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# **ECONOMIC COMMISSION FOR AFRICA**

First Session of the Committee on Development Information, Science and Technology (CODIST-I)

Addis Ababa, Ethiopia 28 April – 1 May 2009

Draft Report of the First Meeting of the Committee on Development Information Science and Technology (CODIST-I)

(Summary, resolutions and recommendations)

#### INTRODUCTION

The First Meeting of the Committee on Development Information, Science and Technology (CODIST) on the theme "Scientific Development, Innovation and the Knowledge Economy", was held in the United Nations Conference Centre (UNCC) at the Headquarters of the Economic Commission for Africa (ECA) in Addis Ababa, from 28<sup>th</sup> April to 1<sup>st</sup> May 2009, with pre-meeting events on 27 and 28 April 2009. The format of the meeting comprised plenary sessions and three subcommittee sessions on Information and Communication Technologies, Science & Technology and Geoinformation, respectively.

CODIST is one of the seven subsidiary bodies of ECA composed of senior officials and experts from member States who meet on a biennial basis. The role of CODIST is to review challenges and issues pertaining to the information and communications technologies (ICTs), geoinformation, and science and technology sectors; formulate policies and strategies to address Africa's development challenges; and determine priorities to be reflected in the work programme of the ICT, Science and Technology Division (ISTD) of ECA. The ISTD, formerly known as the Development Information Services Division (DISD), is responsible for implementing the sub-programme, covering ICTs, science and technology, and geoinformation.

The overall theme of CODIST-1 was "Scientific development, innovation and the knowledge economy", with the sub-themes on Innovation and Economic Growth and the Enabling Environment for Innovation Systems which were mainly addressed by the CODIST sub-committees. The keynote speaker, Prof Lidia M. R. A. Brito delivered a paper entitled "Scientific Development, Innovation and the Knowledge Economy: Premise for Development in Africa?". This was responded to by Geoinformation and ICT perspective respondents, Dr Wilbur Ottichilo (M,P Kenya) and Ms Jennifer Kargbo, Director SRO-SA (UNECA).

# **CODIST-1 THEMES**

## **ATTENDANCE**

The meeting was attended by more than 600 policy- and decision-makers, scientists, lawyers and journalists. These delegates and observers represented African countries, national, international, regional and subregional organizations and development partners.

# **CODIST-1 OUTCOMES AND RESOLUTIONS**

# PLENARY RESOLUTIONS

# Scientific development, Innovation and the Knowledge Economy

# **Noting:**

- The lack of leadership that intrinsically understands and promotes knowledge for development through conscious and systematic investment in capacity building and research-and-development (R&D) infrastructure;
- The emulation of national innovation systems from abroad, that have little relevance to African economies and require a type of critical mass that it is inexistent in most of the continent;
- The fact that ICTs and geoinformation play a transformative role and are key enablers of the knowledge economy.

# Recommends

## Member States should:

- Invest in more high-quality human capital encompassing new ethical approaches
  and attitudes, through increased expenditure on education and R&D and introduce
  incentives to attract private-sector investment in science education and R&D
  activities;
- Strategically choose more STI programs with impact, especially those with focus on important areas such as agriculture, health and socio-economic issues;
- Promote and mainstream geoinformation technology in global and local communities in order to enhance their capacity in generating, managing, analysing and communicating spatial information for better decision-making;
- Strengthen the use of ICTs in socio-economic sectors, particularly in spreading a digital culture for a knowledge society;
- Promote an enabling environment for the development of a science and technology information system in Africa that can enhance private partnerships and accelerate economic growth.

## ECA should:

 Assist member States in the design and implementation of STI policies that are cross-cutting, integrated and that create a structural base for the other policies in the health, education, economic and industrial-development sectors;

- Promote networks of excellence that ensure knowledge production, assimilation and adaptation;
- Give close attention to these common issues and develop strategic guidance on making information available to decision makers and the community in a form they can readily use, and assist member States in developing interactive vehicles for spatial learning, discussion, information exchange, analysis, decision making and advocacy;
- Promote the integration of national Geospatial data infrastructure into national ICT policies and plans.

