UNITED NATIONS

ECONOMIC AND SOCIAL COUNCIL
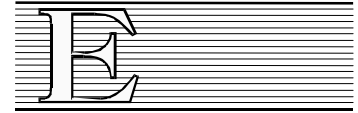
ECONOMIC COMMISSION FOR AFRICA

**Ad-Hoc Expert Group Meeting on "Study on the future
orientation of Geoinformation activities in Africa"**

6-10 November 2000
Addis Ababa, Ethiopia

REPORT OF THE MEETING

A.   ATTENDANCE AND ORGANIZATION OF WORK

1.   The Ad-hoc Expert Group Meeting on "Study on the future Geoinformation activities in Africa" was held at the Headquarters of Economic Commission for Africa (ECA) from 6-10 November 2000.

2.   The meeting, forming part of the ECA work programme 1998-1999, was convened to review a preliminary study of the status of GIS development in Africa, looking at the extent to which on-going or planned GIS approaches and applications are practical and useful to assist decision makers and other stakeholders of socio-economic development. In particular, the study attempts to identify and analyze the key challenges that the African community faces at the dawn of the millennium vis-à-vis its capacity to access and use geographic information by government agencies and the public. Recommendations and guidelines will be provided to improve existing systems, develop new ones, and reorient GIS activities so that they respond to essential and current information needs of the various sectors of development. In this regard, the study will explore emerging and modern concepts for managing geographic data that take into account the development of nation-wide- spatial information networks, and reflect a stronger civil society and private participation.

ATTENDANCE

3.   The Meeting was attended by high-level experts on Geoinformation drawn from the public sector, academia, research institutions, etc, from Africa and abroad, who participated in their personal capacities. The list of participants is appended to the report.

ELECTION OF OFFICERS

4.   Dr. O. Kufoniyi, Director of RECTAS, was elected to chair the meeting. Dr. W. Othichilo, Director General of RCMRD, was elected as Rapporteur.

AGENDA

5.   The following agenda was adopted:

(a)   Opening
(b)   Introduction, organization of work and election of officers
(c)   Presentation by experts
(d)   Presentation of background report
(e)   General discussion and identification of issues.
(f)   Setting up of working groups
(g)   Discussion by working groups
(h)   Compilation of results
(i)   Adoption of report and closing

B.   ACCOUNT OF PROCEEDINGS

OPENING ADDRESS

6.   Ms Karima Bounemra Ben Soltane, Director of the Development Information Services Divison, opened the meeting. She welcomed the participants to Addis Ababa and to the Headquarters of the Commission on behalf of the Executive Secretary of ECA, expressing her

appreciation for having accepted to join this Ad-hoc Group of Experts. She indicated that African countries, in order to better master the complexity of the problems of their development agenda, will have to revise their planning and adopt new criteria of information management. Modern science and technology, in particular Geoinformation technologies, were the means to acquire the extensive knowledge without which man can not cope to develop the strategies they need to fulfil their expectations. A big challenge was to change the perception of policy makers so that geoinformation is seen as an asset and part of the nation's infrastructure. She then explained that the Commission was incorporating its activities in the area of geoinformation within the African Information Society (AISI) strategies. She finally indicated that the study that the meeting would review would be used by ECA —together with its partners— in its campaigns of advocacy, awareness raising, capacity building, and information dissemination as part of its support to African States.

PRESENTATIONS BY EXPERTS

7.   The ensuing papers were presented to the meeting. Each presentation was followed by a brief discussion.

- *User oriented information*, Abdullahi Yusuf
- *The Mara Project (two presentations),* A. Mnzava,
- *Pitfalls of Geoinformation technology implementation in Africa,* P.O. Adeniyi
- *Reform of Government and the future performance of National Surveys,* R. Groot.
- *Inputs to the meeting,* Liz Gavin
- *The challenges of taking GIS to the community level,* V. O. Odenyo
- *The visibility of GIS in Ghana*, B. Akuetteh
- *Monitoring natural Resources,* Ka Alioune
- *The Geoide Programme,* Michael Collins
- *Conservation and sustainable mangment of Pastoral Resources in the Sahel,* Kaboret
- *Aspects of institutional framework for the implementation of GIS in Nigeria*, O. Kufoniyi
- *Best Practices in EIS,* J. Gyamfi-Aidoo
- *EIS Economics,* Pol Jespersen
- *GIS in Africa, challenges and prospects*, J. Mama
- *Remarks by* G. Konecny
- *A regional Malaria distribution model for West Africa,* I. Kleinschmidt

BACKGROUND REPORT

8.   The meeting received the background report commissioned by the secretariat, from Dr. D. Ezigbalike, ECA's consultant, who prepared the document. The study deals with the whole framework for the acquisition, management and use of spatial data, and not only on the technology. The vision is to ensure that spatial data should permeate every aspect of society and that they should be available to people who need them, when they need them, and in a form that they can use to make decisions with minimal pre-processing. Also the collected data sets should be put to the maximum possible uses by publicising their existence and making them easily available to the widest possible audience. The most efficient and effective way to achieve these two related objectives is to establish spatial data infrastructures (SDI), using GIS and ICT technologies to maintain and exploit the geoinformation resources.

