

The Government of Flanders
The Intergovernmental Oceanographic Commission of UNESCO



OCEANOGRAPHIC DATA AND INFORMATION NETWORK FOR AFRICA (ODINAFRICA)

ANNUAL REPORT 2001

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1. INTRODUCTION

The second phase of the project for development of an Ocean Data and Information Network for Africa (ODINAFRICA-II) project aims at enabling member states from Africa to get access to data available in other data centres, develop skills for manipulation of data and preparation of data and information products, and develop infrastructure for archival, analysis and dissemination of the data and information products. This will ultimately lead to a reduction in situations where decisions are based on scanty information and under pressure of uncertainties, assist in disaster preparedness, and provide information for applied research (fisheries, aquaculture, mineral resources, exploitation levels and potentials etc)

The development of a network of functioning data and information centres which is envisaged by ODINAFRICA-II will address concerns expressed in various regional and international programme as outlined below:

- Provision of Internet access to marine scientists in Africa;
- Providing assistance in the development and operation of National Oceanographic Data Centres and establish their networking in Africa;
- Providing training opportunities in marine data and information management applying standard formats and methodologies as defined by the IODE;
- Assist in the development and maintenance of national, regional and Pan-African marine metadata and data holding databases;
- Assist in the development of marine data and information products responding to the needs of a wide variety of user groups;
- Reinforce the RECOSCIX-CEA and RECOSCIX-WIO networks as mechanisms for the dissemination of marine data and information to various user groups in Africa;
- Assist in the development of linkages with other international projects with similar objectives (eg GOOS-Africa; Gulf of Guinea LME, etc)

The implementation of the second phase of ODINAFRICA was re-scheduled due to delays in transfer of the funds to the Intergovernmental Oceanographic Commission of UNESCO. Though it had been envisaged that the project would commence in May 2000, it was not until August that the funds were transferred to UNESCO. Due to the already tight schedule planned for the second half of the year, including the sixteen session of IODE and the final workshop for the Ocean Data and Information Network for Africa it was not possible to start the implementation of planned activities. The coordinators, in consultation with the participating institutions decided to defer the commencement of the project to January 2001. Consequently all the activities planned for 2000 were moved forward.

During the year 2001, a total of about USD577,429 was used out of planned USD 779,045 (USD971,570 was initially budgeted for 2000 and 2001 combined). The second ODINAFRICA II planning workshop, was held at the the Mbagathi Campus of the Kenya College for Communications Technology, Nairobi, Kenya from 14-17 November 2001 and attended by ODINAFRICA National Coordinators from: Benin, Cameroon, Comores, Cote D'Ivoire, Ghana, Guinea, Kenya, Madagascar, Mauritania, Mauritius, Mozambique, Nigeria, Senegal, Seychelles, South Africa, United Republic of Tanzania, Togo, Tunisia. There were also invited experts from Belgium and United States of America who have been providing capacity building support for both data and information management for the project. The participants reviewed the implementation status of the project and adopted work plan and budget for the year 2002. The Director of Kenya's National Environment Secretariat Dr B. K'Omudho officially opened the meeting on behalf of the Minister for Environment Hon Noah Katana Ngala. The opening was also attend by the Director of UNESCO Nairobi Office Dr Paul Vitta, and the Director of KMFRI Dr Johnson Kazungu.

2. ACTIVITIES PLANNED FOR 2001

The ODINAFRICA Work Plan for 2001 was revised by the coordinators (Mika Odido-IOCINCWIO, Sekou Cisse-IOCEA, and Peter Pissierssens- Head of Ocean Services IOC-UNESCO) at their meeting from 15-19 January 2001 in Mombasa, Kenya. The new work plan was based on the decision of the first ODINAFRICA planning workshop (Dakar, Senegal 2-5 May 2000) but reviewed in view of the delayed arrival of funds in late 2001. The coordinators considered the uncertainties that continue to plague the RECOSCIX-CEA RDC and recommended that the arrangements worked out last year, and endorsed by the IOCEA Chairman, in which RECOSCIX-WIO RDC would provide the information services for all ODINAFRICA-II Partner institutions would remain in place until the 2001 ODINAFRICA Review workshop where this matter will be re-evaluated.

The coordinators agreed on the re-design of the ODINAFRICA website to cater better for both the partners and other potential users. IOI-SA will be contracted to prepare artwork for the site and train personnel to develop and maintain the site. The site will have the following sections: news (home page), electronic library, directory of marine & freshwater professionals from Africa, African OceanPilot, activities and events in Africa, and a project management sub-site (access to Partners only). The site will be updated regularly (at least monthly). A web team comprising four people was established composed of Esther Fondo, Eunice Ongyango, Clive Angenyi and Sam Ngete. The team working under the supervision of the Regional Coordinators will also be responsible for preparation of the WINDOW printed newsletter. The scope of WINDOW will also be expanded to encompass the whole continent. WINDOW will be targeted at a wide audience that may not have Internet access (most of the African general public). Its content will be obtained by selecting the most important, low time-sensitivity, items. WINDOW will continue to be published 3 times a year (in English and French). The regional coordinators will actively canvass content from all African Partner countries. Furthermore strong linkages will be established with other organisations in the region like WIOMSA, SEACAM, IOI and COI, as well as with projects such as the GoG, GOOS Africa, WIOMAP, GEF MSP etc.

The coordinators recommended that the data and information centres participating in the project use a uniform equipment configuration. Purchase of the equipment will be either through local suppliers or the UNESCO suppliers depending on price and availability. The Coordinators prepared Guidelines on UNESCO regulations governing contracts (based on the UNESCO Manual) for circulation to all participating institutions to assist them in preparing their accounts. In order to clarify administrative procedures and to assist Member States with the discussions at the National Coordination Workshops where the hosting of National Oceanographic Data Centres or Designated National Agencies will be decided, the coordinators decided for the IOCEA Regional Coordinator, Dr Sekou Cisse, to undertake a mission to a number of ODINAFRICA-II Partner countries in February 2001. The possibility of institutions advancing funds and getting reimbursement from the local UNESCO or UNDP offices was considered. A circular detailing this option will be circulated to all participating institutions. Due to late arrival of the ODINAFRICA-II funds for the year 2000, the activities initially planned for 2000 had to be moved to 2001. These include the national coordination workshops and delivery of data and information centre equipment. Several activities planned for 2001 were also shifted to 2002. These include development of data archives for the IOCEA centre and Comores.

The coordinators considered the offers from Tanzania, Kenya and Mauritius to host the second ODINAFRICA-II review workshop. A decision on the venue was deferred pending the working out of details of relative costs of hosting at each venue. However the date was set for 19-23 November 2001. The coordinators also recalled the offers of Mauritania and Morocco during the first planning workshop to host training courses for the IOCEA region. It was agreed that contacts would be made with the two member states to follow-up on these offers. The data management training workshop was scheduled for 2-13 April 2001, and the information management workshop for 20-30 August 2001. The coordinators recommended that means be explored to enable some IOCINCWIO marine information managers to attend the course so as to train on the use of ABEKT software.

ODINAFRICA WORK PLAN FOR 2001

January	<ul style="list-style-type: none"> • Provision of data management hardware and software for established data centres (NODCs, DNAs) in Comores, Ghana, Guinea, Mauritania, and Nigeria • Request established data centres to identify information centres, preferably in the same institution • Further development of ODINAFRICA-II/IODE Resource Kit • RECOSCIX contracts (operational, WINDOW, Afridir, Document Delivery, web services training) • Circular Letter to Partner institutions clarifying possible funds provision arrangements; Circular Letter to Partner institutions on contractual rules and procedures • Circular to Partner institutions to identify hosts for the 2001 Data Management Workshop (April 2001), Information Management Workshop (August 2001) and Review Workshop (November 2001)
February	<ul style="list-style-type: none"> • Mission ODINAFRICA-II IOCEA Regional Coordinator to IOCEA member states • Provision of information management hardware and software for established information centres (Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, Tanzania) • Distribution of ABEKT Integrated Library Management Software to established information centres (Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, Tanzania) • National coordination meetings (Benin, Cameroun, Gabon, Mauritania, Senegal, Tunisia, Togo, Comores) • Operational expenses support for established data centres (Comores, Ghana, Guinea, Morocco, Nigeria) • Operational expenses; development and maintenance of national/regional data archive; support for development of data and information products; public awareness creation on the project services and products (Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, Tanzania). Note that support for development of data and information products, and public awareness creation will be provided on the basis of defined deliverables. • GODAR participation (repatriation of IOCEA and IOCINCWIO data from former USSR institutions).
March	<ul style="list-style-type: none"> • Provision of hardware and software for new data centres (Benin, Cameroun, Gabon, Morocco, Senegal, Togo, Tunisia). Note: support will be provided only when official letters of formal establishment of National Oceanographic Data Centres or Designated National Agencies have been received by the IOC.
April	<ul style="list-style-type: none"> • Operational expenses data and information centres; development of national and regional meta databases (Benin, Cameroun, Comores, Cote d'Ivoire, Gabon, Morocco, Senegal, Togo, Tunisia). • Regional data management workshop for the IOCEA region (and MED Partners)
May	<ul style="list-style-type: none"> • Regional data management workshop follow-up (M. Brown)
June	<ul style="list-style-type: none"> • Provision of hardware and software for information centres (Benin, Cameroun, Comores, Gabon, Morocco, Senegal, Togo, Tunisia).
July	<ul style="list-style-type: none"> • RECOSCIX Document Delivery 2nd semester
August	<ul style="list-style-type: none"> • Regional Information management workshop (IOCEA and MED- with possible participation of IOCINCWIO librarians)
September	<ul style="list-style-type: none"> • Regional Information management workshop (IOCEA and MED- with possible participation of IOCINCWIO librarians)
October	
November	<ul style="list-style-type: none"> • Annual Project Review workshop • Renewal of ASFA subscriptions

Note: Côte d'Ivoire cannot be provided with any support until the outstanding legal issues with CRO have been resolved. Accordingly CRO is currently not included in the 2001 work plan.

