

## **DRAFT 2007 Work Plan for the IABIN Invasives Information Network (I3N)**

Version 2, submitted to the IABIN Secretariat by USGS/BIO<sup>1</sup> on 1 December 2006

### **Introduction**

The IABIN Invasives Information Network, I3N, aims to integrate and provide access to invasive alien species (IAS) information from Western Hemisphere countries, using the Internet and other tools, to support the detection and management of IAS. I3N provides informatics tools, training on the use of data entry tools, and direct Web access to information. Specifically, I3N provides tools to provide Web access to existing but previously scattered and inaccessible Databases so as to facilitate IAS information exchange and management. I3N is an open, self-sustaining network where users can find quality IAS information easily and quickly. Its objectives are to encourage the creation and standardization of national and sub-national IAS Databases, promote their interoperability to provide direct access to Databases that are currently scattered and inaccessible, and create value-added products. In accordance with the IABIN principles, I3N seeks to improve the accessibility, completeness, and interoperability of IAS Databases, and promote standards for data exchange and shared vocabularies within the IAS field. The I3N will pursue and develop partnerships with organizations and initiatives, including those in each participant nation, with the cooperation and Leadership of I3N National Leads and National Focal Points (NFPs). I3N will continue to encourage and provide training on the use and sharing of IAS information with other IABIN participants and with the larger biodiversity community.

The United States Geological Survey's Biological Informatics Office (USGS/BIO) is the Coordinating Institution (CI) and as such coordinates I3N in close collaboration with the IABIN Secretariat. For all those activities funded by the IABIN Global Environment Facility (GEF) Project, the CI works with the IABIN Secretariat to ensure that proper documentation is submitted to the Organization of American States (OAS) and the World Bank<sup>2</sup> in a timely fashion, and in compliance with OAS and World Bank requirements. USGS/BIO and its partners in the National Biological Information Infrastructure (NBII)<sup>3</sup> have made major investments to increase the amount of publicly-available biological information on IAS and international initiatives. I3N was initiated by the United States to support international IAS activities. The USGS/BIO, which also coordinates the NBII, obtained and managed U.S. State Department<sup>4</sup> funds for the now-completed I3N pilot project. The USGS also organized and funded the first two meetings of I3N participants; supported the development of the I3N Cataloguer, I3N Database on IAS, Extensible Markup Language (XML) schema, and Web template; and created the I3N Web site<sup>5</sup>. The USGS/BIO continues to manage and host the I3N Web site and the I3N listserv. The NBII funds I3N-related activities by developing the NBII Invasive Species Information Node (ISIN)<sup>6</sup>, Leading the Global Invasive Species Information Network (GISIN)<sup>7</sup> and Global Invasive Species Programme (GISP) activities; coordinating the US National Framework for Early Detection, Rapid Assessment and Rapid Response to Invasive Species (EDRR)<sup>8</sup>; providing infrastructure/software development support; coordinating workshops; furthering agreement on and promulgation of protocols and standards; and providing technical assistance to NBII partners.

This Work Plan describes the IABIN GEF Project-funded activities of I3N for 2007 according to the sections of the Project Implementation Plan (PIP) for I3N, as well as the activities not funded by the GEF Project. This Plan was developed by USGS/BIO (the Coordinating Institution for I3N). Input on the plan was requested from I3N Leads, the IABIN Executive Committee (IEC), OAS, I3N Technical Working Group (TWG) and IABIN Secretariat.

The main objectives for 2007 comply with the guidelines set by the IEC and Coordinating Institutions of the IABIN Thematic Networks when they met in June 2006. The feedback on I3N at that time was that I3N is making excellent progress, that other TNs should consider I3N as a model, and that it should continue including focal points and country institutions as much as possible, as well as continue with capacity building as the primary focus and with practical products useful to institutions. The IEC recommended that all TNs try to combine meetings with other TNs to help with integration among TNs.

