



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission

Workshop Report No. 227

First Session of the Steering Committee for the project on “Integrated Data and Information Products and Services for the Management of Oceans and Coastal Zones in Africa’ – ODINAFRICA-IV

IOC Project Office for IODE, Oostende, Belgium
20 – 22 January 2010.

IOC Workshop Report No. 227
Oostende, 25 February 2010
English

For bibliographic purposes this document should be cited as follows:

First Session of the Steering Committee for the Project on “Integrated Data and Information Products and Services for the Management of Oceans and Coastal Zones in Africa” – ODINAFRICA-IV, IOC Project Office for IODE, Oostende, Belgium, 18-20 November 2009
Paris, UNESCO, 4 February 2010 (IOC Workshop Report No. 226) (English)

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1. OPENING OF THE MEETING

The first session of the Steering Committee for the project “Integrated Data and Information Products and Services for the Management of Oceans and Coastal Zones in Africa – ODINAFRICA-IV” was opened at the UNESCO/IOC’s Project Office for IODE at 09h15 on Wednesday 20 January 2010 by Mika Odido, the IODE Regional Activities Coordinator, and ODINAFRICA-IV Project Manager. In his opening remarks Mr Odido emphasised that the session was important as it provided the opportunity for members of the Steering Committee to review the responses to the Assessment Questionnaires, and on the basis of these and the discussions at the Head’s of institutions meeting held from 30 March – 2 April 2009, prepare a detailed implementation plan for ODINAFRICA-IV.

Mr Odido provided an overview of the fourth phase of the Ocean Data and Information Network for Africa (ODINAFRICA-IV), initially planned for the four year period 1 January 2009 – 31 December 2012. The goal of ODINAFRICA-IV is to promote the sustainable management of marine and coastal sources, as well as reducing the risks of ocean related hazards, based on sound scientific knowledge. The primary objectives are:

- Expanding and strengthening the network of marine scientists and institutions in the region to foster the sharing of data and information.
- Developing high quality products and tools to support decision-making, management and conservation of the marine and coastal environment.
- Promoting the use of products and services developed by the project to all stakeholders.
- Fostering active south-south, intra-Africa, north-south and Africa-Flemish collaboration for marine training, research and technology transfer.

In addition, the ODINAFRICA IV programme will strive to promote the involvement and participation of **women and youth in marine science**.

The project will combine a regional approach – building networks and generating economies of scale - with nationally driven identification of needs and priorities. The project will foster a ‘user-oriented’ approach to the management of data and information.

ODINAFRICA-IV will focus on the development of the following products in order to achieve its objectives:

- (i) Web-based data services (including catalogues and archives)
- (ii) Web-based Information Services (including literature catalogues and repositories, institution and experts directories, inventories of projects)
- (iii) National Marine Atlases, and the African Marine Atlas (including scenarios, models, forecasts and predictions on priority issues)
- (iv) National and regional portals, as well as project websites and national NODC websites
- (v) Communication tools: newsletters, policy and media briefs, African Oceans and Coasts books series

The diagram below demonstrates the linkages between the ODINAFRICA-IV products.

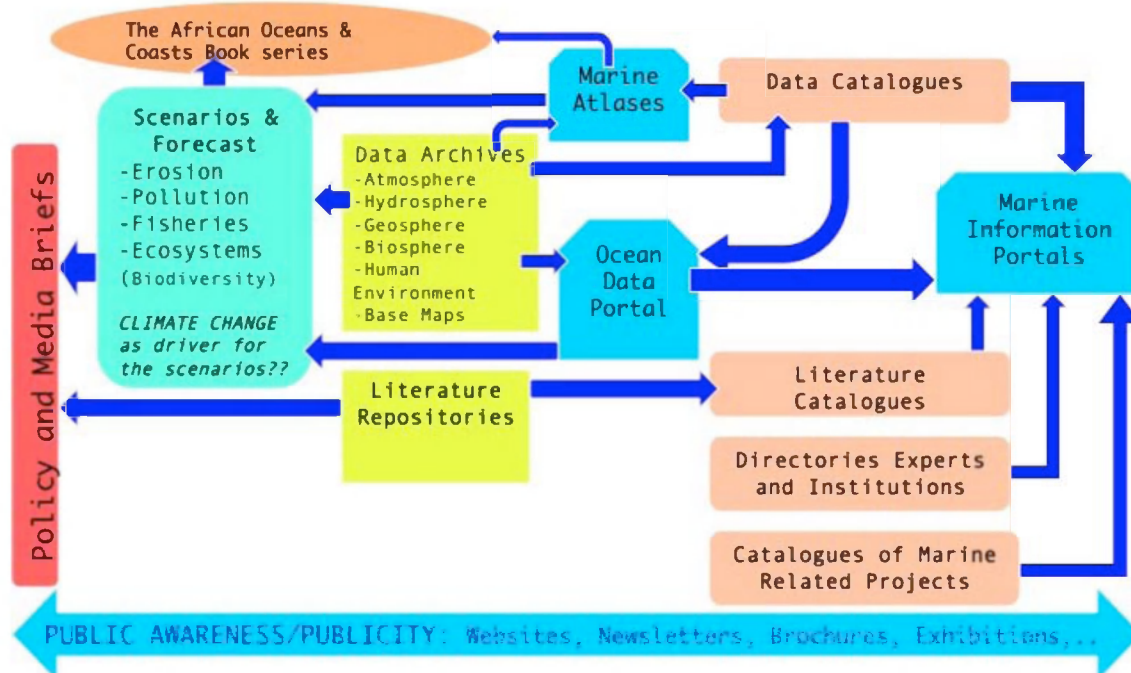


Fig. 1: Linkages between the ODINAFRICA-IV products.

ODINAFRICA-IV will dedicate substantial energies to development of products for integrated marine and coastal management, especially at the local and national level. The national coordination committees will undertake the identification of products that are required for integrated coastal management, and a gap analysis for the data and skills required to develop the products. Ongoing projects will provide crucial inputs into the process and must be engaged.

2. ODINAFRICA-IV WORK PLANS AND BUDGETS

The Steering Committee identified the following broad areas to focus on during each year of implementation of ODINAFRICA-IV:

- 2009: National Assessments and putting in place project management structures at the Regional level
- 2010: Finalization of National Assessments, Identification of priority issues to address, Data Mining and commence development of National Marine Atlases
- 2011: Completion of National Marine Atlases, commencement of work on regional atlases and national ocean data portals, as well as development of scenarios and forecasts to be included in marine atlases.
- 2012: Completion of regional atlases and national ocean data portals, incorporation of scenarios and forecasts in marine atlases
- 2013: Development of regional ocean data portals, publication of the African Marine Atlas book, finalization of ODINAFRICA-IV

The Steering Committee reviewed activities, and expenditures planned under each of the project work packages.

2.1 NETWORKING, COORDINATION AND MANAGEMENT.

2.1.1 Coordination and Management

The Steering Committee noted that the ODINAFRICA-IV Project Manager was recruited in July 2009, and reported to work at the beginning of August 2009. In view of this, the ODINAFRICA Project Steering Committee proposed that a request be made to the donor to extend the end date of the project from 31 December 2012 to 31 July 2013, due to the delay in commencement of the project, and in-order that the project runs for the 4-years as had been planned.