The coordinators met with the Director of Kenya Marine & Fisheries Research Institute, Dr. J. Kazungu, at the end of the session to brief him on the progress of the ODINAFRICA-II project as well as the plans for the coming year. They once again expressed thanks to KMFRI for the considerable support it has continued to provide to the project including office space and staff. In order to improve the working environment of the staff, the coordinators proposed that the ODINAFRICA Regional Coordinator/IOCINCWIO and Mr Pissierssens explore the possibility of renovating the RDC offices within resources available. The Director of KMFRI reaffirmed his institutions commitment to the success of the ODINAFRICA project.

3. ODINAFRICA IMPLEMENTATION STATUS

3.1 IOCEA REGIONAL REPORT

Les conditions d'exécution étaient les mêmes du point de vue de l'assistance du projet aux partenaires nationaux que sont les institutions participant au projet. Elles étaient assorties de conditions spécifiques à chacun des Etats membres .

3.1.1 Ateliers nationaux ODINAFRICA

L'allocation financière sous forme de contrat s'adressait aux Etats membres qui ne disposaient pas de Centres Nationaux de Données Océanographiques (CNDO) avant le lancement du projet ODINAFRICA. La fourniture de cette allocation a permis aux pays suivants de tenir leurs ateliers nationaux de désignation des CNDO : Cameroun, Togo, Bénin, Mauritanie, Sénégal (contrat signé , en attente d'organisation de la réunion). La Tunisie a organisé son atelier sur fonds propre.

A ce jour , le projet ODINAFRICA a aidé la région à porter le nombre de ses CNDO à 09 alors qu'elle n'en avait que 4 au démarrage du projet. Cette activité sera clôturée très prochainement pour tous Etats membres en attente d'organisation de cette réunion . Ce sont Gabon et Côte d'Ivoire,

3.1.2 Atelier de formation en gestion des données marines

Le premier atelier de formation à la gestion des données marines s'est tenu à Casablanca (Maroc) du 30 mars au 13 avril 2001 .

Quatres volets constituent les fondements de la formation (1^{er} niveau) pour doter chacune des institutions partenaires ODINAFRICA de gestionnaires de données marines. Ce sont :

1. formation théorique à la compréhension des concepts utilisés dans le domaine de la gestion des données et relations entre les structures de gestion des données;
2. Manipulation des techniques d'installation de logiciels de gestion de données notamment Ocean Data View, Medi Pilot ; Surfer ;
3. Exercices pratiques d'utilisation de logiciels cités plus haut et de traitement des données marines notamment l'importation et l'exportation de données, interprétation et élaboration de cartes,
4. Utilisation des facilités Internet.

Un timing de travail et de suivi a été donné par les formateurs pour permettre un suivi des différents auditeurs à partir de leurs pays respectifs;

Les auditeurs de la région IOCEA étaient constitués de participants du Cameroun, Bénin, Ghana, Guinée, Maroc, Mauritanie, Nigéria, Sénégal, Togo , Tunisie. Le Gabon et la Côte d'Ivoire sont les Etats Membres qui n'avaient pas d'auditeurs à cet atelier.

Il y a lieu de signaler que le suivi des gestionnaires de données n'a pas encore atteint le niveau attendu par le Chargé de Formation eu égard à la faiblesse de la communication par courrier électronique au niveau des CNDO et du temps mis pour la familiarisation avec le nouvel équipement.

3.1.3 Fourniture d'équipement , de logiciels et d'accessoires :

Comme prévu par le planning, la fourniture d'équipement informatique constitué de :

- trois micro-ordinateurs Multimédia et Pentium ;
- deux imprimantes à jet d'encre laser ;
- un scanner ;
- trois onduleurs ;
- trois stabilisateurs
- trois multi-prises

a été opéré en faveur de tous les Etats membres de la région , exception faite pour la Côte d'Ivoire et le Gabon. Deux fournisseurs principaux ont collaboré à la réalisation de cette activité, ce sont DAN Office (pour les francophones) et PLANSON (pour les anglophones).

3.1.4 Allocations des frais de dépenses d'opération :

La mise à disposition des frais d'opération est un contrat de financement d'activités que le projet accorde à une institution partenaire pour aider à améliorer le fonctionnement global du CNDO. Cette activité a connu un certain retard au niveau de plusieurs Etats membres du fait des spécificités d'organisation de la réunion de désignation du CNDO d'une part et de la soumission de la requête en dehors du délai normal de déroulement des procédures administratives de libération des fonds d'autre part. A ce jour les Etats membres ayant bénéficié de cette allocation sont : le Cameroun, le Bénin, la Guinée, la Mauritanie, le Nigéria, la Tunisie, le Togo. Le Ghana ayant tardivement proposé l'estimation de son budget d'opération n'a pas encore bénéficié de cette allocation.

3.1.5 Autres activités liées au projet

Dans le présent document, sont considérées comme autres activités liées au Projet, les actions initiées dans la région IOCEA dans le cadre du RECOSCIX et dont l'achèvement a été réalisé au cours de la période impartie au projet ODINAFRICA . Elles portaient sur le désenclavement des centres d'information marine des institutions partenaires et l'acquisition d'ouvrages académiques et d'abonnement aux revues scientifiques . Elles devraient être exécutées avant fin décembre 2000.

3.1.6 Désenclavement (acquisition de moyens de communication)

Cette action avaient porté sur des offres d'acquisition de moyens de communication constitués de :

- un abonnement annuel à Internet ;
- une ligne téléphonique nationale ;
- un modem

Peu d'Etats membres avaient requis ces offres dans le délai imparti. Ce sont le Cameroun, la Guinée, le Sénégal et le Togo.

3.1.7 Abonnement et commandes d'ouvrages

Les pays de la région ayant soumis les requêtes sont le Cameroun, le Sénégal et la Guinée.

3.1.8 Missions de Consultation ODINAFRICA

Au cours de l'année, le Coordonnateur Régional a effectué des missions de consultation prioritairement auprès des Etats membres en attente d'organisation des réunions de désignation des CNDO. Ceci dans le but de :

- prendre contact avec les autorités des institutions partenaires pour harmoniser les compréhensions sur les mécanismes et actions à réaliser dans le cadre du projet ;
- s'assurer du soutien et de l'assistance des autorités à la réalisation des objectifs du projet ;
- évaluer le niveau de mise en œuvre du projet à travers les actions initiées ;

- procéder à des séances de travail avec le staff potentiel des futurs CNDO pour aider à une meilleure compréhension des actions à réaliser dans le cadre du projet ;
- procéder à une revue des préparatifs des ateliers nationaux et avoir une connaissance de quelques potentialités de l'institution (données et information marines disponibles, staff, équipement) ;
- recueillir les remarques et suggestions des autorités, du staff.

Les Etats membres suivants ont reçu la visite du Coordonnateur Régional (février-mars 2001): Bénin, Sénégal, Togo , Ghana (mai 2001) , Gabon (octobre 2001) . Tous les Coordonnateurs des pays visités ont exprimé au terme des séances de travail que cette action était nécessaire à plusieurs points de vue. Une mission de consultation sur la relance des activités ODINAFRICA en Côte d'Ivoire avait été réalisée en mai 2001. Pour des raisons de calendrier , la période de visite des autres Etats membres sera fixée ultérieurement.

TABLEAU RECAPITULATIF DES ACTIONS PLANIFIEES EXECUTEES PAR ETAT MEMBRE

PAYS	Atelier National de désignation de CNDO	Atelier de Formation en Gestion de Données	Acquisition d'équipement et accessoires	Atelier de Formation en Gestion d'Information Marine	Dépenses d'Opération des CNDO
Bénin	X	X	X	X	X
Cameroun	X	X	X	X	X
Côte d'Ivoire					
Gabon				X	
Ghana	CNDO avant ODINAFRICA	X	X	X	En attente
Guinée	CNDO avant ODINAFRICA	X	X	X	X
Maroc	CNDO avant ODINAFRICA	X	X	X	RNF
Mauritanie	X	X	X	A préciser	X
Nigeria	CNDO avant ODINAFRICA	X	X	X	X
Sénégal	En attente d'organisation.	X	X	X	
Togo	X	X	X	X	X
Tunisie	X fonds propre	X	X	X	X

3.1.9 CONTRAINTES

Contraintes de report d'exécution des deux dernières activités planifiées pour 2001 Compte tenu

- des retards spécifiques liés à la livraison de l'équipement destiné aux CNDO ;
- du temps requis pour une familiarisation avec les équipements et les logiciels à utiliser ;

il a été estimé que dans la région IOCEA on ne pouvait exécuter efficacement au titre de 2001, les deux dernières actions planifiées (Développement des métadonnées, bases de données et Sensibilisation /conscientisation du public). Cela a généré une contrainte de report

Contrainte de mise à jour par action non exécutée par quelques Etats membres

Ici, il y a lieu de discerner deux types de rattrapage :

1. Etat membre n'ayant pas exécuté une action postérieure à la désignation de son CNDO cas du Sénégal , Ghana , Maroc .
2. Etat membre n'ayant exécuté aucune action planifiée pour 2001 cas du Gabon et de la Côte d'Ivoire.