### **Current status and 2006 milestones**

I3N is an Internet-based resource and an institutional and human network where the countries of the Americas can come

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<sup>1</sup> Andrea Grosse, I3N Project Manager, USGS- National Program Office, 12201 Sunrise Valley Drive, Mail Stop 302, Reston, VA 20192. Telephone 703.648.4342; Fax 703.648.4224; E-mail: [agrosse@usgs.gov](mailto:agrosse@usgs.gov)

<sup>2</sup> <http://www.worldbank.org/>

<sup>3</sup> <http://www.nbio.gov/>

<sup>4</sup> <http://www.state.gov/>

<sup>5</sup> [http://www.iabin-us.org/projects/I3N/I3N\\_project.html](http://www.iabin-us.org/projects/I3N/I3N_project.html), soon to be <http://i3n.iabin.net>

<sup>6</sup> <http://invasivespecies.nbio.gov/>

<sup>7</sup> <http://www.gisnetwork.org>

<sup>8</sup> <http://edrr.nbio.gov>

together to facilitate development and sharing of IAS information. I3N consists of Web-accessible national catalogs and Databases of IAS data and metadata. Tools at the disposal of the network include a cataloging and data output template known as the I3N Database on Invasive Alien Species; a listserv; and an extensive bilingual Web site that contains, among other services, a repository for data submitted by those participants not able to serve their own, a tools page, a search engine, instructions on creating XML and on serving data on the internet, fact sheets, contact information, sample XML output, direct access to products created by collaborators, and official I3N documents. I3N was the first IABIN Thematic Network to be established, and continues to be a model for the other TNs.

The following milestones were achieved during 2006:

- I3N training workshops were offered in 2006 in the Bahamas, Costa Rica, Jamaica, Venezuela, Paraguay, Uruguay and USA. Similar workshops, using the same training materials and content, were also held in Chile, Ecuador and Peru with funding from The Nature Conservancy's South America Invasive Species Program.
- A permanent Technical Working Group was established and convened in November.
- The cataloging and data output template known as the *I3N Database on IAS*, was completed and tested, as was the associated XML output function. A Web page for requesting I3N DB and a request form were created, to be used for keeping track of users.
- The I3N Website template for countries, which draws from I3N Database structure, was completed.
- Two I3N Tools Representatives (Sergio Zalba, I3N-Argentina, and Silvia Ziller, I3N-Brazil) continued distributing the I3N Database.
- The functionality for searching I3N country catalogs and products was made more user-friendly and the number of documents searched was increased. It can now be accessed from the I3N home page.
- The I3N Web site was updated and completely redesigned to comply with new IABIN guidelines. The site continues to be very content rich. Progress report from I3N management and from several I3N Leads can now be downloaded from the I3N website.
- Two new countries joined I3N: Colombia and Uruguay.
- A concept paper regarding the roles and relationships between I3N stakeholders was drafted and circulated.
- The I3N community was kept informed via the Web site and the I3N listserv with regular postings and announcements.
- A new I3N fact sheet was completed in English, and translated into Portuguese and Spanish. I3N posters were updated.
- I3N was represented at a variety of international meetings and presentations on I3N have been given at several meetings.
- A content-building grant Request for Proposals was developed and published in early 2006. Five of seven proposals were funded, in the following countries: Colombia, Argentina, Uruguay, Paraguay and Jamaica. A second RFP was published in October 2006
- A contract for identifying capacity building needs and developing suggestions for a capacity building plan was completed.
- Funds from the GEF project were used to send an I3N representative to a GISIN board meeting in Agadir, Morocco, to help harmonize I3N and GISIN standards, start to disseminate our tools to Asia, and to have I3N presence on the GISIN steering committee.
- As a result of I3N outreach efforts, organizations in Morocco, Ghana, Gambia, Ethiopia, Seychelles, Portugal, Bangladesh, China, Malaysia, and Sri Lanka have now indicated their interest in using the I3N tools. CABI became interested in using the Database in Africa, and organized a training session in July. Training was provided by I3N-Brazil/Horus Institute with The Global Invasive Species Programme (GISP) to government representatives from Ghana, Uganda, Ethiopia, Kenya and Zambia, who then became trainers to implement the use of the Database in each country. Organizations represented in this training session are: Environmental Council of Zambia, Water Research Institute of Ghana, National Agricultural Research Organization of Uganda, Ethiopian Institute of Agricultural Research, and the National Environment Management Authority, CABI Africa and IUCN Eastern Africa Regional Office in Kenya.
- I3N-USA completed an updated Web page ([http://www.iabin-us.org/projects/i3n/i3n\\_products\\_after\\_pilot/products\\_usa.html](http://www.iabin-us.org/projects/i3n/i3n_products_after_pilot/products_usa.html)) that contains important data available to I3N users.