# **Enabling environment for innovation systems**

- Noting the lack of effective institutionalized knowledge-sharing mechanisms within local communities and even among research scientists;
- Recognizing that individual, institutional and infrastructure capacities are essential for Africa's development;
- Considering that the foundation of accurate geospatial information starts with a uniform coordinate reference system;
- Recognizing that innovation is ubiquitous, ranging from the local village to dedicated research institutions, and is not just to be found in universities;
- Recognizing that emerging forms of intellectual, copyright and licensing and media such as Web 2.0, Science 2.0 (including Open Science), a Science Commons may also spur and accelerate innovation.

#### Recommends

#### Member States should:

- Support social innovation for promoting an inclusive knowledge society;
- Support institutional capacity-building and the promotion of mapping agency autonomy (financial, legal, regulatory and institutional);
- Consider spatial data infrastructure as a basic infrastructure on a level with other national infrastructures.

## ECA should:

- Pursue in partnership with the African Union Commission, its effort to develop an
  indigenous African capability in space science and technology as well as
  continuing to champion sound research and transfer of technology, where
  activities will be significantly expanded to cover the fostering of innovation,
  product and service development, and earth-observations applications;
- Support the development of a repository of African research centres and experts;
- Assist member States in the formulation of a legal and regulatory framework for geoinformation;
- Support the effective development of AFREF.

# **Innovation and economic growth**

Recognizing that science, technology and innovation in most of African countries are implemented separately.

Considering that geospatial technology (GIT) and geospatial science (GSS) are essential for innovation and economic growth, for effective policy formulation and for planning, implementing and monitoring development projects.

# Recommends

# Member States should:

- Establish appropriate infrastructures such as technology transfer offices, incubators, or science parks in universities and public research organizations (PRO) to link industries to research institutions;
- Promote awareness-creation with respect to IPR *per se* and the role of intellectual property rights (IPRS) in innovation and economic development;
- Facilitate wide dissemination of data collections so that communities have better access to information and can get involved in decisions affecting them.

# ECA should:

 Assist member States to develop, in a coordinated manner, policy, legal and administrative frameworks (regional, national and institutional) to address innovation and IPR issues in PROs and universities;

- Need to integrate intellectual property rights in business strategy (whether in industry or public research);
- Encourage African governments to provide legislative frameworks, policies and service delivery that enable innovation and hence economic growth;
- Continue the development of a regional geodatabase for priority areas defined by regional initiatives (emanating from the African Union, the NEPAD, and other continental bodies).

# **SUB-COMMITTEES RESOLUTIONS**

# ICT SUBCOMMITTEE

The sub-committee meeting, held from the 29<sup>th</sup> to the 30<sup>th</sup> of April was attended by over 120 delegates and observers from member States including representatives from non-African countries and regional and international organizations. Pre-CODIST-1 workshops, the 1<sup>st</sup> Follow-up on WSIS, Tunis+3 and the Legal and regulatory framework for the Knowledge Economy were held on the 28<sup>th</sup> of April 2009. The Legal and regulatory framework for the Knowledge Economy Workshop was jointly organized with the following partners – Organisation Internationale de la Francophonie (OIF), United Nations Conference on Trade and Development (UNCTAD), and Internet Society (ISOC). Following welcoming and introductory remarks from the Director of ISTD, Ms Aida Opoku-Mensah, the sub-committee adopted the agenda and organisation of work and elected the bureau for the sub-committee as follows: Swaziland as Chair; Cameroon as First Vice Chair; Ghana as First Rapporteur; and Tunisia as Second Rapporteur. The two days of the sub-committee sessions focused on topics and issues pertaining to the two sub-themes of CODIST-1, namely, the Enabling Environment for Innovation and Innovation and Economic Growth.

# I. Enabling Environment for ICT Innovation and Economic Growth

# Recognising that:

Innovation requires an enabling environment, the role of research and development (R&D) through collaborative initiatives between universities, research institutions, industry and commerce was cited as being pivotal to the enhancement of the knowledge economy.

