TECHNICAL PROPOSAL

FOR THE ESTABLISHMENT OF A COORDINATING INSTITUTION (CI) FOR THE IABIN PROTECTED AREAS THEMATIC NETWORK (IABIN PA TN)

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1. BACKGROUND AND TERMS OF REFERENCE

1.1. BACKGROUND

A five year Global Environment Facility (GEF) Grant of US$6.0 million for the Building the Inter-American Biodiversity Information Network (IABIN) Project (the project) is executed by the General Secretariat Organization of American States (GS/OAS) and Implemented by International Bank for Reconstruction and Development (the Bank).

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).

This Project Implementation Plan (PIP) outlines a $35 million plan. Agreements with the primary biodiversity informatics institutions throughout the Americas were forged 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:
1) 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,
2) 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
3) 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 fulfil the mandate of the Clearing-House Mechanism of the Convention on Biological Diversity.

The following criteria were established by the IABIN Council for the prioritization of potential Thematic Networks:

- Theme is of interest to countries (demand driven) as determined by the consultations carried out during the PDF phase

- Valid regional or sub regional data exist
- Infrastructure exists or is planned
- Theme is a priority for global and regional programs
- Theme is a priority of the Convention on Biological Diversity and the 2nd IABIN Council meeting
- Network leverages other funds

Using the above information and criteria, the following six Thematic Networks (TNs) have been identified as a priority for IABIN:
1. Specimen Network
2. Species Network
3. Ecosystems Network
4. Invasive Species Network
5. Pollinators Network
6. Protected Areas

Each TN will be coordinated by an institution, which will be selected by the Executing Agency in consultation with the IEC on a competitive basis and supported by a Technical Committee of Experts constituted by specialists from across the region, chosen by the Secretariat. The IABIN Thematic Networks Coordinating Institutions (CI) is responsible for organizing the development of the TN, including recommendations on standards and protocols. The CI may also be responsible for the coordination of other activities, such as the development of tools for accessing data, entering data in the network, and training, which may be carried out by the CI or by other groups. Where appropriate, CIs could be a consortium of organizations to ensure a good representation of all geographic areas of the Americas.

1.2. THE PROTECTED AREAS THEMATIC NETWORK

The establishment of more than 100,000 protected areas worldwide stands as one of the 20th century's most stunning conservation successes. At the global level core data on protected areas are held in the World Database on Protected Areas (WDPA) maintained by the UNEP World Conservation Monitoring Centre. Nevertheless, knowledge about protected areas is dynamic, and constantly in need of improvement and verification. Often data are widely dispersed, and not easily accessible. In addition, for most countries it is not possible to answer the critical question of how effectively protected areas are being managed.

Many protected areas are conserved in name only. A recent study found, for example, that 70% of over 200 parks across 16 tropical countries have been adversely affected by poaching, logging and encroachment. For example, the rate of habitat loss and fragmentation in the past decade in Wolong's premier "panda parks" has increased to levels similar to or higher than those in areas outside the park, rendering large areas as unsuitable panda habitat.

Under certain conditions, even 'paper parks' have a pivotal role in conserving biodiversity. However in the medium to long term, protected areas only work if they

really are protected. It is therefore critical to assess the management effectiveness of existing areas to make sure they are fulfilling their objectives. This need has been recognized at an international level, specifically during the IUCN Vth World Park Congress (WPC). The Convention on Biological Diversity (CBD) in early 2004 produced a Programme of Work on Protected Areas Areas (PoWPAs), in which Parties to the convention are called to assess at least 30 per cent of their parks AND their networks of protected areas, by 2010. The CBD PoWPAs also requested countries to provide national protected area to the WDPA, and endorsed the use of the IUCN management category system.

Three previous IABIN Council meetings have emphasized the need for a protected areas thematic network and data accumulation. Through standardization followed by improved access, the protected areas thematic network may assist countries with strategic planning and analysis of management effectiveness, as well as provide a comprehensive information network where data on protected areas could be easily located, queried, accessed for management and scientific needs.

Strategic questions that need to be answered and available in a protected areas database are:
- Where are and what is the extend of the Protected Areas?
- How are they being managed?
- What biodiversity do they include?

There is a widespread recognition at the global level that being able to answer to the questions above is very critical, particularly if one is to be able to track progress on protected areas management effectiveness and report against the CBD Programme of Work on Protected Areas target to achieve management effectiveness by the year 2012. Unfortunately there is no mechanism in place that is currently able to do that, either at the regional or global level. But there are some international and regional initiatives that are attempting to address that gap, including:

a) **The development of a minimum common reporting format for Protected Areas Management Effectiveness Assessments**. Most assessments are now following the framework developed by the IUCN World Commission on Protected Areas (IUCN-WCPA), but there is still a great diversity in the way data is collected, stored, analysed and reported on. The World Bank, the GEF, WWF, IUCN-WCPA and TNC have recently agreed to develop a "minimum data gathering/storage/reporting format", so as to enable global comparability of data and global analysis that can be linked as data module to the WDPA core dataset.

b) **The development of a Global Analysis of all reports on Management Effectiveness produced thus far**. IUCN-WCPA, the University of Queensland, WWF and TNC are currently compiling and gauging at what can be learned from all the management effectiveness assessments produced thus far; they will use the study to compare what are the indicators being looked at; gather information that will enable the proposal of a draft "minimum common reporting format". Results of this analysis will produce recommendations on how to enable the CBD to track PA management progress overtime, and report against the targets of the Programme of Work on Protected Areas to carry out

system-wide assessment of PA systems by 2010; carry out specific site-level assessments of at least 30% of sites by 2010; and achieve PA management effectiveness by 2012. The PACI will be specifically linked to this effort through the WWF consultants Marc Hockings and José Courrau.

c) **The development of a module in the current WDPA specifically designed to track progress on protected areas management effectiveness, and report to the CBD**. This shall be done as part of a more comprehensive effort of tracking progress on the CBD 2010 targets.

d) At the regional level, the **"Strengthening Protected Areas Management Effectiveness in the Andes" Project** (IUCN, Office in South America), is currently under implementation. The main purpose of the project is to strengthen the institutional capacity of national protected area planning and management systems in the Andes to allow the use and mainstreaming of management effectiveness methodologies. Some of the main activities consist on compiling existing management effectiveness methodologies in South America (with a focus on the Andes); analysing these methodologies in light of the WCPA Management Effectiveness Framework; and discussing and exchanging experiences on management effectiveness and its institutionalisation on PAs agencies at a regional and national workshops.

1.3. OBJECTIVE OF THE IABIN PROTECTED AREAS THEMATIC NETWORK

The objective of the Protected Areas Thematic Network is to promote the more effective sharing of information on protected areas within and between the countries of the Americas Hemisphere, building on and contributing to existing global experience in this area through close collaboration with the IUCN World Commission on Protected Areas, (WCPA) and the UNEP World Conservation Monitoring Centre.

