



FINAL REPORT ON THE FUST PROJECT "DEVELOPMENT OF AN AFRICAN REPOSITORY FOR ELECTRONIC PUBLICATIONS (ODINPubAfrica)





Brief presentation of the project

Development of an OAI-compliant e-repository providing access to full-text knowledge items available in African ocean libraries and information centres, partners in ODFINAFRICA. These may include scientific articles, theses, reports and other published or unpublished (grey literature) materials, available in full-text electronic form.

Rationale: During the ODINAFRICA-II project all participating ocean libraries were provided with the INMAGIC Integrated Library Management System (ILMS) software. All libraries built their in-house library catalogue using this software (and using a standard format). After quality control the records of all libraries were merged into the AFRILIB library catalogue available on the IOC/ODINAFRICA web site. This data base includes records on all (paper) publications (monographs, reprints, photocopies of articles, journals, theses, etc) available in the libraries. The system does not provide full-text access to these objects. Accordingly to obtain the full-text version of the objects interlibrary loan requests need to be sent to the holding library.

Provide a platform facilitating the development of Africa e-Journals Rationale: on many occasions African scientists have expressed their concern about their difficulty in publishing their research findings in international journals. Several attempts have been made by various institutions and organizations to start the publishing of African ocean journals in print form. Most have failed due to the lack of interested publishers, limited market potential and other business related reasons. E-journals are able to bypass the need for commercial publishers. This model has proved itself for various disciplines (eg physics, mathematics, etc).

Project title and code

DEVELOPMENT OF AN AFRICAN REPOSITORY FOR ELECTRONIC PUBLICATIONS (ODINPubAfrica) – 513RAF2004

Country/region: Africa

Total project budget: US\$ 111,100

Funding sources, including possible Government counterpart contributions: Additional resources have been provided by the University of Hasselt (formerly Limburgs Universitair Centrum) mainly in-kind through the provision of the technical project coordinator (Mr Marc Goovaerts). Project coordination support was provided by the IOC through the ODINAFRICA project office (Mr Mika Odido, Kenya) and the IODE Project Office (Ostend, Belgium). The participating countries in Africa contributed staff time to populate the repository.

<u>Dates of initiation and operational completion of the project:</u>

Initial implementation period: 2004-2005

Revised implementation period: 1 August 2004 – 10 November 2006

Implementing Sector/Field Office: SC/IOC

Name of project officer and, if applicable, of CTA or local project manager: Peter Pissierssens

Executive summary of the report and its main findings:

POSITIVE

- The ODINPubAfrica project has accomplished its objective to establish a central repository of electronic publications. The repository contains 1122 documents related to marine science and oceanography prepared by African authors or authors affiliated with African institutions;
- The ODINPubAfrica project has trained 15 information professionals in Africa and two regional coordinators (one for East and one for West Africa) to are responsible for input or coordination of input by African institutions;
- The ODINPubAfrica project has been recognized as a valuable example for the development of electronic repositories in developing countries. Similar repositories are now planned for Latin America and Eastern Europe (ECET).
 In addition IOC/IODE decided to place all e-repository projects under a new umbrella called *OceanDocs*:
- The ODINPubAfrica electronic repository is harvested by Google Scholar, providing global exposure of publications by African scientists;
- OdinPubAfrica developed specific collections for existing paper journals. The latest release of the OceanDocs Dspace support the creation of e-journals. This will be implemented in the next months

NEGATIVE

- research scientists are unfamiliar with the e-repository concept and see it as a competitor with "traditional journals". It has been challenging for the African marine information managers to convince scientists;
- entering input into the e-repository is an extra and unrewarded task for the librarians, while they often need to enter the same information in other metadata systems (eg local bibliographic database, ASFA,...);
- Internet connectivity remains a problem in some locations.

RECOMMENDATIONS FOR FURTHER ACTION

- A promotional campaign will make the repository better known by the audiences;
- ODINAFRICA needs to support the repository policy and stimulate the support of the participating institutes and their researchers;
- New services (journal page publication lists for authors ...), which are now available in the new release will make the product more attractive. These new services can be used in institute websites, AfricanOceans, OceanExpert and make links between the products;
- The workload of the information manager can be diminished if the metadata once created can be used in other products. Therefore we will have to work on alternative submission procedures where the existing metadata can be reused. Alternative submission procedures are also necessary for institutes with minimal internet capacity. Then the metadata and document can be submitted by ftp or even on a CD-ROM. Some support for controlling and uploading the metadata will be necessary.
- The work of the information managers and regional coordinators are essential to develop OceanDocs Africa. They need a platform to exchange experiences and to post their questions.

<u>Annexes</u>

Annex I: Detailed description of work carried out

Annex II: Institutional repository policy of the Institute of Marine Sciences,
Zanzibar, Tanzania

Annex III: Institutional repository policy of the marine fisheries research division library, Ghana

Annex IV: Evaluation questionnaire of the ODINPubAfrica project

Annex V: ODINPUBAFRICA PROJECT MONITORING FORM

ANNEX VI: ARTICLE PREPARED FOR PUBLICATION IN IAMSLIC – NEWSLETTER,
WINDOW AND WAS ALSO PROPOSED TO LOCAL JOURNALS AS
WESTERN INDIAN OCEAN JOURNAL OF MARINE SCIENCE

ANNEX I

DETAILED DESCRIPTION OF WORK CARRIED OUT

The goal of OdinPubAfrica is to develop an electronic platform to collect scientific documents (articles, conference papers, working papers, ...) produced by members of African research institutes in the field of oceanography and marine science. A two year project was accepted by the government of Flanders in the FUST-programme to realize the goal. The University Library of LUC – since June 1st Hasselt University (Belgium) - is coordinating the project, which started officially on August 1, 2004.

2004 - 2005: Realisations

1. Technical preparation: Development of the technical infrastructure.

The OdinPubAfrica repository/website was installed on a Linux server at Hasselt University (http://doclib.uhasselt.be/odin = now the training server). DSpace was chosen as the repository software, which is mainly developed for a Tomcat web server and a Postgresql database.

The layout of the website was adapted. The implementation of the repository structure was started. OdinPubAfrica has three levels: 1. Country or region, 2. Institutes, 3. Document collections. Every participating country and organization can be identified directly in the database and has a presentation page. The documents can be searched globally and on every level.

The implementation of this structure started with the import of 86 documents from different organisations and collected by KMFRI. During the further development of the project other institutions also submitted documents and the appropriate structure was created.