## **2007 Activities under Component 1 of PIP**

### **Tools and Standards**

Activities in this category support the expansion of standards and content, and support tools for data/metadata input, output, conversion, search, and serving.

## Tools

Various multilingual tools have been developed over the years and made freely available to collect and share invasive species data. In 2005, funded by USGS/BIO, I3N National Leads from Argentina and Brazil (Universidad Nacional del Sur and the Horus Institute for Environmental Conservation and Development, respectively) worked with USGS/BIO in the development of a data input/output tool and Database template, the I3N Database on Invasive Alien Species. The tool is available to the public in Spanish, Portuguese, and English, and is intended to serve globally as a model for managing information on IAS that enables efficient communication and information exchange among countries. This and other I3N tools will give organizations a head-start in creating their invasive species datasets, serving them on the Web, and ensure Database interoperability by defining a minimum content standard. The I3N Database on Invasive Alien Species is a template developed from the Database that was built initially by Universidad del Sur as an I3N project in 2002 with USGS support. A data export function enables standard output (such as fact sheets) from the Database, in either XML or Portable Document Format that can be easily used by others. This function was designed based on a schema developed by the I3N Tools Representative Sergio Zalba of the Universidad del Sur in Argentina, with contributions from GISP, the IUCN Global Invasive Species Database, The Horus Institute for Environmental Conservation and Development, and the Hawaiian Ecosystems at Risk initiative (an XML schema is useful to an organization that wants to create its own tool but standardize its data to I3N.) Trilingual user manuals explain how to use the Database template. (Tools Representatives are individuals active in I3N, who distribute the I3N tools, support and train users, and evaluate user feedback. The first two were selected by the CI in 2005 and are the I3N National Leads for Argentina and Brazil.)

In 2006, a customized *I3N Database* template (with country-specific vocabulary for habitat and political subdivision) was delivered to the Bahamas, Chile, Costa Rica, Ecuador, Jamaica, Mexico, Peru, Venezuela, Paraguay, and USA. Interest in the tools has been spreading beyond IABIN via GISIN and the work of the I3N Tools Representatives. For example, during COP 8 (March 2006), four African countries requested copies of the Database through CABI/GISP: Ghana, Gambia, Ethiopia, and Zambia. During the February GISIN meeting, Asian and Moroccan colleagues were trained in use of the Database. A country-focused Web interface, based on the I3N-Argentina Web interface to the Database, was completed in late 2006. The Web template has been very successful, and I3N will encourage Leads to use it as their main tool. This interface will enable other countries to replicate this tool that serves data via the Internet in a user-friendly way.

Several activities are planned for 2007. A very important, new development is that the TNC South America Invasive Species Program is preparing a framework for the creation of national invasive species strategies, to include a legal framework, control, monitoring and response. TNC will subsequently help countries in developing their strategies. The CBD COP-9, to be held in Germany in 2008, will have IAS as one focus; 2007 is therefore a strategic year to develop national IAS strategies. This is the perfect opportunity for I3N to contribute to national and CBD activities, because risk assessment and priority lists are an integral part of the framework and should be based on I3N data. TNC will develop the broad guidelines and I3N will help with the specifics that are data-related. I3N will support the development of various tools that will become part of the framework and use the I3N Database: risk assessment protocols for new and introduced species, a pathway assessment tool, and a priority-setting tool for control of species already invasive in the country. In addition to becoming a part of the framework, these tools can be adapted by each country using their I3N data, enabling governments to make decisions on species and control priorities.