It is intended to contact all national protected areas agencies of the Americas Hemisphere and invite them to work closely with the IABIN Protected Areas Thematic Network Coordinating Institution (PACI) on PA information gathering harmonization and data sharing. Further, PACI will seek partnerships with important players such as, for example, the UNESCO Man and the Biosphere (MAB) program (on Biosphere Reserves), and various other administrations related to international agreements and programmes on protected areas and with a range of internationally active non-governmental organizations.

2. THE PACI CONSORTIUM

2.1. FORMATION OF THE CONSORTIUM

Many institutions and initiatives are seeking to compile, integrate, and use data, information, and knowledge regarding protected areas (PAs) in order to inventory, monitor, and improve the management of PAs worldwide. What is lacking are a common data model and web services that can standardize and integrate the geographic and tabular data, documents and images.

The PACI consortium seeks to make a practical incremental step toward solving this problem for the Western Hemisphere. At the same time, the work of PACI will serve as a pilot initiative to bring Protected Areas informatics at a globally harmonized level.

2.2. COMPOSITION OF THE PACI CONSORTIUM

Criteria were developed on the ideal composition of the consortium, which are listed as follows:

Know-how

For the technical guidance of the Protected Areas Thematic Network, the PACI should have considerable in-house know-how and understanding of both protected areas management and of the essential information that can inform a large variety of stakeholders on the management effectiveness of protected areas and their state of conservation. A list was made up of players with experience in those fields of analyses.

It was obvious from the beginning that in fact, each Protected Areas Agency could share a wealth of experience and information in this field. However, after careful consideration, it was decided that PAAs should not be burdened with yet another task that would take away scarce staffing resources from their important management tasks, and only organisations were selected with a long history in carrying out research in the field related to protected areas management and/or in developing monitoring methods, practices and related tools. This consortium combines all organisations of the world that have pioneered in the conceptualisation of PA management effectiveness, as united in the WCPA.

Manageability

In order to be manageable a consortium of collaborating institutions should not be too large. Therefore the number of actively collaborating institutions was kept at 8. The consortium partners, however, do not consider themselves a tightly closed group and it will actively seek intensive collaboration with other institutions in the region that have an interest in this theme, particularly with the USGS, which has requested membership after presentation of the prequalification deadline and it is foreseen, that the USGS, de-facto will function as a member.

Regional representation

A balance was sought for the representation of both North and South America, and within South America to have an explicit representation of Brazil, while on the international level, the participation of WWF, IUCN, UNEP-WCMC and TNC warrant maximal international linkage.

2.3. CREDENTIALS AND EXPERTISE OF THE PROPOSED PACI CONSORTIUM

The know-how of each consortium is listed in the institutional profiles. However, it is opportune to highlight some of the relevant strengths of the Consortium, without

pretending to be complete. The institutional profiles, however should be considered for evaluation purposes.

The O Boticário Foundation has three main programmes:
- Protected areas programme, including active area management, support to the Government's official conservation programme, methodology development, monitoring, etc.
- Research, capacity building and environmental education programme involving ecological research, internship programmes for junior professionals, mass educational programmes for elementary schools, etc.
- Small conservation support programme with more than 900 projects.

The Alexander von Humboldt Institute has four main programmes:
- The biodiversity inventories programme works on the organisation of existing information on Colombian Biodiversity, it carries out inventories in poorly known geographic areas and taxonomic groups and research on taxonomy, classification and biogeography;
- The conservation biology programme seeks to compile, synthesize and produce scientific information relating to the factors which influence the maintenance of biodiversity and biological resources;
- Biodiversity use and valuation programme analyses current and potential uses of biodiversity and identifies new products and services derived from biodiversity and their relationship with productive systems;
- The policy and legislation research programme carries out research on the impact of policies and norms upon the knowledge, conservation and sustainable use of biodiversity.
- GEF and Dutch Biodiversity Conservation Programmes have led to the development of myriad innovative methods, a national alliance for sharing information about biodiversity in a distributed environment (the Biodiversity Information System of Colombia) and field applications of baseline development and monitoring of biodiversity and protected areas.

The EcoCiencia Foundation has the following main programmes:
- The biodiversity research and monitoring programme, particularly through long term financing from the Dutch Government has lead to a multitude of field applications of baseline development and monitoring of biodiversity and protected areas;
- The education and training for conservation programme has generated communication materials for promoting conservation among the public;
- The natural resource management programme developed sustainable resource use applications and training;
- The environmental policy management programme supports the Ministry of Environment on legislative issues;
- The information management programme is entirely dedicated to producing and processing data for biodiversity gathering;

- The environmental Economics programme works in environmental economics in order to understand and promote a better liaison between natural resources and national development.

The World Institute for Conservation and Environment (WICE) has worked on:
- Integrated protected areas selection and prioritisation methods and tools;
- Monitoring of ecological conditions and resource use in protected areas;
- Selection of applicable monitoring parameters and costing of monitoring programmes;
- Monitoring of financial indicators as management performance indicators;
- Monitoring Database design and management;
- Ecosystem mapping and proxy species loss detection;
- Worldwide collection of species distribution of mammals and birds and standardization of nomenclature in collaboration with the Information Center for the Environment (ICE) at the University of California, Davis. More than 3,000,000 entries are stored in a database and it currently has the most complete national data sets for Latin America;
- World wide website of more than 2000 web pages on providing biodiversity and visitation information on all the protected areas of the World, with web pages per country, as well as on management and monitoring applications with freely downloadable tools

The Nature Conservancy
The Nature Conservancy (TNC) is one of the world's largest conservation organizations; it works in 29 countries, and has conserved over 46 million ha. Its mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

TNC has been involved in protected areas, and protected area effectiveness for years, through its work in Parks in Peril (www.parksinperil.org). More recently, TNC has begun, through a partnership with IABIN and other organizations, a process to assess protected area effectiveness throughout the Caribbean using GIS data overlays. TNC has plans to expand this assessment throughout South America, and would provide critical data on the effectiveness of protected area effectiveness.

More specifically, TNC is involved in developing a decision-Support System (DSS) for Evaluating Protected Area Effectiveness and Conservation Priority Setting in Mesoamerica and the Caribbean. TNC is developing a prototype GIS-based Protected Area DSS for the Dominican Republic during the first year of the DGF-funded IABIN Connectivity Program. This program is specifically focused on developing value-added geospatial information products and data distribution via the Internet. The DSS is being coded in ArcGIS, and capitalizes on many new conservation tools and models that TNC has recently developed for ecoregional planning. All data is being documented using metadata standards and will reside in the Internet-based multi-geodata server facility in the Mesoamerican Environmental Information System (SERVIR). The system will assist long-term conservation planning by identifying conservation priority and current

protected area network effectiveness through the integration of eight primary conservation indices:

- Analysis of habitat distribution and biodiversity uniqueness;
- Computation of landscape metrics and habitat fragmentation;
- Calculation of biomass and productivity based on remotely sensed data;
- Mapping of habitat vulnerability based on surrounding socio-economic activities;
- Ranking of habitat patch connectivity uniqueness based on graph theory principles and least cost path modelling;
- Assessment of habitat corridor paths based on land cover and socio-economic activities;
- Analysis of efficient biodiversity solution modelling output by MARXAN;
- Consideration of current protected area management or enforcement level.

