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**Development Information Services Division**

**Report on Sub-regional Intergovernmental Committee of Experts  
on  
Harnessing Information for Development**

## I. Introduction

The role of information and communication technologies as a potent force for economic and social development is increasingly being recognized worldwide. The transition of the Internet from a tool for a few to communication, business and empowerment means to over 4 million Africans indicates that rapid growth can be achieved through enhanced use of information and communication technologies. A global consensus has been mounting on the fact that the quest for poverty eradication and wealth creation, efforts to bring about governance, peace and stability, initiatives towards the Millennium Development Goals and those aimed at raising the living standards of African people cannot be achieved without significant investment in information, knowledge and new technologies. A number of African countries have now begun to articulate long term national ICT strategies that aim at creating enabling policy environment, increasing ICT application in key sectors of development, fostering entrepreneurship, building critical mass of skilled human resources for knowledge society and improving content relevant to development.

However, opening access to information, knowledge and options to millions of Africans marginalized by distance, disability, gender, age, ignorance, poverty and bad governance remains a daunting challenge. There is a need for intensive efforts in building rural infrastructure and increasing African bandwidth to acceptable standards and developing a critical mass of knowledge workers that harness the potential of ICTs for local development needs. This in turn requires the creation of enabling policy and regulatory frameworks, institutional capacity building and increasing the role of the private sector and attracting investment in information and knowledge. Articulation of national ICT strategies that cover issues such as knowledge, spatial data, ICT infrastructure and their ultimate implementation has become a key task for African countries in the next decade.

A number of regional initiatives including the New Partnership for African Development (NEPAD) that was launched by the heads of States in 2001 and the African Information Society Initiative (AISI) that was endorsed in 1996 recognize these challenges and embarked on plans to advance the ICT sector in the region. The NEPAD ICT agenda emphasizes that the judicious application of ICTs would create niche opportunities in regional cooperation and integration, in trade, investment and finance and for empowerment of African citizens and institutions. ICTs have a substantial role in enhancing the effectiveness of public administration, in environmental management and control of disease and the HIV/AIDS pandemic. An efficient early warning system is critical for responding to emergencies and for monitoring of tension spots that lead to conflicts. NEPAD's digital opportunity agenda aims to harness ICT to:

- increase teledensity with an adequate level of access for households;
- lower the cost and improve reliability of service
- achieve e-readiness for all countries in Africa
- develop and produce a pool of ICT-proficient youth and students from which Africa can draw trainee ICT engineers, programmers and software developers
- develop local content software, based especially on Africa's cultural legacy.

NEPAD resolution passed during the conference on the participation of the private sector in the financing the infrastructure that was held 15-17 April 2002 in Dakar Senegal emphasized the need for:

- increasing Africa's capacity in design and manufacturing of communications equipment
- promotion of enabling policy and regulatory environment for active participation of the private sector in delivery of services
- harnessing opportunities provided by e-business and electronic commerce
- creation of regional network that bring regulators and decision makers together
- analyzing the impact of ICTs for development

It has suggested several financing mechanisms such as inclusion of ICTs in national development plan, reversal of a small portion of military budget, auctioning of public resources such as radio frequency spectrum, imposing global bit tax and swapping debt for financing education, information technology and knowledge. The meeting recommended the creation of a committee of donors , a trust fund for ICT for development in Africa and a private sector forum for Africa's digital inclusion. It resolved for the implementation of its ICT programmes within the framework of the African Information Society Initiative and mandated ECA to prepare in consultation the short term ICT programme (2002-2008) of the NEPAD. This has increased ECA's role in coordinating and promoting the ICT agenda of NEPAD.

ECA has been promoting for the last 25 years and recently under the African Information Society Initiative (AISI) through its subprogramme on harnessing information for development. The sub-programme is composed of three major areas namely, information and communication technology for development, geoinformation and development and library and information systems.