After several of the new country I3N Databases are up, I3N will hire a contractor to enhance the search function by setting up fielded searches.

The Tools Representatives will review suggestions made during workshops in 2005 and 2006 and other feedback received about the Database and Web template and recommend which essential changes need to be implemented by the end of 2007, and which will be implemented later. An opportunity to translate the Database into French in 2007, at no cost to I3N, is being explored. The TWG determined that the Database is suitable for marine information and additional fields related to marine IAS are not needed. However, I3N will be adding marine habitat terms to the habitat vocabulary list during 2007. The TWG determined that there is significant overlap between the I3N Database fields and the species and specimens network standards being developed by SSTN and the Spanish GBIF Node. The TWG representative from SSTN will work on how to integrate the data fields provided by I3N and the SSTN.

An RFP will be published for the creation of an I3N Helpdesk to support Database users and Leads, and will include IT support, advice on biological issues, as well as data administration issues.

The USGS/BIO IT Lead will discuss with the TN Coordinator and other CI IT Leads how to integrate the I3N Experts Datasets with those of other TNs.

A consultant will be hired to develop a webpage that identifies and links to Web resources that help with taxonomic

identifications, including specialists and web-based ID tools.

The TWG will investigate the feasibility and costs for creating a “Central America Invaded” book along the lines of the GISP South America Invaded book, in collaboration with TNC, CABI, or IUCN. If deemed feasible, support will be provided.

The IABIN TN Coordinator will analyze mapping tools using services provided by Google Earth, DiscoverLife, Guyra Paraguay, and others for use with I3N data, and will recommend which I3N should engage in mapping activities in 07.

USGS/BIO will create a presentation about I3N that can be downloaded and used by anyone to promote I3N standards and tools. The TWG will create a collection of FAQ's for the I3N Web site, as well as a message board for questions and answers. USGS/BIO will write a description of what the GISIN is doing with GBIF and I3N tools to promote information standards and sharing, and establish a link that will point to the GISIN list of sources for financing for IAS management.

A contract will be awarded to develop additional materials collated either in a CD or as a downloadable “toolkit”. This toolkit may include general overview of biological invasions, risk of IAS, case studies, a short document to help I3N National Leads and Focal Points in raising awareness on IAS data management, success stories on how I3N information and tools were used, and suggestions for Focal Points on promoting the use of I3N information in their agencies and national institutions.

*Expected 2007 Output: Feedback analyzed and updates suggested on Database, XML schema, manuals, and Web interface. Decisions on integrating Experts Datasets. Evaluation of mapping tools. Web page of taxonomic identification resources. Contract for fielded searches. Contribution to framework for the creation of national invasive species strategies. Support to development of risk assessment protocols, pathway assessment tool, and priority-setting tool. Addition of marine habitat terms. RFP published for the creation of an I3N Helpdesk. Progress towards integrating data fields of I3N and SSTN. Feasibility explored for creating “Central America Invaded” book. Toolkit.*

## **Standards**

The standards currently used by the I3N are the Integrated Taxonomic Information System (ITIS) (for taxonomy), several controlled vocabulary lists developed by I3N, and Dublin Core (for metadata on resources found on the Web), in addition to the general IABIN standards set by the IABIN Council at its 4<sup>th</sup> meeting in Panama. National classifications are used for habitats/ecosystems. The *I3N Country Web Interface* supplies a suggested standard for displaying data and the *I3N Database on Invasive Alien Species* created de facto standards for fields and vocabularies in Spanish, English, and Portuguese. It provides data entry forms for cataloguing invasive species information, including descriptions of species, habitats, occurrences (or invasion events), projects, experts, and references, and follows the recommendations of the IABIN Standards and Protocols working group. The interoperability of the records in the Database is maintained through the use of controlled vocabularies in Spanish, English, and Portuguese, that were developed by I3N. The Database provides data entry fields for georeferenced data. References are cataloged in the Database using fields from the Dublin Core bibliographic metadata standard with modifications. The Database also incorporates the Integrated Taxonomic Information System (ITIS) as a taxonomic standard. Information can be exported from the Database in XML-tagged text files or Portable Document Format (PDF) files that can be posted to a Web server. The XML tags generated by the Database are based on the Dublin Core Metadata Standard as adapted through consultations with invasive species experts.