IUCN-Sur

To coordinate its work on protected areas, IUCN counts with installed technical capacity in its Headquarters (the Secretariat) in Gland (Switzerland), in the different Regional and National Offices around the world, and its body of Members (over 1,000 worldwide) and Commissions.

IUCN has been one of the global leaders in management effectiveness evaluation of protected areas; working on this theme for over ten years. The recognition of its work in the subject can be demonstrated worldwide through the WCPA, projects, and initiatives in which the Union is involved, in addition to the number of management effectiveness evaluation methodologies developed based on its evaluation Framework.

IUCN's six Commissions are principal sources of guidance on conservation knowledge, policy and technical advice and are implementers of the program. The Commissions are networks of expert volunteers entrusted to develop and advance the institutional knowledge and experience and objectives of IUCN. Of these commissions, the World Commission on Protected Areas (WCPA), WCPA's 1,300 members promote the establishment and effective management of a worldwide representative network of terrestrial and marine protected areas. In this context, much work has been done on the development of management effectiveness assessment methods.

The IUCN Regional Office for South America (IUCN-Sur) was founded in 1991 with the objective to contribute to the conservation and sustainable use of the regional natural resources. Its functions have been oriented to strengthen technical capacities of its membership, broaden its level of influence in decision-making processes and exchange of information and experiences on conservation.

In the region, UICN-Sur has been technically supporting and implementing several projects and initiatives on management effectiveness evaluation. For example the Enhancing Our Heritage Project in South America, which has as its main objective to improve World Heritage Sites management through better monitoring and evaluation system development and application, and two other projects concerning protected area management effectiveness evaluation. One of which, consists in the exchange of experiences in the implementation of evaluation methodologies among actors in the

Andes region and management effectiveness evaluation institutionalisation in protected areas agencies.

In addition to protected area management effectiveness evaluation capacity, and given its regional position and makeup, IUCN-Sur's possess great experience and competitive advantage on catalysing lessons learned communication and exchange. Some specific examples concerning this advantage include, but are not restricted to: the South American Forum on Protected Areas and the Clearing House Mechanism on Social Equity and Conservation.

IUCN's role in the consortium
With several of IUCN's member organisations participating in the consortium, IUCN's has opted for an advisory role, by sharing its knowledge and information with the members of the consortium but without partaking in operational activities.

The World Wide Fund for Nature
WWF is one of the world's largest independent conservation organizations, with over 5 million supporters and a network active in more than 100 countries on five continents, including a strong institutional presence throughout the Americas. Since its creation in 1961, it has maintained a constant record of success. Today, WWF funds close to 2,000 projects and employs almost 4,000 people worldwide.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- conserving the world's biological diversity;

- ensuring that the use of renewable resources is sustainable;

- promoting the reduction of pollution and wasteful consumption.

Protected areas play a central role in WWF's work - from identifying conservation gaps, advocating and supporting the creation of new protected areas, to assessing management effectiveness at both the site and system levels and actively supporting improved management and policies. For example, for the period 2000-2010, WWF aims to add an additional 75 million hectares of the world's most outstanding and poorly represented forests under protection, and increase the management effectiveness of an additional 75 million hectares of existing forest protected areas. Likewise, WWF is working to help double the marine protected areas coverage and designate an additional 45 million hectares of Ramsar sites in the most outstanding freshwater habitats.

For a number of years, WWF has been collaborating with the IUCN World Commission on Protected Areas, the World Bank, and individual governments to develop and apply tools for measuring and tracking improvements in management effectiveness of protected areas overtime. In cooperation with others, WWF has developed a portfolio and system level tools for measuring management effectiveness, such as the Tracking Tool, or the

Rapid Assessment and Prioritization of Protected Areas Management (RAPPAM). The widespread application of these tools has enabled WWF to build the world's largest compilation of data on protected areas management effectiveness.

The WWF network is strongly committed to supporting the implementation of the CBD Programme of Work on Protected Areas. Building regional and global systems for sharing information on protected areas, tracking the increase of protected areas coverage, and tracking improvements in their management effectiveness is a high priority.

United Nations Environment Programme World Conservation Monitoring Centre, UNEP-WCMC

The UNEP World Conservation Monitoring Centre (WCMC) was established in 2000 as the world biodiversity information and assessment centre of the United Nations Environment Programme (UNEP). The Centre's roots go back to 1979 when the IUCN World Conservation Union established a Cambridge office to monitor endangered species. In 1988, the independent, non-profit World Conservation Monitoring Centre was founded jointly by IUCN, WWF and UNEP. In 2000, the Centre became an integral part of UNEP. The Centre is guided by a high-level Scientific Advisory Council closely linked to the UNEP Divisions, which acts as a guarantor of the Centre in its role within UNEP. The Centre is now well established as the biodiversity assessment and policy implementation arm of UNEP, the world's foremost intergovernmental environmental organisation.

UNEP-WCMC strives to promote sound environmental decision-making and a sustainable future by providing information on the conservation and sustainable management of the living world. The Centre's activities include:
- Assessing and analyzing global biodiversity to identify trends and emerging threats in support of international cooperation and action;
- Supporting policy and agreements at national, regional and international levels to promote biodiversity conservation and sustainable management;
- Providing expertise, tools, techniques and information for public awareness, education, capacity-building and cooperation;
- Providing knowledge management to enable easy access to wide-ranging information and analytical services;
- Establishing networks and collaborations to promote conservation and information exchange

UNEP-WCMC promotes sound environmental decision-making and a sustainable future by providing information on the conservation and management of the living world. It provides policy-makers with vital knowledge on global trends in conservation and sustainable use of wildlife and their habitats. Extensive use is made of geographic information systems and other analytical technologies to help to visualize trends, patterns and emerging priorities for conservation action.

The Centre works closely with key convention secretariats (notably the CBD, CITES, CMS, World Heritage, Ramsar and a number of regional agreements). It makes advanced use of geographic information systems and other analytical technologies to help to

visualize trends, patterns and emerging priorities for conservation action. The Centre's programmes concentrate on protected areas, species, forests, marine, mountains and freshwaters; as well as habitats affected by climate change such as polar regions.