9.   SDI is defined as an "umbrella of policies, standards, and procedures under which organisations and technologies interact to foster more efficient use, management, and production of geospatial data." Its components include data, communications, partnerships, standards, technology and users. The user component is very important because without users, the result will be the

proverbial "white elephant." To establish SDIs, there are several issues that African countries need to address. Among them is the issue of coordination of the contributions from various sectors. Other issues include: the need to re-engineer the whole geoinformation industry; the problem of awareness of the role of geoinformation by decision makers; the lack of adequate personnel to develop and maintain the components, and lack of adequate skills in the community to effectively utilise geoinformation products; the poor state of enabling technologies on which the SDI depends; availability of geospatial data sets, especially the framework data on which other thematic layers should be based; and financial constraints.

IDENTIFICATION OF ISSUES

10.   After receiving and discussing the presentations by experts and the background report, the meeting identified the following key issues to be further developed:

(a) Lack of national policy on geoinformation technology and its development and promotion in socio-economic development. There is lack of vision and strategy.

(b) Lack of national and regional mechanism for institutional coordination and development of geoinformation.

(c) Inadequate awareness on the importance of geoinformation technology at decision making and local level.

(d) Lack of spatial data standards (foundation or basic data) and mechanism of sharing and marketing the data sets.

(e) Definition of mapping scales that are suitable for development needs.

(f) Lack of user needs assessments prior to the implementation of geoinformation technology (customer orientation)..

(g) Lack of experienced and professional human resources and motivation.

(h) Lack of sustainable funding and coordination of donors involved in funding geoinformation project.

(i) The role of mapping agencies and other institutions in the geoinformation technology age need to be redefined or re-engineered.

(j) Lack of mechanism for assessment of the outcome of GIT implementation.

(k) Constraints in data acquisition, accuracy, access and updating.

(l) Lack of information budgeting and implication briefs for all projects.

(m)Lack of national review of available spatial datasets.

(n) Development of web-based self-learning material on spatial data utilisation and SDI advantages.

(o) The need to conduct research and development in the application of geospatial technology in sustainable development.

(p) Need for continuous education and training to keep pace with advances in technology.

(q) Need for Metadata structure.

(r) Lack of cost recovery mechanism (role of private practice participation while NMA coordinates).

(s) Need to establish efficient network for geoinformation development and information exchange.

(t) Lack of enabling technologies (electricity, telecommunication, and computer network) for the implementation of geoinformation.

WORKING GROUPS

11.   Four working Groups were established to discuss in detail the issues identified, as follows:

WG1: Policy and Institutions (issues 1,2,3,6,8,9,10,19)

Members:
- L.L. Mollel (chairman)
- G.C. Mulaku (rapporteur)
- Abraham Mnzava
- Alioune Ka
- Abdullah Yusuf
- Joseph Mama
- O. Nino-Fluck
- "Dozie" Ezigbalike
- P.O. Adeniyi
- Muftah Unis

WG2: Data Issues (issues 4,5,11,13,17)

Members:
- Sami Faïz, Tunisia (Chair)
- Gottfied Konecny, Germany (Rapporteur)
- Benjamin Akuetteh, Ghana
- Han Friedeander, Israel
- Hadgu G. Medhin, Ethiopia
- Les Whitney, Canada

WG3: Capacity Building (7,10,14,15,16,20)

Members:
- Michael Collins (Chair)
- Victor Odenyi (Secretary)
- Olajide Kufoniyi
- Yalace Kaboret
- Wilbur Ottichilo
- Desiree Nadaud
- Caxton Matarira

WG4: Economic Issues (issues 6,8,12,18)

Members:
• Jacob Gyamfi-Aidoo (chair)
• Liz Gavin (rapporteur)
• Dick Groot
• Pal Foyn Jespersen
• Helge Donnum

12. The Findings of the Working groups are appended to the report

CLOSURE OF THE MEETING

13. The meeting was closed on 10 November 2000 at 11:45 by the Chairman, Dr. O. Kufoniyi.