TO: IABIN Executive Committee

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**From: General Secretariat of the Organization of American States
Unit for Sustainable Development and Environment
IABIN GEF PDF B - Executing Agency**

Re: Final Progress Report – February 2004 - August 2004

IABIN Milestones

- The IABIN Project Implementation Plan (PIP) entitled *Building The Inter-American Biodiversity Information Network* was submitted to the World Bank for approval after being circulated to IABIN Council and IABINfriends. The Project Implementation Plan (PIP) outlines agreements with the primary biodiversity informatics institutions throughout the Americas based on biodiversity data sharing priorities of these institutions and mandates of the first three IABIN Council Meetings. Co-financing of $28.9 million has been identified from 76 regional or national institutions and programs.
- World Bank and GEF approve the Project in June 2004. Legal Agreement was signed between the World Bank and the General Secretariat of the OAS on July 15, 2004.
- www.iabin.net fully operational in Spanish and English and is receiving an average of over 60,000 hits/month.
- Thirty-four out of 34 countries have designated IABIN Focal Points. Twenty three of 32 recipient countries have endorsed the GEF "Building IABIN" project.
- Development Grant Facility of the World Bank approves project on "Developing Connectivity between Biological and Geospatial Data in Latin America and the Caribbean" for $1.2 million over 3 years.
- The IABIN Secretariat will be hosted in Panama at the City of Knowledge.

- PDF B disbursements: In relation to the execution of the US$650,000 project preparation grant awarded by GEF, to date IABIN has spent 96.5% of the funds, leaving a balance equivalent to 3.5% of the total funds.

Purposes of the PDF B GEF Grant

The purpose of the Grant was to assist in the implementation of the Inter-American Biodiversity Information Network (IABIN) as a regional initiative to promote and facilitate technical and scientific cooperation, among OAS member countries, through the exchange of scientifically credible biodiversity information relevant to conservation and sustainable use of biological diversity (the Project). The activities (the Activities) for which the Grant is given are as follows:

Provision of technical assistance, and training to assist in the design and preparation of the Project's components through, inter alia, the following:

- identification and definition of network content and structure (potential participants) through the carrying out of surveys;
- identification and establishment of collaborative partnerships with related initiatives and organizations;
- development of an project implementation plan (PIP);
- design and preparation of an internet-based communication strategy for IABIN including, development and maintenance of its Web site.

Summary of the "Building IABIN" Project

This Project Implementation Plan outlines a $35 million project. IABIN requested and was awarded $6 million from the Global Environment Facility (GEF) towards this plan. The legal agreement was signed between the World Bank and the GS/OAS on July 15, 2004. The Project Implementation Plan (PIP) outlines agreements with the primary biodiversity informatics institutions throughout the Americas based on biodiversity data sharing priorities of these institutions and mandates of the first three IABIN Council Meetings. Co-financing of $28.9 million has been identified from 76 regional or national institutions and programs.

The overall project will:
- (i) Develop an Internet-based, decentralized managed network to provide access to scientifically credible biodiversity information currently existing in individual institutions and agencies in the Americas,
- (ii) Provide the tools necessary to draw knowledge from that wealth of resources, which in turn will support sound decision-making concerning the conservation of biodiversity, and
- (iii) Provide a mechanism in the Americas to exchange information relevant to conservation and sustainable use of biological diversity, thus promoting and facilitating technical and scientific cooperation to help fulfill the mandate of the Clearing-House Mechanism of the Convention on Biological Diversity.

Background
A Preparatory Grant of US$650,000 was awarded by the Global Environment Facility (GEF) to develop a potential IABIN GEF project. The Implementing Agency is the World Bank. The Executing Agency is the Organization of American States (OAS) that worked under the direction of the IABIN Executive Committee and IABIN Council.

Responding to the importance in the Americas of protection of biodiversity (the Americas house 8 of the 25 biodiversity hotspots), the Inter-American Biodiversity Information Network (IABIN) was officially mandated at the Summit of the Americas on Sustainable Development, convened by the Organization of American States in Santa Cruz de la Sierra, Bolivia, in December 1996. IABIN is an Internet-based forum for technical and scientific cooperation that seeks to promote greater coordination among Western Hemisphere countries in the collection, sharing, and use of biodiversity information relevant to decision-making and education. The objective of IABIN is to promote sustainable development and the conservation and sustainable use of biological diversity in the Americas through better management of biological information. While IABIN is envisioned as a distributed system of data providers in which the data are maintained and controlled by the provider, a single point of access to the integrated resources of the network is a key component of IABIN.