The proposed role of UNEP-WCMC in the IABIN consortium would be to coordinate collection and management of protected area-related data and analyse this data in collaboration with IABIN partners. UNEP-WCMC is the custodian of the World Database on Protected Areas (WDPA), the most comprehensive dataset on protected areas worldwide. The WDPA is a fully relational database containing information on the status, environment and management of individual protected areas. It is managed by UNEP-WCMC in partnership with the national governments, intergovernmental organisations and NGOs. A major function of the WDPA is the periodic publication, in partnership with IUCN, of the United Nations List of Protected Areas - a process commenced in 1962. A WDPA Consortium was established in 2002 to expand participation and leadership on the development of the protected areas database. The Consortium brings together a growing number of international conservation organizations that have agreed to ensure that information on protected areas is maintained on a cooperative basis and used to monitor the effectiveness of global conservation agendas. Four WDPA Consortium members are included within this proposed PACIA Consortium: WWF, IUCN, TNC and UNEP-WCMC.

2.4. THE PACI CENTER OF COORDINATION

While the consortium consists of institutions, that are all able to function as the coordinating body, we feel that the best organisation to be the centre of operation would be the O Boticario Foundation. This is based on the following analysis:

Located in Latin America
As Latin America is the point of gravity for biodiversity conservation in the Americas, it was felt that the PACI should be located in that region. This eliminated the North American and international partners.

Outstanding organisational skills
Each of the participating organisations has proven organisational skills and although an important criterion, it did not point at any institution as being more suitable than the other.

Financial independence to warrant long-term continuity
Many institutions are subject to financing from projects. The O Boticario Foundation is very different in that aspect as it is financed by its own trust fund. Its staff is permanent, which warrants long-term continuity and a strong institutional memory.

International focus
The O Boticario Foundation works internationally; it has an international bilingual magazine with a worldwide distribution to which it invites authors from around the world to write on conservation issues from anywhere, while it has funded projects on a regional basis.

After careful consideration, it was decided that the O Boticario Foundation would be the preferred home for the PACI, considering its international commitment to conservation, its location in the largest tropical country in Latin America, its financial independence providing long-term stability and the only organization in Latin America that issues a region-wide scientific/technical international magazine that can be used as an "PACI-house magazine".

3. PROJECT EXECUTION

3.1. INTRODUCTION

Harmonization of Protected Area informatics and data access
The current contract falls under component 1, "Operationability and Access to Data", of the "BUILDING THE INTER-AMERICAN BIODIVERSITY INFORMATION NETWORK" project. It will create the network infrastructure to access data and information through the IABIN Catalogue Services and Thematic Networks. It is the vision of PACI for this component, to build on existing efforts and experiences, and from there, to work towards information and data compatibility and collaboration between users and producers of information, which would be to the benefit of all concerned. After all, what good would it do an information producer if the information cannot be accessed by those in need of information, the managers of protected areas, either because they can't obtain access, or because they can't use the format in which it is available to them? **There are many organizations that are involved in PA issues in the Americas (IUCN, UNEP-WCMC, FAO, CCAD, US and Canadian National Parks Services, the US Forest Service, CONANP/FANP in Mexico, etc.) and PACI will seek to cooperate with them in an effort to harmonize formats and protocols. It is not the intention to take over their functions. PACI is trying to fill one specific niche, to do with PA INFORMATICS harmonization, so that it complements existing initiatives and does not form any competition.**

Collaboration
To be successful in that effort, PACI will seek collaboration with as many parties as possible, and of course, with the CIs of the other thematic networks, and particularly those that have most in common with the protected areas theme, the Ecosystem TN and the Species TN. As special effort shall to be made to contact and involve island states.

Sustainability
As sustainability is an important issue, PACI will be promoting the creation of a PA information and data users and producers consortium, of which its current members would hope to become members. It sees its leading role eventually transferred to this consortium of direct beneficiaries of the fruits of informatics harmonisation over a period of four to five years of which it may decide to become a member itself in its totality or some of its members. At the end of the contract, all data and documents shall be turned over to IABIN at no costs.

Additional components
While the first component focuses on harmonization of PA informatics and achieving access agreements and spreading their application through training, the other components respectively focus on facilitating the generation of new information under the new protocols and agreements, and on creating data use applications and methods.

Under the current contract, the protected areas network infrastructure to access data and information will be created, and the PACI shall function as the coordinating institution for the duration of 5 years. After the creation of aforementioned infrastructure, the PACI may opt for the execution of contracts financed under components 2 and 3 if selected to do so.

Component 2: Data Content Creation
The incorporation of standards within IABIN needs to be accompanied by development of a formal Content Development Program. The IABIN Content Development Program will support multilingual training, and provide technical leadership to IABIN countries as they develop data for access within the IABIN network. Component 2 will improve the availability of critical data and metadata.

The Program includes:
• Carrying out training sessions on the use of data creation tools.
• Providing Grants to institutions with high quality data to support institutional efforts to make data available through the network.
• Data and metadata quality control.

Products will include:
• Trained personnel throughout the hemisphere
• Newly prepared metadata
• Newly digitized data
• Newly created data and metadata available for access through the IABIN network
• Improved PA data for the Americas to be incorporated into the WDPA for global reporting purposes.

Component 3: Tools for Decision-Making
An important ultimate objective of IABIN is to make biodiversity information useful to decision makers in the public and private sectors. The IABIN Gateway will host a series of value-added applications that will demonstrate to decision makers how data and information can be effectively used in the decision making process. These tools could be as simple as producing a specialized report for a select group of biological data or as complex as the species prediction capabilities of LifeMapper (http://lifemapper.org).

Specifically, this component will address the need for tools that will allow the user to ask questions from biodiversity and socio-economic databases in an integrated manner. The integration of natural and social science data and information is increasingly recognized as vital to scientific research and societal decision making related to a wide range of pressing Building the Inter-American Biodiversity Information Network environmental and biodiversity issues. Under this sub-component socio-economic data relevant to biodiversity issues will be identified and tools will be provided through the IABIN Gateway that will allow users to access socio economic and biodiversity data in an integrated manner.

3.2. MAIN ACTIVITIES

3.2.1.   Formation of preliminary consortium of data providers

3.2.1.1. Identification of reporting needs and current sources of information

The success in engaging countries to provide timely information to a regional protected areas database will depend largely on the ability to clearly demonstrate how the new regional database will help the LAC governments to simplify reporting on international and domestic requirements for information about their PA systems, and to actually reduce workload of already overworked staff. For this reason, this activity will review the various reporting needs of the Protected Areas Management Authorities of the countries, so as to provide guidance to the content and format of the final database that will be designed.

At this phase, it will also identify current sources and standards for protected area data, information, and knowledge. Vast volumes of data have been collected in the past and are stored in different formats and often using incompatible standards. PACI shall identify the main sources and try to obtain an idea of what is available and where. While the first focus shall be on the Americas, PACI will particularly also look at the larger players worldwide and see what formats exist elsewhere. However, at the international level the reference point will be the WDPA, as the single largest resource on global protected areas data. The WDPA Consortium is already engaged in a collective process of global PA data improvement, with consortium members providing inputs through there national and regional level operations and contacts.