## II. The Sub-programme on Harnessing Information for Development

The objective of the sub-programme is to strengthen national capacity for the utilization of information and communication technologies, including strengthening capacity in the development and use of statistical, bibliographic, referral and spatial

databases as decision support tools for socio-economic development. The specific goals for the subprogramme during the years 2000-2001 were to:

- provide the catalysts for substantial penetration of information and communication technologies in Africa,
- develop the awareness that the development of effective library and technical information services are a critical necessity for sustainable development, and that regional networks can be used to facilitate regional capacity in this area, especially in research and development institutions,
- stimulate the adoption by member States of appropriate technologies for building and disseminating development information, including databases and information delivery technologies like CD-ROMs,
- increase the impetus of member States to establish and use coherent spatial databases within the framework of national information infrastructures, as well as increased partnerships and networking in this area, and
- demonstrate the rationale for linking discrete socio-economic and geo-spatial data in building integrated socio-economic information systems for seamless storage, analysis, retrieval, and visualisation.

The strategy employed to achieve the objectives was to use a portfolio of activities to:

- advocate appropriate policies, strategies, best practices, standards and methodologies, through technical assistance, presentations at regional and national meetings and dissemination of technical studies,
- facilitate the building of associated capacity and regional networks; and
- use exhibitions and operative field projects to demonstrate effectiveness of advocated instruments in meeting development objectives, and
- establish new partnerships and strengthen existing ones.

### III. Progress in the Implementation of the ECA Programme of work on Harnessing Information for Development

Efforts in implementation of the work programme in the area of information and communication technology for development focused on raising awareness of member States on the development of the information society and how to use ICT to build competitiveness of national economies and enhance human development. The sub-programme provided assistance to member States in developing their national information and communication infrastructure and plans. This was pursued through the provision of appropriate advisory services and studies on how to make information and communication technologies more accessible to various sections and sectors of an economy, including health, education and commerce with emphasis on capacity-building in the organization and management of information

and knowledge on Africa's development. Advisory services were also provided to regional economic bodies and institutions, including SADC, CEMAC, ECOWAS and IGAD. Advisory services ranged from policy advice in the development of national and sectoral ICT strategies to building capacities of member states through organizations training and workshops.

Twenty-two member States have developed National Information and Communication Infrastructure (NICI) plans and similar NICI development process is currently underway in other six countries in Africa this year of which 15 countries completing the process of developing comprehensive ICT plans and strategies and moving towards implementations. About 17 African countries now have telecentres, which provide access to the wider community, though their number per country vary widely, ranging from one in Ethiopia to about 9000 in Senegal.

To further the advocacy role of the Commission, a review meeting on African Development Forum 1999, which was on "The Challenge to Africa of Globalisation and the Information Age", was held from 27 to 29 March 2000 to develop follow-up action plans on issues that arose at the conference. In the same vein, the annual meeting of the African Technical Advisory Committee of African Information Society Initiative (Addis Ababa, May 2001), and the meeting of the Partners for Information and Communication Technologies in Africa (7-8 September, 2001) were also organised to discuss the strategies to accelerate African Development through the increased use of ICT. Discussions and studies undertaken in four critical areas led to the publication of four corresponding background documents, on Electronic Commerce in Africa; The African Learning network; Information and Communication Technology Policies and Strategies; and Information and Communication Technology for Health Sector.

In 2000, the sub-programme launched a project entitled SCAN-ICT in six pilot countries – Morocco, Senegal, Ethiopia, Uganda, Mozambique and Ghana. The study aims at building support for the phased development of a comprehensive African capacity to collect and manage key information, including indicators needed to support the growing investment in ICT in Africa. The Scan-ICT partnership at present, is comprised of Acacia/IDRC-Canada (International Development Research Center), European Commission (DGVIII), Norwegian Agency for International Development (NORAD) and ECA.

The Information Technology Centre for Africa (ITCA) came to the forefront of building skills and capacity for the information age during 2000-2001. The centre organized a series of workshops for journalists from the private and public media, as well as African ambassadors based in Addis Ababa. In collaboration with Cisco Systems and infoDev it also ran a six-month training programme for women from the different parts of Africa on computer networks

management. Other key capacity building tasks carried out include: a workshop on the use of ICTs by Small and Medium Enterprises (Addis Ababa, September 2001), and the sub-regional NICI workshops for Southern Africa (Windhoek, Namibia, 11-14 April, 2001) were held. Similar NICI workshops followed for Eastern Africa followed (Addis Ababa, 19-21 June 2001). In addition, ECA mounted exhibitions during ADF 2000 and the second meeting of CODI to emphasize the use of ICTs in various economic and social sectors, including in the fight against HIV/AIDS. A permanent exhibition is now mounted on the ground floor of the UN Conference Centre in Addis Ababa.

