



CP-IDEA

Final Report of Activities 2009-2013



CP-IDEA

PERMANENT COMMITTEE FOR
GEOSPATIAL DATA INFRASTRUCTURE
OF THE AMERICAS

**Permanent Committee for Geospatial Data
Infrastructure of the Americas
(PC-IDEA)**

2009 – 2013

President

Luiz Paulo Souto Fortes

Executive Secretary

Valéria Oliveira Henrique de Araújo

Member countries

Argentina	Guatemala
Belize	Guyana
Bolivia	Honduras
Brazil	Jamaica
Canada	Mexico
Chile	Nicaragua
Colombia	Panama
Costa Rica	Paraguay
Cuba	Peru
Ecuador	Dominican Republic
El Salvador	Uruguay
United States	Venezuela



PC-IDEA Final Report of Activities

2009 – 2013

Table of Contents

1. Introduction.....	6
2. Administrative issues.....	8
3. Work Plan.....	10
4. Seminar: Spatial Data Infrastructures – SDI as a Natural Disaster Risk Management Service.....	14
5. Magazines, publications, interviews , books and awards	16
6. Other activities	18
7. Cooperations and Partnerships.....	19
8. Final Products.....	20
9. Final Considerations.....	25
10. Annexes	
Annex A – Meetings and participation in events.....	26
Annex B – Presentations.....	28
Annex C – Current and previous members.....	34
Annex D – United Nations Members.....	40
Annex E – Members and Collaborators of the Working Group on Planning (GTplan).....	41
Annex F– Members and Collaborators of Working Group on Standards and Technical Specifications (GTnet).....	45

1. Introduction

The Permanent Committee for Geospatial Data Infrastructure of the Americas (PC-IDEA) was established on February 29, 2000, based on the Resolution #3 of the 6th United Nations Cartographic Conference for the Americas – UNRCC-A (1997), to maximize the economic, social and environmental benefits derived from the use of geospatial information. This is accomplished through knowledge and exchange of experiences and technologies between countries, based on common standards which would allow the establishment of the Geospatial Data Infrastructure of the Americas. Besides, PC-IDEA implements the regional mechanism associated to the United Nations Global Geospatial Information Management (UN-GGIM) initiative.

Among the main objectives of PC-IDEA, the following ones can be listed:

- ✓ Establish and coordinate policies and technical standards for the development of geospatial data infrastructure for the Americas;
- ✓ Promote the establishment and development of SDI in each PC-IDEA member country;
- ✓ Promote the interoperability of information systems among member countries, through the use of standards;
- ✓ Encourage the sharing of geospatial information among all member countries in the Americas, while respecting their autonomy and their national laws and policies;
- ✓ Stimulate cooperation, research, complementation and sharing of experience in areas of knowledge related to geospatial data;
- ✓ Advise in the drafting of guidelines and strategies to support PC-IDEA member countries in developing geospatial information, considering the individual needs of each country;
- ✓ Set priorities for information sharing, considering the regulatory framework of each member country;
- ✓ Promote SDI training activities and technology transfer.

The Committee is currently formed by 24 American countries (Figure 1) and, as established at the 9th UNRCC-A (2009), Brazil is in charge of the Presidency and the Executive Secretariat for the 2009-2013 period.



Figure 1: Member countries of PC-IDEA

PC-IDEA is structured as indicated in Figure 2:



Figure 2 – PC-IDEA organogram

The statute (http://www.cp-idea.org/documentos/Statute_PCIDEA_maio2011_final_eng.pdf) establishes the existence of an Executive Board (Figure 3). Vocal members shall preferably represent one of the four American sub-regions, namely North America, Central America, the Caribbean Islands and South America, with a view to seeking regional balance.

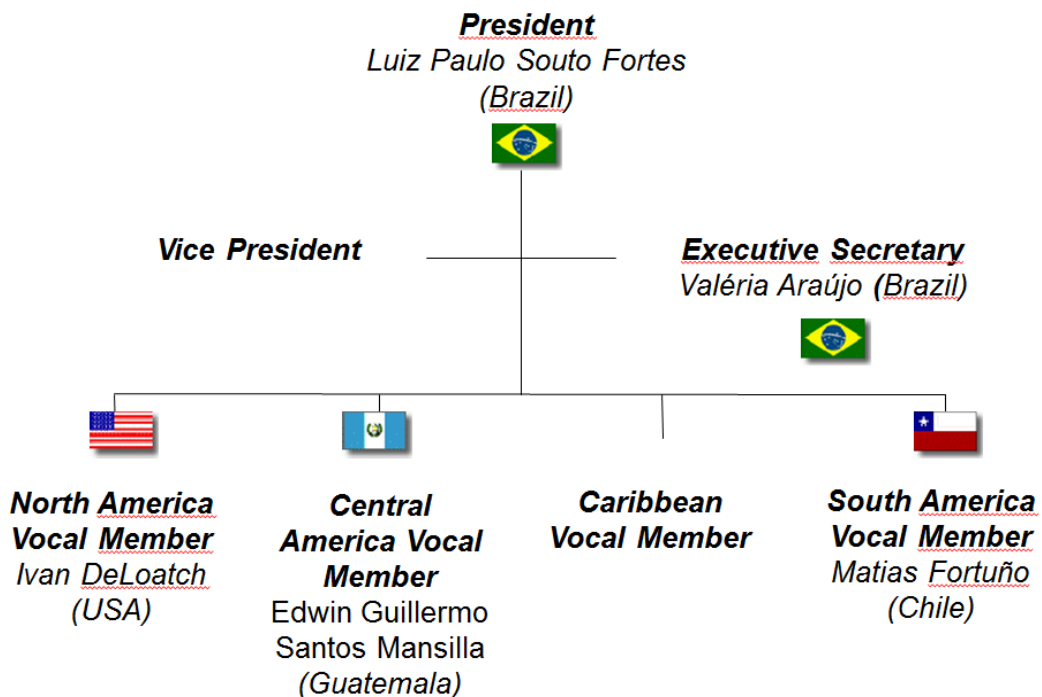


Figure 3: 2009-2013 PC-IDEA Executive Board (as of July 2013)

The distribution of countries by region is shown in table 1.