#### Recommends

#### Members States to:

- Review and reform the education and training system with more emphasis in mathematics and sciences;
- Equip universities with personnel with scientific, technological and organizational skills to stimulate research and development;
- Invest in adequate ICT infrastructure (computer laboratories and high speed Internet) in Universities.
- Encourage linkages between researchers and the private sector and between innovators and commercial enterprises;
- Facilitate access to financial resources for innovative initiatives, product subsidies and replication of successful innovative projects;
- Develop ways of protecting innovations and commercialization of innovation;
- Put in place mechanisms for exposing youth and children to ICT skills;
- Encourage and also focus on targeted ICT application development in parallel to investing in infrastructure;
- Promote and create technology parks and ICT incubation centers.

# ECA to:

- Assist in addressing the problem of brain drain through the creation of conditions conducive to retention of ICT experts in Africa through networking and provision of an appropriate research environment, capacity building activities and fund raising;
- Support and promote development of technology parks, incubators and building entrepreneurship by promoting exchange of both regional and international experience;
- Facilitate collaboration in the development of strategies to facilitate and nurture vocational training institutions in Africa; and
- Promote and create an innovation market place through encouraging business champions at the regional level.

ECA activities in the area of ICTs in 2007 - 2009 and work programme for the biennium 2010 - 2011

# Noting that:

- After the restructuring of the ECA in 2007, the sub-committee for Knowledge Libraries and Information Services (KLIS) was discontinued after CODI V and considering the historic role of the ICT sub-committee on knowledge, libraries and information services;
- The second meeting of the fifth ATAC (African Technical Advisory Committee) on AISI,

# Recognising:

The importance of assessing the progress made by African countries in following up on the recommendations/action lines of the World Summit on the Information Society (WSIS), since its adoption in Tunis in 2005.

ATAC has determined that AISI framework was still relevant and up to date for spearheading development of knowledge economy in Africa.

## Recommends:

## Member States to:

- Improve stakeholder participation including public-private partnerships (PPPs) in infrastructure development to improve on key areas of ICT applications that are not well developed such as education, health, agriculture, environment and sciences;
- Focus on realising capacity building requirements;
- To participate fully in the submission of relevant data requested for through various data collection instruments to enable effective impact assessment analysis to be undertaken;
- Promote self-sufficiency in energy and develop innovative strategies for utilising power- efficient solutions; and
- Put in place effective mechanisms to ensure the steady supply of power in their respective countries.

## ECA to:

- Resume the activities of the KLIS sub-committee and to subsume such activities
  within the ICT sub-committee. This would allow specialists in the fields of
  libraries and information/knowledge services to continue to play their role and
  accord them a Forum to promote and develop their activities;
- Continue to use the AISI as the guiding framework for the development of Knowledge Economy in Africa;
- Shift its emphasis and activities towards supporting member States in the area of implementing their NICI policies and action plans;
- Improve on the questionnaire for WSIS follow up to incorporate new trends and provide definitions and guidelines on some of the WSIS Action Lines;
- Organize coaching/training of focal points and other respondents prior to completion of questionnaire, which would also be useful for validation of the questionnaire;
- Support through the focal points, coordination mechanisms among the different stakeholders at the national level so as to enable them fully participate in the data gathering process of WSIS follow up indicators;
- Use the current WSIS assessment to review e-strategies based on the challenges
  of the knowledge economy and advise member States on the required corrective
  actions;

 Strengthen cooperation with other UN Regional Commissions and international organizations to share experiences/compare results on the WSIS follow up surveys;

 Collaborate with the African Union Commission and include in the next survey an assessment on the follow up to the ARAPKE (Africa Regional Action Plan for the Knowledge Economy) implementation;

• Promote cooperation on e-security and support the establishment of cyber security centres in all countries and at regional level; and

• Undertake sectoral surveys to assist in the national survey for WSIS.