In 2007, the I3N will continue to investigate and promote the use of standards, such as those recommended by the GISIN at its technical meeting in Morocco in February 2006. I3N funds were used to send an I3N Tools Representative and I3N Lead to the GISIN meeting to help harmonize I3N and GISIN standards, start to disseminate I3N tools to Asia via a training session, and to have I3N presence on the GISIN steering committee. Harmonization of standards of the various TNs will be fostered by participation of TWG members in the TWG meetings of other TNs and inviting other TNs to participate in I3N TWG meetings, as already occurred in 2006. In addition, the IT Lead of the SSTN was invited into the I3N TWG as a member and will participate actively throughout 2007.

*Expected 2007 Output: Participation in external experts meetings to encourage mutual compatibility, where appropriate.*

## **Collaboration and Communication**

Activities under this section promote the addition of new stakeholders and data providers to I3N.

## **I3N relationships with other stakeholders**

As the first functioning Thematic Network (TN), the I3N had an important role in the IABIN as a model for the other TNs. A white paper drafted by I3N defining the relationship between the TN and others within the IABIN community (available on the Website) is helping other TNs as they become established. As the other TNs are established, I3N will encourage regular communication, collaboration, and joint working group meetings, to facilitate proper integration of the TNs. The I3N CI, with support from the IABIN Secretariat, will work with the CIs of other TNs to identify their needs related to IAS and opportunities for mutual support among the TNs.

A key role continues to be that of I3N National Leads. Each country participating in I3N has an individual Leading its efforts, such as coordinating with their country's IABIN Focal Point and data providers. Data providers are organizations and individuals at the country level who contribute data either directly to I3N, to be accessed through IABIN portal and through I3N portal or indirectly through the National Leads. In 2007, USGS/BIO will contact the Focal Points of countries without I3N Leads to encourage them to submit names of potential I3N Leads; USGS/BIO will contact these to select at least one Lead per country.

Synergy with other supra-national networks, such as The Nature Conservancy (TNC) South America Invasives Program, the Global Invasive Species Programme, and the Global Invasive Species Information Network, will be continued. The GISIN resulted from a series of meetings and workshops conducted from 2001 to 2004 to formalize efforts to share invasive alien species information in a readily accessible form throughout the globe. The NBII convened a workshop to implement the GISIN in 2004. In 2006, in conjunction with the Secretariat of the Convention on Biological Diversity, the Global Biodiversity Information Facility, and the government of Morocco, GISIN held a second workshop to initiate the global sharing of IAS checklist information, and two I3N Tools Representatives participated. The Global Invasive Species Programme (GISP) was established in 1997 to address global threats caused by IAS and provide an international perspective in the development of information and management strategies for IAS. The ISIN and other NBII nodes including the NBII California Information Node and the NBII Pacific Basin Information Node are working with GISP and others to implement recommended strategies for sharing invasive species information.

The Nature Conservancy (TNC) South America Invasive Species Program has two main goals for 2007: to replicate the invasive species workshop and implement the I3N Database in Bolivia, and to develop an operational manual to help countries develop national strategies on invasive alien species. TNC works with The Global Invasive Species Programme (GISP) on this, and I3N will support their efforts (see the section on tools for more information).

The Internet listserv i3nlist has been a very successful tool in disseminating I3N information. As of 30 October 2006, I3nlist had 287 subscribers. In 2007, USGS/BIO will improve the functioning of the i3nlist by changing to a higher quality list service. Then USGS/BIO will again actively approach a variety of groups (e.g., Focal Points, iabinfriends, IUCN, Aliens-L and others) to encourage additional subscriptions of IAS experts from different countries to the listserv.