The Steering Committee noted the challenges that have been faced in processing of agreements and contracts in the first few months of the project and agreed that ODINAFRICA should make a contribution towards the funding for engaging a temporary administrative support staff based at the IOC HQs in Paris, France. She/he will assist in the administration of IODE projects and activities especially the processing and follow-up of agreements and contracts. Partnership Agreements will be processed for each country outlining the activities to be implement, and the requirements for payment of instalments. Half yearly reports, incorporating statistics to demonstrate usage and development of products will be the required for payment of instalments. The Steering Committee meetings will be held at the beginning of each year (in January) to review progress made in implementation, and plan for the coming year

2.1.2 ODINAFRICA-IV Planning and Review meetings

The Steering Committee decided that the first Planning and Review meeting for ODINAFRICA-IV would be tentatively scheduled for July 2011, with the second and final Review meeting in 2013. Holding the first review meeting in July 2011 will provide time for the participating countries to complete the development of the first version of the National Marine Atlases. A letter should be sent to the ODINAFRICA National Coordinators and Heads of Institutions, requesting offers to host the meeting. Previous planning and review meetings have been held at the following venues: Dakar, Senegal (2 – 4 May, 2000); Nairobi, Kenya (14 – 17 November 2001); Limbe, Cameroon (19 – 23 November 2002); Brussels, Belgium (8 – 10 September 2003); Oostende, Belgium (24 – 26 April 2006); Mombasa, Kenya (14 – 17 July 2008); and Oostende, Belgium (30 March – 2 April 2009).

2.1.3 Proposed Budget Revisions for Work Package 1.

The Steering Committee noted that no allocation had been made for mailing/communications from Paris as the engagement of a temporary assistant was not foreseen. The Steering Committee therefore proposed that the allocation for Operational costs for project office be increased and changed to Budget line 50 to cater for this. The following budget revisions are proposed for the work package:

LINE	WP1: Networking, Coordination and Management		2009	2010	2011	2012	2013	Totals
11	1.1	Project Manager	52,917	130,810	134,734	138,776	74,083	531,320
11	1.2	Regional coordinators (5 regions)	0	30,000	24,000	24,000	12,000	90,000
30	1.3	Meeting, Project Steering Committee	19,950	19,950	19,950	19,950	0	79,800
30	1.4	Bi-Annual review and planning meeting	0	0	142,500	0	142,500	285,000
20	1.4bis	Bi-Annual review and planning meeting (hosting costs)	0	0	35,000	0	35,000	70,000
50	1.5	Operational costs Project Office		10,679	10,000	10,000	10,000	40,679
10	1.6	Official travel Project Manager/ Regional coordinators	16,161	8,839	10,000	10,000	8000	53,000
11		ODINAFRICA contribution IODE admin support		23,000	23,000	23,000	10,000	80,000
TOTAL			89,028	223,278	399,184	225,726	292,583	1,229,799

Table 1: Revised budgets for Work Package 1

2.2 STRENGTHENING OF NATIONAL MARINE DATA AND INFORMATION MANAGEMENT CAPACITY.

2.2.1 Comprehensive National Assessments.

The **Steering Committee** noted that in many participating countries, only one institution had completed the assessment questionnaire. The **Steering Committee emphasised** the importance of collaboration between the relevant institutions in the country to ensure that the products developed incorporate diverse data sets, and contribute to “integrated management of coastal areas” in the country. The participating institutions should strive to undertake the assessments as per the schedule below, and submit: (a) preliminary report highlighting priority coastal issues for the country, institutions that collect and archive the data required to address these issues, and the institutional and expert capacities available for developing the atlases after the first national coordination meeting, and (b) a detailed report incorporating final assessments and work plans for ODINAFRICA-IV implementation in the country.

The following steps will be implemented to finalise the National Assessments:

(i) Each participating country will hold its first **National Coordination Meeting** to:

- Review National ICAM plans and policies to identify key national issues that an atlas will be of use in addressing,
- Where necessary, identify pilot sites or topics for which forecasts and scenarios can be developed.
- Identify the national institutions that generate/archive the data needed to address these issues
- Identify the skills and facilities (equipment and software) available in local institutions to support the development of atlases
- Identify other products/services that should be developed within ODINAFRICA and the capacities required for this.

The National Coordination Meetings will be held before the end of March 2010, and attended by representatives of institutions that will collaborate in the development of the atlases and other products, as well as other stakeholders.

(ii) **Assessment Missions** will be undertaken as follows to confirm availability of data, linkages with potential collaborators and other stakeholders, reliability of internet connections, and availability of equipment and software:

- ASCLME region: The ODINAFRICA Regional Coordinator will visit all the countries in the region that are participating in ODINAFRICA in March and April 2010. The mission will be funded jointly with the ASCLME project.
- CCLME Region: The ODINAFRICA Regional Coordinator will visit Mauritania, and other country [Cape Verde, Gambia, Guinea Bissau].
- GCLME Region: The ODINAFRICA Regional Coordinator will visit Benin, Cote d’Ivoire, Ghana, and Guinea in March/April 2010.
- Mediterranean Sea region: The ODINAFRICA Regional Coordinator will visit Egypt, Algeria, and Morocco.
- Regional meetings will be held as follows: (a) GCLME region: 8 – 11 February 2010, Kribi, Cameroon, (b) BCLME region: April 2010, Swakopmund, Namibia, and (c) ASCLME region: May 2010, Zanzibar, Tanzania

(iii) The National Assessment reports will be finalised, and reports submitted by 30 June 2010.

[NB: The dates for the missions and national coordination meetings will change due to delays in processing contracts/agreements]

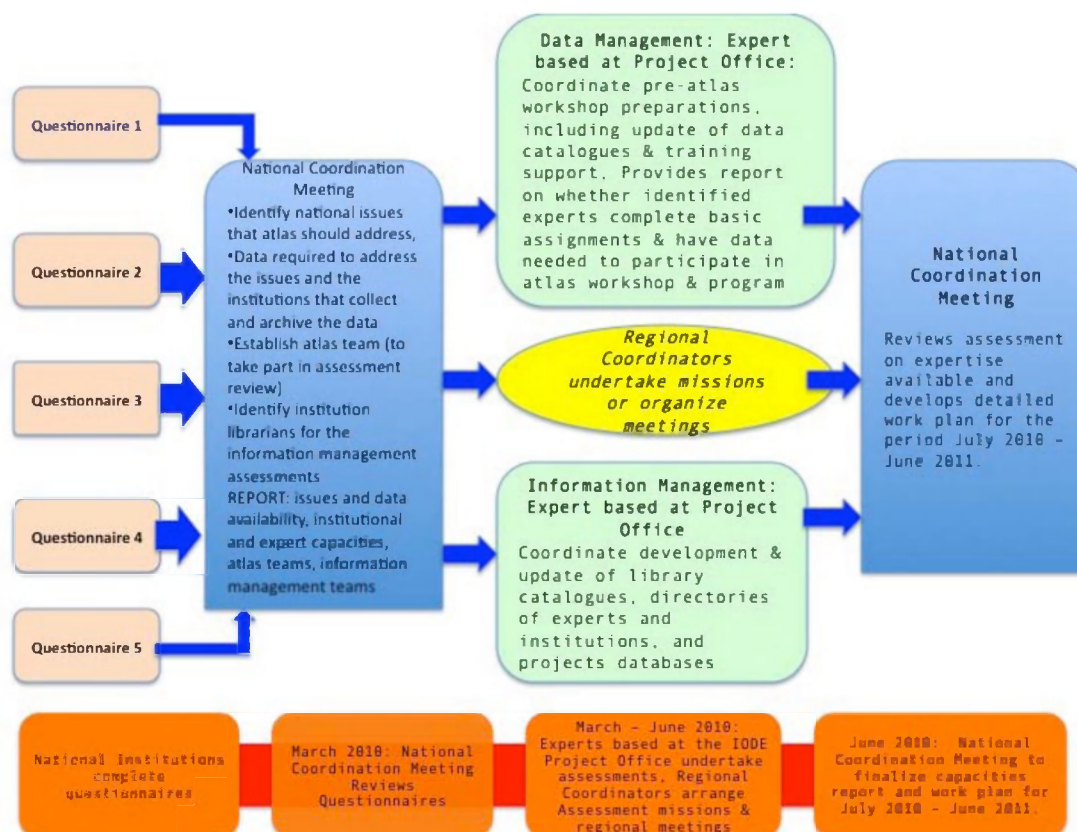


Fig 2: The Comprehensive National Assessment process

2.2.2 National Coordination Meetings.

The Steering Committee reiterated that the National Coordination Meetings are an important mechanism in ODINAFRICA-IV for follow-up and ensuring the involvement of key collaborators and institutions in the development and dissemination of the products and services. Three National Coordination Meetings are planned in 2010, two each in 2011 and 2012 [June and December], and the final NCM will be held in June 2013.