In <u>August 2004</u> the Hasselt University Library developed extra functionalities in the Dspace software (bibliographic output screen, controlled input for authors and keywords). Different technical problems were resolved during the following months: the OAI-compatibility, the use of diacritical signs, the use of the unique identifier system and a bug in the upload procedure.

In the period <u>June-November 2005</u> technical changes have been realized. In the first place a dedicated server has been acquired. The software and the database of the OdinPubAfrica repository have been transferred to that new server at the IOC office in Oostend (Belgium) in <u>September 2005</u> (http://iodeweb1.vliz.be/odin). The DSpace software has been upgraded to version 1.3.1, with a new lay-out and some new features. A multilingual interface has partly been developed and the submission form has been enhanced with a controlled ASFA-keyword field (basic solution). A few technical problems were solved before November 15, 2005 (cron routines, handle server). The IT people of IOC-Ostend received the technical information (software –directory structure – passwords) for the maintenance (backups, ...) of OdinPubAfrica.

The DSpace software is developed constantly. New versions are released yearly. The most recent version, DSpace 1.4 is available since <u>July 27, 2006</u>. Combined with this upgrade a customization of the software based on the experiences of the project was started. On <u>September 30, 2006</u> a stable product was available with the following features:

- A new submission module based on collection and document type
 - o with supported entry for journal titles and ASFA-keywords
 - o The use of unique ID's for authors can be implemented
 - o Refined metadata structure
 - o 6 input screens instead of 8
- A dynamic statistical module
- Installation of the SRW/SRU export module based on the Lucene search engine. This makes it possible to export XML structured data based on a query, while the OAI-export function only makes data available by sets (collections and communities).

- Presentation of content in different formats (based on XSLT):
 - Publication list of authors
 - Journal view
 - o Conference view.

These presentations can be included in other web pages (institute website, African Oceans).

This upgrade has been implemented on <u>November 10, 2006</u> on a new server. Also the service has been renamed to **OceanDocs** *Africa*.

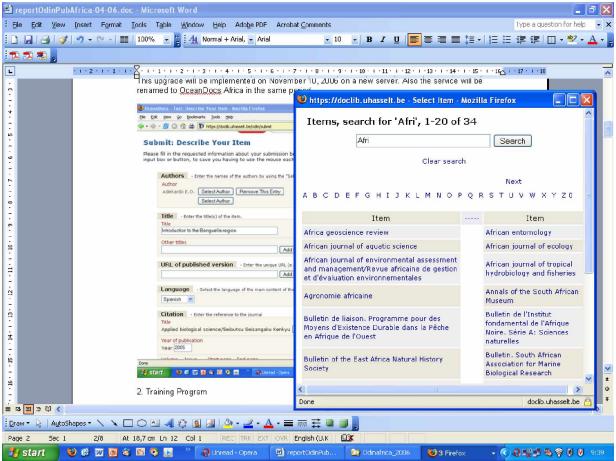


Fig. 1 Screenshot of the submission page for a published article.

2. Training of African Partners

2.1. Preparation of the training program

The success of OdinPubAfrica depended on the participation of the different marine research centres in Africa. Training was essential for realizing this goal. Therefore a self-training package has been developed. It was also necessary to train a group of information managers in a traditional training course. The trained information managers are crucial in sustaining the development of the project and by helping colleagues with the self-training package. Extended training was possible for 16 persons, while nearly all Odinafrica partners had the possibility to have a basic training in the goals and working of OdinPubAfrica (see further).

The announcement of the launching of OdinPubAfrica was sent by email to all the Odinafrica partners on <u>September 29, 2004</u>. The email was also a general invitation to participate actively in the project. It was also decided to organize two workshops.

2.2. First Workshop - LUC, February 21-25, 2005

The selection of participants was based on the response we received to the invitation email, on the survey of Mrs. Aramé Keïta (Questionnaire On Status And Requirements Of Odinafrica Information Centres/Libraries) and on the advice of the Odinafrica Management Group.

The most important selection criterion was the availability of good Internet connection and computer infrastructure in the centres. By the deadline of 15 November not all of Odinafrica partners had send back the survey mentioned above. We gave preference for this first training to candidates that already were involved in marine information management training courses in the Odinafrica context..

Ten institutes were selected and finally eight information managers were invited for the first training course:

- Amartey, Patrick A. Marine Fisheries Research Division Ghana
- Benjaddi, Mohamed Université Mohammed V-Agdal, Faculté des Sciences Morocco
- Sakho, Cheikh Ibrahima IMROP Mauritania
- Alfredo, Ana Maria INAHINA Mozambique
- Keita, Arame G. Ndiaye Direction des Peches Maritimes Dakar Senegal
- Josette Confait Seychelles Fishing Authority Seychelles
- Nyika, Edna Asheri Institute of Marine Sciences Tanzania
- Messaoudi, Saida INSTM Tunisia

In <u>November 2004</u> we started with the self-training modules. A training server was set up at http://doclib.uhasselt.be/odin. The submitters of OdinPubAfrica had the possibility to train the whole submission procedure and to give advice about the development of the OdinPubAfrica structure.

The following modules were available in December 2005:

- 1. Introduction to repository and open access publishing:
 - Document Repositories and Alternatives for Electronic Journals
- 2. Setting up a repository policy in an organization
 - Setting up a repository policy at the institute level
- 3. Copyright and publishing on a repository
 - Document repositories and the copyright issue
 - License Agreement document
- 4. The OdinPubAfrica repository practical sessions
 - Choosing a Password
 - Submission of documents
 - Going through the submission procedure
- 5. Other documents
 - OdinPubAfrica: Realisations in 2004 Planning of 2005
 - ASFA-Thesaurus
 - OdinPubAfrica-Training Course 21-25 Feb 2005

These modules have been used as an introduction to the training courses. The trainees had to prepare three tasks before the start of the course. During the course they have given us feedback about the use and content of the documents.