Pour ce qui concerne le Sénégal, le report de la date de l'atelier national de désignation du CNDO est à notre avis la raison fondamentale qui a empêché le Sénégal de formuler la requête d'assistance pour les dépenses d'opération de son CNDO.

Concernant le Ghana, des changements intervenus au niveau de la coordination nationale ODINAFRICA a été à la base d'une formulation tardive de la requête portant sur les dépenses

d'opération. Le Maroc du fait d'un empêchement prolongé du Coordonnateur National n'avait pu formulé de requête relative.

Contrainte de rattrapage d'actions exécutées au cours de la première année du Projet

Ce type de contrainte ne concerne que le Gabon (exception faite pour sa participation à l'Atelier de Formation à la Gestion de l'Information Marine) et la Côte d'Ivoire qui n'ont pu prendre part à aucune activité au cours de cette première année du Projet. Au cours de la mission de consultation du Coordonnateur Régional à Libreville (octobre 2001), il lui avait été donné de savoir que préalablement, le Coordonnateur National avait fait des efforts de concertation. Une réunion préparatoire tenue à Libreville avait permis d'informer davantage sur le projet et de constater la volonté d'implication de différentes institutions gabonaises dans les activités du projet.

Contrainte générale de mise à jour

Elle porte sur une mise à jour générale de tous les CNDO de la région. Globalement, le suivi des gestionnaires de données se réalise avec un certain nombre de difficultés : difficultés de communication, retard dans les réponses, absence de réponse quelquefois. Une mise à jour des différents répertoires des experts et des institutions des Sciences de la Mer constitue également un autre impératif. Les abonnements et commandes d'ouvrages initiés sont à mettre à jour par les institutions nationales partenaires ODINAFRICA pour atteindre l'objectif d'amélioration du fonds documentaire des centres d'information.

Au terme de cette première année de projet, on se doit de remercier les bailleurs de fonds Gouvernement des Flandres et la COI pour l'assistance fournie. Aussi, ne doit-on pas encourager la collaboration opérée dans le cadre du projet et apprécier les résultats générés. Une participation encore plus active des Etats Membres conduirait à de meilleurs résultats pour 2002.

3.2 IOCINCWIO REGIONAL REPORT

3.2.1 National coordination workshop

The Comores national coordination workshop was held from 15-16 March 2001. The Centre National de Documentation et de Recherche Scientifique was confirmed as the National Oceanographic Data and Information Centre during the workshop. Subsequently Mr. Ahmed Abdoukarim participated in the ODINAFRICA Data Management training course held in Rabat, Morocco from 2-14 April 2001, Morocco. In addition, Mrs. Echata Abdou attended the marine the information management course scheduled held at the Research Aquarium, Directorate of Marine & Coastal Management, Cape Town South Africa from 29 October – 9 November 2001. Mauritius also held a national coordination workshop using funds allocated for public awareness.

3.2.2 Operational activities contracts

Contracts for operational expenses and development of data archives have been processed for data centres in Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa and Tanzania. In the case of South Africa there were delays due to uncertainty in mode of transfer of funds to the centre. This was finally clarified and the contract is now being processed. There were also delays in processing contract for Comores due to delays in submitting of work plan and budgets, and inclusion of unclear items in the budget.

The amount unspent under this item was as follows: Madagascar (US\$400), Mauritius (US\$2100), Seychelles (US\$2400) and South Africa (US\$4700).

3.2.3 Delivery of Information and Data Centre equipment

Information centre equipment and software was delivered to the centres in Comores, Kenya, Madagascar, Mauritius, Seychelles, South Africa and Tanzania. Comores in addition received equipment for its data centre. South Africa identified the Directorate of Marine & Coastal Management as the information centre.

The situation regarding the continued participation of Instituto Investgacao Pesqueira (IIP) as the information centre in Mozambique remains unclear. In the mean time Instituto Nacional da Hidrografia e Navegacao (INAHINA) which is already the National Oceanographic Data Centre (CENADO) will take on the responsibilities of the information centre. Delivery of equipment for the Mozambique information was therefore deferred pending further consultation.

3.2.4 Data and Information products contracts

Contracts for development of data/information products and publicity/public awareness were processed for Kenya, Madagascar, Mauritius, Mozambique and Tanzania. Activities which will be implemented within the framework of these contracts include:

- publication of brochures, information sheets, data summaries, calendars;
- organisation of and meetings/seminars
- lectures to educational institutions
- consultation visits to key government officials

KeNODC commenced an up-date of the African Publications database-AFRIPUB. This data base contains bibliographic information on aquatic science and fisheries documents published in/about Africa. An additional 1500 records are expected by end November 2001.

CENADO is coordinating two studies: i) evolution of the bottom topography of Zambezi river delta, and ii) seasonal variation of currents, sea levels, salinity and other hydrographic parameters along the Mozambican coast.

The amount unspent under this item was: Madagascar (US\$400), Mauritius (US\$1800), Seychelles (US\$3600), and South Africa (US\$3600).

3.2.5 Marine Information Management Training Course

The Marine Information Management training course was held from 29 October- 9 November 2001 at the Research aquarium of the Directorate of Marine & Coastal Management in Cape Town South Africa. The course was attended by trainees from (Comores, Gabon, Ghana, Guinea, Kenya, Madagascar, Mauritius, Morocco, Mozambique, Senegal, Seychelles, South Africa, Tanzania, Togo and Tunisia) as well resource persons from IAMSLIC, GE-MIM, MINDEX, and IOC secretariat. The trainees had very varied backgrounds – some with very high qualifications, and others basic skills for managing libraries and no previous training. Language used (English) was a problem to some of the participants. The first week of the course focused on basic skills in Marine Information Management, including introduction to Information Technology. The second week was dedicated to developing library catalogues using the INMAGIC which is an Integrated Library Management Software. The dates for the next MIM training course was tentatively set for April 2002, and Mauritania, Mauritius, Tunisia, and Tanzania offered to host it. Three types of follow-up support for the information managers were agreed on: i) general support by Mrs Pauline Simpson (SOC/NOL, UK), (ii) INMAGIC Technical support by Ms Bella Odendaal, from MINDEX, South Africa, and (iii) Catalogue building support by Ms Josette Confait of Seychelles Fishing Authority, Seychelles. Ms Confait will also carry out quality control for all the information centres. The quality controlled records will be merged and loaded on the IOC web server.

3.3 ODINAFRICA INFORMATION SERVICES CENTRE REPORT

The ODINAFRICA Information Services Centre located at Kenya Marine & Fisheries Research Institute (KMFRRI) in Mombasa, Kenya has the following objectives:

- Provide marine scientists in Africa with the necessary bibliographic and scientific literature;
- Make full use of the scientific literature available in Africa;
- Promote and facilitate communication between marine scientists in Africa;
- Promote and facilitate communication in Africa and other regions;
- Promote the scientific activities of the marine and coastal scientists within and outside Africa and
- Provide scientific information, software and training to make full use of this information.

3.3.1 Query Handling

The project provides bibliographic search services using the Aquatic Sciences and Fisheries Abstracts (ASFA) database either on CD-ROM or the Cambridge Scientific Abstracts (CSA) Internet Database Access. This service is now mainly for KMFRRI scientists since most of the institutions in Africa have now subscribed to the Aquatic Sciences & Fisheries Abstract (ASFA) CD ROM through the Low Income Food Deficient Countries (LIFDC) programme funded by FAO (Food and Agriculture Organization) and IOC-UNESCO. 26 institutions in Africa are now receiving the ASFA CD ROM.

3.3.2 AFRICurrent

This is a Current Awareness (CA) service. ODINAFRICA information service has subscribed to the journals listed below:

- | | |
|---|--|
| 1. African Geo-Science Review | 17. JMBA Journal of the marine Biology Association of U.K. |
| 2. Applied Ocean Research | 18. Journal of Fish Biology |
| 3. Aquaculture Research | 19. Journal of Marine Research |
| 4. Aquatic Microbial Ecology | 20. Journal of Oceanography |
| 5. Botanica Marina | 21. Journal of Plankton Research |
| 6. Bulletin of Marine Science | 22. Journal of Waterway Port Coastal & Ocean Engineering |
| 7. Coastal Engineering | 23. Limnology and Oceanography |
| 8. Coral Reefs - Journal of the Int. Society for the Coral Reef Studies | 24. Marine and Freshwater Research |
| 9. Crustaceana - International Journal of Crustacean Research | 25. Marine Chemistry |
| 10. Current Contents: Agriculture, Biology and Environment | 26. Marine Policy |
| 11. Estuarine Coastal and Shelf Science | 27. Marine Ecology – Berlin |
| 12. Fish and Fisheries | 28. Marine Resource Economics |
| 13. Fisheries Management and Ecology | 29. Nature |
| 14. Fisheries Oceanography | 30. Ocean and Atmospheric data Management |
| 15. Indian Journal of Fisheries | 31. Oceans and Coastal Management |
| 16. Indian journal of Marine Science | 32. Regional Environmental Change |
| | 33. Science |

In addition it has access to other journals available at the KMFRRI library. Every month the contents tables of the issues received sent to the co-operating institutes and libraries in Africa as the AFRICURRENT. Each issue of the “Current Contents” is scanned for articles of interest by the project staff, and reprints are requested from the authors and once these arrive they are entered in a database. Since February 2001, some 432 reprints have been received.