The National Coordination Committee should incorporate exhibitions and open-days in one of their meetings each year, to improve awareness of ODINAFRICA activities in the country, and Ocean related issues in general. The World Ocean Day in June would be an appropriate day for this. In particular the National Coordination Meeting in June 2010 should include activities to mark the 50th Anniversary of IOC, and the meeting in June 2011 should include activities to mark the 50th Anniversary of IODE.

2.2.3 Equipment for Data and Information Centres.

Infrastructure and software upgrades for both the data and information centres will be based on the requirements for development of products in ODINAFRICA-IV. The following are the minimum specifications for equipment and software required for development of marine atlases and ocean data portals:

- Processor: Intel(R) Core(TM)2 Duo E7500 (2.93GHz, 3MB L2 cache, 1066MHz FSB)
- Memory: 4GB (2X2GB) NECC Dual Channel DDR2 800MHz SDRAM Memory
- Hard Drive: 500GB
- Monitor: 23" Wide Screen Flat Panel LCD Monitor
- Optical Device: 16X DVD + / - RW WITH Dual Layer Write Capabilities

- Operating System: Genuine Windows 7(R) Professional
- Additional storage/backup devices: At least 1Tb, or a networked raid disk
- Anti-Virus
- Microsoft Office Professional 2007 [including Access, Excel, Outlook with Business Contact Manager, PowerPoint, Publisher and Word]

This allocation of US\$2,000/country for purchase of equipment will be sufficient to cover this. It is important that the NODCs have broadband Internet access. The equipment specifications for the Information Centres will be determined after the software issues are resolved (another US\$2,000/country is foreseen for this). Specialised software for both data and information management will be purchased centrally by UNESCO and distributed to the institutions as per requirements for products development.

2.2.4 Information Centre Operational Expenses.

The Information Centres will utilise the funds for operational expenses to maintain and update information products and services, including:

- Library catalogues,
- Catalogue of marine related publications from/about the country,
- Electronic Repository of relevant national/institutional publications,
- Directory of marine and freshwater professionals from the country, and
- Database of ongoing/completed marine related projects.

2.2.5 Data Centre Operational Expenses.

The Data Centres will utilise their allocations for operational expenses to maintain and develop data services and products, including:

- Catalogues of data sets
- Extraction of data from WOD2009,
- Incorporation of new data sets into national data archives
- NODC website.

The services that will be offered by the ODINAFRICA national networks include data extraction and conversion to specific formats, online trend generation, and plotting and printing of maps and figures from databases. Data will be mined from a wide range of national, regional and international sources.

2.2.6 Basic Data and Information Management training.

The Steering Committee decided that Basic training workshops for data or information management will not be organised in the framework of ODINAFRICA-IV. However two experts from ODINAFRICA institutions will be seconded to the Project Office in the period March – June 2010 to provide support to those who will need to undergo the basic data or information management training using the online courses available in OceanTeacher. The experts will also coordinate the completion of assignments that are a pre-requisite for participation in the atlas workshop and program. **The Steering Committee drew the attention** of the participating institutions to the UNESCO Global Priority on Gender and Youth and **requested them to encourage women scientists to take an active role** in the activities of ODINAFRICA-IV, and to use exhibitions, open-days and other modalities to **improve the awareness of the youth on marine related issues.**

2.2.7 Proposed Budget Revisions for Work Package 2.

The following budget revisions were proposed for the work package:

	WP2: Strengthening of national marine data and information management capacity		2009	2010	2011	2012	2013	Totals
20	2.1	National assessments – Regional meetings	18,700	21,300	0	0	0	40,000
10		National assessments – Assessment missions	0	22,000	0	0	0	22,000
20	2.2	Costs related to national coordination committees	0	100,000	50,000	50,000	0	200,000
20	2.3	Infrastructure package new centres (DM) [Two new countries]	0	4,000	0	0	0	4,000
20	2.4	Infrastructure package new centres (IM) [Two new countries]	0	0	4,000	0	0	4,000
20	2.5	Infrastructure upgrades existing centres ODINAFRICA-II (DM) (ref to atlas) (23x2000) [2 countries from previous phase will not participate]	0	46,000	0	0	0	46,000
20	2.6	Infrastructure upgrades existing centres ODINAFRICA-II (IM) (23 x 2000)[2 countries from previous phase will not participate]	0	0	46,000	0	0	46,000
20	2.7	Support operational expenses new centres (DM) [Two new countries]	0	6,000	4,000	4,000	2,000	16,000
20	2.8	Support operational expenses new centres (IM) [Two new countries]	0	6,000	4,000	4,000	2,000	16,000
20	2.9	Support operational expenses existing centres (DM) (23 x 2000) [2 countries from previous phase will not participate]	0	46,000	46,000	46,000	46,000	184,000
20	2.10	Support operational expenses existing centres (IM) (23 x 2000) [2 countries from previous phase will not participate]	0	46,000	46,000	46,000	46,000	184,000
	2.11	Training for new centres	0	0	0	0		0
	2.12	Training for existing centres	0	0	0	0		0
TOTAL			18,700	297,300	200,000	150,000	96,000	762,000

Table 2: Revised budgets for WP2

2.3 DEVELOPMENT OF PRODUCTS

The institutions that participated in the previous phases of ODINAFRICA developed national data collections and catalogues that have been availed through various media, including websites, CDs and printed reports. These products will be improved through the involvement of more institutions in ODINAFRICA activities at national level, and the development of national networks of marine related institutions. The aim is to cover a wide range of data types required for integrated coastal management encompassing the six themes used in the African Marine Atlas: basemaps, geosphere, hydrosphere, atmosphere, biosphere, and the human environment.

The ODINAFRICA Planning meeting (14 – 17 July 2008, Mombasa, Kenya) emphasised the importance of going beyond the cataloguing and archiving of data and adding value to the data by developing scenarios, models, and forecasts that can assist in decision making. The following were identified as some of the issues that may be considered: shoreline changes, marine related hazards and disaster management, management of key ecosystems, and sustainable use of resources. The results from these would also be incorporated in the Marine Atlases

2.3.1 Development of a Multi-Sectoral Metadata System.

The national data catalogues and the African component of the Marine Environmental Data Inventory (MEDI-Africa), which was developed in the earlier phases, will be updated and expanded using the GeoNetwork open source software. Information provided will include: data collection methods, instruments, quality control procedures applied, analyses done, location, e.t.c. The metadata will also be used to describe the datasets that are found in the Marine Atlases, and will supply an OGC compliant catalogue service that can be

harvested by the Ocean Data Portals (both national and regional), which will be developed during ODINAFRICA-IV. The update of the metadata catalogues will commence during the pre-atlas workshop assignments, and continue in earnest after the workshop.

