1. **Region**: North and Central Western Indian Ocean

2. **Name of IODE Regional Coordinator**:
   
   Name: Mr. Harrison Ong'anda
   Address: Kenya Marine and Fisheries Research Institute, P.O. Box 81651, Mombasa, Code 80 100
   Tel: 254 11 475157, 475151-4, 471129
   Fax: 254 11 475157
   E-mail: honganda@kmfri.co.ke

3. **Roles and Responsibilities of the Regional Coordinator**

   The regional coordination of the IODE activities involves the following:
   
   - Provide a regional co-operative structure linking national oceanographic data centres (NODC)
   - Ensure involvement of national institutions in the IODE Programme
   - Adhere to the IODE data management procedures and ensure the use of standard methods for data collection and storage in the region;
   - Ensure access of scientists in the region to data sets not located in the region including satellite data sets
   - Develop and disseminate data products for the benefit of scientists and policy makers in the region;
   - Establish exchange of data and information with the WDCs Oceanography

4. **National Oceanographic Data Centres**

   Out of the 9 IOCINCWIO Member States in the region (Comores, France (La Réunion), Kenya, Madagascar, Mauritius, Mozambique, Tanzania, Seychelles, South Africa) 7 countries have a Designated National Agency (DNA) or National Oceanographic Data Centre (NODC) as listed below. Establishment of DNA or NODC in Madagascar is underway. Establishment of data centre in Comores is planned under the ODINAFRICA-II project.

   - France: NODC established in 1971
   - Kenya: NODC established in 1996
   - Tanzania: DNA established in 1996
   - Mozambique: NODC established in 1998
   - Seychelles: DNA established in 1997
South Africa  NODC established in 1997  
Mauritius  NODC established in 1999  
Madagascar  NODC established in 2000  

The following support have been provided to the centres by ODINAFRICA project:

- Infrastructure support to data centres: All the data centres listed above received computing equipment for use in data management activities;
- Operational expenses support. The operational expenditure includes purchase of computer consumables and small equipment required at the respective centres;
- Facilitation of internet access. Funds have been provided for full Internet access to centers where this is possible, and to e-mail connectivity. Centers have been encouraged to set up homepages to facilitate information sharing. Countries were asked to further survey ways of enhancing Internet access during the last ODINAFRICA-II planning workshop in Limbe, Cameroon.
- Provision of ASFA to NODCs. Most RECOSCIX-WIO cooperating institutions receive free subscriptions to the ASFA CD-ROM.
- Support for internships. 2 months internships have provided by the US-NODC and the Australian AODC in 1997 and 1999 respectively for staff of the KeNODC.
- Support for a regional coordinator. Mr Mika Odido was hired as a consultant as from March 1999 to take the function of ODINEA regional coordinator;

An evaluation of the project was carried earlier this year the recommendations of which will be considered during discussions on proposal for OINAFRICA-III.

5. **Capacity Building**

Efforts in capacity building touch on the ability to mobilize grants for scientists in the region. During IODE XVI, IODE/TEMA was noted as one of the opportunities for training in the IODE network. Travel and study grants including long and short was emphasized with priority given to developing countries. However there is no specific reports on study grants undertaken during the intercessional period.

Equipment still continues to be a stumbling block for data managers and data centres. IODE XVI called upon endowed centres to donate extra equipment to new and upcoming centres. On this note, new projects should also be sensitive to lack of equipment in most of the countries in the region and make provisions accordingly.

The IODE XVII will discuss the setting of an IODE office in Belgium. The project office is proposed to facilitate IODE work by offering working facilities to visiting IODE experts and to host training programs. It is understood that the Belgian and Flanders government may be willing to host the project office in Oostende, Belgium.

6. **Remote Sensing**

The cost of acquiring satellite images and skills in image interpretation are still major issues in utilizing remote sensing in oceanography. IODE XVII referred this issue to the next IODE officers’ meeting. However it should be noted that GOOS-Africa has developed a comprehensive project proposal on this matter to be presented to potential donors.

There are opportunities in developing high-resolution air-borne remote sensing products that would assist in most of the small scale Coastal Management projects, through use of aerial imagery and appropriate sensors. Subsequent analysis may be carried out using the BILKO software.

To this end regional countries should seek resources for training and equipment on aerial mapping.
7. Status And Future of Research Ship Information and Schedules

One research cruise has been reported to Kenya, the Indian Ocean GOOS cruise. The cruise would commence on October 15, 2002 and ended on November 28, 2002. The IODE-XVI committee recognized the importance of NOPs. Member states are reminded that a ships schedule database is available on the OCEANIC www server, maintained by the University of Delaware (USA).

8. Integrated Coastal Management

IODE-XVII recognized the key role that IODE play in providing information to the ICM processes. IODE should put in place an information base to generate dedicated products and services taking into consideration integration of coastal data and open ocean data.

Some of the capacities required in the region include modelling teams and GIS experts and remote sensing capacities. These particular capacities were also given very strong emphases during the IOCINCWIO-V meeting held in Nairobi, Kenya.

9. Knowledge Portals

Knowledge portals or Internet sites integrating thematic information was identified by UNESCO as one of the solutions to the present knowledge gaps. In this connection, IOC has developed a portal.

Ocean Portal (http://www.oceanportal.org) is a high-level directory of Ocean Data and Information related web sites. Its objective is to help scientists and other ocean experts in locating such data & information. The portal is a single point of entry for all information and for many audiences. It promotes participation by as many stakeholders as possible.

Core subject coverage include:

- **Integrated coastal area management** (managing coastal environments, coastal protection);
- Marine environmental protection (the health of the oceans);
- **Sustainable use and conservation of marine living resources** (harmful algal blooms, monitoring coral reefs, fisheries impact);
- **Acquiring information to predict and manage changes in the marine environment** (global warming, climate change, sea level rise, ocean and weather, ocean observations, data and information management);
- **Ocean related economic forces** (maritime shipping, offshore energy, ocean mapping, recreation and tourism, new industry). Marine related directories etc

Most of the audience targeted in the region has limited exposure to Internet or none at all. The regional countries therefore need to set priorities having in mind the need to acquire leased line Internet connectivity. Most of the national oceanographic institutions need support to install and operate the Internet infrastructure.