3.3.3 Document Delivery

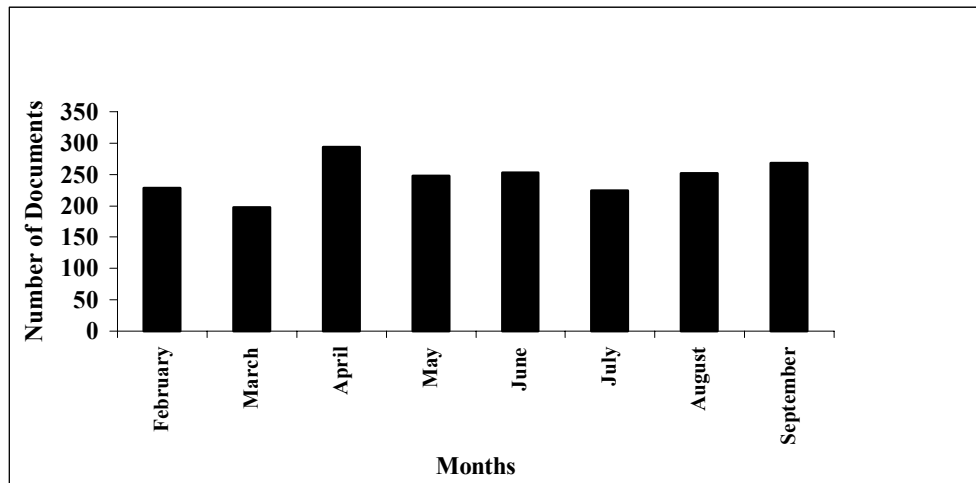


Fig. 2: Number of documents delivered by the ODINAFRICA project monthly

The project provides a Document Delivery service to marine scientists in Africa. The documents are sourced through a network of marine science libraries worldwide. These include Limburg Universitair Centrum (Belgium), IFREMER (France), Fresh Water Institution (Canada), the National Museum (Kenya), the National Institute of Oceanography (India), FAO Fisheries Branch Division (ITALY), University of Nairobi (Kenya), the International Centre for Insect Physiology and Ecology (Kenya), International Centre for Living Aquatic Resources and Management (Malaysia), Southampton Library (UK), Oregon State University (USA), Rosentiel School of Marine and Atmospheric Science (USA) and the National Centre for Marine Research Library (Greece).

3.3.4 Directory of Marine and Freshwater Institutions and Information Centres in Africa

This is a directory of marine, coastal and freshwater research institutions and information centres in Africa. The directory includes information resources and services of international organisations, regional bodies and national institutions and organizations in Africa. It is intended to provide an up-to-date inventory of national capacities in aquatic information resources. The database is accessible on the ODINAFRICA web site and the project's Information Centre is currently updating the records. At the moment there are 284 institutions in the directory widely distributed in Africa as shown in Fig. 1.

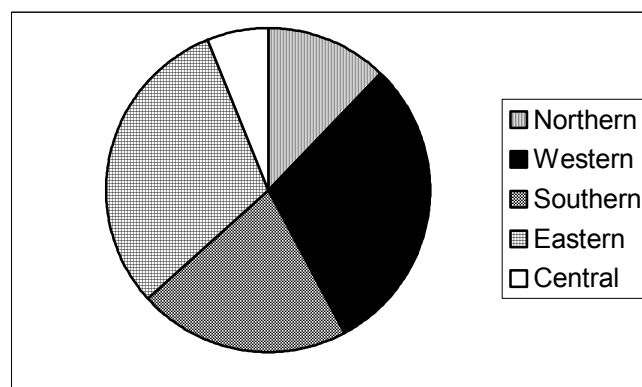


Fig. 1: Regional distribution of marine and freshwater research institutions and information centres in Africa.

3.3.5 AFRILib

ODINAFRICA aims at making library materials of the marine science libraries in Africa accessible locally through the creation of a collective catalogue of library holdings of institutions participating in

the project. Through this service, it has become possible for example to access materials stocked by the libraries. This format has thus widened the information pool available to the scientists in Africa.

The total holding in the AFRILIB database is now approximately 10,430 records from 5 libraries (Kenya Marine & Fisheries Research Institute and University of Nairobi (Kenya); Albion Fisheries Research Centre (Mauritius); Seychelles Fishing Authority (Seychelles); and Institute of Marine Sciences (Tanzania).

3.3.6 AFRIPub

This database of publications about marine and freshwater science in Africa has steadily grown with the rise in the number of institutions and libraries collaborating with the Project. Under the RECOSCIX-WIO Project, the precursor of ODINAFRICA Project this database was called the Western Indian Ocean Publications (WIOPUB). The WIOPUB database was originally developed for the purpose of compiling information on marine science documents published about the WIO Region. ODINAFRICA took over the maintenance of the WIOPUB database and extended the region of coverage to the whole of Africa. Then the name of the database changed to AFRIPUB. Now the database has a total of 5054 records.

3.3.7 AFRIDir

Progress has been made in up-dating the directory of marine and freshwater professionals in Africa which is part of GLODIR. This includes correction, deletion and addition of records. A circular letter was sent out to all ODINAFRICA institutions by the two coordinators, requesting them to provide up-dated information on their marine science professionals. The database also includes recent publications of the professionals. The database now contains more that 931 records of which 235 are PhD holders, 209 are Msc and over 487 have Bsc and other qualifications (see Table 1).

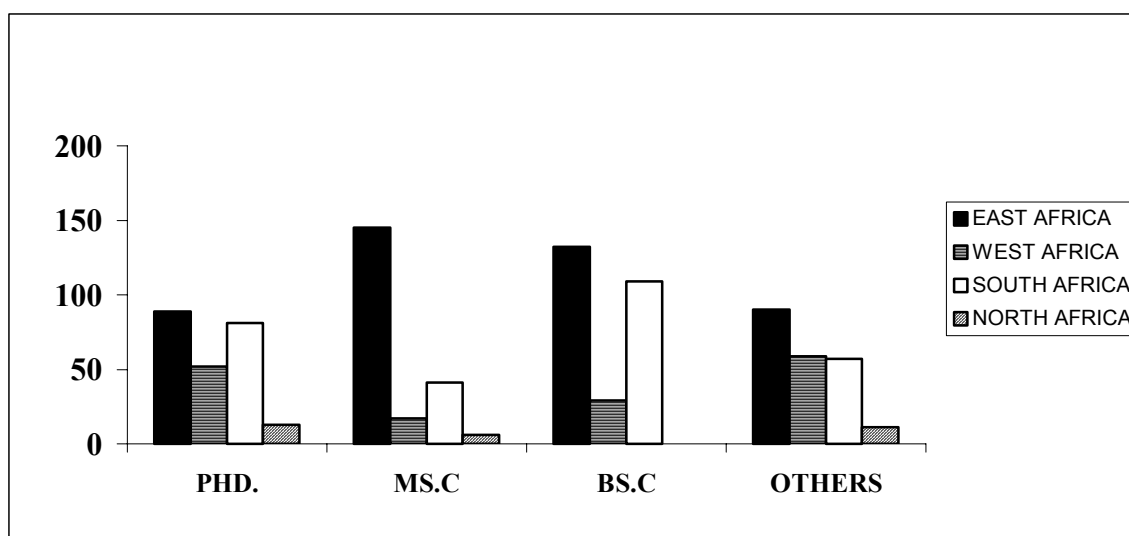


Fig. 4: Distribution of the scientists and their qualifications in different regions of Africa as represented in the Directory of Marine and Freshwater Professionals in Africa (AFRIDIR).

3.3.8 WINDOW

The June 2001 issue of WINDOW was completed and delivered to IOC in May 2001, and September 2001 issue was completed in August 2001 and dispatched to IOC-UNESCO for publication and distribution. However quality of translation and delays printing of the newsletter continues to be a problem that will have to be addressed for continued success of the newsletter. Discussions were held with the Director of Alliance Francaise, Mombasa Ms Isabelle Dange on ways of improving the quality of the WINDOW translation. We are also relying more on the assistance of the ODINAFRICA Regional Coordinator for IOCEA Dr Sekou Cisse. Printing of the newsletter continues to be a problem due to delays at the UNESCO press.

3.3.9 ODINAFRICA website

Training on web-site development was provided to Mr Samuel Ngete and Mr Clive Angwenyi at the International Ocean Institute-Southern African operational centre located at from the University of West Cape in South Africa in April 2001.