Closer collaboration with key international development agencies was fostered by organising and participating in a number of events, including: Global Knowledge II (GKII) Conference and Action Summit, held in Kuala Lumpur, Malaysia (7-10 March 2000); International Symposium on Information Technology for Development held during the G8 Okinawa Summit in Japan (2-4 July 2000); ECOSOC meeting on Information Technology for Development in New-York, July, 2000; Forum of African Telecommunication Regulators, South Africa (29 August - 1 September 2000); Forum on Telecommunication Regulation in Africa, Gaborone, Botswana, 25 - 27 October 2000; Third UNESCO Congress on Ethical, Legal and Societal Challenges of Cyberspace, 13-15 November 2000; ITU Development Symposium for Regulators, 20-22 November 2000. During 2001, the Team also participated in the GKP Annual Meeting, 22-23 March; Meeting on Africa's contribution to the Dot Force and ECOSOC Session, 11-12 May; ECOSOC High Level Panel Discussion on "Bridging the Digital Divide", 22 May in New York. In addition the sub-programme organized a meeting of African Stakeholders Network for the UN ICT Taskforce in January 2002. It has convened the Global Knowledge Partnership meeting in April 2002 in which the issue of African digital inclusion featured prominently.

In the area of geographic information, efforts were concentrated on raising awareness of the importance of national geographic information systems in socioeconomic planning and development; on encouraging African Governments and institutions to invest in the production, maintenance and management of geo-spatial data, as well as in promoting the development of integrated data sets and data standards in order to make relevant information available to governments and the public. In this context, assistance was provided to Member States in developing national geographic information infrastructures that respond effectively to the needs of the various development sectors, such as natural resources, environment, food security, land reform, transport and communication infrastructure, human settlements, health and education, energy and tourism.

The sub-programme organized a workshop on the technical and institutional components of spatial data infrastructures (SDIs) in Addis Ababa from 6 and 7

September 2001. The workshop was attended by more than 50 high level officials from the African public and private sectors and the academia. Technical and resource support were given to two other technical meetings: International Conference on Spatial Information for Sustainable Development held at the UN Office in Nairobi, Kenya, 2-5 October 2001, with joint sponsorship of the International Federation of Surveyors (FIG), HABITAT, UNEP and the Association of Surveyors of Kenya; and the AfricaGIS-2001 International Conference, organized in Nairobi from 5 to 9 November 2001 on the theme "Enhancing Socioeconomic Development with Geo-Spatial Knowledge". A workshop on national spatial infrastructure was also organized and facilitated (Nairobi, 12 November 2001).

A position paper entitled "The future orientation of geo-information activities in Africa" was released in November 2001. Based on the outcome of the group of experts which met in November 2000, the paper elucidates the framework for the acquisition, management and use of spatial data, modern concepts and trends of spatial data management, and their development in Africa. Another important paper released was "The use of Geographic Information Systems (GIS) in National Statistical Offices (NSOs), with the objective of enabling NSOs review policies and actions on adopting modern analytical tools especially on account of the role of GIS in enhancing the quality of analysis and decision making. A booklet: Success Stories on GIS Applications, was also issued in December 2001 to show the diversity of application areas of GIS in a number of African countries, providing examples for emulation.

Progress was registered in strategic areas of geo-information development work, as internal legislative bodies and external regional forums endorsed policies and strategies formulated by ECA on the 'future of GI in Africa. Also, a number of countries have taken steps aimed at developing Spatial Data Infrastructures and Geo-information policies, and virtually every national agency is converting analogue data files into digital files to a lesser and greater extent. There was also evidence of increased cross-fertilization of ideas among stakeholders, including national agencies, professional bodies, private sector and international organizations.

In the area of library and technical information services, ECA implemented a fully integrated library information system that will enable it become a veritable socioeconomic information and knowledge dissemination and exchange hub for the region. Based on international standards for information processing and exchange, it positions ECA for effective international co-operation and exchange in socioeconomic information and knowledge. The associated database can be accessed on the Internet at <http://ecalib.uneca.org>.