Since IABIN's inception in 1996, 34 countries have designated official IABIN Focal Points. Three IABIN Council meetings have been held with the IABIN Focal Points and a broad representation from the international, NGO, and private sector communities. The IABIN Executive Committee (IEC) comprises representatives from 8 Countries and an IGO/NGO member, currently the Global Biodiversity Information Facility (GBIF).

Methodology
In 2002, the IEC instructed the Organization of American States (OAS), acting as the Executing Agency, to submit a GEF Block B Grant proposal through the World Bank to the GEF. In late 2002 a US$650,000 project preparation grant was awarded to IABIN. During 2003 the OAS contracted 7 subregional specialists and a regional coordinator to work closely with the biodiversity information provider and user institutions in the Hemisphere, as well as the IABIN focal points, to define the IABIN implementation.

The activities under this Grant were carried out under the direction of a regional coordinator in two phases by subregional specialists in each of seven established sub regions:

Subregion 1 –   Andean: Bolivia, Colombia, Ecuador, and Peru
Subregion 2 –   Brazil
Subregion 3 –   Southern Cone: Argentina, Chile, Paraguay, and Uruguay
Subregion 4 –   Venezuela, Guyana, Suriname, and Trinidad and Tobago
Subregion 5 –   Caribbean less Trinidad and Tobago (includes Netherlands Antilles, Martinique and Guadeloupe)
Subregion 6 –   Central America: Belice, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama
Subregion 7 –   North America: Canada, United States of America, and Mexico

The subregional analysis methodology allowed for a participatory, comprehensive, and systematic view of available data resources and infrastructure in each sub-region.

The subregional reports may be found on www.iabin.net and summarize the following:

1. An inventory of biodiversity informatics users and providers in each subregion.
2. Biodiversity informatics Project Networks in each subregion.
3. Key institutions and data providers in each of the Project Networks.
4. Memoranda of Understanding (MOU) between the key biodiversity informatics organizations in the subregion, according to the implementation plan, which includes:
   - A five-year plan for development of the thematic network as a IABIN pilot project
   - A chronogram of activities
   - A financial plan including co-financing and parallel financing
5. Detailed information about the biodiversity informatics databases to be incorporated in the Project Networks, or the nature of the metadata to be incorporated in the catalog system from the identified data provider institutions in the subregion.
6. An analysis of the data providers' infrastructure, standards, and protocols.
7. Recommendations for an IABIN Gateway architecture based on IABIN standards for data, communications, and interoperability.

Implementation

The IABIN Secretariat will manage day-to-day activities of IABIN. Through an open, transparent bidding process, the IEC chose the City of Knowledge in Panama City, an NGO, as the Host organization for the IABIN Secretariat. GS/OAS/USDE was requested to be the executing agency.

Achievements

The Survey and Participatory Process -- Throughout 2003, during the PDF phase of the GEF project, subregional specialists worked with leading information institutions in the Americas to plan the implementation of TNs (Thematic Networks) in various thematic areas. The seven subregional specialists contacted 220 biodiversity-related institutions through surveys, telephone conversations, internet searches and personal visits. This survey process gave an overview of the different institutions, networks, and software applications as they pertain to biodiversity data collection and management. This work includes documenting implementation requirements and activities, developing cost sharing agreements among IABIN and the institutions leading the development of the network, and obtaining letters of intent from the data-providing institutions. Documentation for each TN contains: justification, objectives, products, participants, overall costs, and duration. The TNs currently being proposed are:
   - Basic biodiversity infrastructure projects: Specimens, Species, Ecosystems
   - Cross-cutting projects: Invasive Species, Pollinators, and Protected Areas.

The subregional reports summarized the following requirements for IABIN:
   - IABIN works best when it unites existing sub-regional networks that represent national networks -- clear example is Central America where SIAM is already in development.

- Projects established have to respond to a real need; not just a scientific effort but responsive to development efforts of participating countries.
- Small countries especially the SIDS have special requirements for capacity building.
- IABIN needs to be country driven and continually endorsed as a national and regional priority by the countries of the hemisphere.
- IABIN should work towards reducing risk from scientific uncertainty by increasing and improving environmental information to support decision making and action.