2.3.2 Development of Marine Atlases.

The African Marine Atlas - AMA (www.africanmarineatlas.net), developed in ODINAFRICA-III as a pan-African regional product, was a good starting point in the development of a functional Coastal and Marine Spatial Data Infrastructure for Africa. However the scales for the layers in the continental scale atlas are coarse and will not be useful for integrated management of the environment and resources at the local and national levels. ODINAFRICA-IV will focus on the development of atlases at local and national scales and merging layers from these atlases into regional and continental atlases. It will be important to ensure that the atlases are interoperability with other atlas development projects in Africa. AMA will provide an overview of topics related to African marine and coastal areas, as well as an interactive atlas where the user can select map layers from various organisations to view and query. AMA will also allow the user to search for available layers, view metadata, and in most cases download data. The focus will be on developing layers, which address priority issues at local, national and regional level. **The ODINAFRICA-IV Steering Committee decided proposed the following schedule for Atlas development [see also report of the First Session of the African Marine Atlas Task Team]:**

- (i) Members of the national atlas teams will revise the “Ocean Data Collection Development” available in OceanTeacher [<http://hosting1.iode.org/moodle/course/view.php?id=90>], with support from an expert seconded to the IOC Project Office for IODE during the period March – May 2010. **It is important that all participants who expect to attend the training workshop in July 2010 go through this course, as there are many new elements that were not covered in previous data management training courses.**
- (ii) Selection of Areas of Interest is particularly important, as this will form the basis of the atlas work. The National Coordination Committees should therefore be involved in the approval of AOIs proposed by the National Atlas Teams
- (iii) The First ODINAFRICA-IV Coastal and Marine Atlas workshop is provisionally scheduled for July 2010, at Kenya Marine and Fisheries Research Institute, Mombasa, Kenya. The workshop will cover: (i) Ocean Data Products and Synthesis, (ii) Introduction to Metadata, and (iii) Introduction to Marine GIS. The participants will also agree on protocols and work schedules, and atlas team leaders for each ODINAFRICA LME region. The software required for atlas development, including SURFER and ARCMAP e.t.c (ESRI package) will be provided to the participants during the workshop.
- (iv) The participants in the first Coastal and Marine Atlas workshop will on return: (a) train other members of the national atlas team, (b) ensure proper installation of software, and (c) migrate existing metadata records to GeoNetwork, (d) coordinate the data mining and processing, population of the GeoNetwork catalogue with new records, and GIS layers generation for incorporation in the national marine atlases in their respective countries.
- (v) The atlas team leaders will attend the Mapserver workshop at the IOC Project Office for IODE in Ostende, Belgium in November 2010. This training should incorporate the use of MIDA as a web-based interface for the atlas. They will subsequently provide technical support for atlas development in their regions, including undertaking technical missions to all countries in their respective regions to confirm that software is installed and working properly, and providing training and other assistance required.
- (vi) The Second ODINAFRICA-IV Coastal and Marine Atlas workshop will be held in June 2011, and will focus on finalisation of the national atlases. This workshop could also cover development of scenarios, and introduction to portal development.

The Steering Committee noted that it will be mandatory that pre-workshop assignments provided in the period March – May 2010 be completed before qualifying to participate in the atlas workshop, and the marine atlas development initiative of ODINAFRICA-IV. The Steering Committee recommended the involvement of FAO (for GeoNetwork experience) and the MIDA team (for atlas development experience) be involved in the atlas development process. The necessary software will be provided to the trainees during the workshop to enable them commence work immediately they return home.

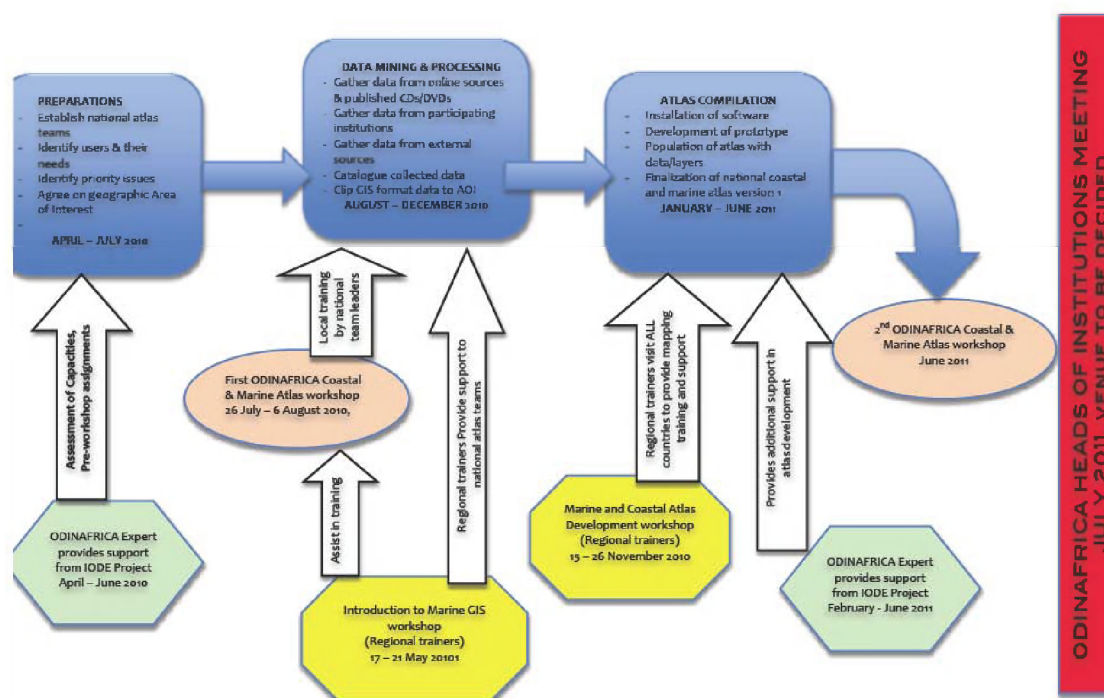


Figure 3: Flow chart for development of the African Marine Atlas

2.3.3 Scenarios, Predictions and Forecasts.

The Steering Committee considered other products that can be developed to address the needs of users. These were categorised broadly as follows:

- Climate Change impacts at regional scales
- Scenarios for SST rise based on remote sensing data and in-situ measurements
- Sea level rise along the African coast
- Tidal predictions for years 2011, 2012 and 2013
- Water quality scenarios
- Coastal inundation maps.

The tidal predictions and sea level rise scenarios will utilise the data collected by the sea level stations installed by ODINAFRICA in the previous phase, and other existing stations along the African coastline. Significant amounts of satellite data and in-situ measurements that can be used for climate change scenarios are also now available. The ODINAFRICA Steering Committee noted that several institutions had requested for Sea level data analysis software in their “Questionnaire Responses” and decided that the ODINAFRICA Regional Coordinator responsible for Mapping, Forecasts and Scenario Development, Prof Angora Aman should provide the software to all the institutions that had requested it.

2.3.4 Proposed Budget Revisions for Work Package 3.

The following budget revisions were proposed for the work package:

		WP3: Development of Products	2009	2010	2011	2012	2013	Totals
30	3.1	Coastal & Marine Atlas workshops [Development national multi-sectoral metadata system]	0	35,000	35,000	0	0	70,000
20	3.1bis	Coastal & Marine Atlas workshops [Development national multi-sectoral metadata system] – hosting costs	0	65,000	65,000	0	0	130,000
10	3.2	Consolidation national data into central ocean data base (25x2000): Technical mission (Software installation & atlas work	0	0	50,000	0	0	50,000
20	3.3	Data mining (data gaps related to national atlas) (25x2000)	0	50,000	37,500	12,500	0	100,000
40	3.4	Data acquisition external sources (hires remote sensing,...)	0	0	30,000	0	0	30,000
	3.5	Training Course national marine atlas	0	0	0	0	0	0
40	3.6	Setup national marine atlases (25x3000): Software purchase	0	75,000	0	0	0	75,000
20	3.7	Development national marine atlases (25x2000)	0	50,000	37,500	12,500	0	100,000
11	3.8	Development/upgrade African Marine Atlas (IODE Project Office)	10,000	10,000	10,000	10,000	10,000	50,000
	3.9	Training Course on application of GIS and Remote sensing to forecasting/predictions and scenario development	0	0	0	0		0
20	3.10	Support development of national products (scenarios, forecasts)	0	12,500	25,000	12,500	0	50,000
11	3.11	Support for development of LME products	0	0	20,000	20,000	10,000	50,000
TOTAL			10,000	297,500	310,000	67,500	20,000	705,000

Table 4: Revised budgets WP3

2.4 DISSEMINATION AND SHARING OF DATA AND INFORMATION, PRODUCTS AND SERVICES

Substantial work was already carried out in previous phases to develop web-based information services. ODINAFRICA-IV will build on these efforts.