# **Enabling Environment – Technical and Policy Issues**

# Recognising:

- The importance of building the capacities of policy makers, ICT experts, lawyers
  as well as representatives from law enforcement agencies with regard to the legal
  and regulatory frameworks of the knowledge economy including cyber
  legislation;
- That ICTs and innovation enable successful introduction of new ideas and methods through the use of the technology to make positive changes in the production of wealth and in provision of services;
- That infrastructure and resources are essential enablers for creating and building innovation systems;
- That Regional Economic Communities such as ECOWAS, SADC and ECCA are proactively working with Regional Regulatory Associations such as WATRA

(ECOWAS), CRASA (SADC) and ARTAC (ECCA) in regulating issues of regional telecommunication infrastructure; and

 That mobile technology stimulates innovation and creates new markets particularly in ensuring that the rural communities benefit from the information and knowledge economy.

# *Noting that:*

• ECA has undertaken numerous initiatives and projects since the launch of the AISI in 1996 and that it had undertaken a ten year audit of the AISI;

## Recommends

# **Member States to:**

- Create a legal framework for e-commerce including m-commerce, m-banking and m-payments. This includes consumer protection in m-banking through bringing regulators and financial institutions together to create a regulatory framework;
- Develop frameworks of 'proportional risk' in regulating m-banking in order to ensure that innovation is not curtailed;
- Discuss in national and regional workshops their response to m-banking (bringing together stakeholders in the telecom sector with counterparts in financial sector);
   and
- Ensure the harmonious integration of physical infrastructure and the promotion and facilitation of the movement of persons, goods and services that member States should evolve common communication policies, laws and regulations in area of ICT.

#### ECA to:

- Audit pilot studies/projects in various countries and ensure ownership by countries. Facilitate peer review among member States and enhance exchange of best practices and create awareness to build and sustain the Information Society and knowledge economy in Africa;
- Organize ICT capacity building activities and awareness raising programmes for the judiciary, lawyers and law enforcement bodies including MPs and executives on the importance of creating legal and regulatory frameworks for the knowledge economy (including on importance of cyber-security laws) including the development of online courses on cyber-security laws;
- Identify 'about to come' technologies and create (one page) briefing notes for regulators;
- Assist countries with guidelines in relation to implementation of cyber-laws;
- Encourage virtual libraries to facilitate scientific and technological development;
- Collaborate with partners in the establishment and hosting of a database on innovations in ICTs and Science and technologies both at regional and subregional level. This could be in the form of virtual libraries to facilitate information sharing;
- Urge RECs and Regional Regulatory Associations to regulate issues such as Right
  of way, pricing, regional/cross-border infrastructure and frequency issues and
  create mechanisms for regional arbitration and regional dispute resolution and
  address consumers' complaints;

## E/ECA/CODIST/I/L

Page 16

- Undertake a study focusing on the impact of mobile telephony in addressing the needs of rural communities;
- Create a framework for the regulation of m-banking and m-payments;
- Conduct studies on consumer behaviour model behaviour that might trigger innovative services;
- Assist Regional Economic Communities ((RECs) to ensure that sub-marine cable projects consider interests of land-locked countries; and
- Promote the use of regional infrastructure resources such as satellite initiatives e.g. RASCOM (Regional African Satellite Communication Organisation).

## **ICT and Economic Growth**

# Recognising:

- The importance of the Intellectual Property Rights (IPRs) for the development of innovation systems;
- The importance of SMMEs in creating entrepreneurs and innovation; and
- The significance of measuring the impact of ICTs on economic growth and the various initiatives in developing ICT indicators both at regional and international levels.

# *Noting that:*

• Innovative ICT applications enhance economic growth as demonstrated through innovative mobile applications; and

• Statistics are essential for measuring the impact of ICTs in business and economic growth.

#### Recommends

# **Member States to:**

- Study, identify and support new and existing small business innovations within their economies:
- Consider support to innovation in the postal services; and
- Build statistical databases and the capacity of responsible institutions through training in enhancing data collection for ICT business indicators.
- Utilize results of ECA undertaken studies in measuring the impact of ICTs for development.

## ECA to:

- Support on-going data collection activities on SMME usage of ICT innovations including data collection in SMME ICT companies;
- Conduct studies on ICT applications particularly mobile applications in sectors relevant to the rural communities e.g. in areas such as fishing, agricultural marketing or commodity exchange, etc.;
- Support capacity building in the area of innovation;
- Gather accurate data on innovation activities and share them with member States;

• Facilitate access to the results of ECA undertaken studies on ICT for

development; and

Provide technical and financial assistance to Member States to use models of

evaluations of the impact of ICT for enhancing economic development.