From February 21-25, the 1st training course has been organized for the 8 information managers mentioned above with the following program:

Course program:

Monday, February 21	09:00-12:00	Arrival at LUC + practical arrangements
	13:00-14:00	 From information delivery to information access: 20 years of information service in marine science in Africa – (Prof. Dr. Leo Egghe)
	14:00-17:00	 OdinPubAfrica: presentation of goals and tasks (Marc Goovaerts)
Tuesday February 22	09:00-12:00	Creation of pdf-documents (electronic/paper) (Annie Kuppens)
	13:00-17:00	Uploading documents in the repository: introduction and practice on the test server (Marc Goovaerts)
	19:00-22:00	Preparing the structure of the repository (Marc Goovaerts)
Wednesday February 23	09:00-12:00	Uploading documents in the repository: practice on the test server (Annie Kuppens)
	13:00-15:00	Upload of documents in the OdinPubAfrica repository (comments) – Marc Goovaerts
	15:00-18:00	Gaining content: experiences at the University of Southampton (Pauline Simpson)
Thursday	09:00-12:00	The copyright issue (Pauline Simpson)
February 24	13:00-17:00	Upload of documents in the OdinPubAfrica repository – practice (Marc Goovaerts – Annie Kuppens)
Friday February 25	09:00-12:00	 Development of a repository policy – guidelines and action plan – introduction + task (Marc Goovaerts) Presentation of AFRILIB –comments Call for Regional Coordinators
	13:00-	Reception - Lunch

The program was reviewed slightly during the course because the trainees did their homework well and went through the documents on the OdinPubAfrica training website quite quickly. At the same time, it took more time to realize the practical organization of the different collections..

2.3. Second workshop - IOC-Oostend, 5-9 December 2005

The second group of eight information managers was invited for the second workshop. The selection was based on the information management background of the candidates and on the internet capacity of the centers they are attached too.

- Dr. Azza Mohamed KHALED, National Institute of Oceanography and Fisheries Egypt
- Mr James Macharia, KMFRI Kenya
- Ms ANDRIAMAMPIANINA Hanitra Sylvia, Institut Halieutique et des Sciences Marines Madagascar

- Ms. Judith LOMBARD, NatMIRC Namibia
- Mrs. Clivy Lim Shung, Albion Fisheries Research Centre Mauritius
- Mr. Igwe, Joseph Chuks, NIOMR Nigeria
- Mrs Dométo Kokoè KOUEVI, CGILE Togo

Ms Alieya HAIDER, Marine and Coastal Management Library / Gilchrist Library - **South Africa**, could not come for personal reasons.

TRAINERS

- Josette Confait, Regional coordinator OdinPubAfrica Seychelles Fishing Authority
- Marc Goovaerts, Hasselt University Library, Belgium
- Pauline Simpson, Head of Information Services National Oceanographic Library, National Oceanography Centre, University of Southampton, United Kingdom
- Cheikh Ibrahima Sakho, Regional coordinator OdinPubAfrica IMROP, Mauritania

WORKSHOP CALENDAR

	1	
Monday 5 December	09:00-09:15	 Welcome, practical arrangements (Vladimir Vladymyrov, Wouter Rommens)
	09:15-10:30 10:45-13:00	 From information delivery to information access Document Repositories and Alternatives for Electronic Journals (Marc Goovaerts) OdinPubAfrica: presentation of goals and tasks (Josette Confait)
	13:30-15:30 15:45-17:00	 Evaluation of needs of the different partners (Marc Goovaerts - Josette Confait – Ibrahim Sakho) Uploading documents in the repository: introduction (Marc Goovaerts)
Tuesday 6 December	09:00-10:30 10:45-13:00	Gaining content: experiences at the University of Southampton (Pauline Simpson)
	13:30-15:30 15:45-17:00	The copyright issue (Pauline Simpson)
	17:00-19:00	Welcome drink
Wednesday 7 December	09:00-10:30 10:45-13:00	 Uploading documents in the repository: introduction and practice on the test server (Josette Confait – Ibrahim Sakho – Marc Goovaerts) Preparing the structure of the repository (communities and collections in OdinPubAfrica) (Josette Confait – Ibrahim Sakho – Marc Goovaerts)
	13:30-15:30 15:45-17:00	 Creation of pdf-documents (electronic/paper) (Ibrahim Sakho – Annie Kuppens)
Thursday	09:00-10:30 10:45-13:00	 Uploading documents in the repository: practice on the test server (Josette Confait – Ibrahim Sakho) Role of the regional coordinators (Josette Confait)
8 December	13:30-15:30 15:45-17:00	 Upload of documents in the OdinPubAfrica repository – practice (Josette Confait – Ibrahim Sakho) Promotion and PR for OdinPubAfrica (Marc Goovaerts)
Friday 9 December	09:00-10:30 10:45-13:00	 Development of a repository policy – guidelines and action plan – introduction + task (Marc Goovaerts)

13:30-15:30 15:45-16:45	\blacksquare Inhad of documents in the ChanPubAtrica repository \blacksquare
16:45-17:00	Closure and presenting certificates (Marc Goovaerts)

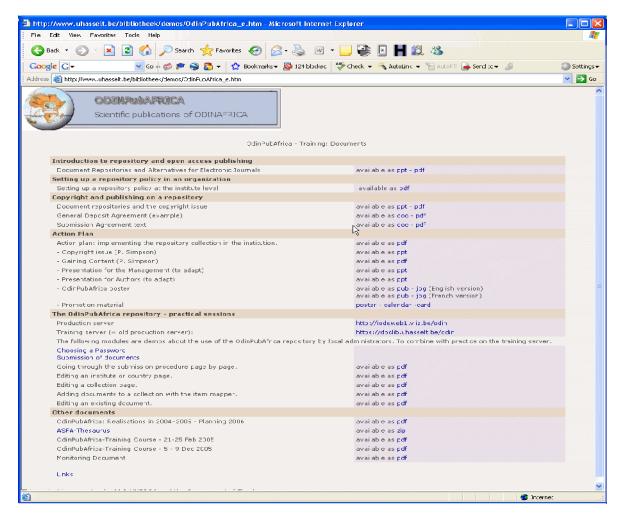
The participants already received two tasks based on this documentation before coming tot the workshop:

- Register and submit a document
- Preparing a list of publication collections

The participants received two CD-Roms: Acrobat Standard 7.0 (with license) and free software: Open Office 2.0 – PrimoPDF – Firefox – course documentation.

2.4. The development of documents for self-training

A web page was created at Hasselt University to collect all the self-training modules . The documents are available in English (http://www.uhasselt.be/bibliotheek/demos/OdinPubAfrica_e.htm) and in French (http://www.uhasselt.be/bibliotheek/demos/OdinPubAfrica_f.htm).



self-training modules page in English

It contains documents about the organization and the challenges of the development of the OdinPubAfrica repository. But it focuses mostly on practical aspects of the project, from workflow organization to submission procedures. More documents will be uploaded during the project development (e.g. policy documents, action plans, folders created by the trainees). They will be made available at the ODIMEX website too.