The ODINAFRICA website was launched in May 2001 and was very well received. The site, which is up-dated monthly is in two main parts

- public site where information on marine sciences in Africa can be accessed. Databases developed within ODINAFRICA can be accessed: (AFRIPUB- publications on marine sciences from/on Africa, AFRIDIR- directory of marine and freshwater professionals in Africa, MASDEA- Marine species database for Eastern Africa). Several websites with information of interest are also linked to the site.
- The project management portion which provides updates on activities of the ODINAFRICA national oceanographic data and information centres, include reports of training courses and national coordination workshops, help desk where data centre staff can get assistance with management of the project, details of budget allocation etc.

Translation of the information to French has taken longer than anticipated. The number of messages which bounced when the website announcement was sent to GLODIR email addresses revealed a need for up-dating GLODIR. The corrections and up-dates, especially for the AFRIDIR component was undertaken by the ODINAFRICA Information Services Centre.

3.3.10 Participation in ASFA

In 2001 the ASFA input centre at KMFRI, Kenya has submitted a total of 449 records directly to the ASFA publishers Cambridge Scientific Abstract (CSA). Three additional institutions from Africa have joined the ASFA partnership: Centre de Recherches Oceanologiques- CRO (Cote d'Ivoire), Institut National Recherche Halieutique –INRH (Morocco), and Institut National des Sciences et Technologies de la Mer- INSTM (Tunisia). Centre de Recherches Oceanologiques- Cote d'Ivoire submitted records (44) for the first time in 2000. Morocco and Tunisia have not yet begun submitting records mainly because they have only recently been trained, or have yet to receive training. Kenya Marine & Fisheries Research Institute participated in an on-going project to convert records previously available in ASFA in printed format only to electronic format. While KMFRI covered records for 1973, the National Institute of Oceanography in India covered 1974 and the Chinese National Marine Data and Information Services (1972, and 1975-1977).

Through the project for distribution of ASFA CDs to Low Income Food Deficient Countries in Africa, 26 institutions received the ASFA CDs, while an additional 6 have been provided free access to the ASFA Internet Database Services (IDS). The IDS access is not limited to countries in Africa. IOC will liaise with FAO to confirm that all the ODINAFRICA institutions that qualify are receiving the ASFA CDROM. Similarly IOC will check with CSA for IDS access institutions that have requested for it.

3.4 LINKAGES WITH OTHER PROGRAMMES/PROJECT

3.4.1 Joint ODINAFRICA/GOOS AFRICA Workshop

The participants attending the Annual Planning and Review workshop for ODINAFRICA and those attending the GOOS Africa meeting had a joint session on 20 November 2001 to explore opportunities for collaboration. The need to protect the property right of researchers, and the need for institutions to recover costs involved in data collection were identified as some of the hindrances to data and information exchange. Participants suggested that the promotion of a regional marine science journal will provide researchers with an avenue to publish their work, thereby encouraging them to release data that they have already used. However it was pointed out that a report prepared by IOC at the request of IOCINCWIO showed that many journals in the region had failed either due to lack of content, or lack of financial resources. The fourth session of IOCINCWIO had deferred the decision on launching another regional journal because of this.

It was agreed that there is a need to link the capacity building initiatives of ODINAFRICA and GOOS Africa. The “Ocean Teacher” was identified as a useful tool which will benefit a broad marine science community in Africa. The participants emphasised the need for collaboration between ODINAFRICA and GOOS Africa, especially in developing of national networks, capacity building, development of national data and information management plans. Quality control procedures have been built into the ODINAFRICA curriculum for data centre managers. This will ensure that researchers get feedback on the quality of their data and contribute towards the improvement of monitoring systems.

3.4.2 African Process

The African Process for the Development and Protection of the Coastal and Marine Environment which was adopted at the Conference on Cooperation for Development and Protection of the Marine and Coastal Environment in sub-Saharan Africa (December 1998 Cape Town South Africa) was endorsed by the summit of the Organisation of African Unity meeting in Algiers in July 1999. This included the convening of a Partnership Conference to consider concrete action proposals in the form of projects and programmes developed on the basis of priorities identified by the PanAfrican Conference on Sustainable Coastal Management (PACSICOM) held in Maputo, Mozambique in July 1998. A Preparatory Committee was established to guide and coordinate the preparations for the Partnership Conference and its planned activities, including the development of a proposal for a GEF assisted project in support of the preparations for the Partnership Conference.

The GEF project is being implemented in two phases: the objectives of the first phase of the project (Integrated Problem Analysis) was to identify, characterize, and prioritise causes of environmental degradation, as well as hot spots and sensitive areas. This phase initially covered the six countries that are members of the Preparatory Committee for the Partnership Conference (Côte d’Ivoire, Ghana, Kenya, Mozambique, Seychelles, and South Africa), and Nigeria, which holds the presidency of the African Ministerial Conference for the Environment (AMCEN). Another four countries (Gambia, Mauritius, Senegal, Tanzania) have been able to participate in the project thanks to the efforts of UNEP and the GPA Coordinating Office in sourcing additional funds. Comprehensive national reports (covering key issues, sites, impacts and causal chain for each issue—national priorities and other activities at the national levels) were prepared by all the eleven national team.

The second phase of the project will involve the design of a programme of interventions addressing problems of regional priority that may be presented to the Partnership Conference. The proposals for intervention at the regional level should incorporate issues with elements of transboundary, and/or commonality, which could lead to participation of other countries. The framework proposals will be organized along the following “clusters” or “activity themes” based on issues or sectors identified in the first phase: i) Sustainable use of living resources, ii) Coastal Erosion, iii) Pollution, iv) Management of Key Habitats and Ecosystems, and v) Tourism. For each theme (cluster), a working group will be set up, headed by a regional coordinator from one of the pilot countries. The participants recognized the need to share the treasure of information generated by the GEF project. The ACOPS

(www.acops.org) and the ODINAFRICA (www.odinafrica.org) websites were identified as potential vehicles for dissemination of the information.

3.4.3 UNEP Regional Seas Programme

Third meeting of the contracting parties to the Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African region (also called the Nairobi Convention) was held in Maputo, Mozambique, 5th - 7th December 2001 (COP-3). Recognising the importance of communication, information dissemination and networking as tools for any effective management approach, COP3 approved the implementation of a new theme on “Cross Cutting Issues” in its work programme for the next biennium (2002-2003) which comprise of two major components namely: dissemination and exchange of information and emerging issues. The other three themes are: Assessment, Management, and Coordination and Legal Aspects. The goal of the “cross-cutting issues” theme is to position the work programme within the anticipated framework of forthcoming events of great significance to the Nairobi Convention as well as to ensure the dissemination of information resulting from its implementation.

UNEP has assisted countries in the region to develop coastal and marine environment databases and atlas within the framework of the EAF/14 project. The Intergovernmental Oceanographic Commission of UNESCO is also providing support for data and information management through the “Ocean Data and Information Network for Africa (ODINAFRICA). This initiative builds on activities and capacities developed in the projects on “Regional Co-operation in Scientific Information Exchange in Western Indian Ocean (RECOSCIX-WIO) and the “Ocean data and Information Network for Eastern Africa (ODINEA). The effectiveness of these regional programmes and other initiatives to address coastal and marine environmental problems and issues depends on their ability to share information across national, sectoral and disciplinary boundaries. There is therefore, the need for regular exchange of critical programmatic information among individuals and organisations an appropriate management strategy/approach for implementing this work programme.

The objective of this component is to provide information in an easily accessible and understandable format to assist in the decision-making processes for management of the marine and coastal resources.

Activities in this component will be based on the following themes:

I: Assessment

- a) Development of regional monitoring databases, with GIS integration and tools for analysis (some regional initiatives already underway and would be integrated e.g. the UNEP Map server).
- b) Dissemination of monitoring results and recommendations provide feedback to stakeholders, governments, conventions etc. (Mechanisms to be developed);
- c) Support the internet based meta-database on programs, projects and institutions in the region maintained by SEACAM and other regional initiatives;

II: Management

- (a) Development of catalogues of literature, datasets and other marine information sources available in the region
- (b) Development and dissemination of data and information production (such as zonation and sensitivity maps) which will assist in planning and decision-making
- (c) Development and strengthening of mechanisms for information exchange, such as network, information websites, etc.

III: Co-ordination and legal aspects

- a) Organising fora for legal experts and decision makers to exchange information and experiences within the region and with other conventions and programmes

- b) Widely distributing all publications and reports of activities carried out under the Nairobi Convention
- c) Creating a specific website for the Nairobi Convention and strengthening the capacity of focal institutions to access the web site
- d) Strengthening national capacities to collect and disseminate information on relevant legal and regulatory instruments.

In carrying out the identified priority activities and strengthening the joint implementation structures, the Convention will rely on the support of the national and regional institutions and the private sector, as well as United Nations bodies and traditional and non-traditional donors and partners. UNEP, as the Secretariat for the Nairobi Convention, will actively seek collaboration with the Intergovernmental Oceanographic Commission (IOC) of UNESCO through the IOCINCWIO framework particularly in initiating, co-ordinating and implementing activities related to shoreline changes, emerging issues as well as information dissemination and exchange.

