# PAN AMERICAN INSTITUTE OF GEOGRAPHY AND HISTORY Specialized Organization of the OAS



10<sup>th</sup> UNRCC -Americas United Nations, New York, 20 August 2013

# PAIGH, SIRGAS, PC-IDEA and GeoSUR "2013-2015 Joint Action Plan to Expedite the Development of the SDI of the Americas"

Santiago Borrero Secretary General





#### SDI in the Americas: Essential Background

- Establishment of the SIRGAS (Paraguay, 1993)
- Creation of the Inter-American Geospatial Data Network –IGDN (USA, 1995)
- Resolutions adopted by the four UNRCC's since 1997
- Establishment of PC-IDEA (Colombia, 2000)
- SDI Resolutions of the PAIGH's Commission on Cartography (Colombia, 2001 and Venezuela, 2005)
- PAIGH's Directing Council Declaration on "Development of SDI for the Americas" (Colombia, 2007)
- OAS Science Program "Initiative for Hemispheric Cooperation in the Field of Geographic Information for the Development of the Americas" (Peru, 2003)
- OAS General Assembly Resolution 2328 (Panama, 2007)
- CAF PAIGH establish the GeoSUR Program (Brasil, 2007)
- PAIGH's General Assembly Resolution on "2010-2020 Pan American Agenda"
- ISO PAIGH Publication of the TC211 family of standards in Spanish (Mexico, 2009)
- GSDI conferences held in the region (Colombia, 2001; Chile, 2006, Trinidad and Tobago, 2008 and Canada, 2012).

In the Americas, the regional SDI has been going on for more than 15 years with efforts undertaken by multiple stakeholders.

#### **SDI** in the Americas: A bit of Inter-regional Background

Memorandum of Understanding on cooperation between the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) and the Permanent Committee on SDI for the Americas (PC IDEA)

Recalling that PCGIAP and PC IDEA formation is related to specific resolutions approved at United Nation regional cartographic conferences for these regions and that there is obligation for these committees to report to the UNRCCs.

Bearing in mind the Resolutions approved at 6th PCGIAP and 15th UNRCC/AP at Kuala Lumpur, Malaysia in 2000 and at 2<sup>nd</sup> PC IDEA and 7<sup>th</sup> UNRCC/A at New York in 2001, in terms of the need for institutional strengthening and benefits derived from sharing regional experiences and lessons learned to achieve SDI objectives at the national, regional and global levels.

Taking into consideration existing SDI regional capabilities, now further stimulated by PCGIAP and PC IDEA, and the convenience to establish mechanisms for knowledge exchange and experiences obtained from producing, analyzing and disseminating geographic information.

Noting that both regional organizations are striving for adequate incorporation of capacity building strategies to advance SDI projects at the national and regional levels.

Also noting the difficulties being faced by many PC IDEA and PCGIAP member states in designing and sustaining appropriate topographic and cadastral spatial data production projects and associated spatial data infrastructures.

Further noting the need to establish formal liaisons and co-operative mechanisms amongst the appropriate geographic regional initiatives and organizations.

Conscious about the relevance of existing cultural and social backgrounds in the regions sub-regions in Asia-Pacific and the Americas and its importance when considering project formulation and decision making processes to derive social, economic and environmental benefits from digital geographic data sets.

Recognizing that a Global Spatial Data Infrastructure (GSDI) and a Global Map (ISCGM) are emerging from the existence of common infrastructure components and data sets, facilitated by coordinated efforts of nations as well as regional and global initiatives.

Welcoming the initiative for a new United Nations Geographic Database.

Resolves to establish a MOU on co-operation between PC IDEA and PCGIAP.

By authority given by the board of executives of the PCGIAP and PC IDEA, we the presidents of the Committees, agree in the context of each committee scope and responsibilities, to advance jointly and for mutual benefit, the following goals and

- A) To build a new and more effective working relationship with the United Nations system, in order to advance SDI progress for sustainable development. In order to achieve this objective, PC IDEA and PCGIAP authorities, among other activities and if possible with the support or in conjunction with other regional organizations, will submit for consideration at the UN appropriate level or to the UN member states, propositions leading to the following:
  - Re-engineering of the UNRCC structure, in terms of meeting frequency, administration, regional coverage and budget
  - Two-way relationship with the UN geographic data base, in particular, assistance in data base production and in data access and dissemination
  - Coordinated efforts to promote SDI goal and objectives at the RIO+10 conference and beyond, in terms of support and priority
- B) In order to contribute with SDI policy formation, education and capacity building needs in both regions, to promote higher levels of involvement and participation from the main International Geographic Organizations by advancing harmonic and sound policy statement aiming at SDI promotion in these regions.
- C) To promote and stimulate SDI development in each region, in a coordinated manner, by implementing the following activities:
  - Sharing of the lessons learned and SDI best practices
  - Simultaneous implementation of pilot projects in areas of mutual interest
  - Advance on an inventory of SDI programs and projects
- D) Support and stimulate country members participation in GSDI activities. As well, to motivate non-participants nations to get involved in the Global Map

Signed at Cartagena de Indias, Colombia, on May 24, 2001.