Region	Number of Countries	Number of PC-IDEA Member Countries	%
North America	3	3	100
Central America	7	7	100
South America	12	11	92
The Caribbean	13	3	23

Table 1: PC-IDEA members by region (source: ECLAC)

PC-IDEA work plans are prepared in accordance with the resolutions adopted at UNRCC-A, which happens every 4 years. At the last one, held in August 2009 in New York, the following 7 resolutions related to the activities of PC-IDEA were established:

- ✓ Work plan of the Permanent Committee for Geospatial Data Infrastructure of the Americas and establishment of working groups
- ✓ Mechanisms for the building of spatial data infrastructures
- ✓ New study on the status of mapping by country and region
- ✓ Forum for sharing SDI best practices
- ✓ Event on disaster and risk management related to SDI
- ✓ Funding issues
- ✓ Support of SDI in the developing countries of the Americas and in particular in the Caribbean region

To comply with these resolutions, PC-IDEA established the Working Groups on Planning (GTplan) in May 2010, and on Standards and Technical Specifications (GTnet) in December 2012, which have worked together with the Executive Board to draft the Committee's work program for 2009-2013 aimed at capacity building, institutional strengthening and many other products and actions that are already being made available to member countries. It is expected that these products and actions will have been completely delivered by the end of this term.

In addition, the Committee seeks to disseminate all its activities through presentations at events and made them available at its website (www.cp-idea.org).

The activities carried out since 2009 are briefly reported in the following sections, along with links to all the documents produced.

2. Administrative issues

2.1. Vice-President

With the retirement of Mr. Mario Reyes, from the National Institute of Statistics and Geography of Mexico, in 2009, a new Vice President was appointed for PC-IDEA, Mr. Cristian Aqueveque, Chile's representative on the Committee (as well as South America vocal), during the meeting of the Executive

Board in May 2010, in New York. Following the consultations established at the Statute, he assumed the position of South America's vocal and, later, of Vice President of the Committee. From March 2013 a new person is in charge of the Executive Secretariat of SNIT, therefore, the Vice Presidency of the PC-IDEA is vacant.

2.2. New Central America Vocal

After the Committee's approval, as set out in the Statute, Mr. Oscar Leonel Figueroa Cabrera was appointed Central America's Vocal. He replaced Mr. Ronald Estuardo Arango Ordoñez, both from the National Geographic Institute of Guatemala. With the beginning of the management of the new Director of IGN-Guatemala, Mr Edwin Guillermo Santos Mansilla, and after due consultation with the Committee, the same was confirmed in June 2012 as new Vocal for Central America.

2.3. Caribbean's Vocal

In the Ninth UNRCC-A, Cuba was elected as the Caribbean's vocal at the Executive Board. After the change of this country representative in the Committee, Cuba did not show interest in continuing to perform this role. As a result, the vocal for this American region is currently vacant.

2.4. South America Vocal

In the Ninth UNRCC-A, Mr. Cristian Aqueveque Iglesias, from Chile's Sistema Nacional de Coordinación de Información Territorial (SNIT), was appointed to fill the position of South America's vocal, and later replaced by Mr. Esteban González Tohá, also from Chile. Recently, after due consultation with the Committee, there was another replacement, by Mr. Matías Soto Fortuño, current Chile's representative in PC-IDEA.

2.5. A list of all present and previous members and their alternates in the PC-IDEA 2009-2013 term is available in Appendix C.

2.6. New logo

A new logo was developed in 2012, as shown in Figure 4.



Figure 4 – New PC-IDEA logo

2.7. Financial Resources requesting

2.7.1. CYTED Convocation – The Project "Ibero-american Network to improve and enhance the use of spatial data infrastructures (SDI) in territorial planning" was applied to the Ibero-american Program of Science and Technology for Development (CYTED) in 2010. The overall objective of the project was stimulating the creation of a scientific and technological research network associated to PC-IDEA. Its purpose would be to develop methodologies and applications for geospatial data and services, making use of Spatial Data Infrastructures (SDI) for territorial planning, risks associated to territorial vulnerability, and sustainable use of natural resources, improving decision making. Brazil, Chile, Colombia, Cuba, Guatemala and Portugal participated of the proposal, presenting documentation. The project included the participation of all countries of the Committee, not only of those directly involved in the application. Besides the mentioned objectives, the proposal intended to enable the several meetings needed to carry out PC-IDEA's work. The amount was estimated at € 33,000 per year for a

four-year project. The proposal was presented in April 2010. In December CYTED Secretariat informed that the project had not been approved.

2.7.2. World Bank – The project "Strengthening of Spatial Data Infrastructures (SDI) of the Americas" was presented to the World Bank (Brazil), also in 2010, through the Institutional Development Fund (IDF), in order to maximize the economic, social and environmental benefits of the use of geospatial information, seeking to promote the SDI construction in countries that have not started this process, as well as strengthening the implementation and sustainability of existing SDI in the countries of the Americas. The request of funding for strengthening and empowerment of the countries of the Americas in the scope of the SDI was justified. The proposal was submitted in October 2010 with a total budget of US\$ 672,645.00 for three years. Among the main activities planned in the two lines of action of the project were the Working Groups meetings, events on disaster and risk, and various courses and training for the countries of the Americas. In February 2011 the World Bank representation in Brazil reported that the project had not been approved.