*Expected 2007 Output: Information exchange and coordination meetings with other TNs, GISIN, GISP and TNC. Invitation of potential I3N Leads. Invitation of potential i3nlist subscribers.*

## **I3N Web site**

The I3N Web site<sup>9</sup> was first created in 2001 and regularly updated since then. During 2006 the Web site was redesigned according to new IABIN guidelines. A new URL was adopted (<http://i3n.iabin.net>). The site will continue to be maintained and updated by USGS/BIO. Key pages will be translated into Spanish and Portuguese by a contractor. A search and retrieval function, developed and maintained for I3N with USGS funding, will be updated by USGS/BIO with new I3N datasets to be searched.

I3N data will be searched in the portal search tool set up by IABIN. The IABIN Catalog Lead, with input from IT-TWG, will create a requirement specification for a fielded search based on the structure of the I3N Database schema. I3N will include the requirements in the Web interface manual. The IABIN Catalog Lead will write the RFP for a technician to create a toolkit for I3N data providers to install on their servers. The Tool Representatives will send the toolkit to the I3N data providers.

Several new information services will be added to the Central I3N Website, as described in the Tools section of this document.

*Expected 2007 Output: I3N website maintained and updated. List of new datasets added. Key pages translated into*

<sup>9</sup> [http://www.iabin-us.org/projects/I3N/I3N\\_project.html](http://www.iabin-us.org/projects/I3N/I3N_project.html) will soon be changed to <http://i3n.iabin.net>.

*Spanish and Portuguese. Progress towards integration into IABIN portal search. Five new information services posted on Web.*

## **External conferences and meetings**

As in previous years, and as a way to promote the I3N (and the IABIN in general), to gather information on user needs, to improve compatibility, and to network with related efforts, the CI, IABIN Secretariat, and I3N National Leads will participate in various external events during the year, as opportunities arise. Funding is set aside for travel to up to 6 meetings.

*Expected 2007 Output: Promotion of I3N ideas, networking, and information gathered for I3N use. Participation in 6 meetings.*

## **Promotion Materials**

During 2006, several promotional materials for I3N, such as posters and fact sheets, were updated or rewritten by USGS/BIO. The fact sheet was translated into Portuguese and Spanish by USGS/BIO for the first time. In 2007, a contract will be awarded to develop a toolkit with materials that will help I3N National Leads and Focal Points in raising awareness on IAS data management, and suggestions for Focal Points on promoting the use of I3N information in their agencies and national institutions. (See Tools section for more information.) It will be useful for Focal Points and I3N Leads to distribute to the people in their government who deal with the World Trade Organization (WTO) and other regional world trade policy authorities. The toolkit will be distributed actively during I3N workshops, and to all Focal Points and Leads.

*Expected 2007 Output: Toolkit.*

## **Value-added products**

TWG members suggested several possible products. Ideas included: toolkit for decision-makers; sharing of information about native species that are invasive elsewhere; increased and more complex search capabilities; taxonomic identification tools; mapping tools; case studies of impacts and successful control. Some of these will be funded by I3N in 2007 and others will be proposed for funding under the IABIN Tools for Decisionmakers component. See Tools section for more information.

*Expected 2007 Output: See Tools section.*

## **Project management**

### **Coordination, maintenance and operations**

The TN is maintained and operated by the TN participants, subject to availability of funds. USGS/BIO funds, updates, maintains and operates the central I3N Web site and the I3N search engine. It also funds the staff time for coordination of the TN and the TWG. The Leads maintain and update their respective national Databases and Web sites, coordinate activities with their Focal Points, and encourage contributions from Data Providers, as described in the white paper on I3N relationships distributed by I3N in 2006. USGS/BIO will continue coordinating with the Data Content Manager and TN Coordinator.

In 2007, the TWG will develop an overview of the national data administrator roles and responsibilities. This will be distributed prior to future workshops and will be included in the white paper on I3N relationships. USGS/BIO and I3N-Uruguay will work jointly on organizing the I3N meetings to be held in conjunction with the IABIN Council meeting in Uruguay. These will include a regional meeting for South American Leads and Focal Points, and another for the TWG. To include additional countries in I3N, USGS/BIO will approach each FP for the names of potential I3N Leads and invite them to become Leads. I3N will continue to participate in the TWG meetings of other TNs when invited.