WWW.IABIN.net. IABIN has a completely re-designed user interface for more effective information delivery that includes:
- Information structure, navigation and graphic design
- Scripting for dynamic menus
- Translation and edit of graphics and templates from English to both Spanish & Portuguese
- Restructured current web directory structure to create analog web page collections for English, Spanish, and Portuguese
- Compiled lists of useful WebPages that contain biodiversity data
- Completed Matrix Guide to hyperlinks of Biodiversity Informatics on Terrestrial and Freshwater issues in the Americas that evaluates which WebPages supply different types of data.

The IABIN/NBII BioBot Search interface -- The surveys indicated that there is a great need for a catalogue system that enhances the infrastructure and tools necessary to organize information derived from biological collections and associated biodiversity enterprises into a maximally accessible form to meet the needs of society and science. For this reason, IABIN has teamed up with USGS National Biological Information Infrastructure (NBII) to create the IABIN/NBII BioBot Search interface. This interface allows for the seamless access to NBII and IABIN web content including all of the NBII Nodes throughout the country. This includes FGDC Biological Profile based Metadata, currently served via the NBII Mercury interface and published literature citations. Overall, BioBot facilitates the metadata dissemination of existing and future collections data and information from the Hemisphere's biodiversity for use by policy makers, environmental managers, the public and the scientific and educational communities.

Presently, the IABIN/NBII catalogue utilizing BIOBot:
- Assists institutions with biological collections to compile their metadata with information management solutions, support, and training;
- Builds support tools for managing systematic, biogeographic and ecological databases in a distributed and interoperable environment;
- Assists biological collections with managing technological change;
- Integrates biological collections-based data with other databases, modeling tools and geographic information systems;
- Fosters the process of full international access to biological collections information;
- Reduces the technical, political and social barriers to the free interchange of biodiversity information;

- Supports initiatives, such as "smart systematics," using technology and information science to improve the efficiency, quality and impact to society of biodiversity science;
- Supports systematics, inventories, and taxon-focused research to assure an institution's ability to generate and maintain accurate specimen-based data.

Intellectual Property Rights. The Inter-American Forum on Environmental Law (FIDA) completed the Intellectual Property Rights (IPR) policy that can be viewed on www.iabin.net in both English and Spanish. The draft document is based on the regulation of CONABIO-REMIB of Mexico.

Joint CHM IABIN Meeting. The Joint Inter-American Biodiversity Information Network-Clearing-house Mechanism Meeting on Building Partnerships through Effective Networking was held August 12-14, 2003, in Cancun, Mexico. The meeting represented the Third IABIN Council Meeting. The meeting was jointly sponsored by IABIN and the Convention on Biological Diversity, Clearinghouse Mechanism (CBD/CHM).   The final "Report of the joint Latin America and Caribbean regional meeting on the Clearing-House Mechanism and the Inter-American Biodiversity Information Network" is available on the Convention on Biological Diversity's website at:
http://www.biodiv.org/doc/meetings/cop/cop-07/information/cop-07-inf-04-en.doc (in MS Word format). Parties to the Convention on Biological Diversity in the Latin America and Caribbean region, participants in the Inter-American Biodiversity Information Network, and those countries in the Americas that are members of the Global Biodiversity Information Facility attended, along with several NGOs and academic institutions. The more than 70 participants comprised experts in the fields of management of clearing-house mechanism issues, information-sharing systems, biodiversity information networks and database management.

IABIN Foundation. The fund development initiative for IABIN sustainability will be administered by an established, experienced, biological-informatics focused, fund-raising, private non-profit organization on behalf of IABIN. IABIN specific funds would be placed in a separate and dedicated account in the fund development organization. IABIN related sustainability activities/expenditures of the fund development organization would require coordination with and approval of the IABIN Executive Committee. The International Bioinformatics Foundation (IBF), which is an existing, bioinformatics fund-raising focused, not-for-profit organization, has been selected to serve this function for IABIN. An IABIN representative will be selected by the IEC and become a formal IBF Board member. IABIN Focal Points are asked to recommend candidates for the position of IABIN representative on the IBF Board.

Fundraising.   (i) In June 2004, the World Bank approved a proposal to the DGF entitled "Developing Connectivity between Biological and Geospatial Data in Latin America and the Caribbean" for $1.2 million over 3 years. The proposal would help promote interoperability between biological information in the Americas (being achieved under IABIN) and different sets of non-biological information in order to promote the emergence of cross-thematic value-added applications in the areas of agriculture, disaster reduction, forestry, and rural development. (ii) In 2005, a fund-raising proposal will be submitted to OAS FEMCIDI for a total of $1.2 million over

4 years. The proposal will be submitted by the Country that is elected IABIN Chair at the next Council meeting.