2.7.3. Pan American Institute of Geography and History (PAIGH) – A project was presented to IPGH in 2012 through the 2013 Call to cover PC-IDEA Working Groups activities taking into account their alignment to the PAIGH 2010-2020 Pan-American Agenda - which seeks to support national initiatives based on international standards and concepts of spatial data infrastructure. The project was approved at the 44th Meeting of the Steering Council, held in Buenos Aires, Argentina, in November 2012, with USD 8,000. PAIGH Steering Council has conditioned the release of these resources to the establishment of a cooperation with the United Nations (UNSD) or other solution that facilitates cooperation with PC-IDEA.

2.8. New Statute

The document was approved in May 2010, as follows: 17 votes in favor of it and 1 abstention (6 countries did not submit their votes). Available in Spanish and English in http://www.cp-idea.org/documentos/Estatuto_CPIDEA_maio2011_final_esp.PDF and http://www.cp-idea.org/documentos/Statute_PCIDEA_maio2011_final_eng.pdf. The Portuguese version is expected to be available by the end of 2013.

3. Work Plan 2009 - 2013

Prepared by the Working Group on Planning (GTplan), coordinated by Chile and co-coordinated by Canada. The Plan was developed considering seven themes developed by August 2013, namely:

Theme 1: Institutional Strengthening, Education and Training (CAP) – Country in charge: Colombia
Creation of institutional capabilities, education and training – a specific proposal to share capacity among PC-IDEA member countries, in a sustainable manner in time and pointing out the relevant needs and issues in the region.

Theme 2: Standards and Technical Specifications (NET) - Country in charge: Mexico
Establishment of standards and technical specifications that were applicable to the region as a whole, taking into account the specificities of each country. Creation of a normative "core" consisting of a common basis for the Americas.

Theme 3: Recommended practices and guidelines for the development of SDI (PRA) - Country in charge: Canada

Survey of best practices in the various themes that are related to SDI in order to draw up a guide in support of the development of geospatial data infrastructures for the American countries.

Theme 4: Innovations in national cartographic agencies (INN) - Country in charge: Brazil

To catalog innovations implemented in the cartographic and geographic national institutes in order to contribute to the management of these bodies.

Theme 5: Inventory on relevant issues on SDI for the region (REL) - Countries in charge: Guatemala and Chile

Development of a SDI Observatory for the region, accessible at the PC-IDEA website, which provides access to relevant documents related to data, metadata, policies, legal frameworks, management models and standards.

Theme 6: Assessment of the Development of SDI in the Americas (DES) - Countries in charge: Cuba and Canada

Establishment of mechanism for regular and systematic assessment of SDI in the Americas based on a set of common criteria.

Theme 7: Implementation of technological means for the discussion of data access and dissemination of geospatial data (TEC) - Country in charge: Chile

Establishment of a tool for implementation of virtual forums to facilitate the exchange of opinions in relation to the highlighted themes as well as the construction of a new website.

3.1 Working Group on planning (GTplan)

Created during the fifth meeting of the Executive Board, held in New York in May 2010, in order to meet the recommendations of the Ninth United Nations Regional Cartographic Conference for the Americas. This working group was initially formed by members from Brazil, Canada, Chile, Colombia, Cuba, Guatemala and Mexico.

3.1.1. 2011 and 2013 Questionnaires

To support planning activities, a questionnaire – covering the issues of training, standards and specifications, best practices, innovations in National Mapping Institutes and Status of SDI in the America – was sent out to the Committee member countries.

The first questionnaire consisted of 76 questions developed by GTplan and applied to members of the PC-IDEA throughout 2011. Twenty of the 24 members responded to the questionnaire (Cuba, Dominican Republic, Guyana and the United States did not answer). Analyses were processed in 2012 and made available in August 2012 during the 9th plenary meeting of the Committee, held in Rio de Janeiro.

The structure of the report includes a description of the methodology used to gather data and its subsequent processing. It also contains the presentation of results for each of the themes. A brief comparison with the results of the questionnaire used in 2008 was made whenever possible. Finally, the conclusions and the following annexes were presented:

- Annex A: broadly shows academic offer related to SDI in countries of the Americas
- Annex B: related to good practices and successful stories documented in the member countries of the PC-IDEA
- Annex C: lists the legal instrument which supports the SDI in each country, when necessary.

A digital version of the report was enclosed in the publication, complemented by the individual responses of the countries that authorized its publication.

(<http://www.snit.cl/cpidea/index.php/component/jdownloads/finish/42-9-reunion-cp-idea/245-diagnostico-sobre-temas-relevantes-de-la-gestion-de-informacion-geoespacial-y-desarrollo-de-las-infraestructuras-de-datos-espaciales--ide-en-los-paises-de-las-americas?Itemid=0>)

Figure 5 shows Diagnosis on relevant topics of geospatial information management and development of Spatial Data Infrastructures (SDI) in countries of the Americas 2011, 1st and 2nd editions.

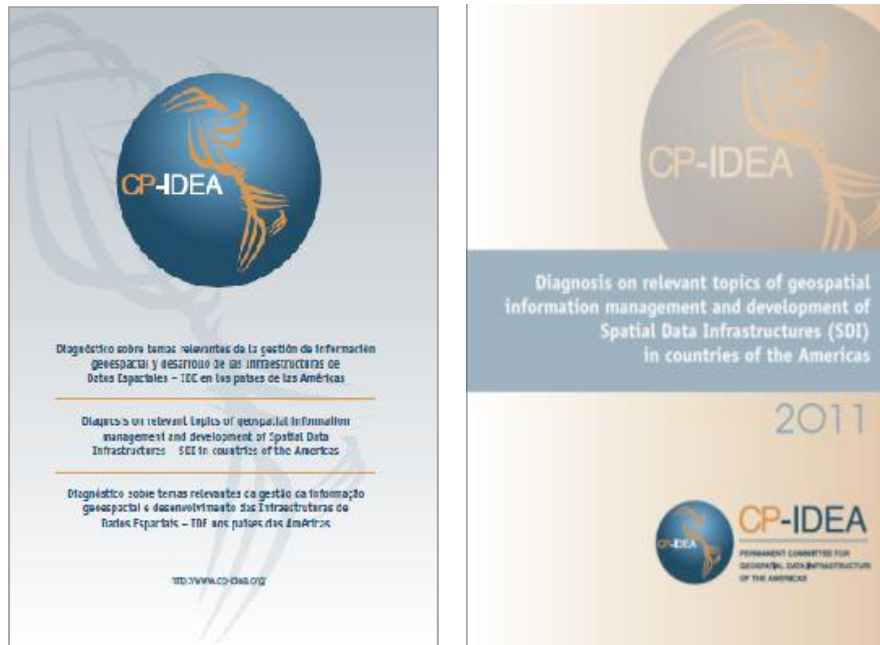


Figure 5
Diagnosis 2011 (1st edition) Diagnosis 2011 (2sd edition)