3.2.1.2. Consortium of Data Collecting and Storing institutions (DCSIs)

The DCSIs within the region have done a lot of pioneering work on data collecting and storage and their involvement is paramount for the success of the project. These institutions shall be contacted at a high level and invited to participate in a consortium of data providers. It shall be discussed with the institutions involved whether the WDPA would be the preferred umbrella for the consortium, but the option must be left open for a regional under IABIN. However, if this should be the case, it is critical that an IABIN database is compatible and interoperable with the global WDPA, and that data is used to improve the quality of the global dataset.

3.2.1.3. Orientation workshop with DCSIs

A technical workshop must be held with technical representatives of the DCSIs to understand the issues of their data collection and use policies and learn from their criteria for and experience of data collecting on PA information and their use.

Discussions shall be held and consensus sought on information use policies and production of protected areas metadata.

The experiences of these DCSIs will be important for future work as they may then serve to make a preliminary identification of PA information use in preparation of an official broad international regional workshop.

Current gaps and inconsistencies in the collection and standardization of PA information shall be identified.

Product: Proceedings of the workshop, including a strategy for progressing the database component of the PATN.

3.2.1.4. Preparation of a document on information and metadata production and use policies

Based on the workshop, a document on information and metadata production and use policies shall be written in preparation for the regional workshop.

3.2.2. Formation of a Protected Areas Information Advisory Committee (PAIAC)

Agreement must be reached among main actors on the composition and appointment of a Protected Areas Information Advisory Committee for the Western Hemisphere. This committee must function under the authority of IABIN. **The IUCN would opt to have its role primarily on this committee.**

Product: Advice on the composition of the advisory committee. The IABIN Director would appoint the members.

3.2.3. Preliminary identification and prioritisation of data needs

Based on the findings of the orientation workshop, the PAIAC shall write a document on:
- preliminary identification of information and data needs in PA management in preparation of the International workshop.
- current gaps and inconsistencies in the collection and standardization of PA information

This comprehensive document shall serve as the primary background document for the region-wide technical workshop to be organized as a next step. It will also be the first version of a document that through several phases will develop into the final document. It is the idea to have the document grows through several phases of consultation and technical development. While the workshops provide first-hand criteria for the report, the consultation by email is also important, as it helps constituency building and involvement of the beneficiaries in the content development.

Product: Technical background document on preliminary identification and prioritisation of data needs in preparation of the Regional Workshop, including
- typology of data that clarify what "protected area informatics" means and the objectives for gathering and using data (e.g., national level management, monitoring and reporting purposes; regional collaboration (e.g. to assist in transboundary cooperation); input to global reporting processes (e.g., MDGs, 2010 and 2012 targets, CBD PoWPAs, UN List of PAs);
- PA informatics production and use policies;
- metadata standards;
- a prioritized, annotated list of user types and their requirements

- current information and data collecting gaps;
- other issues that come up during this orientation phase.

3.2.3.1. Preliminary identification of information and data needs for PA management

The document shall identify and deal with the following issues:
- Identification of information users;
- Strategic and tactical questions that PA planners and managers face on a consistent basis;
- type of data, information, and knowledge needed to answer those questions.

3.2.3.2. Preliminary identification of current gaps and inconsistencies

Analyze data collected by DCSIs and identify current gaps and inconsistencies in the collection and standardization of PA informatics.

3.2.4. Inter-American workshop on Protected Areas Informatics

A region-wide technical workshop shall be organized to identify and reach the largest possible consensus on data and information needs, standards and data access policies. This workshop shall be the formal workshop with technical representatives of the member states. The previous activities were preparatory activities to this major event, so that this formal workshop would have ample background material to allow all participants to be well-informed. This is the workshop that shall deal officially with all the issues raised previously.

With so many partners and stakeholders, it is unlikely that full consensus can be reached. The workshop can identify the issues on which consensus is reached and document those that remain subject to disagreement.

Product: Regional Workshop with Proceedings and Training

3.2.4.1. Inter-American information and data needs in PA management

Annotated assessment of the users of PA information and data at national and international levels and their information needs identified.

3.2.4.2. Inter-American data type collection and storage needs.

Based on the identified information needs, the required data types that need to be collected to satisfy such information needs as well as their storage requirements shall be identified. The Strategic information needed on protected areas can be divided in the following categories:
1) National status and designation;
2) Location and size, including boundary polygons;
3) History;
4) Legal status;

5) IUCN PA Management Category (I-VI);
6) Biodiversity content and representativeness within biomes, ecoregions, etc.;
7) Management effectiveness.

With regard to management effectiveness both content and methodology must be agreed upon. How can IABIN help to ensure that a minimum common reporting format is developed and agreed on in the IABIN region, so as to enable the development of a baseline from which to track progress on protected areas management effectiveness overtime? A variety of tracking tool (Scorecard) data are available, such as WWF Alliance/World Bank Tracking Tool, RAPPAM, Parks in Peril Scorecards, PRO-ARCA reports, Parks Canada, Parks Watch, and many other systems for assessing protected area management effectiveness. In cooperation with the global and regional initiatives on management effective assessments, the PACI will support and extend this work at the IABIN level. An analysis shall compare management strategies and regimes between countries. Do these tools deal with the essential information? WICE has worked at staffing and protected areas costing and budgeting as indicators for management effectiveness. E.g, a protected area without budget or field staff is not likely to have high conservation effectiveness, unless for instance, it is located in a very remote area with little or no human population. Financing sources may give indications about durability of management, etc.

While comprehensive information on the biodiversity of protected areas is very difficult to acquire for relatively species-poor protected areas in temperate and cold climates, it is practically impossible for species-rich areas in the humid tropics, Mediterranean type climates and semi-deserts. Biodiversity information must be acquired by proxy methods and indicator species and conditions. Methodological alternatives must be analyzed and collecting protocols defined. This must be done in very close collaboration with particularly the Ecosystem CI.

All these ideas and experiences shall be compared and recommendations shall be made on means for assessing and reporting on protected areas management effectiveness, which must be easily applicable and low cost in their application to be affordable by finance starved and understaffed Protected Areas Administrations (PAA).

3.2.4.3. Analysis of data characteristics per theme
For each of the three categories, a technical working group must define the data characteristics and storage needs.

3.2.4.4. Prioritization of data collection needs
The identified information **needs** will be far greater than the **possibilities** to collect and store data. Therefore, prioritization of data is paramount, so that with a minimum of effort and financial means, a maximum in critically important data and information can be acquired and stored. Critical information for such prioritization includes:

- Assessment of professional time requirements and overall budgeting for data collecting and storage on a per-area basis;

- Minimum collection frequency assessment;
- Prioritization of data collection and scheduling;
- National involvement of data collecting.