OdinPubAfrica - Self-Training Page:

- 1. Introduction to repository and open access publishing
 - Document Repositories and Alternatives for Electronic Journals (last update 01/12/2005)
- 2. Setting up a repository policy in an organization
 - Setting up a repository policy at the institute level (last update 01/12/2005)
- 3. Copyright and publishing on a repository
 - Document repositories and the copyright issue
 - General Deposit Agreement (example)
 - Submission Agreement text
- 4. Action Plan
 - Action plan: implementing the repository collection in the institution.
 - Copyright issue (P. Simpson) (last update 15/12/2005)
 - Gaining Content (P. Simpson)
 - Presentation for the Management
 - Example of a poster/leaflet
- 5. The OdinPubAfrica repository practical sessions
 - Demos: Choosing a Password Submission of documents: To combine with practice on the training server (last update 15/11/2005)
 - Going through the submission procedure page by page (updated 15/12/2005).
 - Management of the institute webpage and collections (available 03/01/2006)
- 6. Other documents
 - OdinPubAfrica: Realisations in 2004 Planning of 2005
 - ASFA-Thesaurus
 - OdinPubAfrica-Training Course 21-25 Feb 2005
 - OdinPubAfrica Training course 5-9 Dec 2005
 - Monitoring document
- 7. Links

As a result of the software upgrade, the practical guidelines and demos need also an upgrade. This was realized before November 30, 2006.

3. Operational Phase

3.1 . Appointment of regional coordinators

All the participants of the first training course were invited to send in their candidatures. After an evaluation of the six candidates, the Odinafrica Management Group appointed two regional coordinators in June 2005:

- Josette Confait Seychelles Fishery Authority
- Cheikh Ibrahim Sakho IMROP, Mauritania.

Tasks: from 1 December 2005 on:

- Management of OdinPubAfrica-repository:
 - Not the technical part
 - Management of communities and collections:
 - o Creation and updating of communities and collections
 - o Granting the access rights to the collections + control
 - Supervising the submission of documents

- Helpdesk for the information managers in the use of the repository (submissions and consultation)
- Doing the follow up of the participants to have a sustained development of the repository collections
- o Doing the public relations for OdinPubAfrica in OdinAfrica / IAMSLIC / ...
 - Preparing posters, emails and other to promote the setup of the repository (collections) by the OdinAfrica or African marine institutes and organisations
 - Preparing posters, emails and other to promote the use of the repository in and outside Africa.
 - Helping the information managers in promoting the setup and use of the OdinPubAfrica collections in their institute.
- Giving support at the OdinPubAfrica-training (Oostend 5-9 December 2005)

3.2 Development of content

After the two training sessions the information managers went home with a few tasks. First of all they had to inform their audience (institute management and researchers). Then a framework had to be developed in the form of an <u>institutional repository policy</u> (e.g. see <u>Annex II</u> and <u>Annex III</u>) and publications had to be collected. Based on an evaluation survey realized in the period August – October 2006 (see <u>Annex IV</u>), 8 out 10 respondents organized a presentation at their institute. In these institutes a repository policy was accepted. Also the information managers had regular contacts with the authors.

Based on the requirements of the different institutes, DSpace was structured in different levels:

- Countries or regions
- Institutes
- Type of documents

African Marine Science - Oceanography - Fishery

o Miscellaneous [675]

Egypt

National Institute of Oceanography and Fisheries

- o Articles [7]
- o Conference Paper [1]
- o Egyptian Journal of Aquatic Research [29]
- o Reports [0]
- o Thesis [0]

Ghana

Marine Fisheries Research Division

- o 1. Articles [6]
- o 2. Reports [5]
- o 3. Theses [0]

Indian Ocean

Indian Ocean Tuna Commission

- o Proceedings Expert Consultation on Indian Ocean Tunas [37]
- o Reports (IOTC) [7]

WIOMSA

- o Western Indian Ocean Journal of Marine Science Archive [52]
- o Working papers (WIOMSA) [2]

Kenya

Kenya Marine and Fisheries Research Institute

- o Articles [19]
- o Conference Papers [22]
- o Other Reports [9]
- o Technical Reports [1]
- o Thesis [0]
- Working papers (KMFRI) [4]

Madagascar

Institut Halieutique et des Sciences Marines

- o Articles [0]
- o Conference [0]
- o Rapports de recherche [0]
- o Rapports scientifiques et techniques [0]
- o Theses [0]

Mauritania

Institut Mauritanien de Recherches Océanographiques et des Pêches

- o 01. Bulletin Scientifique de l'IMROP [48]
- o 02. Documents Techniques de l'IMROP [1]
- o 03. Bulletin Statistique [1]
- o 04. Rapports Techniques [0]
- o 05. Rapports de Projets [0]
- o 06. Thèses [8]
- o 07. Actes de Conférence [5]
- o 08. La lettre de l'IMROP [6]
- o 09. Livres [0]
- 10. Rapports de Programmation [1]
- o 11. Divers [2]

Mauritius

Albion Fisheries Research Centre

- o Articles [4]
- o Conference Paper [5]
- o Other reports [3]
- Technical Reports [1]

Morocco

Université Mohammed V-Agdal, Faculté des Sciences

- o 1. Thèses [0]
- o 2. Articles [2]
- o 3. Actes de conférences [0]
- o 4. Rapports et Autres Documents [0]

Mozambique

INAHINA

- o 1. Articles [2]
- o 2. Conference Paper [0]
- o 3. Reports [0]
- o 4. Theses [2]

Namibia

NatMIRC

- o Articles [1]
- o Conference Papers [0]
- o Reports [0]
- o Thesis [0]

Nigeria

Nigerian Institute for Oceanography and Marine Research

- o Annual Reports [11]
- o Articles [1]
- o Conference Paper [0]
- o Other Reports [0]
- o Technical Report [0]
- o Thesis [0]

Senegal

Direction des Pêches Maritimes / CRODT

- o 1. Document scientifique du CRODT [0]
- o 2. Bulletin d'Information [0]
- o 3. Articles [2]
- o 4. Actes de Conférence [1]
- o 5. Rapports [2]
- o 6. Thèses [1]
- o 7. Législation et réglementation [0]
- 8. Divers [0]

Seychelles

Seychelles Fishing Authority

- Annual Reports [8]
- o Articles [2]
- o Conference papers [3]
- o Others [2]
- o Special Collection [12]
- o Technical reports [21]
- o Tuna Bulletin [3]

Tanzania

Institute for Marine Science - Zanzibar

- o Articles (IMS) [15]
- Conference papers [1]
- o IMS series [6]
- Theses [0]

Tanzania Coastal Management Partnership

- o Pwani Yetu Newsletter [14]
- o Reports (TCMP) [3]

Togo

Centre de Gestion Integrée du Littoral et de l'environnement

- o Bulletin d'information du CNDO Togo [0]
- Papiers de conférence [0]
- o Publications et notes réunies sur l'environnement marin et cotier [38]
- o Rapports [0]
- Thèses [0]

Tunisia

Institut National des Sciences et Technologies de la Mer

- o 1. Bulletin de l'INSTM-Salammbô [44]
- o 2. Autres Articles [0]
- o 3. Mémoires et Thèses [2]
- o 4. Autres Publications [0]

LUC/UHasselt submitted the collection 'African Marine Science - Oceanography - Fishery'.