Project Implementation Plan (PIP) -- The PIP lays out the details for the implementation of IABIN, a $35 million, 5-year effort of which $6 million is requested from GEF. The PIP also describes the administrative and financial management of the project. The project will finance 3 IABIN Council meetings, in project years 1, 3, and 5, which will review project milestones and authorize changes to project design and implementation. For monitoring and evaluation, a series of quantitative performance indicators are established to assess project progress.

Key priorities and recommendations for Biodiversity Informatics in the Hemisphere to be addressed by IABIN -- Key priorities based on the subregional reports include:

- **Outline legal framework** and agency policy regarding data exchange: Many Government agencies have not investigated and clarified their legal obligations and mandates for making mass quantities of information available electronically.
- **Formulate data standards:** Data standards may vary with the intent of each information sharing project. However, some basic guidelines for data standards should be developed to assist information managers in developing protocols and classifying their data.
- **Provide incentive framework for data sharing:** Although the benefits of collaborating on information exchange projects can be tremendous, they are often not highly visible to administrators or the public. Quite often, incentives such as financial, technical, or programmatic support can provide the mechanism to initiate new information exchange projects and leverage additional support from agencies.
- **Stabilize and improve funding:** Long-term financial sustainability of biodiversity informatics has meant that requests from outside networks such as CHM, GBIF, and IABIN for data add additional burdens on agency budgets that are often not met.
- **Recognize biodiversity informatics as a data management profession**: Hybrid informatics professionals evolved from other areas of technical expertise within agencies, such as biologists. With working on data systems, it was emphasized that investments in continuing education and training needed to be made to ensure that data management skills remained up-to-date. When personnel specifically trained in data management are employed by agencies, they are often removed from the program area where they are most needed (i.e., fisheries, wildlife, and so forth) and placed in overarching "IT" divisions serving a variety of customers. Emphasis needs to be placed on integrating these professionals directly with the customers (i.e., divisions) that they serve, and providing pay/promotional opportunities commensurate with skills to retain them within the agencies.
- **Improve agency leadership:** For biodiversity informatics to flourish, there is a need for stronger support for information management/sharing programs by Government administrators.
- **Improve communication between Government and provincial agencies**: Since provinces or states generally do not have mandates for interagency data exchange, requests from outside agencies that do not directly impact the state constituencies are

often given lower priority. There is "paranoia about data sharing" that has developed due to lack of communication/understanding about the uses of shared data.

- **Promote activities such as the Towards Best Practices** (TBP) eForum that is a Web-based resource designed for those involved in studying and managing the complex interactions between life forms - including human populations - and the environment. The TBP eForum will be both an **archive** and a **public forum** where users can submit and access full-text publications describing Best Practices related to biocomplexity and conservation and participate in a moderated discussion of the posted Best Practices.

- **Utilize Development Gateway**. Development of the "Biodiversity of the Americas" content on the Development Gateway Portal is utilized by IABIN with over 70 documents and WebPages being shared by dozens of contributors. It is particularly useful for gray unpublished literature where authors want to get feedback from a multi-disciplinary audience. This portal provides simple user interfaces for sharing knowledge, discussing issues, accessing projects and statistical databases, and registering and profiling users.

- **Keep current the Biodiversity informatics Matrix with Databases of the Americas (B-Matrix)**   IABIN developed the B-matrix, a digital library-based on biodiversity informatic service. The B-Matrix is a comprehensive compilation of links providing internet-compiled information about biodiversity in the Americas. It contains pertinent current information on terrestrial, inland, and marine ecosystems and related themes.   The B-matrix design helps biodiversity informatics users locate taxonomical, biological, ecological, spatial, and environment information.

PDF B Disbursements.

In relation to the execution of the US$650,000 granted by GEF, to date IABIN has spent or committed 96.5% of the funds, leaving a balance equivalent to 3.5% of the total funds. $23,066 of the $650,000 will be returned to the World Bank. Annex 1 is an expenditure report by activity detailing budget, actual expenditures, and funds available to be returned to the World Bank. Annex 2 is a Co-financing for project preparation "Building the Inter-American Biodiversity Information Network (IABIN)"

Annex 1. Expenditure report by activity detailing budget, actual expenditures, and funds available to be returned to the World Bank.