3.4.4 Gulf of Guinea Large Marine Ecosystem Project

The Gulf of Guinea Large Marine Ecosystem Project (GOG-LME) Assessment workshop and Steering Committee meeting took place from 14-18 May 2001 in Accra, Ghana. The workshop brought together national experts from countries that took part in the pilot phase including Benin, Cameroon, Cote d'Ivoire, Ghana, Nigeria and Togo. National experts from ten additional countries which are to join the next phase of the project (Angola, Congo, Democratic Republic of Congo, Gabon, Guinea, Guinea Bissau, Equatorial Guinea, Liberia, Sao Tome, Principe and Sierra Leone) also participated in the workshop. There were also experts representing the IOCEA, United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), United Nations Industrial Development Organisation (UNIDO), United Nations Educational Scientific and Cultural Organisation (UNESCO) and the African Development Bank (ADB).

The objectives of the workshop were to review the implementation of the pilot phase of the project and plan for the next phase. Activities implemented were:

A. National Pilot Project

1. Setting up of Marine Protected Areas (Benin).
2. Integrated Marine Coastal Zone Management of Limbe (Cameroon).
3. Application of low cost technologies for measures against coastal erosion (Cote d'Ivoire).
4. Setting up of industrial wastes treatment system (Ghana).
5. Cutting of Nipalm, mangrove afforestation programme in the South East Nigeria region.
6. Pollution control of phosphates mines around Togo Lagoon

B. Regional Projects

- Sustainable management of industrial fisheries resources in the Large Marine Ecosystem of the Gulf of Guinea Current.
- Integrated Management of Data and Information Systems as a tool to assist in decision-making.

The topics that were covered include: Plankton Research, Water quality, Ichthyology and Fisheries, Industrial pollution, Mangrove, Socio-economics, Integrated management of the littoral zone, Coastal erosion, Geographic Information System, Information and Communication Technology, Capacity building. The Steering Committee examined and adopted the intermediate phase project document entitled: FIGHT AGAINST DEGRADATION OF COASTAL ZONES AND THE REDUCTION OF LIVING RESOURCES IN THE LARGE MARINE ECOSYSTEMS OF GUINEA CURRENT which will run for a period of 8 months (July 2001 - February 2002) with a budget requirement of US\$ 1,380,000 consisting of PDF financing of US\$ 695,000 and US\$ 685,000 representing the contributions of the member States from the US NOAA, ADB Scientific Committee of OAU, IOC of UNESCO and IUCN.

The ODINAFRICA Regional Coordinator for IOCEA took the opportunity to discuss explore possible collaboration with the Coordinator for GOG-LME

4. ODINAFRICA ANNUAL REVIEW WORKSHOP

The second ODINAFRICA II planning workshop, was held at the the Mbagathi Campus of the Kenya College for Communications Technology, Nairobi, Kenya from 14-17 November 2001 and attended by ODINAFRICA National Coordinators from: Benin, Cameroon, Comores, Cote D'Ivoire, Ghana, Guinea, Kenya, Madagascar, Mauritania, Mauritius, Mozambique, Nigeria, Senegal, Seychelles, South Africa, United Republic of Tanzania, Togo, Tunisia. There were also invited experts from Belgium and United States of America who have been providing capacity building support for both data and information management for the project (List of participants is Annex I). The participants reviewed the implementation status of the project and adopted work plan and budget for the year 2002. The Director of Kenya's National Environment Secretariat Dr B. K'Omudho officially opened the meeting on behalf of the Minister for Environment Hon Noah Katana Ngala.

Welcoming the participants, Dr Johnson Kazungu, the Director of Kenya Marine and Fisheries Research Institute, expressed Kenya's pleasure in hosting the workshop. He recalled that Kenya has been actively involved in the development of ODINAFRICA and its preceeding projects (RECOSCIX-WIO and ODINEA). Dr Kazungu outlined KMFR's plan to establish an regional marine information centre, which will offer conference facilities in addition to housing the ODINAFRICA Information Services Centre.

On behalf of Dr Patricio Bernal, Assistant Director-General of UNESCO and Executive Secretary of the Intergovernmental Oceanographic Commission of UNESCO, the Head of Ocean Services at IOC Mr Peter Pissierssens welcomed the participants and thanked the Government of Kenya for its kind hosting of the this ODINAFRICA Review and Planning Workshop. Mr Pissierssens emphasised that the ODINAFRICA project is an extremely important undertaking for the IOC as it represents a new direction in the IOC's Capacity Building strategy. Whereas capacity building activities in the past were mostly limited to occasional national or regional training courses, or to donations of equipment, the ODINAFRICA project uses a new strategy which is based on linking training, equipment and operational support. ODINAFRICA is a project implemented by Africa for Africa. All products and services such as the ODINAFRICA web site, the Directories, the Data catalogues and many more are developed and maintained in participating Member States. He assured the participants that all IOC Member States are looking forward to the success of ODINAFRICA. Another region, namely the Caribbean and South America region have already started preparations for the establishment of their ODIN network that will be named ODINCARSA. While inviting Dr K'Omudho to officially open the workshop and deliver the ministers speech, the Director of UNESCO Nairobi Office Dr Paul Vitta reaffirmed UNESCO's commitment to development of Science and Technology in Africa. He welcomed the participants to the workshop on behalf of the Director General Dr Koichiro Matura and wished them a successful meeting.

In his opening speech the Minister for Environment, Hon Noah Katana Ngala pointed out that the relatively low level of computerisation of marine science institutions in Africa has hampered their contribution to the use of the enormous opportunities which information technology provides for addressing the problems of poverty, inequality and environmental degradation. He hoped that the development of an "Ocean Data and Information Network for Africa" will address this problem and assist the institutions with tools to enable them source information for their research work, and to disseminate information necessary for sustainable use of the marine environment and resources for development. While expressing his appreciation to UNESCO-IOC and the Government of Flanders-Belgium for the support that they have provided for implementation of the ODINAFRICA network, Mr Ngala asked the participants to already start thinking of the period beyond the four year project period (2001-2004) so as to ensure that the network that has been established in ODINAFRICA forms the basis of a lasting alliance of marine science institutions that can exchange experiences. He reiterated

Kenya's commitment to the implementation of the programmes of the Intergovernmental Oceanographic Commission of UNESCO and other UNESCO programmes, and said that in spite of the difficult economic situation prevailing in the country, KMFRI will continue availing its facilities and staff for the service of the project, and marine scientists in the whole of Africa.

4.1 Review of ODINAFRICA Implementation Status

Mr Peter Pissierssens, the Head of Ocean Services presented the ODINAFRICA Work Plan for 2001 as was recommended by the coordinators at their meeting in January 2001 in Mombasa, Kenya. The work plan was based on the decision of the first ODINAFRICA planning workshop (Dakar, Senegal 2-5 May 2000) but reviewed in view of the delayed arrival of funds in late 2000. During the year 2001, a total of about USD571000 was used out of an envisaged USD942000 which were initially budgeted for 2000 and 2001. The meeting should also look at future perspectives. Funding will be available for the establishment of Ocean Portals in the next biennium (2002-2003). ODINAFRICA must consolidate its role as the data and information source. Sustainability of the project beyond 2004 is a key issue which should be addressed by the participants. Following presentation of reports by the Regional and National coordinators, the participants reviewed the implementation status of the project and approved work plans and budgets for 2002.

The participants considered the products and services offered by the ODINAFRICA Information Services center located at KMFRI, Mombasa, Kenya. In order to improve the project services the participants recommend that the possibility of accessing full text journals on line be explored, and the use of electronic document delivery be initiated. However internet bandwidth at the centres will be an issue that needs to be investigated at both the regional and national levels.

The participants congratulated the web team for the good work done but noted the slow progress in translation of the site to French. More substantive contribution are also required from participating Member States, including reports, brochures, photographs etc. Participants were requested to offer to assist in the translation of the web site and WINDOW, and strongly urged to send articles for publication.

The participants welcomed the return of Cote d'Ivoire to the project and considered its role of regional information service centre for the IOCEA region, a task it had been implementing during the RECOSCIX-CEA project for some time. The National Coordinator of Cote d'Ivoire reiterated his institution's offer to host the Centre. The participants accepted the kind offer of Cote d'Ivoire and decided to identify funds in the budget for the operation of the Centre. It was further agreed that responsibility for the AFRIDIR, AFRIPUB and other relevant regional information tools would henceforth be shared between the ODINAFRICA Information Services Centres in IOCINCWIO and IOCEA.

4.2 ODINAFRICA Capacity Building Activities

The participants were informed that the trainees in both the data and the information courses had very varied backgrounds- some with very high qualifications and others average. They agreed that basic training (including languages) should be provided locally within the available budgets so as to better prepare the trainees for the regional training courses. Those trained should also train others in their institutions to ensure continuity. The participants called for the re-instatement of internships as these provide opportunities to acquire working experience in well established data and information centres. There is also need to provide training on product development as this is one area which most of the centres have not mastered.