A follow-up to the development of the system was the conceptualization of the African Virtual Library and Information Network (AVLIN). The concept document which includes the mission, objectives and operational framework were

discussed by a group of experts from the Africa region on 3 September 2001. And based on the recommendations of the experts, ECA was mandated by the Committee on Development Information (CODI) sitting from 4-7 September 2001, to develop AVLIN as a platform for sharing development information and knowledge. The African Virtual Library and Information Network (AVLIN) will be a network of Internet-based information and knowledge resources and services that form a web of virtual libraries and knowledge exchanges that link African libraries, information centres and specialized networks. Its main objective is to help bridge the digital divide between Africa and the developed world by focusing on capacity building at institutional, national and regional levels. It will also focus on regional cooperation especially on standardization and system development, and the facilitation of research and developmental activities in both infrastructure and development of digital and virtual libraries. The enthusiasm and unanimity with which AVLIN was launched indicated a great deal of understanding of the need for co-operation and networking in sharing of development and socio-economic information in the region.

The ECA Library intensified efforts to deliver on its mandate to provide library and technical information services to the secretariat and member states of the Commission through the acquisition, processing and dissemination of relevant print and electronic information resources. To this end, it participated in UN system-wide consortium on acquisition of electronic information resources and developed enhanced bibliographic information retrieval service. The sub-programme also produced and distributed several socioeconomic information sources for use of the Secretariat and researchers and policy-makers in member States during the period. These include: Africa index, ECA-in-Print, New Acquisitions, Index to African Official Publications and Journal Contents.

- Substantive meetings

The sub-programme underwent a major legislative review at the second meeting of the Committee on Development Information, a subsidiary organ of the ECA Conference of Ministers, held in Addis Ababa from 4-7 September 2001, on the theme: "New directions in information and knowledge management for decision making". The meeting was conducted in plenary sessions and three subcommittees on Statistics, ICT and libraries, and Geo-information. On the whole, 500 persons participated in various capacities, including delegates from 53 member States and observers from numerous national, regional and international organizations. Ad hoc expert group meetings in ICT for development, geo information and library and information systems development were also held during the meeting of the Committee on Development Information.

- Recurrent and non-recurrent publication



The sub-programme produced a number of valuable publications that are available via the ECA web site covering the areas of ICT for development, geo-information, libraries and information systems. Some of the key papers include:

- Status on information and communication technologies in Africa
- Building the information economy in Africa
- Regional studies on electronic commerce in Africa in collaboration with IDRC
- The future of Geo-information in Africa,
- Economics of Geo-information
- Knowledge management for decision making: tools, institutions and paradigms.

Annex I provides list of publication of the sub-programme.

□ Digital material production

The sub-programme has also been very active in the development of digital information. It continued maintaining a web site on National Information and Communication Infrastructure (NICI) and content development in Africa. The sites were designed to identify the level of penetration of information and communication technologies and content development in Africa. They are intended to create awareness among decision-makers, planners, ICT producers and users to support an integrated approach to ICT development in the region. The information for web page is drawn from ECA's own sources and other national and international data sources. ECA has also been gathering development oriented data from various public and research institutes in member States, compiling them in printed and electronic format to disseminate it to its clients. A CD-ROM entitled the "Africa Development CD-ROM 2000" has been produced to provide access to development information using an alternate medium of dissemination.

□ International and Regional Cooperation

Regional and international cooperation is another dimension of the sub-programme that expanded immensely. The growing attention on Africa's digital inclusion over the last two years provided immense pressure on the sub-programme to coordinate and liaise with international initiatives such as the United Nations ICT Task Force, the DOT Force, the Digital Opportunity Initiative and recently the preparatory conference on the World Summit on Information Society (WSIS).

One of the activities in international cooperation was advocating for African position at these initiatives. ECA held two consultative workshops to set an African agenda for the G8 Summit and ECOSOC session in June 2001. The first workshop

will was held 3-4 May 2001 in Addis Ababa bringing together the members of the Partners for Information and Communications Technologies in Africa (PICTA), the African Technical Advisory Committee (ATAC) on the African Information Society Initiative and the representatives of the G8 DOT Force from South Africa, Senegal, Egypt and Tanzania. The meeting produced a "common position" document that reflects Africa's position to global fora on ICTs including the G8 DOT Force, ECOSOC, United Nations Task Force, World Economic Forum, etc. It called upon regional, international, bilateral and non-governmental organizations, to support the implementation of the recommendations set out in the Common Position for Africa's digital inclusion. The second consultative workshop was held in May 2001 in New York to provide input to the ECOSOC.