2.4.1 Catalogue of Library Holdings.

The information centres that participated in ODINAFRICA-III developed their library catalogues using the INMAGIC software. These were quality controlled, merged and availed via the ODINAFRICA website. However the online catalogue has not been updated for sometime. Similarly the library software has not been updated since INMAGIC terminated the DB Textworks software library module, and replaced it with DBTexts Library Suite.

The ODINAFRICA Steering Committee discussed the development of library databases, and the need for software updates **and concluded that the decision** on choice of software library management, and development of library databases be used in ODINAFRICA-IV **be deferred**. This will enable exhaustive consultation on the best approach to be used in developing and providing access to library databases in ODINAFRICA-IV. The consultations will take into account the costs of software and the training that may be required for any migration to new software. The ODINAFRICA Regional Coordinator responsible for Web-Based Information Services, in coordination with the ODINAFRICA Project Manager, will consult with GEMIM and the ODINAFRICA Information Managers and provide recommendations to the next session of the Steering Committee. In the meantime the Information Centres will continue updating their library catalogues using the software they are currently using. The IODE Internship programme will be utilised for the secondment of one of the ODINAFRICA Information Managers to the UNESCO/IOC's Project Office for IODE (Oostende, Belgium) for a period of up to six months to assist with collation and quality control of records from the countries and merging them to update the AFRILIB union catalogue of library holdings. A workshop for Information Management will be held after the issues of software selection has been addressed. However it is

important to note that training on basic information management and websites development will be undertaken in the framework of the OceanTeacher Academy programme.

2.4.2 Repositories of Marine Publications.

The ODINAFRICA information centres participated in the project for development a “Repository of Marine Related Publications from/about Africa” which formed the basis for the OceanDocs repository. The project was funded by the government of Flanders and implemented in the period 2004 - 2006. It is focused on the development of an electronic repository to make publications in marine science from scientists affiliated to ODINAFRICA institutes electronically available. The results can be accessed at www.oceandocs.net. The repository covers publications of authors working in ODINAFRICA affiliated institution, and include: (i) Articles, scientific reports, technical reports, theses, conference papers, grey literature, and preprints. The creation of a repository for an institute and for each researcher is a very important task in the present world of scientific communication. It is of great importance to the visibility of scientific work of an individual, an institution and hence an entire country.

The development of OceanDocs will focus on increasing the documents available in the repository, and assisting institutions that have sufficient materials to develop their own institutional repositories, incorporating documents and other multi-media resources. The Ocean Teacher Academy courses will be utilised to provide the skills for this.

The development of interface for accessing documents from specific LME regions will be considered in consultation/collaboration with the LME projects. The possibility of designation regional (LME?) input centres will be explored in collaboration/consultation with the LME projects. The ODINAFRICA Regional Coordinator responsible for Web-based Information Services will develop detailed proposal on creation of a news service informing ODINAFRICA contacts of relevant recent publications, and also on the possible extension “journals view development to other institutions that have their own publications. Possible publications include: Journal of Aquatic Research (Egypt), Bulletin Scientifique de l’IMROP (Mauritania), Bulletin de l’INSTM (Tunisia), and Archives Scientifiques du CRODT (Senegal).

2.4.3 Other Information Sources.

An Information Manager from one of the ODINAFRICA institutions, seconded to the IOC Project Office for IODE for a period of 3-6months, will coordinate the update and maintenance the national library catalogues, AFRILIB, the African records in OceanExpert (www.oceanexpert.org) and OceanDocs (www.oceandocs.net), and the development of the Projects and Programmes database.

The Steering Committee recalled that the African Ocean Portal (www.africanoceans.net) had been developed in the framework of the UNESCO Cross Cutting project on “Knowledge Portals” to provide access to all sort of marine related information relevant to Africa- including links to useful sites, directories and catalogues. UNESCO no longer supports the TOMOYE SIMPLIFY software used for the portal. **The Steering Committee agreed** that a new portal based on joomla be developed and relevant knowledge objects in the African Ocean portal be moved to it.

The Steering Committee noted the progress that has been made by the NODCs in the ASCLME region in developing national marine information portals in the framework of the Nairobi Convention Clearing House Mechanism, and tasked the ODINAFRICA Regional Coordinator for ASCLME to explore mechanisms for collaboration between NCHM and ODINAFRICA. ODINAFRICA should explore the development of Marine Information portals for the other regions in collaboration with the LME projects. These regional initiatives will then feed into the African Ocean Portal, which should be re-developed for this purpose.

2.4.4 The African Register of Marine Species.

The development of marine biodiversity database commenced in ODINAFRICA-III with the organisation of two training courses in Ostende, Belgium (April, 2005), and Grand Baie, Mauritius (September, 2005) attended by experts from the institutions hosting the ODINAFRICA data centres. These were followed by three focused workshops at the IODE Project Office in Ostende, Belgium, for mobilising data on Marine Molluscs (March, 2006), Sponges (November, 2006), and Decapods (June, 2007). The data compiled in these workshops was included in Marine Species Database for Eastern Africa - MASDEA, which will now be re-named as the African Register of Marine Species (ARMS) to reflect its expanded geographic scope. **The Steering Committee emphasised that** activities in ODINAFRICA-IV will be implemented in close collaboration with the Ocean Biogeographic Information System (OBIS).

The Steering Committee decided that an interface be developed for ARMS to enable edition of data and online data entry, as well as improve access to the register. Additional functionalities such as maps to display existence of given species in a country's EEZ, statistics of known species etc will be included. The development of the interface will be undertaken by an expert from an ODINAFRICA institution, seconded to the Project Office, in collaboration with IT experts at the Project Office, OBIS and VLIZ. S/he will also extract records for each country from MASDEA/OBIS/WORMS and send these to national experts [biologists] to review for accuracy and completeness. The quality-controlled information will form the basis for development of ARMS. The database will be hosted on the IODE servers.

A workshop on ARMS data collection and logging will be organised in the first quarter of 2011 and attended by representatives of each of the ODINAFRICA LME regions. They will then coordinate the collection of new data to populate ARMS in their regions. The focus of the work in ODINAFRICA-IV will be on assisting African countries in fulfilling their reporting obligations to UN Convention on Biodiversity - CBD. The information required to facilitate this include the reporting requirements and formats for CBD, as well as any reports that might have been submitted by the countries participating in ODINAFRICA countries. **The Steering Committee requested the Project Manager** to liaise with Dr Edward Vanden Berghe (Director of OBIS) to get this information. Data entry will be based on the IUCN Red Listed species, rather than taxa as in previous phase. The creation or strengthening of national and regional marine biodiversity nodes to provide input for ARMS, as well as contribute to the development of national marine atlases will be explored.

2.4.5 The Ocean Data Portal.

The development of Ocean Data Portal (ODP) will provide seamless access to collections and inventories of marine data from the NODCs in the ODINAFRICA network and will allow for the discovery, evaluation (through visualisation and metadata review) and access to data via web services. The system architecture will use Web-oriented information technologies to access non-homogeneous and geographically distributed marine data and information. The Ocean Data Portal will deliver a standards-based infrastructure that provides the integration of marine data and information from a network of distributed IODE NODCs as well as the resources from other participating systems. The ODP can be queried in various ways from an easy-to-use Google-like interface to a powerful geospatial query interface.