In between the [...] the numbers of submitted documents are shown. <u>During the project 1122</u> <u>documents were submitted</u>. LUC/UHasselt submitted 675 documents. (Only) 447 documents were submitted by the information managers. Since their training only 7 institutes have submitted documents on a regular but slow pace:

- IMROP Mauritania (72)
- KMFRI Kenya (55 + 30 (WIOMSA))
- SFA Seychelles (51 + 44 (IOTC))
- IMS Tanzania (39 + 24 (WIOMSA))
- INSTM Tunisia (46)
- CGILE Togo (38)
- NIOF Egypt (37)

There are different reasons which we will expose in the evaluation chapter, but it is now already clear that an important effort from the Odinafrica project is still necessary to develop the repository, to be representative for the African literature on marine science. Still, it is clear that most of the repositories are only in a starting phase. Avano, the harvester developed by IFREMER (http://www.ifremer.fr/avano/) shows that OdinPubAfrica contains one of the largest collections of literature in oceanography and marine science now available through OAI.

During the project different actions were taken to promote OdinPubAfrica and to support the information managers. This was mainly the work of the regional managers Josette Confait and Ibrahim Sakho. The actions included:

- A survey with the group of the first workshop to identify the reasons for the limited submission of documents
- An email has been sent to the national coordinators/directors of institute to ask to support the
 effort of the information managers. After this first communication, they were informed on the
 evolution of the project every two months. The information managers also received this
 information.
- An email to the 8 information managers already involved was sent to urge them to enter documents and to let us know what sort of problems they were confronted with at their institutional level
- The regional coordinators monitored the steps taken by the information managers (every 12 months): a monitoring document was prepared (see: Annex V).
- During the training sessions promotional material was prepared. A first poster was developed by Josette Confait (In English) and Ibrahim Sakho (in French), which was distributed during the second training session. This material is also available on the training web pages (http://www.uhasselt.be/bibliotheek/demos/OdinPubAfrica_e.htm
 http://www.uhasselt.be/bibliotheek/demos/OdinPubAfrica_f.htm). It was furthermore decided to create a new poster and leaflet. It was further decided to change the name of the repository. IOC decided to support the setup of other repositories. It was decided in October 2006 to rename the e-repository initiatives at the global level to 'OceanDocs' and OdinPubAfrica would then be renamed 'OceanDocs Africa'. As a result, the creation of a new poster and leaflet were postponed. (this will be implemented as part of the new e-repository project)
- An article was prepared for publication in the IAMSLIC newsletter, WINDOW and was also proposed to local journals such as the Western Indian Ocean Journal of Marine Science (Annex VI).
- OdinPubAfrica was presented at different international conferences, workshops and seminars:
 - o IAMSLIC conferences 2004 (Hobart -AUS) Marc Goovaerts
 - o EURASLIC conference 2005 (Split CR) Marc Goovaerts
 - o IAMSLIC conferences 2005 (Rome IT) Aramé Keïta, Josette Confait
 - o Afriamslic conference 2005 (Accra GH) Edna Nyika
 - DSpace conference 2006 (Sydney AUS) Edna Nyika
 - o DSpace workshop 2006 (Bergen NO) Marc Goovaerts
 - o IAMSLIC conferences 2006 (Portland USA) Ibrahim Sakho

The example of OdinAfrica stimulated other organizations in marine science to start up their own repository, in the first place Odincarsa (temporary web address: http://doclib.uhasselt.be/odincarsa)

- The repository has been announced in the open access community and to search engines like OAlster, OpenDOAR (specific for repositories) and Google/Google Scholar. OdinPubAfrica is now searchable through these search engines..

4. OdinPubAfrica as platform for African e-journals.

The second main objective of OdinPubAfrica was to facilitate the development of African e-Journals. OdinPubAfrica focuses in the first place on existing paper journals, but new journals can also be developed. Specific collections were created:

- Egyptian Journal of Aquatic Research (NIOF Egypt)
- Bulletin de l'IMROP (IMROP Mauritania)
- Document Scientifique du CRODT (CRODT Senegal)
- Bulletin de l'INSTM Salammbo (INSTM Tunisia)

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These collections archive the articles of the journals. In the latest release of the OceanDocs DSpace a specific module was developed to create journal views (e.g. http://doclib.uhasselt.be/test/article.jsp). The journal view can easily be integrated in a webpage of the institute or of Odinafrica. The result is basically an e-journal webpage backed by a stable repository system.

5. Evaluation of the project

Josette Confait and Ibrahim Sakho sent an evaluation form (see <u>Annex IV</u>) to the participating information managers in <u>August 2006.</u> The last filled out form came back at the end of October. From the 15 information managers 11 sent back the evaluation form.

- Azza Mohamed Khaled NIOF (Egypt)
- James Machacharia KMFRI (Kenya)
- Judith Lombard NatMIRC (Namibia)
- Joseph Igwe NIOMR (Nigeria)
- Patrick Amartey MFRD (Ghana)
- o Ibrahim Sakho IMROP (Mauritania)
- o Ana Maria Alfredo INAHINA (Mozambique)
- o Arame Keïta CRODT (Senegal)
- Josette Confait SFA (Seychelles)
- o Edna Nyika IMS (Tanzania)
- o Saïda Messaoudi INSTM (Tunisia)

There are different reasons for not answering the evalution request. Some people have moved (Mauritius and Morocco). I presume that Kokoé Kuoevi (Togo) has internet problems because she sends us CD's with documents by mail. Sylvia Andriamampianina (Madagascar) had a baby in April. Since then we got no reaction from her anymore.