ECA has also organized the African Stakeholders Network to the UN ICT Taskforce meeting in January 2002 that adopted the "common position" on African digital inclusion. In collaboration with the Global Knowledge Partnership (GKP), it has organized an "Africa day" during the second GKP meeting that was held in April 2002. The meeting among others provided input to the preparatory conference of the World Summit on Information Society to be held in Bamako in May 2002. It has organized two meetings of Partners for Information and Communication for Africa and launched a monthly PICTA bulletin that is aimed at improving the exchange of information among members. The sub-programme has participated in a number of international and regional meetings that discussed digital inclusion, knowledge and information systems and the role of geo-information systems for development. Annex II lists international and regional fora in which ECA participated during the years 2000-2001.

□ Field projects

The Scan-ICT and the Information Technology Center for Africa are two major filed projects of the sub-programme. The Scan-ICT aims to build support for a phased development of a comprehensive African capability to collect and manage key information needed to support the growing investment in information and communication technologies in Africa. It intends to create a pan-African ICT network, connecting all levels of ICT related issues, co-ordinated and supported by an observatory/research institute that monitors the penetration, impact and effectiveness of ICT application in Africa. Following discussion on the methodologies of the Scan-ICT, all participating countries have submitted their business plan for gathering and analyzing data. Filed activities are currently underway.

The Information Technology Centre for Africa has been implementing various programmes aimed at its core activities: - training, exhibition and development of information resources. The ITCA has developed a business and implemented a number of field project including a joint project financed by CISCO and the World Bank InfoDev programme for training African women enterpreneurs

in Internetworking. The ITCA organized panel and virtual exhibitions during ADF 2000 to emphasize the use of ICT in the health sector in general and combating HIV/AIDS in particular. It also exhibited during the International Telecommunications Union's Telecom Africa 2001 Conference (Johannesburg, South Africa, 12-16 November 2001). It has launched a portal on regional integration during ADF III that focused on regional cooperation and integration. ITCA also coordinated an exhibition during the meeting of the Committee on Development Information, at which over 22 exhibitors displayed application of ICT in the various aspects of development information, including geo-information, statistics and information service.

□ Regional advisory services

Providing regional Advisory services in information and communication technology was one of the core activities of the sub-programme. Through its two regional advisors the sub-programme covered over 16 countries during the years 2000-2001. Countries that benefited from the advisory services include Cameroon, Central African Republic, Cote d'Ivoire, Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Nigeria, Rwanda, Senegal, Swaziland, Uganda, Zambia and Zimbabwe,. The regional advisors were also active in advocating from Africa's common position at global forums.

IV. Support to Southern African sub-region

Members states in southern Africa have benefited from the sub-programme in a number of ways. In addition to direct technical assistance to countries such as Malawi, Mozambique, Swaziland, Zambia and Zimbabwe in the area of national information and communications strategies, the sub-programme provided opportunities for members states to participate in various conferences and workshops. Southern African countries actively participated in the meetings of the Committee for Development Information (CODI) and the African Virtual Library Network. The Information Technology Center for Africa has provided training for women entrepreneurs from Lesotho, Malawi, Mozambique, South Africa Swaziland and Zambia.

V. Review of Core activities for the years 2002-2003

The sub-programme will be implementing a number of activities during the years 2002-2003 as outlined in its programme budget. The sub-programme intends to produce the following documents for various intergovernmental/expert bodies:

- a report on National Information Communication Infrastructure (NICI) plans and policies, sectoral applications, and content development to ECA Conference of Ministers
- a Report on National Information Communication Infrastructure (NICI ) plans and policies, sectoral applications, and content development to the Inter-governmental Committee of Experts of the ECA Sub-regional Development Centres in (2002)
- a report on National Information Communication Infrastructure (NICI ) plans and policies, sectoral applications, and content development to CODI meeting in 2003.

Other substantive activities to be delivered include:

- a publication on Country profiles including success stories in ICTs and NICI plans
- a report on ICT indicators and ICT impact at a country level
- a report on Harnessing the African Diaspora to help Africa's development.

The sub-programme expects to continue its work on information dissemination in digital format particularly on the web. In addition to maintenance of web-sites on African content and African information and communication infrastructure plans and strategies, the sub-programme will create and maintain a database on African Diaspora and African regulators. Among other core activities for the next two years are:

- a. Implementation of AISI through international cooperation, harmonization and coordination

The sub-programme will continue its implementation of the African Information Society Initiative and recommendations of the ADF'99. Promotion for "African common position" that emerged from the ADF'99, CODI II and other meetings including that of the African Stakeholders Network to the UN ICT Task Force will continue at global level in order to voice African agenda to partners interested in increasing digital opportunities to the region.