Within the framework of ODINAFRICA-IV the NODCs will be able to "plug-in" their databases into OceanDataPortal as data providers. NODCs with web-serving capability (and permanent internet connection of sufficient bandwidth) will be able to directly connect to ODP. NODCs without a permanent internet connection and/or web-server capability will be able to use the central node at the IOC Project Office for IODE and serve their data sets through that facility.

The training workshop on development of ocean data portals will be organised in 2011.

2.4.6 NODC and Project websites.

ODINAFRICA developed and maintained several websites in the previous phase. **The Steering Committee agreed** that these must be updated and maintained. In particular the ODINAFRICA website (www.odinafrica.org), and the African Sea Level Network (www.iode.org/glosafrica). The interfaces for accessing several databases developed in ODINAFRICA-III will need to be updated, and or new interfaces developed as required. These include:

- (i) An interface to access the records of African Experts and institutions in OceanExperts (www.oceanexpert.org). Similar interface for accessing national experts will be developed for linkage with the NODC websites.
- (ii) The AFRILIB interface will be reviewed and updated. Possibility of enabling access through the NODC websites will be explored.
- (iii) The projects database, previously available through the NEPAD/COSMAR website will be moved to the ODINAFRICA website. An interface will be developed to enable access and data entry. Information Managers will update records from their countries. The records will be linked to the metadata catalogues developed by the NODCs.
- (iv) An interface will be developed for accessing the African Register of Marine Species (ARMS) – this has already been discussed under 2.4.4 above.
- (v) An interface will be developed to access the sealevel data generated at country level, with linkages to the appropriate tools for analysing the data.

The development of the interfaces and the update and maintenance of websites will be undertaken with the IT experts from IOC Project Office for IODE, experts seconded from ODINAFRICA institutions and consultants engaged for specific tasks. The NODC websites (www.nodc-countryname.org) will be evaluated and the webmasters provided with recommendations for updating and improving them.

2.4.7 Publicity/Public Awareness.

The Steering Committee stressed the importance of developing linkages with all categories of stakeholders. The following products for publicity/public awareness will be prepared to facilitate the communication of information on the projects products and services:

- (i) A Standard ODINAFRICA-IV presentation in English and French to be provided to the ODINAFRICA National Coordinators to use during the National Coordination meetings.
- (ii) WINDOW newsletter, with possible increase in frequency (while reducing the number of pages), and efforts made to produce it in English and French.
- (iii) Posters and brochures will be produced to publicize the activities of ODINAFRICA at national, regional and continental levels
- (iv) The possibility of translating the ODINAFRICA book into French should be explored. The publication of additional books will be considered depending on the availability of resources
- (v) Publication of the African Marine Atlas book

The Steering Committee proposed that an open-day/exhibition be held each year, during one of the National Coordination Meetings, to publicize the products and services developed by the project.

2.4.8 Visual and Interpretative Tools.

The analysis of data and preparation of products is not sufficient to ensure that the information that has been generated is utilised. The development of visual aids and interpretive products for prioritised issues can assist towards this end, but further effort is still required to support the uptake of this science. Different tools, methodologies and media will be utilised to facilitate interactions with stakeholders and assure greater exposure to the institutions and the services that they can provide.

- Policy and media briefs provide tangible advice for decision-making, priority issues and resource deployment. ODINAFRICA-IV will support the NODCs and national coordination committees to prepare short documents that convey specific problems and outline possible actions to resolve them (policy briefs). The policy briefs will have to be focused, professional, evidence based, succinct, understandable, and accessible. The policy briefs will focus on, but not limited to the four topics that were identified during the ODINAFRICA workshop: shoreline changes, sustainable use of resources, management of key ecosystems, and marine hazards and disaster management. Similarly, materials for the media will be developed that are accessible to the general public and easily taken-up by television, radio and newspapers.
- Conceptual diagrams: Coastal resource mapping can indicate the location and relative loading of point source pollution within an enclosed bay or harbour of interest. Interpretive tools such as the conceptual diagram, can take this information one step further: showing the interaction with competing interests and the ecological processes that are underway. Stakeholders can use such tools in decision making to reach agreement on the causal relationship of an issue such as a pollution source, and the actions that should be taken to address it.

2.4.9 Proposed Budget Revisions for Work Package 4.

The following budget revisions were proposed for the work package:

	WP4: Dissemination and sharing of data, information products and services		2009	2010	2011	2012	2013	Totals
30	4.1	Development and improvement of web-based information services AFRILIB, OceanExpert, OceanDocs (development cost)	0	10,000	60,000	5,000	5,000	80,000
	4.2	Training Course Marine Biodiversity data mobilization	0	0	0	0		0
30	4.3	Development and improvement of special data products (eg African Register of Marine Species ARMS)	0	10,000	30,000	5,000	5,000	50,000
11	4.4	Updating and upgrading of NODC, National Marine Information Centres web sites [develop interfaces for databases]	0	25,000	5,000	5,000	5,000	40,000
	4.5	Training Course OceanDataPortal	0	0	0	0		0
40	4.6	Setup ODP data nodes [Library database software to facilitate contribution to portals]	0	0	50,000	0	0	50,000
20	4.7	Operation ODP data nodes	0	0	25,000	25,000	0	50,000
40	4.8	Operational cost ODP Africa (IODE Project Office)	1,671	10,000	10,000	10,000	4,329	40,000
20	4.9	Support for national outreach and promotional activities (25 partners)	0	25,000	25,000	25,000	0	75,000
20	4.10	Preparation of national policy briefs and other decision support tools	0	0	50,000	50,000	0	100,000
40	4.11	Publication of printed ODINAFRICA books	0	0	15,000	15,000		30,000
40	4.12	Publication of printed atlases (African)	0	0	0		15,000	15,000
TOTALS			1,671	80,000	270,000	140,000	34,329	526,000

3. SUMMARY OF BUDGET REVISIONS PROPOSED.

3.1 SUMMARY OF REVISED BUDGETS.

	2009	2010	2011	2012	2013	TOTAL
WP1: Networking, Coordination and Management	89,028	223,278	399,184	225,726	292,583	1,229,799
WP2: Strengthening of national marine data and information management capacity	18,700	297,300	200,000	150,000	96,000	762,000
WP3: Development of Products	10,000	297,500	310,000	67,500	20,000	705,000
WP4: Dissemination and sharing of data, information products and services	1,671	80,000	270,000	140,000	34,329	526,000
TOTAL	119,399	898,078	1,179,184	583,226	442,912	3,222,799
10% UNESCO overhead	11,940	89,808	117,918	58,322	44,291	322,279
GRAND TOTAL	131.339	987,886	1,297,102	641,548	487,203	3,545,078

3.2 Project budget in UNESCO format (in US Dollars)

Budget	Description	Total	2009	2010	2011	2012	2013
Line							
10	Staff/individual travel	125,000	16,161	30,839	60,000	10,000	8,000
11	Experts (ALD, consultants)	841,320	62,917	218,810	216,734	220,776	122,083
13	Admin support staff	0	0	0	0	0	0
20	Fee/activity fin. Contracts	1,415,000	18,700	477,800	500,000	287,500	131,000
30	Meeting costs	564,800	19,950	74,950	287,450	29,950	152,500
40	Equipment	236,000	1,671	85,000	105,000	25,000	19,329
50	Hospitality, office expenses	40,679	0	10,679	10,000	10,000	10,000
	Totals before support costs	3,222,799	119,399	898,078	1,179,184	583,226	442,912
80	Programme support costs	322,279	11,940	89,808	117,918	58,322	44,291
	TOTAL BUDGET	3,545,078	131.339	987,886	1,297,102	641,548	487,203