The evaluation was in general very positive, with a lot of critical remarks and some indications of problems. It is clear that most of the participants are aware that the collection is not (yet) representative for African literature in marine science and oceanography. At the same time, they all find it an added value for Odinafrica. They are very positive about the website, specifically about the community collection structure. The search function is easy to use, but a remark was made about the created result set. The Lucene search engine automatically combines different terms in an OR-relation, when users sometimes expect and AND. This gives unexpected result sets. Using an AND relation as standard will regularly empty result sets. This is a dilemma. In general they found the OdinPubAfrica website user-friendly.

The training sessions and material were also positively commented. More attention was asked for support in French. The training sessions were for some people too short, specifically for the community-collection management parts. There is also a need for support on the level of the collection of documents, specifically about the contacts with authors – how to convince them to participate).

All of the 11 information managers have prepared the organization of the repository on the institute level by doing a presentation and working on an institute policy. Still only 50% of the researchers are aware of OdinPubAfrica and less than 25% use it. Besides, the authors are not cooperative, specifically for articles in international journals. They are afraid of not respecting copyright regulations and they do not see the purpose of the project. This is a problem that European and American librarians also have so it is not specific for OdinPubAfrica.

Internet access is still a problem for some institutes (Ghana, Nigeria, and especially Togo). Even the institutes of the regional coordinators (SFA, Seychelles – IMROP, Mauritania) have connection problems sometimes. Slow connections can influence the submission of documents, specifically for large files (theses, scanned documents ...).

Most of the information managers experienced the repository as an extra workload which is not remunerated and which has to be done sometimes outside the office hours. There is a lot of double or even triple work to be done by the information managers. The metadata submitted to the repository is also submitted to the catalogue (7 times), to ASFA (7) and African Oceans (3).

ANNEX II

INSTITUTIONAL REPOSITORY POLICY OF THE INSTITUTE OF MARINE SCIENCES, ZANZIBAR, TANZANIA

UNIVERSITY OF DAR ES SALAAM, INSTITUTE OF MARINE SCIENCES, LIBRARY E-Repository Policy Document

by

Edna A. Nyika Information Manager



Background

The Institute of Marine Science is charged with teaching and research objectives in all field related to marine sciences under the University of Dar es Salaam Act. 1970. It is the leading marine science institution in Tanzania hosts the Tanzania National Oceanographic Center (TZNODC). Being the National Oceanographic Data Centre, The Institute of Marine Sciences' library is charged with the role of collecting, processing, disseminating and also archiving marine science materials in all formats. With this regard the IMS library e-repository is a way to archive, protect and make accessible via the open space the institution's scientific research findings and intellectual publications. The Library E-repository shall put forward the research and development activities of the Institute of Marine Sciences and the University of Dar es Salaam as a whole.

Scope of Materials

Although all documents are worth archiving, the IMS's e-repository shall hold materials (articles, reports, data summaries, metadata, conference papers, theses, dissertations and grey literature) produced by IMS academic staff, students, laboratory scientists, technical staff, visiting students and researchers, other university of Dar es Salaam members of staff dealing with marine science related subjects, and affiliated institutions within the country.

The Role of The Information Manager

The Main goal of the Institute of Marine Sciences is teaching and research in all field related to marine sciences (marine environment) though in the few past years the institute has widened its activities into other larger body waters such as lakes (Victoria, Tanganyika and Nyasa). To ensure the successful implementation of this service the IMS Information Manager has following roles. These include:

- To Sensitize students and staff members to deposit materials to the repository (advocacy);
- To advise members of staff about copyright and journal embargo policies for materials which
 they would like to deposit in the IMS e-repository and to make sure that copyright issues are in
 place;
- Depositing material directly on behalf of staff members;
- Collecting materials on behalf of the staff members and converting them to a suitable format such as PDF for import into the repository;
- To develop guidelines for self-archiving in repository;
- Collecting materials for e-repository from authors from stakeholder institutions for.

Content Accession and Access of Material

The IMS library shall not permit content to be removed once submitted except for revision or where the content has proved to be published by other publishers within the ODINAFRICA institutions. In a variety of legitimate circumstances the library shall limit access to a particular content to a specific set of users. These circumstances include copyright restriction, policies established by the University of Dar es Salaam such as intellectual regulations and access to information clause of the University of Dar es Salaam Records and Archives Management Policy or any other regulation from institution working with the IMS.

Responsibility for Archiving

Academic and Technical members of staff and other members of staff from the affiliated institutions shall archive their publications and documents with the library.

List of Journals where IMS staff members publish their articles

- 1. Ambio
- 2. Tanzania Journal of Science
- 3. Western Indian Ocean Journal of Marine Science
- 4. Geological Journal of Mozambique
- 5. International Journal of Remote Sensing
- 6. Coral Reef
- 7. European Journal Phycology

- 8. South African Journal of Botany
- 9. Hydrobiologia
- 10. Aquatic botany
- 11. Trees structure and function
- 12. Estuarine, coastal and shelf science
- 13. Ocean and coastal management
- 14. Wetland ecology and management
- 15. Marine biology
- 16. Indian journal of marine science
- 17. Journal of natural products
- 18. World aquaculture society
- 19. International journal of remote sensing
- 20. Journal of African earth sciences
- 21. Marine geology
- 22. Marine ecology progress series
- 23. Indian journal of earth science
- 24. South African journal of botany
- 25. Planta
- 26. Uhandisi journal (pCET)
- 27. Journal of climate research
- 28. Journal of Institution of Engineers-Tanzania

Conclusion

As an essential part of the repository's operation, this policy has clearly established the roles of all parties involved in the deposit process.

For the repository, it provides a formal framework that defines what the repository can and cannot. For the author, it provides reassurance that the repository is not taking ownership of the work and also makes them aware of the type of service the repository is providing.

The Policy being a guidance for the e-repository processes, is dynamic, and will change according to needs of both parties when ever there is need to do so for the benefit of all parties.

ANNEX III

INSTITUTIONAL REPOSITORY POLICY OF THE MARINE FISHERIES RESEARCH DIVISION LIBRARY, GHANA

It was the vision of the administrator of the OdinPubAfrica training that by the end of the current year about 1800 articles were loaded at the website.

This task obviously falls on the first group that participated in the first (21st February – 25th February 2005) of the two trainings.

The MARINE FISHERIES RESEARCH DIVISION established in 1962 has a lot scientific documents, which are scattered. Theses documents are in the form of grey literature: reports, theses reprints conference papers.

