decision makers and devoted professionals, both from the public and the private sectors, that are involved in the process.

4. Expected Results

The development process of the NICI Plan aims at improving, at national level:

- The information and communication infrastructure;
- Policies in the field of ICT and the regulatory frameworks;
- Human resources, and
- The infrastructure.

5. Contents of the NICI Plans

The NICI plans constitute an adequate framework for the sustainable development of an information society in Africa. These plans and the policies contained therein may be defined as “an integral collection of the decisions, directives, laws, rules, and other mechanisms aimed at orienting and shaping the production, acquisition and utilisation of ICT”. The NICI plans and strategies are always based on the development needs and priorities of a particular country (in the fields of health, education, creation of employment, food security, water, debt management, trade, tourism, etc.) as spelt out by all the interested parties in each country. However, in the process of their preparation, there is no standard model or ready at hand solution. Everything must be according to a precise study of the prevailing situation, of the potentialities, of the needs in terms of development, of the available resources, etc. Nevertheless, the elements are the same in most of the cases and should cover institutional policies (administration or enterprise). Some of the components depend on the existing environment and on exchanges with the outside world (for example, the communication standards and protocols for the names in the field of the internet). Given that the agenda for national development constitutes the basis of the NICI plans, here below is a non-exhaustive list of the key questions to be addressed during the implementation of the plans:

5.1 The physical infrastructure

The physical infrastructure constitutes the basis for an information society. Without reliable networks and telecommunications services at the country level, the AISI vision will remain a mere dream. In addition, there is need to improve the interconnection within the region and to create links with the international telecommunication networks. The development of applications and software, the development of transmission infrastructure for radio and television services, and the production, assembly and distribution of affordable computer-related equipment, are among the other fields of importance. The discussion will focus on:

- The development communication infrastructure;
- Setting up a national information network meant to support high value added services and linking, among others, the administrative centres, hospitals, universities and business centres;
- The inter-operationality of information and communication systems;
- Improvement of public communication services;
- Reduction of the cost of supply of communication goods;
- Infrastructure for e-trade and secure transactions;
- Development of technological standards;
- Libraries, documentation centres and bookshops;
- Access for all;
- Etc.

5.2 A legal, institutional and regulatory framework

A stable and predictable legal and regulatory framework still remains a pre-condition to investment in the sector of information and communication.

A global review of the existing regulatory frameworks, that is to say, all the institutional arrangements that have been concluded, as well as the functional implementation of all the institutional structures required for the circulation and acquisition of ICT. This shall mean:

- With regard to the regulatory frameworks: to improve the legislative and regulatory mechanism to enable a harmonious and secure development of the network of information technologies and to ensure that it is accessible to private investment; to promote competition among the networks and providers of telecommunications services; and to draft laws on:
 - Trade and fiscal policies on ICT goods and services;
 - Protection of intellectual property rights;

- Protection of private life;
 - Policies on access to local and national public information,
 - Protection against illegal contents, spam, etc.
 - Cyber criminality;
 - Etc.
- At institutional level, the discussion will focus on the implementation of:
 - Institutional structures for the circulation of information technologies and the promotion of the ICT services sector;
 - Regulatory bodies;
 - The national coordination structure for the development of ICT or the implementation of the plan ;
 - Etc.

5.3 Development of human resources

The development of human resources is the cornerstone that will ensure a sustainable information society. The NICIs strongly recommend the building of both technical and managerial capacity through education and training, in order to make the Africans better citizens that will be well armed to confront the era of knowledge and information. The educational and training institutions must come up with teaching programmes that aim at capacity building for managers, ICT engineers, workers and students. The issues to tackle will partly be:

- Education and professional training in ICT,
- Introduction of ICT in schools and colleges,
- Setting up educative Intranets and Extranets,
- Development of on-line education modules,
- ICT research and development,
- Etc.

5.4 Electronic Good Governance

E-administration has become a must today, as a strategic choice and an inevitable tool for laying the foundation for a performing, transparent and user-friendly administration. ICT will therefore facilitate the introduction of new modalities of availing useful information to the public, in a digital and therefore cheaper form. In addition, ICT offers the possibility of carrying out remote controlled administrative procedures, through tele-procedure to overcome the constraints of different opening hours for services rendered to the public, or constraints of geographical remoteness. The

discussion will focus on the ways and means of turning the administrative units or government departments into role models in the use of ICT, particularly through:

- Setting up governmental inter-departmental communication systems;
- Setting up a governmental network for exchange of information;
- Normalisation of data and information systems;
- Digitalising and putting public statistics on line;
- Generalising electronic exchanges between the central, regional and local administrations.
- Provision of services to enterprises, citizens
- etc.

5.5 Environment facilitating the issuing, utilisation and exploitation ICT tools in the economy and within the society

The development of the NICI plans will depend, in most cases, on the private sector, with, in particular:

- creation of an environment that encourages investment,
- programmes that are aimed at offering support to the private sector,
- facilitating a comfortable atmosphere for investment and mobilisation of technological resources,
- reduction of administrative and regulatory barriers,
- etc.

5.6 National Resources in Information

The content is also as important and as interesting as the information and communication infrastructure. Central Africa is already rich in information, but this information is generally not easily accessible or exploitable. This will be a major determining factor in the planning process, in decision-making within the public and private sectors, and in the development of all the socio-economic sectors of African societies. At this level, there is need to know how to benefit from free software.