*Expected 2007 Output: Continued maintenance and operation of I3N Web site, search engine, and coordination of TN and TWG by USGS/BIO. Maintenance and operation of national efforts by I3N National Leads and Data Providers. Coordination with Data Content Manager and TN Coordinator. Subregional meeting. New I3N Leads. Overview of data administrator roles. Participation in TWG of other TNs.*

## **I3N Technical Working Group (TWG)**

AN I3N TWG, chaired by the USGS Biological Informatics Office, was convened to address content, metadata, standards, capacity building, and other issues relevant to I3N. The first meeting was held April 5th and 7th, 2005 in Panama City, Panama; a second meeting was held 23 and 24 November 2006 in Costa Rica. Invaluable input was provided by the Costa Rican Focal Point and the at-Large IABIN observer (I3N-Uruguay) funded by I3N. Two meetings will be held in 2007, one of them jointly with the IABIN Council meeting. USGS/BIO will continue inviting other TNs, Leads and Focal Points to these meetings. These will participate at their own expense, except for one at-large observer, selected competitively by the Secretariat and paid for from I3N funds. A Pan American Institute on Geography and History (PAIGH) member will be invited to join the TWG, to bring in a geospatial and Pan-American geography point of view. Other TNs will be approached for participation in TWG meetings. TWG members who are on the GISP technical advisory group, on the GISIN board and on the GISIN Interim Steering Committee will continue liaising between GISP, GISIN and I3N. In particular, IAS-related trade issues are on the GISP and TNC agendas; TWG members are liaising between these organizations and I3N on these issues.

*Expected 2007 Output: Two meetings. Decisions arising from 2 meetings. New TWG member. Liaising with PAIGH, TNC, GISP and GISIN.*

### **2007 Activities under Component 2 of PIP**

Grants and capacity building activities bring in participants and data from new countries and encourage active participation by existing I3N members.

#### **Capacity Building and Training**

Capacity building activities in 2005 and 2006 were very successful. We will continue these in 2007, with addition of some activities recommended in the 2006 consultant's report and TWG recommendations. The consultant's recommendations are based on the results of the 2006 needs assessment and the feedback gathered from users of the new I3N tools.

The main objectives of I3N capacity building efforts in 2007 are to:

- Increase awareness of standardized information exchange.
- Encourage adoption and consistent use of I3N tools and standards.
- Support the role of IABIN Focal Points and I3N Leads in promoting the use of information from I3N.
- Develop tools that help countries use the information in the Database to set priorities for prevention, develop risk assessments and a national strategy on invasive alien species.

As stated in the IABIN Project Implementation Plan, one of the goals of IABIN Thematic Networks is to facilitate the inclusion of biodiversity themes in national agendas. I3N is accomplishing this through its capacity building activities, such as the I3N workshops. To encourage proper use of I3N tools and aid in their dissemination, I3N provides training workshops on the use and application of I3N informatics tools, as well as providing training on the conceptual background and importance of using these tools and of creating standardized IAS data and metadata (e.g., policy issues and IAS science and management). The objectives of each workshop, as designed by I3N, are to raise awareness about IAS; to bring together staff from academia, government agencies and NGOs; to facilitate discussion among these groups about local issues through case studies presented by participants; to teach the basic concepts of environmental, policy and management issues; to inculcate the importance of using standardized data and metadata; and to train participants in using I3N tools. Capacity-building activities will be enhanced by production of printed and electronic materials and Web pages for different audiences. The I3N Toolkit to be developed will help participants take what they learned back to their stakeholders and colleagues.

In 2006, most I3N workshops were held in South America. Most South American countries have received the training. One of the ones that has not, Bolivia, is a priority for TNC, which will sponsor the I3N training there. Central America will be the focus for workshops in 2007. Collaboration with TNC and CCAD for our Caribbean and Central American activities will be sought. For example, CABI, with participation from ISSG and TNC, is convening a regional Caribbean workshop in Trinidad in early 2007 and they have offered to collaborate. TNC is preparing a draft of "A Mesoamerican and The Caribbean Cooperative Network on Invasive Species". The 3-day I3N workshop will be delivered in at least 4 countries. Priority will be given to workshops in countries with Focal Points active in I3N.