Based on this questionnaire, the Work Plan for the period 2009-2013 was completed by GTplan, and can be found in http://www.cp-idea.org/documentos/plano_trabalho/Plano_Trabalho_ENG.pdf.

In a following chapter, information is provided regarding the products offered by this administration in the light of the execution of this work plan.

A simplified version of the questionnaire was applied to PC-IDEA member countries in 2013, in order to monitor SDI advances, as well as general progress, over 2011-2013. Twenty-one of the 24 members responded to the questionnaire (Dominican Republic, Guyana and the United States did not answer). This diagnosis, as well as analyses and comparison with the results from the previous questionnaire, will be presented during the 10th UNRCC.

Figure 6 shows Diagnosis on relevant topics of geospatial information management and development of Spatial Data Infrastructures (SDI) in countries of the Americas 2011, 1st and 2sd editions.

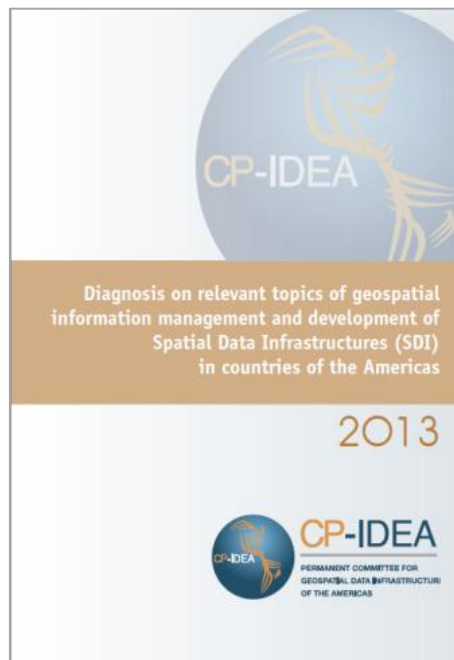


Figure 6 - Diagnosis 2013

3.2. Working Group on Standards and Technical Specifications (GTnet)

This group was created in December 2012 from an agreement reached at the Ninth PC-IDEA Plenary Meeting held in Rio de Janeiro in August 2012. Six countries (Bolivia, Brazil, Canada, Colombia, Honduras, and Mexico) compose this group with the collaboration of the Open Geospatial Consortium (OGC). Mexico, with the support of the National Institute of Statistics and Geography (INEGI), is the Coordinator of the group.

The group's goal is to establish a set of standards and technical specifications that apply to the region within a common scenario, considering and respecting the specificities of each country. Based on this goal, general activities, as part of the 2009-2013 work program, are:

- ✓ Developing a vision for the integration of geospatial information in the region, through the use of standards
- ✓ Establishing the state of the art in the development and use of standards, as well as multinational profiles in the region
- ✓ Preparing proposals of core standards for the region
- ✓ Coordinating the participation in regional organizations and normalization initiatives
- ✓ Developing manuals related to use of the standards for the daily management of information

Figure 7 shows the publications and the webpage of the Standards Database.



Publication: Implementation Overview of the Standards Framework of the Americas



Publication: Proposal of CORE Standards of the Americas



Publication: Geospatial Data Model of the Americas



Website: Standards Database

Figure 7

4. Seminar: Spatial Data Infrastructures – SDI as a Natural Disaster Risk Management Service:

The seminar took place on August 17, 2012, in the scope of the Second Latin-American Geospatial Forum - LAGF 2012, held in the city of Rio de Janeiro, Brazil. PC-IDEA in partnership with Geospatial Media and Communications, fulfilled Resolution No. 5 of the Ninth United Nations Regional Cartographic Conference for the Americas (UNRCC-A/2009), which recommended holding an event on Disaster and Risks focusing on Spatial Data Infrastructures (SDI).

This event aimed to promote the exchange of experiences and concepts in the design, development and advancements of the components of an SDI in natural disaster risk management, emphasizing the management and use of geospatial information.

The event was organized by teams belonging to Geospatial Media and Communications and Augustin Codazzi Geographic Institute (IGAC), from Colombia (a member of PC-IDEA), as well as by the Executive Secretary of the PC-IDEA. Three distinct sessions were established, coordinated by Professor Paulo Márcio Leal de Menezes, PhD, from the Federal University of Rio de Janeiro (UFRJ), Brazil, and debates were held at the end of each session, including conclusions on what was discussed.

The Seminar was addressed to professionals and experts from public, private, academic and non-governmental organizations from the region, involved in issues related to SDI and the management of disaster risks. The following topics were addressed during the event: the SDIs for risk management of natural disasters, geographic information for the awareness of the risk, the SDI in defining processes and protocols for the management of natural disaster risks, information technologies for the management of risks: earth observation technologies, Geographical Information Systems, Virtual Communities, geoportals.

Figure 8 shows the banner of the Seminar.