3.2.5. Training

The gathering of delegates from the many participating countries shall be used for inter-active training in the use of tools and techniques. Prototype data creation tools and training modules shall be prepared prior to the workshop in such a fashion that they can be adapted during the workshop to the agreements reached during the workshop. The advantage of combining decision taking and training is that participants will be trained in sometimes-new concepts and ideas. Choices and alternatives can be clarified during the training, which will prepare the participants for making better choices.

Product: Prototype data creation tools and training modules provided at the workshop in English and Spanish:
- Legal documentation and IUCN-category analysis and assignment;
- Protected areas plotting and referencing;
- Participatory Management Effectiveness analysis methods;
- Principles of biodiversity baseline assessment and PA monitoring

3.2.6. Preparation of a Technical Document on PA Information and Data Needs, their Standardisation and Prioritization

On the basis of the results of the workshop, a technical document shall be written on PA Information and Data Needs, their Standardisation and Prioritization. The draft document shall be sent for comments to all national authorities on protected areas management for comments. Upon completion of the consultation process, the document shall be sent to the IABIN Council with elaborated recommendations, which shall decide on option or adaptation needs of the recommendations.

Eventual adaptations resulting from the Council decision shall be incorporated in the document, after which a final version shall be prepared and made broadly available from the web, in a printed version and on CD, which shall be sent to a broad variety of users in the Americas. The document shall contain further guidance on the application of the IUCN protected area management categories within the region.

Product: Technical Document on to the IABIN Council with elaborated recommendations on Protected Areas Information and Data Needs, their Standardisation, Protocols, Prioritization and Data Sharing. A revised final version with the decisions of the council shall be made available from the web, on CD-Rom and in printed version to a broad variety of users. The bi-lingual house magazine of the O Boticario Foundation, Natureza&Conservação, shall provide updates on developments in each issue and shall be sending to all stakeholders of the PA-TN. Additionally, the WCPA newsletter will receive updates from PACI. If IABIN distributes a newsletter, the PACI will write articles on its developments in each issue.

3.2.7. Consortium of users and producers of PA information and data

3.2.7.1. Draft rules on membership consortium of users and producers

Based on the findings of the Technical Document on Protected Areas Information and Data Needs, their Standardisation, Prioritization and Data Sharing, rules shall be drafted on membership of a consortium of users and producers.

Product: Draft rules

3.2.7.2. Open the consortium of users and producers for membership

Rules and conditions for membership would be signed by user and producer members, pending approval from IABIN or any other agreed platform (e.g. WDPA). This is a target of this contract but not a contractual condition, as the decision cannot be taken by the PACI.

3.2.8. Web-based PA information database

A database structure shall be (re-)designed to meet the requirements agreed at the regional workshop and to be capable of providing basic annual reporting on management effectiveness on a regional basis. In the case that the database of an existing group is chosen, that database needs to meet the agreed requirements. Reporting options need to be customized and standardised per country as reporting is a mandate of each of the participating countries.

- The database shall be made **accessible as a web service** with user interfaces for integrated searches of protected areas information and reporting on protected areas management effectiveness and PA monitoring data. For the Americas the Internet access interface shall be made in English, Spanish and Portuguese.
- The PACI shall acquire a domain for the duration of 10 years and host and maintain a a secure website for the duration of the contract at T1 server speed and during that period it shall provide a Help Desk and User Support support during upgrades and/or downtime. The website shall be linked to the IABIN Gateway and be backed up regularly on a dual back up system with back-up drives stored at different locations.
- Test-populate the database and run functionality tests and expose it to limited Internet use for evaluation as a Betaversion.
- Document the results of the testing and evaluation and recommend next steps;
- After testing, the database shall be made available on the website in agreement with the user access agreed on the workshop and compatible with the IABIN Gateway and other Thematic Networks websites, using IABIN basic standards and protocols.
- PACI shall

If the current World Database on Protected Areas (WDPA) managed by UNEP-WCMC, would be chosen as the point of departure for the database for the Protected Areas thematic Network, an interesting opportunity would arise to actively engage with this global initiative and develop a hemispheric database for the Americas that would be complementary to the broader global effort. In such case, a fundamental value-added of the project would be that the IABIN web-based and relational PA database would

facilitate both the work of the IABIN Parties in reporting on their CBD commitments, and of the CBD itself, in enabling it to contribute to a relevant global effort.

Product: A web accessible database

3.2.9. Web based Inter-database search tool
A Version 1.0 web based inter-database search tool shall be agreed upon to give access to various users to search existing databases of participating data collecting and storing institutions. This database shall be run from the IABIN website and designed by the IABN IT administrator as the PACI has been informed by Mr. Richard Huber on 03-17-2005. This is a target, as agreement on participation can't be enforced by the PACI. It is very important that prototype tools for integrated searches of protected areas are also cross-referenced with information of the other thematic networks.

3.2.10. Resolving data gaps
Make plans to resolving data gaps and inconsistencies.

Product: Document on data gaps collection strategy

3.2.11. Further developments
Once the network infrastructure necessary for users to search and access PA information and data is in place, the PACI can define prioritized needs on application and data-gathering that would fall under Component 2 and for some practical applications of data use under Component 3.

Product: Prioritized proposals for modules for execution under Components 2 and 3.

3.2.12. Advances in the project and changes in protocols
Advances and changes in protocols and tools will be coordinated and communicated among the Network participants and will be downloadable from the IABIN web page.

Product: Regular preparation of information in htm format on the project ready for hosting on the IABIN website. PACI will prepare for the IABIN webmaster, everything it judges useful to be published on the web, so that it can be easily made available from the IABIN website.

3.2.13. Coordination with the other thematic networks

PACI shall actively seek close collaboration with the CIs of the other TNs through the following mechanisms:
- Continuous information and document sharing;
- Synchronized events whenever possible to promote immediate coordination of conclusions and recommendations;

- Invitation of representatives of the other networks on the workshops and key-meetings;
- Sending a technical representative of PACI to important events of the other TNs;
- Where and when opportune producing joint tools and training.