Regional advisory services at national levels will be intensified to reach all African countries that have not yet developed their national strategies and those that intend to implement their ICT policies. Advisory services on developing national information and communication infrastructures (NICI) and national Geo-spatial information infrastructure (NGII), on regional communication systems for information exchange, sectoral applications (e.g. health, education, electronic commerce) and content development will be carried out in a more systematic and sustained manner.

Promotion of international cooperation will not only enable the implementation of AISI but also increase synergies between global initiatives that are striving to increase digital inclusion in the region. Co-ordinating, harmonizing and liaison with partners at all levels including with Partnership for Information and Communication Technologies in Africa (PICTA) and the African Technical Advisory Committee will continue during the biennium. The African Stakeholders Network to the UN ICT Task Force will be strengthened to facilitate global dialogue on issues relevant to Africa's digital inclusion and to shape the African agenda for the World Summit for the Information Society to be held in Geneva in 2003 and Tunis in 2005. The sub-programme will also continue to promote the NEPAD/AISI ICT programmes at national, regional and global levels.

#### b. Development of National, sectoral and regional ICT strategies

Development of national, sectoral and regional strategies will remain the core programme of the sub-programme in the biennium. In collaboration with regional Economic Communities such as ECOWAS, COMESA, UMA, CEMAC, SADC, UEMOA, etc, the sub-programme will intensify strategies for sectoral applications of ICTs in health, education, electronic commerce, in the development of regional communication systems, and increasing African participation in the global ICT Governance. Some of the activities in this regard include:

- Providing advisory services to member States on importance of developing a comprehensive and deliberate national information and communication infrastructure policies and strategies
- Development of national sectoral strategies in the key areas such as health, education, electronic business, e-government, agriculture and environment
- Working with regional economic communities and other development partners in launching regional ICT strategies
- Holding national/regional workshops on the importance of development of information society, sectoral ICT strategies and information systems, communications infrastructure and the creation of an enabling environment
- Ongoing assessment and monitoring the status of communications infrastructure, gaps in policies and regulatory environment, human resources development needs, relevance and development of applications and content in key areas of socio-economic development
- Increasing regional cooperation and research in ICT policy development and implementation

#### c. Development of Geo-spatial Data Infrastructure

Spatial Data Infrastructures (SDIs) are increasingly recognized as an indispensable part of the national infrastructure of countries that need to be constructed and maintained as other elements of the infrastructure. SDI encompasses the policies, technologies and institutional arrangements involved in delivering spatially related information from many different sources to the widest possible group of potential users. They enable an unconstrained and transparent access of Geo-information to all members of society.

There are many reasons to develop, in each country, inter-agency activities to improve geographic information production, management and distribution, using information technology and telecommunication advances to let government and communities access and widely use geographic information to support their decisions. Africa faces critical challenges in areas of poverty alleviation, food security, environmental degradation, social welfare, trade, energy, agriculture, health, industry, and population growth, among others. Putting into place a framework for national and regional spatial data infrastructure will be a key element in developing the institutional capacity to meet these challenges. The sub-programme will hold the following meeting to increase awareness and disseminate information on the need for Spatial Data Infrastructure:

- Ad-hoc expert-group meeting on “Spatial Data Infrastructures in Africa (SDIs) and the way forward” to be held on 9-12 September 2002 in Addis Ababa. The objective of the meeting is to undertake a critical review of the status of spatial data infrastructures in Africa and to recommend implementation approaches. It will map out strategies and propose model action plans for various scenarios, including spatial policy models, standards and data catalogues, partnership arrangements, funding strategies, and other elements that cater for all SDI components.
- Pan African Symposium on “National and Regional Spatial Data Infrastructures” and “Geographic Metadata” to be organized in October 2002. The symposium will have approximately 120 participants in attendance, most from national geographic agencies, statistical offices and agencies, environment and natural resources ministries, and other stakeholders producers and users of geo-spatial data. The purpose of the meeting is two fold: On the one hand, to activate dialogue among African stakeholders about national spatial data infrastructures (NSDIs) with a view of getting NSDIs solidly on the agenda of governments and help countries to develop standards for SDIs. On the other hand, the meeting will be used to form a Permanent Committee on Spatial Data Infrastructure for Africa, as directed by the second meeting of the Committee on Development Information (CODI2, September 2001) urging the region to establish such a Permanent Committee for Africa, following the models for the Americas and for Asia and the Pacific.