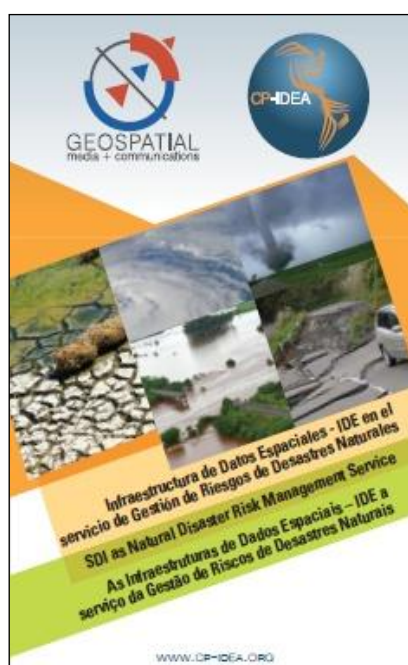


Figure 8 – Banner of the Seminar

The following persons attended the event with their presentations:

- ✓ Paulo Márcio Leal de Menezes (Prof. Dr.) - Vice President of International Cartographic Association - ICA, Brazil , presenting “Cartas de Sensibilidade a Derramamento de Óleo Costeira e Terrestre”;
- ✓ Valéria Oliveira Henrique de Araújo, Executive Secretary of PC-IDEA, Americas, presenting “Importância da Informação Geoespacial no Gerenciamento de Riscos Naturais nas Américas” ;
- ✓ Ivan Marcio Barbosa, Executive Secretary of International Charter , Chief of the Division of Images Generation of Instituto Nacional de Pesquisas Espaciais - INPE - Brazil, presenting “Space and Major Disasters”;
- ✓ Eymar Silva Sampaio Lopes, Specialist, Instituto Nacional de Pesquisas Espaciais - INPE , Brasil, presenting “TerraMA2 - Plataforma de Monitoramento, Análise e Alerta a Extremos Ambientais”;

- ✓ Paula McLeod, GeoConnections, Earth Sciences Sector, Natural Resources Canada , NRCan , Canadá, presenting “Situational Awareness System (MASAS) - A Real-Time Situation Map”;
- ✓ Esteban Tohá, Executive Secretary of IDE Chile - SNIT , Chile, presenting “Información geoespacial y gestión de riesgos en Chile”;
- ✓ Armin Augusto Braun, Chief of Centro Nacional de Gerenciamento de Riscos e Desastres – CENAD, Defesa Civil Nacional, Brazil, presenting “Centro Nacional de Gerenciamento de Riscos e Desastres, CENAD”;
- ✓ Roberto Varela, Regional Commercial Manager of DigitalGlobe, Brasil, “First Look at Global Disasters: rapid response and monitoring”;
- ✓ Israel Sánchez, General Director of Instituto Geográfico Nacional do Panamá Tommy Guardia, Panamá, “Tecnologías de la Información para la Gestión del Riesgo”.

The presentations, as well as the program can be accessed on the website of PC-IDEA: <http://www.cp-idea.org/> (Reuniones/CP-IDEA)

At the end of the seminar, from the presentations made and the initial proposal of the event, the following seven recommendations were approved :

1st Recommendation: that all countries which already have their Spatial Data Infrastructure SDI, or are implementing or planning one, make data, metadata and information aimed at emergency prevention and response available.

2nd Recommendation: that the UN, supported by regional bodies, such as PC-IDEA, PCGIAP, CODIST etc. encourage governments in their various instances to create and maintain their respective national SDI.

3rd Recommendation: The creation of a working group, under CP-IDEA, aiming at studying the specific use of SDI for managing risks of natural disasters in the Americas.

4th Recommendation: that the participation of the countries of the Caribbean region in PC-IDEA be encouraged.

5th Recommendation: the creation of mechanisms that consider the possibility of assessment and, when appropriate, the incorporation of geospatial information obtained through voluntary contributions.

6th Recommendation: that all levels of government involved in the control and monitoring of these phenomena assess the possibility of becoming potential sources of funding for pre-disaster phases, i.e. , that these instances are able to fund and support SDI.

7th Recommendation: that a second edition of the event, preferably within one year, be carried out.

5. Publications, books, magazines, interviews and awards

- 5.1. Special Award received at MundoGEO#Connect 2013 event for the activities carried out during the last years towards the development of Spatial Data Infrastructures in the Americas. (<http://mundogeoconnect.com/2013/premio-mundogeoconnect-2013/vencedores-de-2013/>)