5.7 Application of ICT in some social and economic fields

The creation of applications in phases with the socio-economic development priorities of a country could constitute a significant contribution. For example, the following national pilot projects could be considered:

- Telemedicine;

- Distance learning;
- E-commerce;
- E-governance;
- Incubators and expertise centres for the SMEs;
- Access and training for the rural areas;
- Technological research;
- etc.

5.8 Links with national, regional and global development goals

The NICI process must be founded on initiatives aimed at fighting against poverty, such as the Millennium Development Goals to which all the member States of the United Nations have ascribed, in the same way as other efforts such as the strategic plans for the fight against poverty (PRSP).

6. Methodology for the preparation and implementation of national ICT strategies

The formulation of the NICI plans calls for a wide ranging process of dynamic and continuous consultations. In order for the process and the national plan to succeed, there is an absolute need to sensitise, to include in the preparation process and to associate as many socio-economic officials and decision makers as possible. Among the participants in the national consultations process, representatives of the following bodies could be called upon:

- Governments and State institutions;
- Domestic and foreign private sector stakeholders operating in the country;
- Regulatory bodies;
- Telecommunications service providers;
- NGOs and representatives of the civil society;
- Universities, academies, research centres and ICT experts;
- International and regional development organisations;
- Other bodies as may be deemed necessary.

Experience has shown that from the different processes in the preparation of NICI plans in various African countries within the AISI framework, a methodology using different phases could be adapted to the other countries. The duration of preparing a NICI plan varies from one country to another. The countries must show flexibility and should not wait for the end of the NICI process to start implementing some of the programmes and taking concrete actions.

6.1 Sensitisation and involvement of the interested parties

To start with, it will be important that all the interested parties are involved in the preparation of the NICI plans and policies, right from the beginning of the process. This activity is an intensive process involving wide scale consultations under the leadership of a high level task force, commission or agency that works under the direct supervision of the Presidency of the Republic, or of the Office of the Prime Minister. The first step would be to organise a workshop for sensitising all the parties that are to be involved in the process. The members of the task force comprise representatives of governments (agencies, departments or ministries), groups coming from the civil society, representatives of the private sector, representatives from independent regulatory bodies, universities, trade unions, etc.

6.2 The process for preparing the NICI plans

The process for preparing the NICI plans puts emphasis on three aspects:

- the master document;
- the policy document; and
- the implementation plan.

The exercise consists of crating an integrated ICT plan in the filed of socio-economic development, capable of paving the way to the creation of the necessary socio-economic base and favourable environment needed in accelerating the countries' evolution towards an economy or society of information and knowledge. Once the plan has been prepared and the implementation has started, its plan is supervised and assessed on a regular basis, particularly during the annual reviews.

Phase 1: Setting up a working committee, task force or commission (with a wide representation as mentioned earlier).

Phase 2: Preparation of a master document. This involves the preparation, by a team of experts, after consultations with the major actors and institutions, of a review and an analysis of the existing national social and economic development frameworks, as well as the development, the deployment and exploitation of ICT by the country in question. The master document will specify and define difficulties of general nature, by highlighting the specific strategies required to steer the process for the preparation of the resultant policy and plan. This document contains, at least:

- A description of the current situation, the needs and future prospects in terms ICT of the various partners involved in the process (government, private sector, civil society, education, research workers, etc.);
- ICT opportunities and priorities for national development;
- Correlation with the national economic and social development priorities;
- The available and needed human and material resources;
- A clearly spelt-out national vision in matters of social and economic development, as well as the corresponding actions needed in the achievement of the vision;
- The strategies for accomplishing these actions as listed above.

Phase 3: Preparation of the policy document. The ICT sectoral policy analyses the problems to be solved on the basis of the plans and documents listed above and gives orientations in terms of the actions and strategies needed to achieve sustainable development. It highlights the details on the commitments in accordance with what has to be done through the use and development of ICTs.

Phase 4: Preparation of the implementation plan. This document shows how the political commitments will be translated into concrete programmes and initiatives that will be implemented. It proposes priority projects, for each sector, with a short term, medium term and long term plan, as well as project proposals identifying the context, the objectives, the form of the system proposed, the coordination, the contents and applications, the chronological order of the actions, as well as the required budget, clearly defining which financing will be from national and external resources. The extent of achieving these objectives is measured by using indicators for which annual targets will have established.

Phase 5: Consultations with all the sectors and institutions involved (through working sessions, interviews, workshops or seminars, etc.)

Phase 6: Drafting the final document integrating the 3 documents listed earlier above, with the mechanisms of action and organisation, as well as the anticipated follow-up action. This plan, the first in a series, will constitute the corner stone for the socio-economic development of the country as planned for a well defined period (3 to 5 years).

Phase 7: Approval by the Government

6.3 Follow-up and evaluation of the implementation

Once the plan has been approved and the implementation has begun, this implementation has to be supervised and an evaluation carried out on a regular basis, particularly during the annual reviews. This framework must be prepared to facilitate and coordinate the follow-up and assessment mechanism, which is applicable right from the base to the top, with a proper reporting process. Clear procedures and directives on how and when they must be activated, and by which particular structure or authority, must be properly spelt out.