SUB-COMMITTEE ON SCIENCE AND TECHNOLOGY

Introduction

The subcommittee S&T session was attended by over 90 delegates and observers

from Member States including representatives from non-African countries and regional

and international organizations, the sessions of the Subcommittee on Science and

Technology were held from 29 to 30 April 2009 with pre-meeting events held on 28

April 2009 on training on innovation and entrepreneurship. The Director of ISTD, Ms

Aida Opoku-Mensah welcomed the participants and gave opening remarks emphasizing

the role of S&T in addressing the continent socio economic development and in

promoting people centered Knowledge based Society and Economy. Following the

introductory remarks, the subcommittee adopted the agenda and organisation of work and

elected with consensus the bureau for the subcommittee as follows:

• Chair: Senegal

• Vice Chair: South Africa

• First Rapporteur: Tanzania

• Second Rapporteur: Egypt

The two days of the S&T sub-committee sessions dealt with topics and issues

pertaining to the two sub-themes of CODIST I, namely, the Enabling Environment for

Innovation; and Innovation and Economic Growth.

# Recommendations of the Sub-committee on Science and Technology

The following recommendations were made.

1. Global scientific research: Challenges and Opportunities for Science, Technology and Innovation in the Changing Global Economy.

# Noting that:

- African Countries are faced with many challenges from livelihood on planet earth; primary energy resource exploitation to number of scientists/engineers vs. population, investment in the field of science, technology and research sector has remained low.
- Many Africa countries have recognized the leading R&D & Innovation fields in the 21st Century such as Agricultural Technologies & Industries, Science of Climate Change & Adaptation, Life & Health Sciences, Earth System Science, Energy Resources new and emerging technologies which requires heavy investment to benefit from its potentials.

#### Recommends that:

## **Member States should:**

- Implement the Lagos Plan of Action, African Union Heads of State Summits and Science with Africa Conference recommendation of setting at least 1% of the country's GDP for Research and Development.
- Provide Tax Incentives for priority projects especially those dealing with new and emerging technologies in research.

E/ECA/CODIST/I/L

Page 20

• Promote and build scientific culture among stakeholders through popularization

programmes.

• Strengthen education system to increase human resource capacity in science and

technology.

ECA should:

• Promote social corporate responsibility among private sector of Africa and

Multinational companies to contribute for development of Africa through

financing R&D and promote the use of science and technology to create and

strengthen creative industries.

• Build a strong synergy with AU/NEPAD on science and technology common

goals in the implementation of the Consolidated Plan of Action.

• Promote the establishment and development of Technology Parks in Africa, and

encourage synergies among stakeholders in Africa.

**Enabling Environment – Technical and Policy issues** 

Noting that:

• Innovation is a key driver of the growth of the knowledge economy of the

country; African Countries need to reposition its innovation system.

• The sprit of innovation working in Africa society would be strongly transferred in

the education system and research.

## **Recommends that:**

Member States should:

- Develop protocols to bring innovators, entrepreneurs and venture capitals together to commercialize innovations that would benefit the continent.
- Make effort to strengthen education system to increase strong human capacity in science and technology by involving industry and Research Institutions in development of universities curricula to ensure that graduates of tertiary institutions are relevant to industry imperatives as foreign investors to recognize and use the universities, researchers and other expertise in Africa for their operation.
- Establish forums of displaying innovations and solutions for sharing and exchange of experiences.
- Develop comprehensive or holistic yet dynamic long-term investment plan in infrastructure, human capital and policy environment to promote innovations functional incentives and financial leveraging for innovation capability development.
- Build networks of research institutions and researches in Africa and prepare a concept note concerning different kinds of research and improve their interactions for development.
- Increase scientific publications in Africa.
- Increase participation of women in science in Africa.

• Evolve clear Science Communication Policy.

• Develop and take advantage of vast indigenous technologies and innovations.