In addition, scientist or research officers have published scientific articles in local and international journals, some the library have received.

The Division having specialty in the area of marine science would concentrate in depositing into the repository technical reports, scientific articles and theses.

The library will carry out in the short and the medium term:

- Installation of the software distributed during the training into the computer.
- Looking into pamphlet boxes and collecting all reprints of scientific of significance, scan and convert them into electronic formats and submit them.
- Gather reports that are scattered on personal computers of researchers in the institution.
- Visit to institutions affiliated to ODINAFRICA and selling out the idea of the repository to them.
- Securing ISSN and ISBN for all publication of the Division.
- Report the repository to local editors at a special meeting.

The repository cannot thrive on its own without the support of researchers or scientists. The following researchers has been identified to be very supportive as far as the repository is concerned, Mr. S.N.K Quaatey, the acting director, Mr. Paul Bannerman, Miss. Hawa Yaqub, Mrs. Comfort Akomea-Adu, Mr.Kofi Amador, Mr. Richmond Quartey and Mr. Daniel Ofori-Adu a retired staff of the Division.

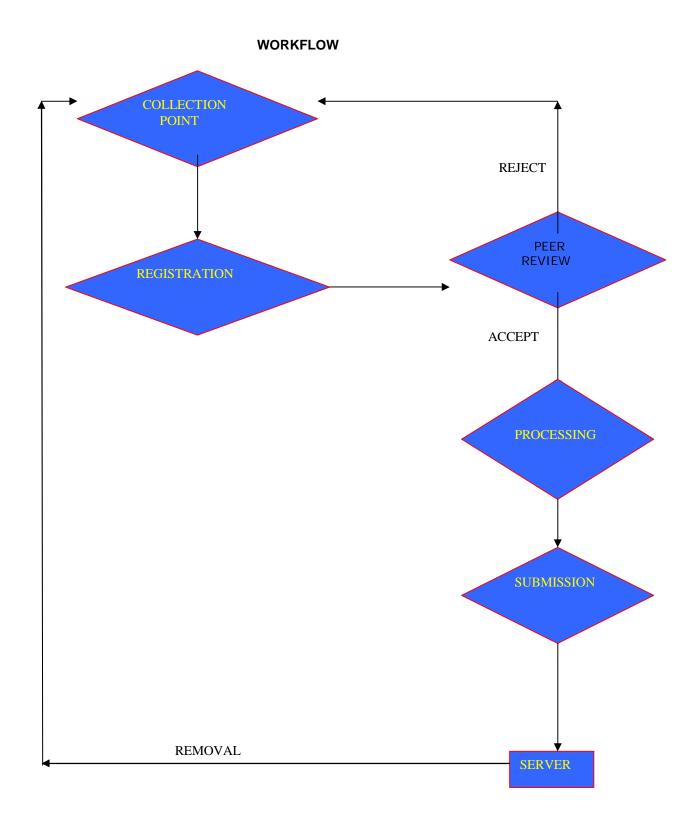
Others are partners that are affiliated to the project.

A survey carried out by the library shows that researcher or scientist from the division publishes in the following international and local journals:

- ICES journal of Marine Science
- Inter-Research
- Elsevier (which journals ??)
- Ambio
- Fisheries Research
- Journal of Natural Science
- West Africa Journal of Applied Ecology
- Journal of the Ghana Science Association
- Ghana Journal of Science

The official mouthpiece of the Directorate "The Fisherman" is out publication. This was due to the transfer of editorial staff as a result of the decentralization policy of the ministry.

As a result of this the institution will have to look at a better way of selling this idea.



INTERPRETATION OF WORKFLOW CHART

Publication from interested scientist and researchers are deposited at the collection that is the library. After the collection the said paper is registered and the presenter is educated on copyright issues. If the author agrees he /she is made to sign the mandatory submission form.

The paper is then send for review by panelists selected by management. If the panel agrees that the work is good i.e. without copyright problems and also good for archiving, it will then be send to the information manger for processing. On the other hand where the panelist considers otherwise it will be send to the author and would be advised of the rejection.

When the submission process is approved by the administrator the author will be accordingly informed by giving the author the link to the site.

The author can also order the removal from the site the work which will also done if the removal has been motivated.

ANNEX IV

EVALUATION QUESTIONNAIRE OF THE ODINPUBAFRICA PROJECT

How to fill out this questionnaire?

- o Simply, fill out this questionnaire in Word
- Erase the superfluous choices and keep one for every question (choices are bold typed)
- You can type your comment and use the space you need for it. You have more space than the two lines which are now available.
- 1. Website and software

Comment:

o Is the name adapted to the content of the repository?
If no, do you have an alternative?

Good - Average - Bad

Is the lay-out attractive?Comment:

Good - Average - Bad

o Do you find the structure of the website easy?

Good - Average - Bad

o Do you find the search function easy?

Good - Average - Bad

Comment:

Good - Average - Bad

Is the website user friendly for the scientific users?
 Comment:

o For the information managers:

Is the document submission procedure user friendly? Comment:

Good - Average - Bad

- 2. Training courses for information managers
 - Did the training courses prepare you for the organizational part of the realisation of OdinPubAfrica in your institute (contact with authors – repository policy)?
 Comment:

Yes - Average - No

 Did the training course prepare you for the submission and management tasks?
 Comment:

Yes - Average - No

o Is the quality of the training material for OdinPubAfrica on the internet:

Good - Average - Bad

(see http://www.uhasselt.be/bibliotheek/demos/OdinPubAfrica_e.htm - http://www.uhasselt.be/bibliotheek/demos/OdinPubAfrica_f.htm)
Comment:

Do you use the training material on the Internet:
 Comment:

Yes - No

3. OdinPubAfrica at your institute

Did you make a presentation of OdinPubAfrica for the staff members?

Comment:

Yes - No

o Did your institute develop a repository policy?

Comment: If no why

Yes - No

o Did you contact the authors to collect the publications?

Comment:

Never - Once - Regularly

How many hours/month do you spend on OdinPubAfrica?

Comment:

<5 - 5-10 - >10h

4. Content of OdinPubAfrica

Comment:

o Is the content of OdinPubAfrica already representative of the literature in marine science and oceanography in Africa? Yes - Average - No

What is the quality of the submitted documents in general? Good - Average - Bad Comment:

What is the quality of the metadata?

Good - Average - Bad

Yes - No

Yes - No

Yes - No

Comment:

Is the repository OdinPubAfrica known

by Odinafrica members? At your institute? By the researchers of your institute?