3.3 COMPARISON OF ORIGINAL BUDGETS AND PROPOSED REVISIONS.

3.3.1 Comparison by Budget Line.

BUDGET LINE	ORIGINAL	PROPOSED	CHANGE
10	20,000	125,000	+105,000
11	531,320	841,320	+310,000
13	0	0	0
20	2,086,679	1,415,000	-671,679
30	434,800	564,800	+130,000
40	150,000	236,000	+84,000
50	0	40,679	+40,679
SUBTOTAL	3,222,800	3,222,800	0
80	322,279	322,279	0
GRAND TOTAL	3,545,078	3,545,078	0

3.3.2 Comparison by Years.

YEAR	ORIGINAL	PROPOSED	CHANGE
2009	849,129	119,399	-729,730
2010	964,760	944,078	-20,682
2011	686,184	1,179,184	+493,000
2012	722,726	583,226	-139,500
2013	0	396,912	+396,912
SUBTOTAL	3,222,799	3,222,799	0
UNESCO overhead	322,279	322,279	0
GRAND TOTAL	3,545,078	3,545,078	0

3.3.3 Comparison by Work Package.

WP	ORIGINAL	PROPOSED	CHANGE
WP1	1,122,800	1,229,800	+107,000
WP2	830,000	762,000	-68,000
WP3	740,000	705,000	-35,000
WP4	530,000	526,000	-4,000
TOTAL	3,222,800	3,222,800	0
UNESCO overhead	322,280	322,280	0
GRAND TOTAL	3,545,080	3,545,080	0

3.3.4 Justification for the changes.

These changes have been necessitated as follows:

- (i) Line 10: Assessment and Coordination missions to be undertaken by the Regional Coordinators was initially budget under line 20, as “Fee contracts” could still be used for individual experts at the time the proposal was prepared.
- (ii) Line 20: At the time the project was developed experts could be engaged on fee contracts (Line 20). This now not possible and they have to be engaged as Consultants (Line 11). Those covered under this include: Regional Coordinators, and experts who will assist in development of the Coastal and Marine Atlases, development of interfaces for websites, development of scenarios and products. Similarly the assessment and coordination missions initially planned under line 20 have been moved to Line 10.
- (iii) Line 30: The Project Steering Committee approved the organization of two Coastal and Marine Atlas development workshops
- (iv) Line 40: The software for development of atlases, and that for integrated library management will be purchased centrally by UNESCO and distributed to the participating institutions. This will ensure that the correct software is acquired, with possibility of negotiating cheaper rates for bulk purchases.
- (v) Line 50: Includes mailing and communications costs for temporary assistant based in Paris (engaged to assist in processing contracts/agreements etc)

The project was initially to run from 1 January 2010 – 31 December 2012. However due to delays in commencement we would like to request for an extension to 31 July 2013.

ANNEX I

LIST OF PARTICIPANTS

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ANNEX II

SUMMARY OF PROJECT INFORMATION

Project Title: Integrated Data And Information Products And Services For The Management Of Oceans And Coastal Zones In Africa (ODINAfrica-IV)

Target Country or Region: AFRICA

Budget code : 513RAF2013

Project Goal: The overall goal of ODINAFRICA-IV is to promote the sustainable management of marine and coastal resources, as well as reducing the risks of ocean related hazards, based on sound scientific knowledge.

This will be achieved by strengthening the pan African network of National Oceanographic Data Centre (NODCs), and marine related institutions, as a sustained mechanism for application of data, information and products in marine and coastal management in Africa.

Project Objectives:

- Expanding and strengthening the network of marine scientists and institutions in the region to foster the sharing of data and information.
- Developing high quality products and tools to support decision-making, management and conservation of the marine and coastal environment.
- Promoting the use of products and services developed by the project to all stakeholders.
- Fostering active south-south, intra-Africa, north-south and Africa-Flemish collaboration for marine training, research and technology transfer.

In addition, the ODINAFRICA IV programme will strive to promote the involvement and participation of women and youth in marine science.

Project Duration:Planned 01 January 2009 – 31 December 2012 [4 years]. Requested change: 1 August 2009 – 31 July 2013

Executing Agency:UNESCO/IOC

Implementing partners:UNESCO/IOC and participating institutions in Algeria, Angola, Benin, Cameroon, Comoros, Congo, Cote d'Ivoire, DR Congo, Egypt, Gabon, Ghana, Guinea, Kenya, Madagascar, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Senegal, Seychelles, South Africa, United Republic of Tanzania, Togo, and Tunisia.

Project Funding:

SOURCE	TOTAL
Contribution requested from Flanders	3,545,080
UNESCO/IOC Counterpart contribution	181,000
National Partner counterpart contributions	3,583,234
TOTAL	7,309,314

ANNEX III

COMPOSITION OF PROJECT STEERING COMMITTEE.

1. IOC Vice Chair, Region V (Africa and Middle East)
2. Chair, IOC's Regional Committee for the Central and Eastern Atlantic (IOCEA)
3. Chair, IOC's Regional Committee for the Western Indian Ocean (IOCWIO)
4. Dr Malika Bel Hassen-Abid
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ANNEX IV

PARTICIPATING COUNTRIES [as at 20 January 2010].

COUNTRY	INSTITUTIONS.
1. ANGOLA	Instituto Nacional de Investigação Pesqueira
2. BENIN	Centre de Recherches Halieutiques et Océanologiques du Bénin
3. CAMEROON	Specialized Research Centre for Marine Ecosystems, Agricultural Research Institute for Development
4. COMOROS	Centre National de de Documentation et de Recherches Scientifiques
5. CONGO	
6. COTE D'IVOIRE	Centre de Recherches Oceanologiques
7. EGYPT	National Institute of Oceanography & Fisheries
8. GHANA	Directorate of Fisheries, Marine Fisheries Research Division
9. GUINEA	Centre de Recherche Scientifique de Conakry -Rogbane (CERESCOR)
10. KENYA	Kenya Marine & Fisheries Research Institute
11. MADAGASCAR	Institut Halieutique et des Sciences Marines, Université de Toliara
12. MAURITANIA	Institut Mauritanien de Recherches Océanographiques et de Recheches
13. MAURITIUS	Albion Fisheries Research Centre Mauritius Meteorological Services
14. MOZAMBIQUE	Instituto Nacional de Hidrografia e Navegação (INAHINA)
15. NAMIBIA	National Marine Information and Research Centre (NatMIRC)
16. NIGERIA	Nigerian Institute for Oceanography & Marine Research (NIOMR),
17. SENEGAL	CRODT/ISRA Direction de Pêches Maritimes
18. SEYCHELLES	Seychelles Fishing Authority
19. SOUTH AFRICA	Directorate of Marine and Coastal Management
20. TOGO	Centre de Gestion Intégrée du Littoral et de l'Environnement, Université de Lomé
21. TANZANIA	Institute of Marine Science
22. TUNISIA	Institut National des Sciences et Technologies de la Mer (INSTM)

THREE COUNTRIES FROM THE ONES LISTED BELOW WILL BE INVITED TO PARTICIPATE IN ODINAFRICA TO MAKE THE TOTAL 25.

DR CONGO	Applied to participate but is not a member state of IOC
ALGERIA AND MOROCCO	Participated in previous phase, but with challenges that need to be addressed
GABON	Pending issues to be finalised before participation can be finalised.
CAPE VERDE, GAMBIA AND GUINEA BISSAU	Have not participated, one could be invited to participate

ANNEX V
ORIGINAL ODINAFRICA-IV BUDGETS.

Budget is expressed in US Dollars. The project will have duration of 4 years (48 months) with a planned starting date of 1 January 2009.

Note that the **cost for training courses** in the below costing tables (marked in red) will be covered by a separate project (OceanTeacher Training Academy) and will be organized inter-regionally.