Use human and social science to contribute to the development of STI

ECA should:

• Initiate & house a regional secretariat to develop a catalytic & analytical support

program for building Systems of Innovation in Africa.

Build networks of research institutions and researches in Africa and prepare a

concept note concerning different kinds of Research and improve their interaction

for the development.

• Sensitize and update a classification of the Scientific and technological fields.

· Promote the best experiences by forums, exhibitions and establish awards and

prizes recognitions to innovators at different levels.

• Accelerate the establishment of the African Science Philanthropy Initiative

(ASPI).

Science Technology and Economic growth

Noting that:

• The intensification of the use of Science and Technology by increasing research

and development activities is essential to reach the millennium development

goals;

• The scientific and technological development of African Countries should go

through the collective and voluntary application of various international and

regional agreed S&T Agendas including African Union and Science conference

with Africa decisions;

• There is need to promote integration among Technology Parks in Africa to have

synergies among stakeholders in Africa.

• The form of the initiatives to identify private sector champions in Africa to

support STI in Africa is laudable

Recognizing that, it is urgent to build better science and technology governance in

African countries.

## **Recommends that:**

Member States should:

• Support Science and Technology by providing the necessary resources, especially

politicians.

• Universities and research institutions must strength their capacity to contribute to

the economy of their countries.

• Use print and electronic media (Radio, TV, etc.) to promote education in Science

and Technology in order to develop new and emerging innovative groups.

## E/ECA/CODIST/I/L

# Page 24

- Strengthen the basic science in education and the fundamental research for strong development of innovation and economic growth.
- Promote the collaboration between Research and innovation institutions with those of emerging countries like Brazil;
- Re-enforce the importance of science and technology in the African Government structure.
- Encourage the acquisition of foreign technology to facilitate the local innovation system;
- Urge African countries to implement the Science with Africa Conference recommendations.

# ECA should:

- Advise the African governments to allocate more resources in the STI sector.
- Contribute in defining main STI indicators;
- Pursue the ASKIA initiative, taking into account the discussions, remarks and
  observations that were made. ASKIA should facilitate not only access to scientific
  knowledge existing in databases and journals but also be a tool for dialogue,
  debates, research, innovation and a repository of key documents and links to
  useful resources.

# **Resolutions of the Sub-Committee on Geoinformation**

# 1. On Spatial Data Infrastructure

- Considering that Geospatial Data Infrastructure is the basic infrastructure for sustainable national development.
- Noting that NSDI's are underpinned by effective partnerships and co-operation amongst a wide variety of multi-disciplinary stakeholders in the public and private sectors and the end user communities.
- Recognizing the commendable efforts that have been made towards the integration of geospatial information in the NICI policy.

## Recommends

## **Member States**

- To set up where national SDI bodies to engage the formulation of appropriate policy and institutional frameworks and facilitate co-operation amongst the stakeholders. These National NSDI bodies should involve end user representation.
- To establish unambiguous naming conventions as a key component of their NSD, following the guidelines produced by the UNGEGN.
- Each country to enact (1) a National Geoinformation Policy and (2) a National Mapping Policy to provide an enabling environment and legal backing for geoinformation activities in Africa.

## **ECA**

 To continue to assist Member States to harmonize national policies in various sectors, as support to integration efforts and seeking to integrate SDI policies into others plans and strategies, such as National Information and Communication Infrastructure (NICI) and National Statistics Development Strategies (NSDS).

# 2. On Partnership and Capacity Building

• Noting that Individual, Institutional and Infrastructure capacity are essential in the continent's development.

#### Recommends

# **ECA**

- To continue to develop training programs in geo-information technologies and their applications in resource assessment, planning, management and monitoring for resource technicians, managers and scientists in collaboration with regional centres of excellence (RECTAS, RCMRD, AOCRS, CRTEAN).
- To closely work with the AUC toward the development of an indigenous African capability in Space Science and Technology and champion sound research and transfer of technology's programmes, where activities will be significantly expanded to cover the fostering of innovation, product and service development, and earth observations applications.
- To collaborate and coordinate its activities with other agencies in UN system, with international and regional associations and programmes, and other development partners, as an important vehicle for mobilizing financial resources

- and technical know-how in support of Africa's developments in the field of geoinformation.
- To increase the development partnership with regional and international organizations through contribution and participation to several initiatives on geoinformation at national and sub-regional levels: Group on Earth Observation (GEO) capacity building process, GMES, UNGIWG, UNGEGN, etc.