- 5.2. Interview for Geospatial World Magazine – set/2013 – by Luiz Paulo Souto Fortes (http://geospatialworld.net/magazine/ymag.aspx?id=2013_Geospatial%20World%20Magazine)
- 5.3. Interview for Geoconnect 2013 / Brasil – may/2013 – by Valéria Oliveira Henrique de Araújo (<http://mundogeo.com/blog/2012/07/16/conheca-um-pouco-mais-sobre-o-trabalho-do-cp-idea-no-setor-geoespacial/>)
- 5.4. Publication: Diagnóstico sobre temas relevantes da gestão da informação geoespacial e desenvolvimento das Infraestruturas de Dados Espaciais (IDE) nos países das Américas, Comitê Permanente de Infraestrutura de Dados Geoespaciais para as Américas – CP-IDEA , 2013 (<http://www.cp-idea.org>)
- 5.5. Publication: IPGH, SIRGAS, CP-IDEA e GeoSUR Plan de Acción Conjunto 2013-2015 para acelerar el Desarrollo de la Infraestructura de Datos Espaciales de las Americas, IPGH, México, D.F., 2012 (http://www.ipgh.org/Consejo-Directivo/44-RCD/Files_44-RCD/Version_Preliminar_Iniciativa_Conjunta_IPGH-SIRGAS_CPIDEA_GeoSUR_13dic12.pdf)
- 5.6. Article for Magazine: Acciones y Resultados del Comité Permanente para la Infraestructura de Datos Geoespaciales de las Américas (CP-IDEA) - 2009 a 2013, Revista Cartográfica nº 88 do Instituto Panamericano de Geografía e História (IPGH), Novembro 2012, Araújo, V. O. H., Fortes, L. P. S. (<http://www.ipgh.org/Publicaciones/Files/Periodicas/RCA/RCA-088.pdf>)
- 5.7. Book: Fundamentos de las Infraestructuras de Datos Espaciales – IDE - Spain, Chapter 38 – “CP-IDEA: Actualidade y Perspectivas cercanas”, organized and edited by the National Geographic Institute of Spain, August 2012 , Authors: Luiz Paulo Souto Fortes, Álvaro Monett Hernández, Moema José de Carvalho Augusto and Valeria Oliveira Henrique de Araújo (<http://www.upmpress.es/tienda/>)
- 5.8. Interview for the MundoGEO magazine, no 68 - August 2012 - by Valeria Oliveira Henrique de Araújo (<http://mundogeo.com/mundogeo68/>)
- 5.9. Interview for the 2012 Geoconnect/Brazil – May 2012 -- by Luiz Paulo Souto Fortes (http://www.youtube.com/watch?v=RaccstcG3w&feature=player_embedded)
- 5.10. Interview for the 2012 Geoconnect/Brazil – May 2012– by Valéria Oliveira Henrique de Araújo (<http://mundogeo.com/blog/2012/07/16/conheca-um-pouco-mais-sobre-o-trabalho-do-cp-idea-no-setor-geoespacial/>)
- 5.11. Interview for the 2011 Geoconnect – May 2011 - by Luiz Paulo Souto Fortes (<http://www.youtube.com/watch?v=Y5sjsP1tKE>)
- 5.12. Diagnóstico sobre temas relevantes da gestão da informação geoespacial e desenvolvimento das Infraestruturas de Dados Espaciais (IDE) nos países das Américas, Comitê Permanente de Infraestrutura de Dados Geoespaciais para as Américas – CP-IDEA , 2011
- 5.13. Article for the 2011-2012 SNIT Newsletter, Fortes, L. P. S. "Actualidad de las Infraestructuras de Datos Espaciales de las Américas". SNIT Newsletter 2011-2012, pp. 8-10, Sistema Nacional de Coordinación de Información Territorial (SNIT), Ministerio de Bienes Nacionales, Chile, outubro de 2011 (<http://www.ide.cl/images/Publicaciones/Boletines/snit2011.pdf>)
- 5.14. INDE Bulletin nº 3 (Brazil)

Article: The UN initiative for the Global Geospatial Information Management (GGIM) and its intersection with the activities developed in the Americas, by Luiz Paulo Souto Fortes
 Interviews with Paula Mcleod - NRCan (Canada), Iván Darío - IGAC (Colombia) and Esteban González Tohá - SNIT (Chile)
 (http://www.concar.gov.br/arquivo/150@boletim_inde_n3_internet.pdf)

- 5.15. Article for the Geospatial World Magazine, October 2010 – "Poised to Realise Potential" - by Luiz Paulo Souto Fortes (<http://geospatialworld.net/magazine/viewEdition.aspx?magid=180>)
- 5.16. Interview for the Mapping magazine (Spain) – 2010 - by Luiz Paulo Souto Fortes

6. Other activities of the Committee

- 6.1. Transfer of website domain from Mexico's INEGI to Brazil. Upload of all existing documents to the site. In 2011 the Vice-Presidency of PC-IDEA (Chile) took over the management and upload work of all information of the Committee's website in view of the responsibility of this country regarding the implementation of technology issues, according to work plan prepared by GTplan. It should be noted that the site is being totally redesigned. The launch of the new website is scheduled for the 10th PC-IDEA Plenary Meeting, to take place in New York, United States, on August 2013.
- 6.2. Preparation of papers for news and interviews in magazines and journals.
- 6.3. Dissemination of the work and activities of the Committee through specific marketing material and e-mail.
- 6.4. Dissemination of news and events of interest to the mailing list of members and contributors.
- 6.5. Preparation of various reports to the Committee and other bodies (UN-GGIM, for example).
- 6.6. Preparation of the digital folder in 2013 for the engagement of Caribbean countries in the Committee.
- 6.7. Preparation of two folders: Institutional and about the Achievements of 2009 – 2013 term

Figure 9 shows the folders prepared e distributed in this term.



Achievements of
2009 – 2013 Term Folder



Digital Folder



Institutional Folder

Figure 9

7. Cooperation and Partnerships:

- 7.1. PAIGH-SIRGAS-PC-IDEA-GeoSUR Joint Action Plan towards fostering the development of SDI of the Americas. This policy document was prepared by the four institutions to harmonize efforts and work plans, to avoid duplication, as well as to prepare relevant institutions for the constant technological changes, innovations and sharing, reuse and interoperability of geospatial data at the regional level. Available in Spanish, English and Portuguese (Figure 10) in the link <http://www.ipgh.org/Iniciativas/PlanodeAcao.pdf>
- 7.2. Cooperation proposal between the Panamerican Institute of Geography and History (PAIGH) and the United States Statistics Division (UNSD) regarding PC-IDEA activities. This proposal is under discussion between the parts involved.