There was concern that the member states which had missed the training sessions would lag behind others. Several options were considered to enable them catch up. These included use of the Resource Kit (with support from the lecturers), organisation of short training courses, and training attachment at some of the institutions participating in the project which are already proficient in implementation of

the agreed on activities. It was agreed that the consultant for data management (Dr Murray Brown) would undertake short hands on training courses in the relevant countries. The meeting was informed that the librarians and documentalists, during the training course in Cape Town, South Africa, had proposed that the next data and information courses be held back to back so as to enable interaction between them and the data centre managers. Participants considered the offers of Mauritania, Mauritius, Tanzania and Tunisia to host the workshops and agreed that a decision will be taken based on a number of practical considerations including available infrastructure, internet access, difficulties in procuring visas etc. The participants requested that the training experts on data management and on information management should compare their programmes and identify a suitable and practical shared component for the planned training courses in 2002. The participants were also informed of the many difficulties experienced by librarians in their institutions, mostly related to the low positions occupied by the librarians in the institutional hierarchy. The participants stressed that the data and information management components of ODINAFRICA are equally important and close collaboration between the data and information experts as well as a strong national support for both components was essential.

In view of the selection of the INMAGIC DB/Textworks software for library management, some participants expressed concern about sustainability of using commercial software. It was pointed out that whilst CDS/ISIS and its ASFISIS (and also FILEMAKER) were suitable for catalogue development they were not library management packages. INMAGIC which has now been adopted for use in the project is an Integrated Library Management Software with a much wider range of functionalities. The software was selected by the IODE Steering Group for the Resource Kit after assessment of a wide selection of available options. The secretariat repeated that software maintenance and support will be provided throughout the duration of the project. Beyond 2003 the costs to the institutions would be approximately USD100/year/institution. The participants were further informed that during the Cape Town workshop, it had been decided to provide three types of follow-up support for the information managers. (i) general support by Mr Pauline Simpson (SOC/NOL, UK); (ii) INMAGIC Technical support by Ms Bella Odendaal, MINDEX, South Africa; and (iii) Catalogue building support by Ms Josette Confait (Seychelles Fishing Authority, Seychelles). Ms Confait will also carry out quality control for all information centres. The quality controlled records will be merged and loaded on the IOC web-server.

The participants mentioned problems which they have had with the MEDI software used at the data management training course held in Casablanca, Morocco in April 2001, and were informed that a new version will be released before the end of the year.

4.3 ODINAFRICA Linkages with IOC Programmes And Other Regional Initiatives

The participants emphasised the importance of close interaction with other programmes and initiatives, especially the African Process, as this is one of the ways of ensuring sustainability of the project. It was agreed that the National Coordinators will make contacts with the national contact points for the African Process in their respective countries so as to discuss the inputs that ODINAFRICA can provide to the process. Participants stressed the importance of ensuring that the ODINAFRICA data centres play an active role in the development of the data and information management plans for the project proposals that are being prepared for submission to the Partnership Conference.

4.4 ODINAFRICA Administration And Management

The participants considered several actions to improve the running of the project. They agreed that the number of contracts made for each institution should be reduced to about three to reduce the administrative paperwork. The participants agreed that terms of reference for the Regional Coordinators would be drafted and circulated to the national coordinators for approval, as a way of improving the management of the project. Several participants noted their Regional Coordinator had not yet visited their institutions. The group recommended that Regional Coordinators visit the institutions under their responsibility once a year to discuss proposals to promote the project to national

authorities. The participants were requested to identify the preferred method of transfer of funds, based on their experiences.

The hitches that arose during the delivery of equipment through UNDP offices were considered and it was noted with concern that UNDP offices may henceforth charge for their services.

The participants discussed at length the actions required to ensure sustainability of the project beyond 2004. This included the possibility of developing data and information products for sale, the sourcing of additional donor funding, provision of data and information management services and products to other projects and initiatives. However they agreed that data should not be given a monetary value and that the current IOC policy on “full and open access” to data should be followed. Products valuable to the whole network, especially those whose production has been funded by UNESCO/IOC should also be freely exchanged.

It was noted that email communication between the now 60 or so contacts (national coordinators, data managers, information managers) was still not very active. It was felt that, to some extent, this was due to the frequent changes in email addresses and/or email systems. In response to these concerns, the secretariat offered to register the domain name odinafrica.net and provide all participants in the project with a unique email address (f.surname@odinafrica.net). The participants accepted the offer and requested the secretariat to do the necessary. The domain was registered and email addresses for the National Coordinators were distributed during the workshop. It was further noted that the new domain would be able to host a mirror of the ODINAFRICA website, as well as national ODINAFRICA (and other institutional) sites (original or mirror).

The participants pointed out that the logistics of travel, including ease with which one can get a visa should be considered in selecting the venue for the next meeting. They welcomed the offer of Cameroun to host the next session from 19-23 November 2002 in Limbe, Cameroun, and congratulated the ODINAFRICA National Coordinator for Cameroun for the very detailed proposal he had submitted in this regard. In his closing remarks the Chairman of the session Mr Harrisson Ong’anda thanked the participants for the thoroughness and dedication with they had addressed the issues. Mr Ong’anda, on behalf of the participants expressed thanks to the Government of Flanders- Belgium, for the generous support they have continued to provide to the project. He expressed the hope that the participants will be able to implement and complete the work plans agreed on before the next session of the planning and review meeting.

5 ODINAFRICA WORK PLANS AND BUDGETS 2002

5.1 National Work Plans and Budgets

The participants prepared national draft work plans and budgets for consideration. These were reviewed by the regional coordinators to ensure that they fall within the acceptable parameters. The participants then discussed the budgets in detail and also agreed upon the joint activities budget.

Activity	Benin	Cameroun	Comores	Côte d'Ivoire	Gabon	Ghana	Guinee
National Coordination Meeting	2000	2000	0	1800	2000	2000	0
Operational expenses	6000	5000	6980	6000	4000	10020	5000
Development of metadatabase	3000	3400	2700	4000	2000	3000	2900
Development of data archives	3000	3700	2000	4000	5400		3600
National workshop on products	3000	3000	3000	3000	3000	3000	3000
Development of products	2000	2500	3500	1800	3600		2400
Public awareness	2000	2500	1800	2400	3600	1800	2400
Internship				2510			
Provision of hardware							
& Software						3000	
TOTAL	21000	22100	19980	25510	23600	22820	19300
Remaining from 2001/2002	24193	24537	19246	39100	39100	26695	22214
Balance	3193	2437	-734	13590	15500	3875	2914

Activity	Kenya	Madagascar	Mauritania	Mauritius	Morocco	Mozambique	Nigeria
National Coordination Meeting	0	0	0	0	0	0	1800
Operational expenses	4000	4700	6200	6500	4000	9000	6000
Development of metadatabase	0	0	2300	0	2000	0	2600
Development of data archives	1700	2000	2700	2000	5400	2700	2700
National workshop on products	4000	0	3000	2500	3000	3000	2300
Development of products	1800	7200	1800	0	3600	1800	2500
Public awareness	1800		3000	4350	3600	1800	1800
Internship							
Provision of hardware		3000					
& Software							
TOTAL	13300	16900	19000	15350	21600	18300	19700
Remaining from 2001/2002	11655	12105	23623	15350	19900	18600	22695
Balance	-1645	-4795	4623	0	-1700	300	2995

Activity	Senegal	Seychelles	South Africa	Tanzania	Togo	Tunisia
National Coordination Meeting	1300	0	0	0	1000	1300
Operational expenses	6500	4000	2700	4400	9000	2500
Development of metadatabase	2600	0	0	0	2500	0
Development of data archives	2700	5100	1700	2700	2700	0
National workshop on products	4099	0	3000	6500	3500	4500
Development of products	3300	1800	3600	1800	4000	6500
Public awareness	1800	6200	0	1800	1500	1800
Internship	6000					
Provision of hardware		3500				
& Software						
TOTAL	28299	20600	11000	17200	24200	16600
Remaining from 2001/2002	28299	17290	21950	11650	24299	26560
Balance	0	-3310	10950	-5550	99	9960

5.2 ODINAFRICA Joint Activities Budget 2002

ACTIVITY	BUDGET
Annual Project Management workshop	65000
Annual project Staffing costs –WIO (Consultant P-3 50% time)	20994
Annual project Staffing costs –CEA (Consultant P-3 50% time)	20994
Development of ODINAFRICA/IODE resource kit	20000
Regional Data Management Workshop	65000
Regional Data Management workshop follow-up (consultant)	20000
Regional Information Management Workshop	60000
Regional Information Management workshop follow-up (consultant)	20000
GODAR participation	15000
Support RECOSCIX-WIO network	16000
Support RECOSCIX-CEA network	16000
Participation in African Process- Abuja and Johannesburg	10000
Project Coordination- travel	20000
Public Awareness (posters, brochures etc)	10000
Support RECOSCIX networks- Document Delivery	14000
Catch up data and information management training (Benin, Cameroun, Cote d'Ivoire, Gabon)	10000
AFRIDIR development-WIO	1000
AFRIDIR development-CEA	2000
AFRIPUB/AFRILIB (QC and Merging)	3000
ODINAFRICA website/WINDOW	7000