4. TEAM COMPOSITION AND TASK ASSIGNMENTS

Table 1: Specialists, positions and tasks

Name	Inicials	Position	Task
Miguel Serediuk Milano	MSM	Director FBCN	Project Manager
Leide Yassuco Takahashi	LYT	FBCN Protected Areas Management specialist	Technical coordinator
André Ferretti	AF	Technical Specialist FBPN Team	Coordination and general support
Frank Biasi	FB	TNC Senior Conservation Data Architect	1 corps team member methodology development and documentation 2 Database development
Steven R. Schill	SRS	Senior Geospatial Scientist TNC	1 corps team member methodology development and documentation
Jamison B. Ervin	JBE	TNC Manager – Ecoregional Status Measures	1 corps team member methodology development and documentation
Daniel Vreugdenhil	DV	Director WICE, Protected areas management & monitoring, GIS, ecosystems analysis	1 corps team member methodology development and documentation 2 coordination with other CIs
Stuart Chape	SC	Head - World Heritage & Protected Areas Programme, UNEP-WCMC	1 corps team member methodology development and documentation
Lucy Carole Fish	LCF	GIS Officer, Internet & GIS Services, Programme, UNEP-WCMC	General support
Igor G. Lysenko	IGL	Senior biologist / GIS UNEP-WCMC	1 corps team member methodology development and documentation
Ian May	IM	GIS Developer, Internet & GIS Services, Programme, UNEP-WCMC	General support

Galo Medina	GM	Director Ecociencia, protected areas and natural resources management	1 corps team member methodology development and documentation 2 Facilitator Hemispheric workshop
Christian Martínez	CM	GIS at Ecociencia	1 Trainer Hemispheric workshop, 2 general support
Malki Sáenz García	MSG	Ecociencia Management Effectiveness analyst, database management	1 Trainer Hemispheric workshop, 2 general support
Leonardo Vieria Lacerda		WWF Protected Areas & management effectiveness	1 corps team member methodology development and documentation
José Courrau	JC	WWF Management Effectiveness consultant	1 corps team member methodology development and documentation
Marc Hockings	MH	WWF Management Effectiveness consultant	1 corps team member methodology development and documentation
Rocío Polanco Ochoa	RPO	Specialist VON HUMBOLDT	1 corps team member methodology development and documentation
Natalia Arango Vélez	NAV	Specialist VON HUMBOLDT	1 Trainer Hemispheric workshop, 2 general support
Clara Lucía Matallana Tobón	CLMT	Specialist VON HUMBOLDT	General support
Angela M. Suárez Mayorga	AMSM	Specialist VON HUMBOLDT	General support
Alan Aguía Agudelo	AAA	Specialist VON HUMBOLDT	General support
John Waugh	JW	Director IUCN North America	Steering committee member
Marina Cracco	MC	IUCN coordinator protected areas management South America	Steering committee member

5. WORK SCHEDULE

The PACI offers to carry out the activities as stipulated in the table 3:

- Organize 1 technical workshop to be held in the USA with as participants the principal DCSIs;

- Organize 1 Inter-American workshop to be held in Ecuador with as participants at least 1 invited representative of each IABIN country with a total number of about 45 participants whose travel costs are paid for by the PACI;

- Provide a interactive training at the Inter-American workshop;

- Prepare a technical document that grows in content and quality through a process of consultation by means of the workshops and email-consultation;

- Coordinate with other TN CIs and send a representative to the main events of at least the Species and Ecosystems TN;

- Communicate relevant information to all identified stakeholders;

- Function as the Protected Areas TN coordinator and secretariat;

- Present quarterly reports to the IABIN Secretariat and the GS/OAS;

- Present an annual operation plan to the IABIN Secretariat and the GS/OAS;

- Present detailed financial information on direct project expenditure and detailed time information on matching contributions through contributions in time at values as stipulated in the budget.

Table 2: Approximate time input per specialist per activity.

Activities and reports	Specialist	Days	Periods by trimeste															
			Year 1				Year 2				Year 3				Year 4			
			I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Technical workshop to be held in the USA						■												
	LYY																	
	IGL	3																
	SRS	3																
	SC	3																
	GM	3																
	JBE	3																
	FB	3																
	DV	3																
	RPO	3																
	LVL	3																
	JW	3																
	JC	3																
Proceedings	JBE	5				■												
Inter-American workshop to be held in Ecuador									■									
	LYY																	

			Periods by trimeste
	IGL	5	
	SRS	5	
	SC	5	
	GM	5	
	JBE	5	
	FB	5	
	DV	5	
	RPO	5	
	LVL	5	
	JW	5	
	JC	5	
Proceedings	GM	5	
Facilitator	GM	15	
Interactive training at the Inter-American workshop			
Preparation materials	JBE	7	
	JC	7	
	DV	7	
Training	MSG	7	
	CM	7	
	XFV	7	
	NAV	7	

			Periods by trimeste																		
Technical document that grows in content																					
	LYY																				
	IGL	7																			
	SRS	7																			
	SC	7																			
	GM	7																			
	JBE	7																			
	FB	7																			
	DV	7																			
	RPO	7																			
	LVL	7																			
	JC	7																			
Construction and testing website with database		50																			
Coordinate with other TN CIs																					
	LYY																				
	DV	20																			
Technical & scientific advisors																					

			Periods by trimeste																	
	LYY																			
	IGL	10																		
	SRS	10																		
	SC	10																		
	GM	10																		
	JBE	10																		
	FB	10																		
	DV	10																		
	RPO	10																		
	LVL	10																		
	JC	10																		
Annual technical meetings																				
	LYY																			
	IGL	10																		
	SRS	10																		
	SC	10																		
	GM	10																		
	JBE	10																		
	FB	10																		
	DV	10																		
	RPO	10																		
	LVL	10																		
	JW	10																		

			Periods by trimeste																	
	JC	10																		
General Support																				
	MSG																				
	CM																				
	XFV																				
	RPO																				
	NAV																				
	CLMT																				
	AMSM																				
	AAA																				
Steering committee																				
Member	JW	20																			
Member	MC	20																			
Function as the Protected Areas TN coordinator and secretariat																					
Project Director	MSM	78																			
Project Technical Coordinator	LYY	300																			
		150																			
PACI technical specialist																					
PA/financial administrator																					
Quarterly technical reports			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	

			Periods by trimeste														
Semi-annual progress reports				*		*		*		*		*		*		*		
Annual operation plans			*				*				*				*			
Financial reports					*				*				*					*
Final project report																		●
Total		1080																●

Table 3: Budget

Activity	Cost factor	Unit	Total	2005	2006	2007	2008	US $ / Unit	2005	2006	2007	2008	Totals	Expenditure	Days	Months	GEF financing	PACI financing
DSCI Workshop		Days	3															
	Preparation technical document before workshop	Days	30	30				$550	$16,500	$	$	$	$16,500		30	1.50	$16,500	
	Scientific advisers	Days	10	10				$550	$5,500	$	$	$	$5,500		10	0.50	$2,750	$2,750
	Technical advisers	Days	10	10				$550	$5,500	$	$	$	$5,500		10	0.50	$2,750	$2,750
	PACI Participants	Number	10															
	PACI Participants	Days	30	30				$550	$16,500	$	$	$	$16,500		30	1.50	$8,250	$8,250
	Travel	Tickets	5	5				$800	$4,000	$	$	$	$4,000	$4,000				$4,000
	DSA	Days	20	20				$80	$1,600	$	$	$	$1,600	$1,600				$1,600
	Proceedings	Days	5	5				$550	$2,750	$	$	$	$2,750		5	0.25		$2,750
	Meeting space	Days	5	5				$500	$2,500	$	$	$	$2,500	$2,500				$2,500
Inter-American workshop		Days	5															
	Revision technical document with new inputs before workshop	Days	20	10	10			$550	$5,500	$5,500	$	$	$11,000		20	1.00	$11,000	
	Workshop organizer	Days	15		15			$400	$	$6,000	$	$	$6,000	$6,000	15	0.75	$6,000	
	Scientific advisers	Days	10		10			$550	$	$5,500	$	$	$5,500		10	0.50	$2,750	$2,750
	Technical advisers	Days	10		10			$550	$	$5,500	$	$	$5,500		10	0.50	$2,750	$2,750
	Fee PACI participants	Days	42		42			$550	$	$23,100	$	$	$23,100		42	2.10	$11,550	$11,550
	Facilitator	Days	15		15			$550	$	$8,250	$	$	$8,250		15	0.75	$8,250	
	PACI Participants	Number	7															
	Non-PACI Participants	Number	35															
	Travel	Tickets	42		42			$800	$	$33,600	$	$	$33,600	$33,600				$33,600
	DSA	Days	252		252			$80	$	$20,160	$	$	$20,160	$20,160				$20,160
	Proceedings by Facilitator	Days	5		5			$550	$	$2,750	$	$	$2,750		5	0.25		$2,750