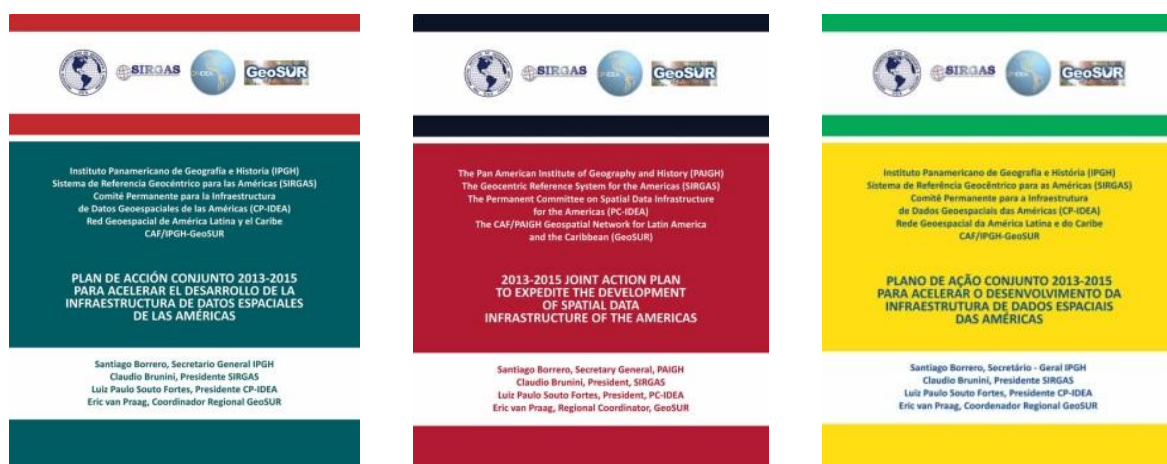


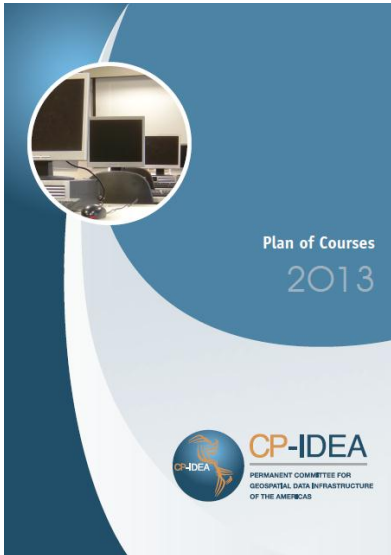
Figure 10 - Joint Action Plan (Spanish, English and Portuguese version)

8. Final Products:

The following final products are being made available to PC-IDEA member countries and to the international community in general at the end of this term (Tabel 2):

Theme	Product	Type
Capacity Building (Figure 11)	Capacity Building Observatory	Website
	User Manual – Capacity Building Observatory	Document
	Implementation Strategy of Capacity Building Plan	Document
	Plan of Courses	Document
Standards and Technical Specifications (Figure 12)	Implementation Overview of the Standards Framework of the Americas	Document
	Proposal of CORE Standards of the Americas	Document
	Geospatial Data Model of the Americas	Document
	Standards Database	Website
Best Practice (Figure 13)	Spatial Data Infrastructure (SDI) Manual for the Americas	Document
	Best Practice List	Website
Innovations (Figure 13)	Diagnosis about Innovation in National Mapping Agencies in countries of the Americas	Document
Tecnology (Figure14)	Website	Website
	User Manual – Website	Document
General	PC-IDEA Final Report of Activities (Figure 16)	Document
	Diagnosis on relevant topics of geospatial information management and development of Spatial Data Infrastructures (SDI) in countries of the Americas – 2011 (Figure 15)	Document
	Diagnosis on relevant topics of geospatial information management and development of Spatial Data Infrastructures (SDI) in countries of the Americas – 2013 (Figure 15)	Document

