Preface

Coastal and marine resources provide the basis for a substantial proportion of economic and social activities in Africa. These include fishing, tourism, offshore mining (including oil and gas), navigation and other industries. Africa, like the rest of the world is experiencing a steady migration of populations to the coastal areas, in search of improved livelihoods and economic opportunities. This has led to intense competition for the use of coastal areas and resources by different sectors of the society. Science-based approaches to sustainable management will ensure equitable solutions.

The stress on the coastal and marine resources originates in: industrial and municipal pollution, coastal change and modification, destructive fishing and over-fishing, invasive species, and global issues such as sea level rise and climate change. These human-driven factors exacerbate natural degradation of coastal resources due to storm surges, droughts, floods and threats to the availability and use of freshwater. Given that the lives and livelihoods of much of the coastal population are dependent on coastal and marine resources, conserving and sustainably managing these resources is essential for social and economic development and in efforts towards poverty alleviation in Africa.

The availability of reliable, up-to-date, accessible data and information is essential as a basis for integrated and sustainable management of coastal and marine environment and resources. Indeed, the shortage of such data and information has been and continues to be a major constraint to sustainable development in coastal and marine areas in Africa. The Johannesburg Plan of Implementation approved in 2002 as a major outcome of the World Summit on Sustainable Development (WSSD) places great emphasis on the need to obtain information about the environment as the basis for monitoring its behavior and forecasting the effects of environmental change, so as to provide decision makers with the tools they need to improve and sustain development and to mitigate or reverse undesirable trends or effects.

An increasing number of initiatives, supported by national governments and international partners, to address coastal and marine resource management in an integrated manner have been launched in Africa in recent years. However the data and information generated from these projects and programmes remain virtually inaccessible to marine scientists and resource managers though they are in the publicdomain.

The Ocean Data and Information Network for Africa (ODINAFRICA) brings together more than 40 marine related institutions from twenty five countries in Africa (Algeria, Angola, Benin, Cameroon, Comoros, Congo, Cote d'Ivoire, Egypt, Gabon, Ghana, Guinea, Kenya, Madagascar, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Senegal, Seychelles, South Africa, United Republic of Tanzania, Togo, and Tunisia). With the support of the Intergovernmental Oceanographic Commission of UNESCO (United Nations Educational, Scientific and Cultural Organization) and the Government of Flanders (Kingdom of Belgium) the network has strived to address the challenges faced in ensuring that ocean and coastal data and information generated in national, regional and global programmes are readily available to a wide range of users in an easily understandable format.

Each of the participating institutions has developed a suite of data and information products including: directories of marine and freshwater professionals, catalogues of marine related data sets, marine species databases, library catalogues, and catalogue of marine related publications from or about Africa. ODINAFRICA made substantial contribution to the development of the African sea level network, which currently comprises more than 40 tide gauges installed and maintained by several organizations, including national agencies and international programmes. The African Marine Atlas (www.africanmarineatlas.net) developed in collaboration with the African Coelacanth Project (ACEP), and the United Nations Environment Programme (UNEP) provides access to maps, images, data and information to a wide range of users.

These are but a few of the products that have been developed by the Ocean Data and Information Network for Africa. The IOC through its continued efforts in capacity development during the last 25 years

has endeavored to put in place at the national level the scientific and technical capabilities necessary to use these resources in the formulation of national policies. New cohorts of young African scientists and technicians are rapidly populating the old science institutions left from the colonial times. New, more modern institutions are emerging and the old ones are being re-invented to serve new needs. Without an autonomous development of science in Africa, the continent will remain reliant on external help and guidance. There is still a long way to go, and significant resources will be needed to achieve a seamless end-to-end system, from scientific facts to policy and management decisions. This said, what has been achieved so far is both refreshing and encouraging.

The Intergovernmental Oceanographic Commission of UNESCO and the Government of Flanders are proud to have been partners in this worthwhile endeavor and look forward to continued collaboration with the Members States from Africa in further development and strengthening of the network so that it continues to provide the data, information and products required for management of the marine and coastal environment and resources for the benefit of the coastal populations of Africa.

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