6. ODINAFRICA BUDGETS 2000-2001 OVERVIEW**6.1 ODINAFRICA PLANNED BUDGETS 2000-2001.**

	2000		2001		TOTAL IOC	TOTAL FLANDERS	TWO YEAR TOTAL
	IOC	FLANDERS	IOC	FLANDERS			
1.1 Annual Project Management workshop			10000	48600	10000	48600	58600
1.2 Project Staffing and Management	67390	11397	79388	21795	146778	33192	179970
2.1 National coordination meetings	0	12000	0	12000	0	24000	24000
2.2 Formal establishment of NODCs/DNAs	0	0	0	0	0	0	0
2.3 Provision of hardware and software package	0	116000	0	0	0	116000	116000
2.4 Support for operational expenses	0	44000	0	72000	0	116000	116000
3.1 Development of ODINAFRICA/IODE Resource Kit	0	24000	20000	4000	20000	28000	48000
3.2 Regional Data Management Training Course	0	42000	0	42000	0	84000	84000
3.3 Regional Data Management Course Follow-up	0	0	0	20000	0	20000	20000
3.5 Regional Information Management training course	0	0	0	42000	0	42000	42000
3.5 Regional Information Management course Follow-up	0	0	0	20000	0	20000	20000
4.1 GODAR participation	0	15000	0	15000	0	30000	30000
4.2 Development of national and regional meta database	0	0	0	33000	0	33000	33000
4.3 Development and maintenance of national and regional data archive	0	0	0	54000	0	54000	54000
5.1 National workshops on data/information services/products requirements	0	0	0	0	0		0
5.2 Support for RECOSCIX-CEA	0	0	0	40000	0	40000	40000
Support for RECOSCIX-WIO	0	0	0	20000	0	20000	20000
Provision of ASFA	0	0	0	14000	0	14000	14000
5.3 Support for development of data and information products				36000		36000	36000
5.4 Support for public awareness creation on the projects services/products				36000		36000	36000
TOTALS	67390	264397	109388	530395	176778	794792	971570

6.2 DETAILED EXPENDITURE TABLES FOR 2001

Description	Obligation Number	Month event	IOC	FLANDERS
PROJECT MANAGEMENT				
Annual Project Review Management Workshop - minus I.1084,1085	8108461	11	5000	
Annual Project Review Management Workshop - (was 48,600)		11		50000
Annual Project Review Management Workshop: Travel Cisse		11		3113
Annual Project Review Management Workshop: Travel Odido		11		2502
Annual Project Review Management Workshop: Travel resource persons		11		10425
Annual Project Review Management Workshop: Travel Pissierssens	2017981	11	2220	
Project Staffing and Management Costs (Consultant) - CISSE consultant	2091151	2	17550	5400
Project Staffing and Management Costs (Consultant)- ODIDO			20994	
Project Staffing and Management Costs (Consultant) - ASFA contract Cochrane	2091481	2		7050
Project Staffing and Management Costs (IOC Secretariat staff time)			17400	
Project Staffing and Management Costs (IOCINCWIO Office operational costs)			8000	
Project Staffing and Management Costs (Consultant) - MISSION CISSE IOCEA REGION feb 2001 - part 1	2090731	2		2300
Project Staffing and Management Costs (Consultant) - MISSION CISSE IOCEA REGION Accra/Abidjan				3025
Project Staffing and Management Costs - Staff Travel To Pissierssens Mombasa	2014621	1	1799	
PROVIDING ASSISTANCE IN THE DEVELOPMENT AND OPERATION OF NODCs AND ESTABLISH THEIR NETWORKING IN AFRICA				
National Coordination Meetings - Benin	2141841	2		2000
National Coordination Meetings - Cameroun	2141861	2		2000
National Coordination Meetings - Comores	2141851	2		2000
National Coordination Meetings - Mauritania	2142451	2		2000
National Coordination Meetings - Senegal	2142651	6		2000
National Coordination Meetings - Togo	2141971	2		2000
PROVISION OF HARDWARE AND SOFTWARE				
Provision of hardware and software package - Data Management and Information Management - Maroc	2130951	2		5923
Provision of hardware and software package - Data Management – Benin	6350631	2		8907
Provision of hardware and software package - Data Management – Cameroun	6350631	2		8563
Provision of hardware and software package - Data Management – Comores	6350631	2		9254
Provision of hardware and software package - Data Management – Ghana	6350631	2		8505
Provision of hardware and software package - Data Management – Guinee	6350631	2		8986
Provision of hardware and software package - Data Management – Mauritania	6350631	2		9477
Provision of hardware and software package - Data Management - Nigeria	6350631	2		8505
Provision of hardware and software package - Data Management – Senegal	6350631	2		8801
Provision of hardware and software package - Data Management - Togo	6350631	2		8801
Provision of hardware and software package - Data Management – Tunisie	6350631	2		8540
Provision of hardware and software package - Information Management - Kenya	6350631	2		5145
Provision of hardware and software package - Information Management - Madagascar	6350631	2		5495
Provision of hardware and software package - Information Management - Mauritius	6350631	2		5350
Provision of hardware and software package - Information Management – Seychelles	6350631	6		5510
Provision of hardware and software package - Information Management - South Africa	6350631	6		5150
Provision of hardware and software package - Information Management - Tanzania	6350631	6		5150
Provision of hardware and software package - miscellaneous software	2130731	2		900

Provision of hardware and software package - miscellaneous software	5160431	2		68
OPERATIONAL EXPENSES, DATA ARCHIVES AND METADATABASES				
Operational Expenses Data and Information Centres - Benin	2142641	6		4000
Operational Expenses Data and Information Centres - Cameroun	2142461	6		4000
Operational Expenses Data and Information Centres - Comores	2143091	6		4000
Operational Expenses Data and Information Centres - Guinee	2142361	3		4000
Operational Expenses Data and Information Centres - Kenya	2141961	2		6700
Operational Expenses Data and Information Centres - Madagascar	2142221	2		4000
Operational Expenses Data and Information Centres - Mauritius METEO	2142211	2		4000
Operational Expenses Data and Information Centres - Mozambique	2141931	3		4000
Operational Expenses Data and Information Centres - Nigeria NIOMR	2142041	3		4000
Operational Expenses Data and Information Centres- Senegal				4000
Operational Expenses Data and Information Centres - Seychelles	2141951	3		4000
Operational Expenses Data and Information Centres - Tanzania	2141941	2		4000
Operational Expenses Data and Information Centres - Togo	2142531	7		4000
Operational Expenses Data and Information Centres - Tunisie	2142991	7		4000
Development of national and regional meta databases - Comores	2143091	6		2600
Development and maintenance of national/regional data archive - Kenya	2141961	2		2700
Development and maintenance of national/regional data archive - Madagascar	2142221	2		2300
Development and maintenance of national/regional data archive - Mauritius		7		
Development and maintenance of national/regional data archive - Mauritius METEO	2142211	2		600
Development and maintenance of national/regional data archive - Mozambique	2141931	3		2700
Development and maintenance of national/regional data archive - Seychelles		7		300
Development and maintenance of national/regional data archive - Tanzania	2141941	2		2700
PROVISION OF TRAINING OPPORTUNITIES IN MARINE DATA & INFORMATION MANAGEMENT				
Development of ODINAFRICA/IODE resource kit - Brown FEE CONTRACT	2142551	6		10000
Development of ODINAFRICA/IODE resource kit - Contract Brown	2091121	2		13444
Regional Data Management Workshop	2150181	4		36000
Regional Data Management Workshop - Staff travel PISSIERSSSENS Casablanca	2015531	4		1650
Regional Data Management Workshop follow-up (FEE CONTRACT)- Murray brown	2142551	6		12000
Marine Information Management Training course MIM - amendment		10		1819
Marine Information Management Training course MIM - was 42000		10		47521
Marine Information Management Training course MIM - local arrangements		10		5000
Marine Information Management Training course MIM - Mission Travel Odido		10		1600
Marine Information Management Training Course MIM – Travel Pissierssens	2018001	11	2407	
GODAR Participation - PAYMENT IN 2002	2143011	7		30000
ASSIST IN DEVELOPMENT AND DISSEMINATION OF MARINE DATA & INFORMATION PRODUCTS				
Support to RECOSCIX networks - AFRIDIR - JOINT ACTIVITY	2981081	1		2500
Support to RECOSCIX networks - Document delivery 1st semester LUC	2981101	1		8000
Support to RECOSCIX networks - Operational Expenses and DocDel	2981091	1		22000
Support to RECOSCIX networks - WEB SERVICES TRAINING- Ngete	2075641	1	3300	700
Support to RECOSCIX networks - WEB SERVICES TRAINING- Angwenyi	2075631	1	3300	1250
Support to RECOSCIX networks - WINDOW	2141831	1		6000
Support for RECOSCIX networks - internship Angwenyi NOAA Washington USA	2142731	8		5200
Support for RECOSCIX networks ODINAFRICA ILMS - Paris server configuration INMAGIC	2600541	8	7646	
Support for RECOSCIX networks Provision ASFA - excess cost journals 2000 SWETS	6728221	2		2000
Support for RECOSCIX network ILMS software INMAGIC - decentralized UNESCO Pretoria	8256161	7		64000

Support for development of data and information products - Kenya -AFRIPUB	2142761	7		1800
Support for development of data and information products - Madagascar	2142791	7		1800
Support for development of data and information products - Mozambique	2143071	7		1800
Support for development of data and information products - Tanzania	2142981	7		1800
Public awareness creation on the project services and products - Madagascar	2142791	7		1400
Public awareness creation on the project services and products (National workshop) - Mauritius		7		1800
Public awareness creation on the project services and products- Mozambique				1800
Public awareness creation on the project services and products - Tanzania	2142981	7		1800
TOTALS			89616	577429