- **Regional Workshop on “Space-based technologies for Disaster Management”** to be held jointly with the UN Office for Outer Space Affairs (OOSA), Vienna, from 1<sup>st</sup> to 5<sup>th</sup> July 2002, in Addis Ababa. The workshop is aimed at increasing the awareness of managers and decision-makers involved in disaster management of the potential benefits of using space-based technologies; will provide a forum in which needs which are specific to the region and institutional settings can be identified; will enable the consolidation of networking among national and regional agencies and the definition of possible partnerships; and most importantly will develop a regional plan-of-action that will lead to one or more pilot projects that incorporate and refines the use of space technologies for disaster management.

ECA is implementing a spatial clearinghouse node through which African countries can publish the metadata of their data holdings. As part of this facility, ECA will host metadata collections for countries that are unable to serve them directly. Those that are already online will be cross-linked from the ECA node, providing a single source of entry to metadata about the spatial data collections of member states.

#### **d. Implementation of the African Virtual Library Network**

The sub-programme will intensify its effort towards harmonization, liaison and collaboration with other United Nations Agencies and other partners in the areas of information systems development and knowledge management and exchange. Implementation of the African Virtual Library and Information Network (AVLIN) will take place through coordination and cooperation with regional and national information centers, services and libraries.

#### **e. The Information Technology Center for Africa**

The Information Technology Center for Africa will be one of the core activities of the sub-programme. A revised business plan will be developed to improve the role of the Information Technology Center for Africa (ITCA) in capacity building, technology demonstration, research, training and information management and exchange.

## **VI. Conclusion**

Current evidence in innovative use of information and communication technologies by small and medium enterprises, government and educational institutions in Africa shows that the region can take advantage of the ICT revolution. ICT is seen by many as the last chance for Africa to provide new job and income opportunities for the next generation, reduce poverty and help close

the development gap between the north and South and between “haves” and “have nots”. But obstacles remain, including lack of political and public awareness, limited infrastructure, small markets, low levels of education and skills as well as a variety of policy barriers. Tremendous efforts are still required to build African capacity for its active participation in the global information economy. Global consensus on increasing African digital opportunities and commitment of African countries to develop their national strategies and regional frameworks through the New Partnership for African development provide a window of opportunity for harnessing ICT to raise African people out of poverty.

ECA’s sub-programme on harnessing information for development realizes these challenges. It will continue its focus on the development of national information and communication infrastructure strategies and creation of an enabling policy and regulatory environment to ensure development of ICTs in the social and economic sector, improving access to ICT by youth and the education, health and business sectors and to build sufficient human resource with high-level skills and enterprenurship to take advantage of the information revolution. This will not only increase digital opportunities but also increase Africa’s participation in global information economy.



## Annex I. List of publications of the sub-programme

- Progress report by ECA to CODI-II on Geo-information
- The future orientation of Geo-Information in Africa
- Policy and Regulatory issues in the development of Africa's Infrastructure : the need to Integrate Geo-information within the National Information and Communication Infrastructures
- Economic issues in the evolution of Geo-information
- Experiences and visions on Spatial Data Infrastructures (SDIs)
- Economics of Geo-information
- Establishment of a geographic database facility for Africa
- Building the African Virtual Library and Information Network (AVLIN): Concepts, Issues, Challenges and opportunities
- Report of the Expert Group Meeting on Knowledge Management and the African Virtual Library and Information Network (AVLIN)
- Knowledge management for decision making: tools, institutions and paradigms
- Assessment of the implementation of the Addis Ababa Plan of Action for Statistical Development in Africa in the 1990s
- Report of the Tenth meeting of the Coordinating Committee on African Statistical Development
- The Way Forward (Open discussion on the next steps of the process of strengthening statistical development in Africa for the next decade)
- Progress report on the implementation of the 1993 System of National Accounts in Africa
- Follow-up to the first meeting of the Sub-Committee on Statistics
- Database development and management activities
- Report on ECA statistical activities during the period 1999 to 2001 and the programme of work for the biennium 2002 to 2003
- Use of statistical databases and information systems for data dissemination and decision making
- International cooperation and inter-agency cooperation and liaison
- Progress report on the NICI implementation, and evaluation of the impact in Africa; the SCAN ICT project
- Follow up of the recommendations of the first meeting of the Sub Committee of ICT
- Report of the African technical Advisory Committee on the African Information Society Initiative (AISI)
- The African Learning Network: Emerging from behind the knowledge curtain
- Information and Communication technology Policies and Strategies
- Electronic Commerce in Africa
- Information and Communication Technology for Health Sector
- Strategy to accelerate African Development through the Increased use of Information and communication technologies