Presidente CP IDEA

Presidente PCGIAP

The MoU signed in 2001 between PCGIAP and PC IDEA stated that their existence was the outcome of UNRCCs, welcome UN efforts for improved global data sets and agreed to jointly contribute to the re-engineering of the UNRCCs and to collaborate in areas of interest













































## The 2013-2015 Joint Action Plan: Aims and Objectives

Based on the consensus among the leaders of the PAIGH, SIRGAS, CP-IDEA and GeoSUR that the SDI of the Americas will not become a tangible and sustainable reality as a result of individual actions, rather as the result of the united and coordinated actions of all parties, as requested by its members, the Joint Action Plan was conceived to:

- Harmonize efforts and work plans,
- Foster specialization and avoid duplication,
- Prepare relevant institutions for the constant technological changes and innovations (i.e: cloud data warehousing, crowdsourcing), and
- •Highlight the importance of sharing, reusing and interoperating spatial data at the regional scale

The purpose with the Joint Action Plan is not to bring about a new form of governance of regional SDI, it is to consolidate a widely distributed system of responsibilities, while respecting the necessary independence of the parties



# The Joint Action Plan Seeks to Contribute to the Institutional development of the Parties Involved

This 2013-2015 Joint Action Plan effort seeks also to consolidate:

- •PAIGH's role as "facilitator" of regional processes and "capacity builder"
- •SIRGAS' key function as the supplier of geodetic reference frames for the region
- •PC-IDEA's responsibility as steward of regional and institutional SDI policies and liaison with the system of UNRCCs and GGIM, and
- GeoSUR's role as developer of services and applications built on institutional and regional spatial databases
- •The Challenge is to make time, functions and resources more effective and to avoid duplication and redundancies

Current work plans should be thoroughly reviewed periodically leading to subsequent proposals to optimize contributions, maximize the use of limited resources and attain improved results for the benefit of all the Americas



#### The Joint Action Plan: Methodology for Transparency and Consensus

The document 2013-2015 Joint Action Plan is the result of:

- comparing the features of each organization,
- •their functions,
- •work plans and their institutional projection.

It also considers the global connections of each agency:

- •PAIGH and its role as liaison with OAS and several international geographic organizations
- SIRGAS with the IAG;
- PC-IDEA and its relationship with the UNRCCs and GGIM) and
- GeoSUR with the Eye on Earth, UNASUR, INSPIRE and GSDI

The Joint Action Plan can extend its scope as new initiatives and forms of collaboration are identified. The Plan is a starting point to cooperate on targets that are common to the PAIGH 2010-2020 Pan Americana Agenda, the SIRGAS Work Plan, the 2009-2013 PC-IDEA Work Plan and the GeoSUR 2013-2015 Action Plan



#### Formalizing the Joint Action Plan

For its incorporation and distribution to the international community, the document was first submitted to the Directing Council of the PAIGH and since then it has been presented to the authorities of SIRGAS, PC-IDEA and GeoSUR



From left: Eric van Praag, GeoSUR Coordinator; Valéria Araújo, PC-IDEA's Executive Secretary; Claudio Brunini, SIRGAS President and Santiago Borrero, PAIGH's Secretary general



Representatives of the four organizations signed the joined action document on November 15, 2012 in Buenos Aires, Argentina, during the 44th Meeting of the Directing Council of the PAIGH



### PAIGH, SIRGAS, PC-IDEA, and GeoSUR are the key pillars committed to the building of SDI



PAIGH - Pan American Institute of Geography and History (1928) http://www.ipgh.org/



SIRGAS – Geocentric Reference System for the Americas (1993) http://www.sirgas.org/



PC-IDEA – Permanent Committee for Geospatial Data Infrastructure of the Americas (2000) http://www.cp-idea.org/



Geospatial Network for Latin America and the Caribbean (2007) http://www.geosur.info/

Regional cooperation with IGN Spain is transcendent, including multiple capacity building initiatives and innovative ways for SDI implementation. Also, URISA Chapter is becoming a relevant factor for SDI development in the Caribbean



### 2013-2015 Joint Action Plan: Institutional Framework

PAIGH is the specialized body of the OAS in charge of the spatial component and for years has assisted its Member States with their efforts to establish NSDI initiatives.