- How many know OdinPubAfrica? 25% - 50% - 75% - 100% - How many use OdinPubAfrica? 25% - 50% - 75% - 100%

Comment:

5. Problems

5.1. Technical

o Do you have problems with the access to the internet regarding OdinPubAfrica?

Comment:

Yes - Sometimes - No

o Do you have problems with the submission of documents? Yes - Sometimes - No

Comment:

o Do you have problems converting documents to pdf?

Comment:

Yes - Sometimes - No

5.2. Organizational

- o Do you have problems collecting publications?
 - § Published articles
 - Yes Sometimes No Institute publications (journal, reports, ...) Yes - Sometimes - No

Comment:

- Do you enter the (metadata of) documents in other library systems/databases? (it is possible to indicate more than one choice)
 - Catalogue (Afrilib) ASFA input database African Oceans
 - § Other: ...

Comment:

- Do you have enough staff time to realize the work for OdinPubAfrica? Yes No Comment:
- 6. Added value
 - o Has there been value added of OdinpubAfrica at your institute? Yes Moderate No
 - Has there been value added of OdinPubAfrica for Odinafrica? Yes Moderate No Comment:
- 7. Any other comments:

ANNEX V

ODINPUBAFRICAPROJECT MONITORING FORM

OdinPubAfrica

Project Monitoring Form (to be completed quarterly)

Period: to: Completed Institution: Country: (Answers must be based for the period stated above Task/Activity 1. Presentation of OdinPubAfrica To the Institute management When: Y/N Results: To the scientific staff members When: Sesults: Other publicity given/User awareness (e.g. talk – advert – poster – experiment) Other publicity given/User awareness (e.g. talk – advert – poster – experiment)	by:
(Answers must be based for the period stated above Task/Activity 1. Presentation of OdinPubAfrica To the Institute management Y/N When:	
Task/Activity 1. Presentation of OdinPubAfrica To the Institute management Y/N When: Results: To the scientific staff members Y/N When: Results: Other publicity given/User awareness (e.g. talk – advert – poster – e	
1. Presentation of OdinPubAfrica To the Institute management Y/N When: Results: To the scientific staff members Y/N When: Results: Other publicity given/User awareness (e.g. talk – advert – poster – e	/e)
To the Institute management When: Results: To the scientific staff members When: Results: Other publicity given/User awareness (e.g. talk – advert – poster – e	
When: Results: To the scientific staff members When: Results: Other publicity given/User awareness (e.g. talk – advert – poster – e	
When: Results: Other publicity given/User awareness (e.g. talk – advert – poster – e	
Describe:	email)
2. Status of editorial policy (please tick)	
Not yet started Under preparation Completed Approved/not approved (by institute management) If not approved, describe the problems:	
3. Do you receive the documents created by your staff? If Not, Why?	Y/N
No. new scientists/other users delivering their documents: Total number of users:	

4.	Inventory of available materials (no. recorded for period stated above)			
Availability of local journals (by title):				
Availal Journa	Availability of documents in			
Journa	Local Journals:	No. (approximatively)		
	Regional Journals			
	International Journals			
Crow list	· ouestrane	No.		
Grey lit	Preprints			
	Theses/Dissertations			
	Technical Reports			
	Conference papers			
	Working papers Others			
	Otricis			
5.	Articles in internation	nal journals (*)		
How many pre- or postprints do you have received? How many published versions? Did you request a copyright exemption by the publisher?				
		nted: No. of copyright rejected:		
(*) The use of articles in international journal is limited by a copyright agreement between author and publisher. Most of the publishers accept that a pre- or postprint version is placed on an institutional repository, but the published version cannot be used without the publisher's consent. You have to ask for it.				
6.	Staff involvement			
	No. of staff:	average hours/week:		

Journals Local Journals: Regional Journals International Journals	No	
Grey literature Preprints Theses/Dissertations Technical Reports Conference papers Working Papers Others	No.	
9. Problems faced (please	Problems faced (please explain)	

7.

Materials delivered to repository

ANNEX VI

ARTICLE PREPARED FOR PUBLICATION IN IAMSLIC – NEWSLETTER, WINDOW AND WAS ALSO PROPOSED TO LOCAL JOURNALS AS WESTERN INDIAN OCEAN JOURNAL OF MARINE SCIENCE



Development of an African repository for electronic publications (ODIN*Pub*AFRICA)

(http://iodeweb1.vliz.be/odin)

African scientists have expressed their concern on the difficulties of publishing their research findings in international journals. Several attempts have been made by various organisations to start the publishing of African journals in print form, but they have fail due to lack of interested publishers or limited market potential.

In August 20005 a new project on the development of the African repository (Odin*Pub*Africa) was launched. The two-year project is being coordinated by the University of Hasselt in Belgium and is being sponsored by the Flanders government. It will later be supported by the IODE of UNESCO

The Odin*Pub*Africa was created to develop an Open Access Initiatives (OAI) compliant repository, providing access to full text publications (articles, conference papers, working papers, theses, preprints...) created by scientists affiliated to OdinAfrica institutes working in the field of oceanography and marine science. This will later on be extended to include non-affiliated OdinAfrica institutions. The ultimate objective of the project is to make available material that cannot be obtained through the traditional printing process.

The goals of the project are;

- Making scientific publications of OdinAfrica institutes more easily and freely accessible
- Facilitate publishing of research findings and hereby promoting African research and increasing access by African scientists to the international research forum.
- Provide long term preservation of the digital publications

• Creating electronic versions of journals

Every participating institution has its own webpage with its own collection of documents. The service provides a simple mechanism to enable the information managers to deposit on behalf of their authors. Dspace is the software used because of the possibility of metadata exchange capability with the OdinAfrica catalogue. The documents can be searched globally and at every level.

The success of the project depends on the participation of the different partners in the marine research centres. Training is also essential in realising the goals of OdinPubAfrica. At present a total of 15 Information Managers from the OdinAfrica institutes of Tanzania, Mozambique, Seychelles, Mauritius, Kenya, Namibia, Togo, Madagascar, Tunisia, Ghana, Senegal, Mauritania, Egypt, Nigeria and Morocco have received specific training in order to sustain and underpin the development of the project. The first training was held in February 2005 in Hasselt (Belgium) and in December 2005 the second one took place in Oostende (Belgium).



OdinPubAfrica training workshop held in Oostende, Belgium, 5-9 $^{\rm th}$ December 2005

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[END]