| | | | | | | | | US $ / | | | | | | Expendit | | | GEF financing | PACI financing |
Activity	Cost factor	Unit	Total	2005	2006	2007	2008	Unit	2005	2006	2007	2008	Totals	ure	Days	Months		
	Translators (6)	Days	30	30				$250	$	$7,500	$	$	$7,500	$7,500				$7,500
	Conference space	Days	5	5				$500	$	$2,500	$	$	$2,500	$2,500			$2,500	
Interactive training at workshop																		
	Preparation of training modules	Days	20	20				$550	$	$11,000	$	$	$11,000		20	1.00	$11,000	
	4 Trainers at workshop	Days	28	28				$400	$	$11,200	$	$	$11,200		28	1.40	$11,200	
	Travel	Tickets	2	2				$500	$	$1,000	$	$	$1,000	$1,000			$1,000	
	DSA	Days	12	12				$80	$	$960	$	$	$960	$960				$960
Final document and manuals																		
	Final technical document	Days	15	15				$550	$	$8,250	$	$	$8,250		15	0.75	$8,250	
	Translation Spanish, Portuguese	Translations	2	2				$2,500	$	$5,000	$	$	$5,000	$5,000			$5,000	
	Printing in 3 languages		3	3				$3,000	$	$9,000	$	$	$9,000	$9,000			$9,000	
	CDs		500	500				$10	$	$5,000	$	$	$5,000	$5,000				$5,000
	Mailing		500	500				$8	$	$4,000	$	$	$4,000	$4,000			$2,000	$2,000
Assistance to development and testing PA database on IABIN website																		
	Database and website design expert development and testing	Days	50	50				$550	$	$27,500	$	$	$27,500		50	2.50	$27,500	
	T1 Database hosting, maintenance and helpdesk	Year	30.00		6	12	12	$1,000		$6,000	$12,000	$12,000	$30,000				$15,000.0	$15,000
Coordination																		

Activity	Cost factor	Unit	Total	2005	2006	2007	2008	US $ / Unit	2005	2006	2007	2008	Totals	Expenditure	Days	Months	GEF financing	PACI financing
	PACI director	Days	78	18	24	18	18	$550	$9,900	$13,200	$9,900	$9,900	$42,900		78	3.90		$42,900
	PACI technical coordinator	Days	300	60	120	60	60	$400	$24,000	$48,000	$24,000	$24,000	$120,000		300	15.00		$120,000
	PACI technical specialist	Days	150	30	60	30	30	$400	$12,000	$24,000	$12,000	$12,000	$60,000		150	7.50		$60,000
	PACI Pers. As./financ. Adm.	Months	18	6	6	3	3	$800	$4,800	$4,800	$2,400	$2,400	$14,400	$14,400		18.00		$14,400
	Scientific advisers	Days	47	15	20	6	6	$550	$8,250	$11,000	$3,300	$3,300	$25,850		47	2.35		$25,850
	Technical advisers	Days	47	15	20	6	6	$550	$8,250	$11,000	$3,300	$3,300	$25,850		47	2.35		$25,850
	Annual meeting consortium 10 persons 3 days including travel	Days	120	30	30	30	30	$550	$16,500	$16,500	$16,500	$16,500	$66,000		120	6.00		$66,000
		tickets	16	4	4	4	4	$800	$3,200	$3,200	$3,200	$3,200	$12,800	$12,800			$12,800	
		DSA	80	20	20	20	20	$80	$1,600	$1,600	$1,600	$1,600	$6,400	$6,400			$6,400	
	Fully equipped office	Months	48	12	12	12	12	$250	$3,000	$3,000	$3,000	$3,000	$12,000	$12,000				$12,000
	Digital laboratory with GIS, programming and database capability	Months	6	2	2	1	1	$1,000	$2,000	$2,000	$1,000	$1,000	$6,000	$6,000				$6,000
	Communication	Lump sum	4	1	1	1	1	$2,000	$2,000	$2,000	$2,000	$2,000	$8,000	$8,000				$8,000
	Travel coordination activities (other CI-activities, IABIN office, etc.)	Lump sum	5	1	2	1	1	$3,000	$3,000	$6,000	$3,000	$3,000	$15,000	$15,000			$7,500	$7,500
	Office materials	Lump sum	5	1	2	1	1	$1,000	$1,000	$2,000	$1,000	$1,000	$5,000	$5,000				$5,000
	Mailing	Lump sum	4	1	1	1	1	$1,000	$1,000	$1,000	$1,000	$1,000	$4,000	$4,000				$4,000
PACI Project Administration 3%													$35,016					$35,016
Miscelaneous 3%													$35,016					$35,016
Totals									$160,850	$358,570	$99,200	$99,200	$789,602	$186,420	1057	71	$251,060	$538,542

6.   MATCHING FUNDING

The matching funding by the PACI consortium is reflected in the last column of Table 3: "Budget", which amounts to approximately $520,000. In addition to this amount, the PACI consortium estimates to spend US$191,000 in the currently ongoing project in the Andes:

At the regional level, the IUCN-Sur "Strengthening Protected Areas Management Effectiveness in the Andes" Project is currently under implementation. The prime objective of the project is "to strengthen the institutional capacity of national protected area planning and management systems in the Andes to allow the use and mainstreaming of management effectiveness methodologies". This project contributes to experience building with management effectiveness assessments.
The main activities consist of
- compiling existing management effectiveness methodologies in South America (with a focus on the Andes);
- analyzing these methodologies in light of the WCPA Management Effectiveness Framework;
- discussing and exchanging experiences on management effectiveness and its institutionalization on PAs agencies at a regional and national workshops.

Total funds for the project (including counterpart funds): US$191,000 of which US$85,000 is managed by IUCN.