# 3. On Development of Regional Geodatabases

- Considering that Africa faces major pressing issues which affect citizens, business and the community at large.
- Noting that there are a number of agencies and organizations with different yet possibly complementary datasets and approaches to spatial data management.

#### Recommends

- ECA
- To continue the development of geoinformation database for priority areas defined by regional initiatives (of the African Union, the NEPAD, and other continental bodies); and the continued support to existing centers of excellence.

# 4. On Standards

 Recognizing that ISO and the Open GIS Consortium (OGC) produce data and interoperability standards that should be adopted by NSDI stakeholders.

#### Recommends

# ECA

- To produce best practice guidelines providing NSDI implementors with practical advice on how to effectively implement the essential standards.
- To promote and support activities for coordinating the input and views of key stakeholders to ensure that the standards and approaches to be adopted in geospatial information make sense, are build on existing standards and approaches in such a way that they anticipate the future potential use of geoinformation resources to tackle emergent issues in the continent.

# 5. On Enlisting National Mapping Agencies in the Fight Against HIV/AIDS

- Recognizing that HIV/AIDS is a major concern on the African continent that affects all aspects of society;
- Noting that there is a strong geographic dimension to the planning, implementation, and monitoring and evaluation of HIV/AIDS prevention, care and treatment programs;
- Also noting that very often health issues are not taken into account when developing the National Spatial Data Infrastructure (NSDI);

#### Recommends

## Member States

 To ensure that the key players in the heath sector (Ministries of Health and / or Social Services as well as National AIDS Commissions) actively participate in the NSDI process to ensure that public health issues such as HIV/AIDS are addressed;

• To ensure non-discrimination against those afflicted with HIV/AIDS, particularly migrants:

#### **ECA**

 With the help of partners, to establish a community of practice allowing for the transfer of knowledge and experiences integrating health into the NSDI process among countries on the African continent and discuss issues such as developing a common semantics;

#### **Partners**

- Assisting in the effort to realize universal access to HIV/AIDS prevention, care
  and treatment to develop and implement a communication and advocacy strategy
  for the use of geographic information at the continental, regional and national
  levels;
- Involved in public health and NSDI activities in member States, including donor
  agencies, industry leaders, civil society and academia, to support all of the above,
  for example through public-private partnerships.

# 6. On African Geodetic Reference Frame (AFREF)

- Considering that there are several on-going GNSS projects relevant to AFREF
- Noting that the Capacity Building on Space Science including AFREF is identified as the early deliverable of the AUC/EC Light House Projects
- Also noting that the geodetic reference frame is the backbone of the activities and product of the African Observatory

 Noting that AFREF fits into in the Consolidated Plan of Action on Science & Technology of the AUC

## Recommends

Member States (NMA or any other mandated agency)

• To commit to put at least one GNSS station on the AFREF network.

## **ECA**

- To set up a consultative workshop on how to agree on the modalities to perform the first official computation.
- To appoint 3-person Task force to draft a non-technical document for awareness creation and sensitisation of AFREF and raise the importance / contribution of AFREF in societal benefit areas, namely: climate change, peace and security (border issues), transboundary resources management, urban and regional planning, economics, etc.
- To work with the AFREF International Steering Committee and the AUC to implement the Light House project on AFREF
- To work with the AUC to ensure that AFREF-related activities should be endorsed by the African Ministerial Conference on Science and Technology (AMCOST) and therefore be directed to the appropriate governing structures.

# 7. On Structure and Funding Mechanism of National Mapping Agencies

 Recognizing the importance of geospatial information to sustainable development and the need to empower the national Surveying and Mapping Agencies to effectively produce manage, and disseminate geospatial information in African countries.

# Recommends

# Member States

- To structure National Mapping Agencies as extra ministerial departments.
- To consider National Mapping Agencies as priority institutions for funding.