- Report on ECA's activities in the area of information and communication technologies, Information systems and libraries (1999-2001) and Programme of Work for the biennium (2002-2003)
- Report of the First Meeting of CODI
- Information Connaissances et Intelligence au service du développement et de la prise de décision
- The Information Technology Centre for Africa Business Plan for 2001-2002
- Brief note on ITCA
- Pan African E-Commerce Initiative
- Report of the Second Meeting of the Committee on Development Information, Addis Ababa, 4-7 September 2001
- Implementation of the 1993 System of National Accounts (SNA) in Africa;
- Follow-up to the First Session of the Committee on Development Information (CODI) Sub-committee on Statistics
- Report to CODI on international cooperation and inter-agency cooperation and liaison in the area of statistics
- Current status of energy statistics in Africa
- Economic censuses and surveys in Africa
- Organization and management of national statistical services
- Future orientation of Geoinformation activities in Africa", a position paper based on the outcome of the group of experts that met in November 2000.
- Success stories on GIS Applications. A booklet. Issued December 2001
- African Statistical Yearbook: Volume I, Parts 1 & 2; Volume II, Parts 3, 4 & 5, printed format and CD-Rom
- Compendium of intra African and related foreign trade statistics: hard copy;
- Integrated national and subregional economic social and environmental indicators; printed format and CD Rom (National Accounts, Trade, Balance of Payment, Debt, Population, etc.)
- Index to African Official Publications: Volume 4(1 & 2) and Volume 5(1);
- Bibliography of New Acquisitions in ECA Library: Volumes 36 to 39;
- ECA-In-Print: Volumes 3 to 5
- Africa Index: Volumes: 82 to 84
- ECA Regional Statistical Database: Progress report on migrated sectoral components: ECA/DISD/SDB/3c.12 (IV)/00 and progress report
- Study of Users needs Assessment and Technical Design for the Development of ECA's Statistical Information System
- Africa Live Database and five country Live Database
- Demographic Health Surveys (DHS) databases developed for 29 African countries based on 48 surveys and 82 indicators and disseminated on CD Roms.

## Annex II. Some of the key meeting in which the sub-programme participated

- Global Knowledge II (GKII) Conference and Action Summit (Kuala Lumpur), Malaysia, 7-10 March 2000
- Meeting of African Network Operators Group (AFNOG) and African Network Information Centre (AFNIC), Cape Town, South Africa, 6-7 May 2000,
- International Symposium on Information Technology for Development, organized as an input to the G8 Meeting in Okinawa, Japan, 2-4 July 2000,
- ECOSOC Segment on Information Technology for Development, New York, July 2000
- Forum of African Telecommunication Regulators, South Africa, 29 August to 1 September 2000
- Forum on Telecommunication Regulation in Africa, Gaborone, Botswana, 25 – 27 October 2000
- ITAG, Paris, 2-5 October 2000
- Global Society Development, Germany, Reisensburg, 1 – 4 October 2000
- Third UNESCO Congress on Ethical, Legal and Societal Challenges of Cyberspace, 13-15 November 2000
- Working sessions with WIPO in view of finalising ECA/WIPO cooperation, 17-20 November 2000
- Development Symposium for Regulators, 20-22 November 2000
- GKP Annual Meeting, 22 - 23 March 2001
- Third United Nations Conference on the Least Developed Countries (LDC III) Brussels, 15-20 May 2001
- Workshop on Spatial Data Infrastructures (SDIs): Technical and Institutional Components, Addis Ababa, 6 and 7 September 2001
- Workshop on Spatial Data Infrastructures (SDIs) for participants from Eastern Africa at “AfricaGIS-2001 International Conference”, Nairobi, 5 to 9 November 2001.