	WP1: Networking, Coordination and Management	2009	2010	2011	2012	Totals
1.1	Project Manager (ALD P-3 full-time)	127,000	130,810	134,734	138,776	531,321
1.2	Regional coordinators (5 regions, US\$ 400/month/pax)	24,000	24,000	24,000	24,000	96,000
1.3	Meeting, Project Steering Committee (4 days, 9 pax)	19,950	19,950	19,950	19,950	79,800
1.4	Bi-Annual review and planning meeting (50 pax)	0	177,500	0	177,500	355,000
1.5	Operational costs Project Office	10,679	10,000	10,000	10,000	40,679
1.6	Official travel Project Manager/ Regional coordinators	5,000	5,000	5,000	5,000	20,000
	Total for Work package 1	186,629	367,260	193,684	375,226	1,122,800

	WP2: Strengthening of national marine data and information management capacity	2009	2010	2011	2012	Totals
2.1	National assessments (self and moderated)	50,000	0	0	0	50,000
2.2	Costs related to national coordination committees (at least 2 meetings/year)	50,000	50,000	50,000	50,000	200,000
2.3	Infrastructure package new centres (DM) (max 5)	10,000	0	0	0	10,000
2.4	Infrastructure package new centres (IM) (max 5)	10,000	0	0	0	10,000
2.5	Infrastructure upgrades existing centres ODINAFRICA-II (DM) (20x2000)	40,000	0	0	0	40,000
2.6	Infrastructure upgrades existing centres ODINAFRICA-II (IM) (20 x 2000)	40,000	0	0	0	40,000
2.7	Support operational expenses new centres (DM) (5 x 2000)	10,000	10,000	10,000	10,000	40,000
2.8	Support operational expenses new centres (IM) (5 x 2000)	10,000	10,000	10,000	10,000	40,000
2.9	Support operational expenses existing centres (DM) (25 x 2000)	50,000	50,000	50,000	50,000	200,000
2.10	Support operational expenses existing centres (IM) (25 x 2000)	50,000	50,000	50,000	50,000	200,000
2.11	Training for new centres	0	0	0	0	0
2.12	Training for existing centres	0	0	0	0	0
	Total for Work package 2	320,000	170,000	170,000	170,000	830,000

	WP3: Development of Products	2009	2010	2011	2012	Totals
3.1	Development national multi-sectoral metadata system (25x3000)	75,000	50,000	0	0	125,000
3.2	Consolidation national data into central ocean data base (25x2000)	0	50,000	50,000	0	100,000
3.3	Data mining (data gaps related to national atlas) (25x2000)	0	50,000	50,000	0	100,000
3.4	Data acquisition external sources (hires remote sensing,...)	30,000	0	0	0	30,000
3.5	Training Course national marine atlas	0	0	0	0	0
3.6	Setup national marine atlases (25x3000)	0	75,000	0	0	75,000
3.7	Development national marine atlases (25x2000)	0	50,000	50,000	50,000	150,000
3.8	Development/upgrade African Marine Atlas (IODE Project Office)	20,000	20,000	10,000	10,000	60,000
3.9	Training Course on application of GIS and Remote sensing to forecasting/predictions and scenario development	0	0	0	0	0
3.10	Support for development of national products (scenarios, forecasts,...)	12,500	12,500	12,500	12,500	50,000
3.11	Support for development of LME products	12,500	12,500	12,500	12,500	50,000
	Total for Work package 3	150,000	320,000	185,000	85,000	740,000

	WP4: Dissemination and sharing of data, information products and services	2009	2010	2011	2012	Totals
4.1	Development and improvement of web-based information services AFRILIB, OceanExpert, OceanDocs (development cost)	20,000	5,000	5,000	5,000	35,000
4.2	Training Course Marine Biodiversity data mobilization	0	0	0	0	0
4.3	Development and improvement of special data products (eg African Register of Marine Species ARMS)	20,000	20,000	5,000	5,000	50,000
4.4	Updating and upgrading of NODC, National Marine Information Centres web sites	25,000	5,000	5,000	5,000	40,000
4.5	Training Course OceanDataPortal	0	0	0	0	0
4.6	Setup ODP data nodes	50,000	0	0	0	50,000
4.7	Operation ODP data nodes	12,500	12,500	12,500	12,500	50,000
4.8	Operational cost ODP Africa (IOE Project Office)	10,000	10,000	10,000	10,000	40,000
4.9	Support for national outreach and promotional activities (30 partners)	30,000	30,000	30,000	30,000	120,000
4.10	Preparation of national policy briefs and other decision support tools	25,000	25,000	25,000	25,000	100,000
4.11	Publication of printed atlases (national)	0	0	25,000	0	25,000
4.12	Publication of printed atlases (African)	0	0	20,000	0	20,000
	Total for Work package 4	192,500	107,500	137,500	92,500	530,000

		2009	2010	2011	2012	Totals
	TOTAL	854,450	966,950	684,450	716,950	3,222,800
	10% UNESCO overhead	85445	96695	68445	71695	322280
	GRAND TOTAL	939,895	1,063,645	752,895	788,645	3,545,080

Summary budget

	Total
Contribution requested from Flanders	3,545,080
UNESCO/IOC counterpart contribution¹	181,000
National Partner counterpart contributions	3,583,234
TOTAL	7,309,314

National counterpart contributions are calculated based upon the following elements and expressed *per annum*:

1. Cost of staff employed by partner institution and working at NODC and marine information centre
2. Office furniture provided by the partner institution for the NODC and marine information centre
3. Cost of utilities of office space used for NODC and marine information centre
4. Cost of equipments purchased by the partner institution for the NODC and marine information centre (from funding sources other than ODINAFRICA) that will be used for ODINAFRICA-IV
5. Cost of internet connection and other communication technologies paid by partner institution as a contribution to the project
6. Direct financial contribution to the NODC and marine information centre from the partner institution budget (operational expenses)
7. Financial contributions received from other sources (projects) that will contribute to the ODINAFRICA-IV project

¹ The IOC counterpart contribution will also include financial and in-kind contributions from other IOC programmes such as IOC Capacity Building, ICAM, GOOS and JCOMM. However this often concerns expected extra-budgetary contributions that have not been assured at the time of publication of this proposal.

Project budget in UNESCO format (in US Dollars)

<i>Budget</i>	<i>Description</i>	<i>Total</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
line						
10	staff/individual travel	20,000	5,000	5,000	5,000	5,000
11	experts (ALD, consultants)	531,321	127,000	130,810	134,734	138,776
13	admin support staff	0	0	0	0	0
20	fee/activity fin. Contracts	2,086,679	547,179	631,500	526,500	381,500
30	meeting costs	434,800	19,950	197,450	19,950	197,450
40	equipment	150,000	150,000	0	0	0
50	hospitality, office expenses	0	0	0	0	0
	Totals before support costs	3,222,800	849,129	964,760	686,184	722,726
80	Programme support costs	322,280	84,913	96,476	68,618	72,273
	TOTAL BUDGET	3,545,080	934,042	1,061,236	754,803	794,999

ANNEX VI

LIST OF ACRONYMS

AMA	African Marine Atlas
AfrOBIS	African OBIS node
CBD	Convention on Biological Diversity
CMA	Caribbean Marine Atlas
EEZ	Exclusive Economic Zone
FUST	UNESCO/Flanders Fund-in-Trust for the support of UNESCO's activities in the field of Science
GE-MIM	
GIS	Geographic Information System
IOC	Intergovernmental Oceanographic Commission (of UNESCO)
IODE	
IT	Information Technology
IUCN	International Union for Conservation of Nature
OBIS	Ocean Biogeographic Information System
ODIN	Ocean Data and Information Network
ODINAFRICA	Ocean Data and Information Network for Africa
ODINCARSA	Ocean Data and Information Network for the Caribbean and Latin America region
QC	Quality Control
ToR	Terms of Reference
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization

Intergovernmental Oceanographic Commission (IOC)

United Nations Educational, Scientific and Cultural Organization (UNESCO)

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