PAIGH founded in 1928, is the oldest inter-governmental agency body of the Inter - American system. The OAS Resolution 2328 (Panama, 2007) stated the role the PAIGH in the "consolidation of the territorial databases of each country as part of the infrastructure that is necessary for social and economic development" in the Americas.

PAIGH promotes modernization programs of the geographic institutes responsible for national cartography, including the development of fundamental spatial databases and their interoperability, human resource training and certification of international rules and standards.

PAIGH has been directly involved in the conception, launching and development of SIRGAS, CP-IDEA and GeoSUR. PAIGH has funded over 60 related projects investing US\$1.5 million. Since 1995 the PAIGH has backed 18 projects connected to the SIRGAS, valued at US\$276,348.

In Latin America and the Caribbean improved results will not be attained if there is no improvement in institutional management capacity. In other words, without the comprehensive strategic modernization of institutes responsible for national cartography and geography, institutional capacity building will continue to be marginal.

http://www.esri.com/news/arcnews/summer11articles/hand-in-hand-spatial-information-for-latin-america.html



### The Joint Action Plan: Essential Competencies and Potential Areas of Contribution

Agency and Instrument	Potential Areas of Contribution		
PAIGH 2010-2020 Pan American Agenda	<ul> <li>Cooperation among institutions and key SDI initiatives</li> <li>Consolidation of fundamental data bases</li> <li>Capacity- building</li> <li>Spatial data and interoperability standards</li> <li>Technical publications</li> </ul>		
SIRGAS	Continental geocentric reference system that is key for SDI Capacity - building by training human resources		
Annual Work Plan	Technical publications		
PC-IDEA Four - Year Work Plan	<ul> <li>Development of the legal framework, policies and plans that are key for SDI</li> <li>Human resource training and dissemination of good practices</li> <li>Monitoring of progress achieved by countries in every component of SDI</li> </ul>		
	Coordination with national and - sub national SDI in the region		
	<ul> <li>Consolidation of a Geoportal to facilitate access to and use of regional geospatial information</li> </ul>		
GeoSUR	<ul> <li>Assist with capacity -building to ensure technological innovation in SDI (CAF)</li> </ul>		
Three-Year Work Plan	<ul> <li>Aid with the creation of homogenized and standardized base and thematic maps at the regional scale (Central America and South America)</li> </ul>		

After reviewing the institutional frameworks of the four regional initiatives, the vision is that, from their specific spheres of action, they all contribute to the development of the SDI - Americas and associated national processes to implement their SDIs



#### 2013-2015 PAIGH-SIRGAS-PC-IDEA-GeoSUR Joint Action Plan

Activity	Expected Result	Timeline	Responsible Agency
First Joint Work Meeting between the PAIGH, SIRGAS, PC-IDEA and GeoSUR	Document integrating and updated vision of the status of SDIs and concrete actions and responsibilities	20th General Assembly of the PAIGH	PAIGH, SIRGAS, PC-IDEA and GeoSUR
"Towards the Integration of the Caribbean into the Geodetic Infraestructure of the Americas" Workshop	Participation of at least six Caribbean nations, drafting a document that providing a diagnosis for the region and planning actions leading to SIRGAS in the Caribbean	2013	SIRGAS, PAIGH, IAG, IUGG and Guyana Lands and Surveys Commission
"Building Leadership Capabilities at NMAs Responsible for Geoservices and NSDIs" Workshop		2014	PAIGH, CAF and IGN Spain
"Status of Fundamental Spatial Data Bases in the Americas" Workshop		2015	PAIGH, SIRGAS, PC-IDEA and GeoSUR
"Towards a Real-Time SDI" Project	Joint project aimed at developing capabilities to implement real-time services supported by NSDIs	Late 2015	PAIGH, IAG, CAF, SIRGAS, PC-IDEA and GeoSUR

The building of SDIs is a long term, dynamic process that chains concepts, methods, cultural and institutional issues, as well scientific and technological resources, capital and specialists, all at the service of Development



#### PAN AMERICAN INSTITUTE OF GEOGRAPHY AND HISTORY

#### **Specialized Organization of the OAS**



The SDI of the Americas will not become a tangible and sustainable reality as a result of individual activities, it will be the outcome of coordinated actions implemented by key institutions and regional initiatives