For our workshops in Caribbean countries, most of which will be in 2008, I3N will work on adding marine case studies during 2007; also, I3N is considering developing workshop materials in French in 2008.

I3N will stimulate the adoption of official national IAS lists through the workshops and through follow-up activities to support the I3N Leads in carrying out the work of official adoption of IAS list. Government commitment to workshop and follow-up work is vital to success. Key elements of the workshops are the meetings with potential data providers, data

administrators, and Leads before and after the workshop. Leads in countries where there has been training can be provided with a small amount of funding (up to \$500) for costs related to a one-day follow-up meeting, to take place about 3 months after the training; funds could be used for things like transportation to the meeting, coffee breaks, or lunch.

If a country just joining I3N already has a key spreadsheet with a lot of IAS information, and that Database would make a significant contribution to I3N, then I3N will consider on a case-by-case basis whether to hire a contractor to put it into the new Database format.

I3N will attempt to find additional IAS experts to lead the I3N workshops. Finding good trainers has not been easy; trainers need to be very well grounded in their knowledge about invasive species from the biological as well as from the political/implementation perspective, need to understand the international arena, should have experience in informatics and I3N tools, and should be bilingual to be able to enhance collaboration across countries.

Feedback from workshop participants will be analyzed by the I3N Tools Representatives to improve future versions of the training workshops. Freshwater and marine case studies will be added to the workshop modules.

*Expected 2007 Output: Feedback analyzed. Delivery of workshops in at least 4 countries. Addition of marine case studies. Liaising with TNC, CABI. Stimulation of work towards national lists. Follow up activities. Contracts for converting IAS spreadsheets.*

### **Indigenous peoples and I3N**

The Project Appraisal Document (PAD, Annex 9, page 62) highlights the need to conduct capacity building and support for indigenous peoples and local communities to access scientific data and technologies. I3N is awaiting guidance from the IABIN Council and Secretariat on how to proceed. However, to proactively begin addressing this need at a network-wide level, USGS/BIO will engage the TWG and I3N Leads in discussions to explore how to carry out capacity building activities for indigenous communities. TWG members will seek contacts interested in I3N - indigenous partnerships in their countries and beyond. USGS/BIO will encourage I3N Leads to establish contact with indigenous organizations. This effort has already begun in the USA, where I3N-USA adapted the I3N workshop and presented it to the National Tribal Invasive Species Conference on November 2006. I3N-USA will follow up on indigenous peoples contacts established in 2006 and distribute the Database to American Indian invasive species information managers.

*Expected 2007 Output: Encouragement of Leads to reach out to indigenous people's organizations. Contacts established with indigenous organizations.*

### **Matching Grants**

Content building grants will be awarded to support institutional efforts to make data available through the I3N. One or two final calls for proposals (depending on volume and quality of responses received during the first call) will be made by the IABIN Secretariat, in collaboration with USGS/BIO. A selection committee, composed of USGS/BIO, Secretariat, TWG, and OAS representatives, will evaluate the proposals. The selected institutions will sign an agreement ("IABIN Subproject Agreement") with the GS/OAS. It is expected that 4 - 6 grants of \$10K each will be awarded in 2007.

*Expected 2007 Output: RFP published. Review and award of 4 – 6 grants. Deliverables reviewed. New data available to I3N.*

### **Data Quality**

Quality of data will be managed by data providers and National Leads. To support their efforts, a data quality policy will be proposed by a contractor and reviewed by the TWG. This policy will consider the GBIF data quality policy and will comply with the IABIN standards policy drafted during the Fourth Council Meeting. The Protected Areas Thematic Network (PATN) data quality expert and GISD Lead will be contacted for input.

USGS/BIO will continue to Lead the effort to ensure quality of the I3N Web site and search engine.

*Expected 2007 Output: Continued monitoring of Web site and search engine. Data quality policy contracted, reviewed and adapted.*