

## Summary of Consultation & Planning Meeting

### *Enhancing Latin American GIS&T Capacity for Innovation and Economic Development*

December 1-2, 2010  
Hotel Country Inn Amador  
Room *Salon Las Americas*  
Panama City, Panama

This meeting gathered representatives of universities, government agencies, research centers, mapping agencies, the Panama Canal Authority, international geography organizations, and others from Panama, Latin America, the U.S. and Korea (see List of Attendees on following pages).

#### **GROUP DISCUSSION AND ENDORSEMENT OF PRIORITY NEEDS**

In the course of Day One the meeting participants heard presentations which illustrated the current state of activities and expertise among national and regional/international organizations based in Panama in the field of geospatial science and technology, and were able to learn about other high-level international experience and efforts in this field that might serve as useful examples for the region. In the course of this portion of the meeting, participants were able to identify gaps and needs in both the education and research areas for GIScience in Panama and Latin America, and also point out the gaps in the preparation of a workforce with geospatial capacity. During the opening portion of Day One Dr. Rubén Berrocal, the Head of Panama's Secretariat for Science, Technology, and Innovation (SENACYT), also shared with all those present SENACYT's support of this meeting and its purpose: to discuss the establishment of a center to further facilitate and coordinate development of research, education and workforce capacity building in geospatial science and technologies in Panama for the country and for other Latin American countries. Dr. Berrocal also mentioned SEANCYT's forthcoming strategic plan for science, technology and innovation, which will be officially released on December 16, 2010.

Some of the salient points and areas of need were discussed extensively, and meeting participants endorsed the following as previously established during the needs identification phase of the project:

- The need for not only individual but also institutional and institutionalized capacity in the private, public, and academic sectors. Also the need for newly acquired capacity and knowledge not to be lost when administrations change or new personnel replaces existing staff who have these skills.
- The need to support policymakers and decision makers by engaging them with the work of geographers and GIScientists which can effectively serve the development and administration of their programs.
- The need to ensure access to geospatial data, and participation in the development of data systems, in order to encourage the sharing of data and information, as well as expertise and knowledge, more broadly across sectors.

- The need for central repositories of fundamental geospatial datasets at national levels, and to ensure its maintenance and updating. There should also be linkages to regional level geospatial portals for sharing across national borders.
- The need to coordinate data collection and metadata standards, and to ensure interoperability and online data dissemination protocols, to allow the data collected to be used for multiple applications and by a multitude of organizations, institutions, government agencies, and the private sector. Data standards efforts are underway and countries of the region are participating, but this is still a work in progress.
- The need to create curricula for GIScience and GIS in the education system, and to emphasize principles and basics of GIScience and technology, which will allow graduates to continue growing with the rapidly changing technology without needing constant re-training in the latest software versions. The AAG and UCGIS GIS&T Body of Knowledge is one well known relevant model.

## **DECISIONS ON PLANS FOR ESTABLISHING A CENTER**

On this day the meeting participants discussed some existing examples of geography or GIS-related organizations that serve various constituencies (AAG, IGU, PAIGH, among others) and also discussed ideas about what structure and location for the center might best serve the Panamanian case and address regional needs. There was consensus about the importance of engaging all sectors, public private, academic, and non-governmental in the creation and support of the center. The National Center for Geographic Information and Analysis (NCGIA) and IUCRC models (both of which are supported by the US NSF) were mentioned as highly salient models for successfully structuring the engagement of the suite of actors and would offer a place to start for adapting to the current effort.

After extensive discussion, it was recommended unanimously by the group that SENACYT should seek \$1 million in funding from the IDB for the initial plan to enhance Latin American GIS&T capacity for innovation and economic development. The Center would develop linkages to other universities in the region, research centers, government agencies, the Tommy Guardia Institute, the Panama Canal Administration, and other agencies, as well as the private sector. There was consensus that the initial \$1 million should be divided as follows: 60% used to develop a multi-university consortium center similar to the highly successful U.S. NCGIA model; 30% used to fund research grants administered by SENACYT and to be allocated on a competitive basis to address strategic national and regional priorities with GIS applications; and 10% used to cover administrative and standards development activities.

This initial funding should also be supplemented by seeking longer term support in the form of matching funds and other in-kind resources (human and infrastructure), as well as private sector support through grants of funds, GIS&T equipment, or GIS software.

The AAG intends to complete the planning phase and deliver the proposal for a plan to SENACYT by the end of February 2011.