Building the Inter-American Biodiversity Information Network
GEF PDF Block B Grant
August 2002 - July 2004

PHASE I Consultancies

	Budget	**Actuals**	**Funds Available**
Regional	$24,000	$24,000	$0
Subregion 1	$24,000	$24,000	$0
Subregion 2	$24,000	$24,000	$0
Subregion 3	$24,000	$24,000	$0
Subregion 4	$24,000	$24,000	$0
Subregion 5	$24,000	$24,000	$0
Subregion 6	$24,000	$24,000	$0
Subregion 7	$24,000	$24,000	$0

PHASE II Consultancies

	Budget	**Actuals**	**Funds Available**
Regional	$24,000	$24,000	$0
Subregion 1	$18,000	$18,000	$0
Subregion 2	$24,000	$24,000	$0
Subregion 3	$24,000	$24,000	$0
Subregion 4	$24,000	$24,000	$0
Subregion 5	$24,000	$24,000	$0
Subregion 6	$24,000	$24,000	$0
Subregion 7	$24,000	$24,000	$0

Other Components

	Budget	**Actuals**	**Funds Available**
Website/Brochure	$79,317	$61,000	$18,317
Third Council Meeting	$54,683	$54,683	$0
PIP/PAD Development	$73,000	$68,251	$4,749
Project Management	$65,000	$65,000	$0

Total Project	$650,000	$626,934	$23,066
Funds Execution		96.5%	

Return to Bank			**$23,066.00**

Annex 2. -- Co-financing for project preparation "Building the Inter-American Biodiversity Information Network (IABIN)"

PDF Activity	Timeframe	GEF	Other[1]	OAS & World Bank
1. Define requirements for network architecture and content				
a. Develop and apply survey instrument to document network requirements	June 02– June 03	20,000	10,000	
b. Convene Technical Working Group meetings	June 03, Oct 03, Feb 04, Jul 04	15,000	62,000	250,000[2]
c. Prepare special studies, projects and background documentation	Jun – Dec 03	100,000	2,500,000	30,000[3]
d. Convene three regional meetings of biodiversity experts	Mar – May 03	75,000	102,000	
e. Prepare report	Jun 03	10,000	20,000	

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[1] Sources of funding: U.S. Geological Survey, National Biodiversity Informatics Infrastructure (NBII) governments supporting official IABIN Executive Committee (8 members) and IABIN Focal Points (34 members), Global Biodiversity Information Facility (GBIF), (CHM) and collaborative activities with the Clearing House Mechanism (CHM) Secretariat.

[2] Represents World Bank financing in the PDF period.

PDF Activity	Timeframe	GEF	Other[1]	OAS & World Bank
2. Institute collaborative partnerships		25,000	300,000	40,000[3]
a. Expand partnership with the CHM	Jan – Oct 03			
b. Develop collaborative efforts	Jan – Oct 03			
c. Develop agreements for information-sharing with international and national academic institutions, private enterprise, and NGOs	Jan – Oct 03			
d. Implement financial sustainability strategy	Jan – Oct 03			
3. Develop infrastructure implementation plan		175,000	26,000	30,000[3]
a-d. Design infrastructure; develop implementation plan	Jul – Sep 03			
e. Submit draft to IABIN Executive Committee, IABIN Council	Oct 03, July 04			
4. Support communication and coordination among participants		50,000	20,000	
a. Maintain Web site and listserv	Oct 2002- Aug 2004			
b. Coordinate among IABIN project participants and PDF working groups	Jan – Dec 03			
c. Keep participating organizations informed of progress	Jan – Dec 03			

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[3] Source of funding: Organization of American States

PDF Activity	Timeframe	GEF	Other[1]	OAS & World Bank
5. Develop GEF Project Document				
a. Prepare draft GEF Project Document	Oct 02	50,000	20,000	30,000
b. Coordinate review of GEF Project Document	Nov 03	5,000	46,000	20,000
c. Convene IABIN Council Meeting	Aug 03	50,000	104,000	
d. Publish information brochure	Dec 02	10,000	20,000	
6. Administration				
Provide project management coordination; meeting logistics support; etc.	Jan - Dec 02	65,000	220,000	90,000
TOTAL:		**650,000**	**3,450,000**	**490,000**
PDF REQUEST TOTALS:		**$650,000**	**$3,940,000**[3]	

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[3] The total shown includes both project support funds and in-kind contributions.