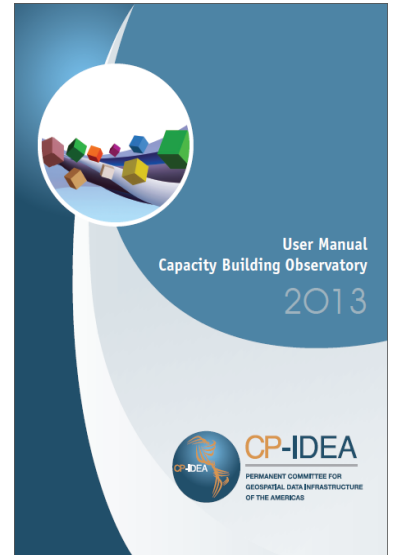
Tabel 2: List of Final Products



Publication: Plan of Courses



Publication: Implementation Strategy of Capacity Building Plan



Publication: User Manual – Capacity Building Observatory

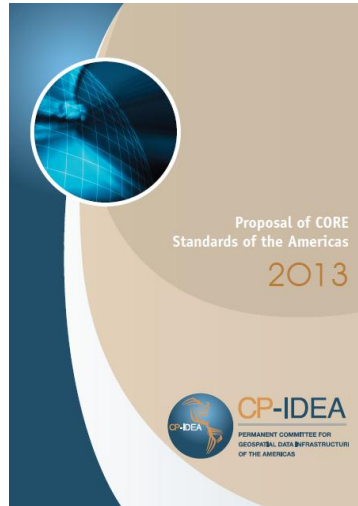


Website: Capacity Building Observatory Page

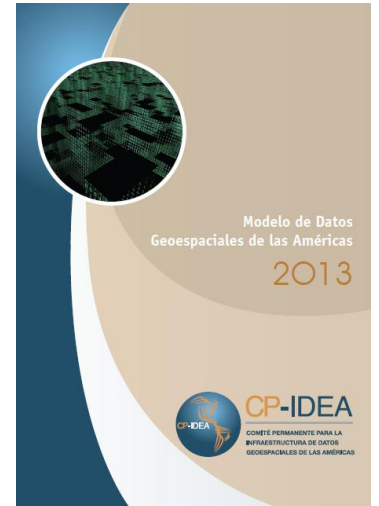
Figure 11



Publication: Implementation Overview of the Standards Framework of the Americas



Publication: "CORE Standards" Proposal of the Americas

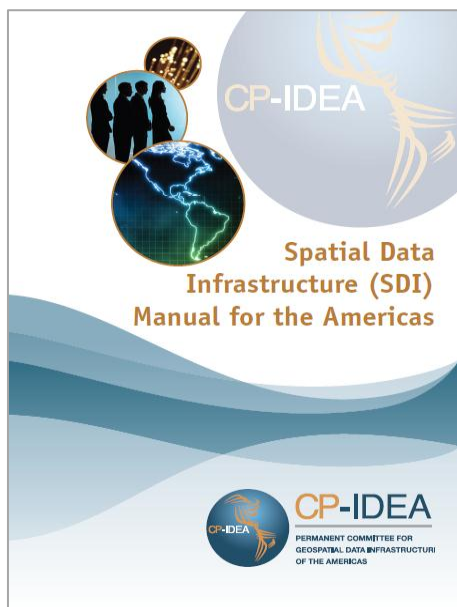


Publication: Geospatial Data Model of the Americas

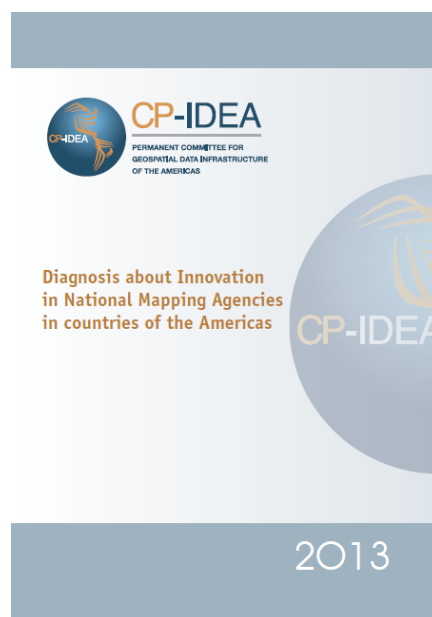


Website: Standards Database Page

Figure 12



Publication: Spatial Data Infrastructure (SDI) Manual for the Americas



Publication: Diagnosis about Innovation in National Mapping Agencies in countries of the Americas

Figure 13



Website

User Manual – Website

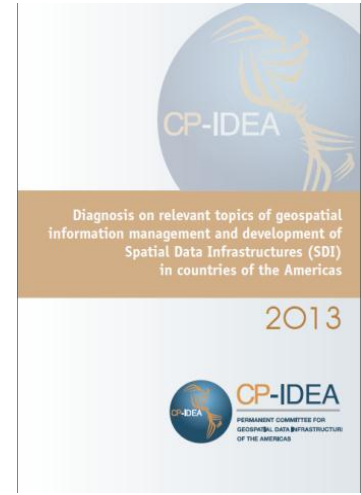
Figure 14



Publication: Diagnosis on relevant topics of geospatial information management and development of Spatial Data Infrastructures (SDI) in countries of the Americas – 2011 (1st edition)



Diagnosis on relevant topics of geospatial information management and development of Spatial Data Infrastructures (SDI) in countries of the Americas – 2011 (2nd edition)



Diagnosis on relevant topics of geospatial information management and development of Spatial Data Infrastructures (SDI) in countries of the Americas – 2013

Figure 15



PC-IDEA Final Report of Activities 2009 - 2013

Figure 16

9. Final Considerations:

All goals established by the 9th UNRCC-A have been achieved, in addition to many products/activities that have been generated/carried out during this term. The work plan has been implemented in such a way that the next Executive Board may promote its continuity, in case this is envisaged.

Numerous working meetings have been held during this term: four plenary meetings, one Executive Board meeting and seven GTplan meetings. Besides, a large number of virtual meetings have also been held. All these activities have certainly contributed to the achievement of all goals for this period.

PC-IDEA and its work have been widely divulged through participation in many events with presentations, written texts for publications, and release of promotional material.

During these four years, some attempts to obtain financial support have been carried out, in order to speed up the work of the Committee and the achievement of even more challenging goals. Unfortunately, these initiatives have not been successful, except for a partnership established with PAIGH. This is an aspect that may be taken into account by the next Executive Board.

It is recommended that a continued effort be made towards engaging all countries of the region in PC-IDEA activities, especially from the Caribbean.

Recently an important cooperation has been established with four regional entities of the Americas which deal with the geospatial information issue: PAIGH, SIRGAS, PC-IDEA and GeoSUR. Their activities and responsibilities have been re-visited and a 2013-2015 work plan developed which will benefit all countries involved with them. Capacity building, events organization, joint documents production, standards and specifications, webservices, and etc., are areas that may be benefitted with this cooperation. This effort is very important to optimize initiatives, avoiding efforts' overlapping and amplifying the results on the establishment of the SDI in the Americas.

PC-IDEA recognizes the importance of the UN-GGIM initiative, which aims to set a high level forum, coordinated by the member countries, for global geospatial information management. PC-IDEA was glad with the opportunity of actively contributing to the process of building this initiative and its corresponding UN Committee of Experts.

Annex A

Meetings and participation in events

(2009 – 2013)

1. Participation of the President in the First Preparatory Meeting of the Proposed United Nations Committee on Global Geographic Information Management (<http://ggim.un.org/meeting1.html>), October 25, 2009, in Bangkok, Thailand, in the 18th United Nations Regional Cartographic Conference for Asia and the Pacific (<http://unstats.un.org/unsd/geoinfo/RCC/unrccap18.html>), which was held in the same city, on October 26-29, 2009, and in the panel “*Permanent Committee on Geographic Information System Infrastructure for Asia and the Pacific - PCGIAP Future Directions*” of the Conference.
2. Participation of the Executive Secretary in the Workshop CYTED IDEDES “*IDEs Semánticas Sociales*”, in Panama, November 9-11, 2009. (<http://www.cp-idea.org>)
3. Participation of the President, Representatives of the Board (Chile, Mexico, Guatemala), Representative of Canada and of the Executive Secretary in the Second Preparatory Meeting of the Proposed United Nations Committee on Global Geospatial Information Management, held on May 10-11, 2010, in New York (<http://ggim.un.org/meeting2.html>).
4. 5th Meeting of the Board, on May 12-13, 2010, in New York, United States. (<http://www.cp-idea.org/>).
5. Participation of the President in the 42th “*Reunião do Conselho Diretivo do IPGH*” and in the “*Reunião CAF-GeoSUR*”, held in Lima, Peru, November 10-12, 2010.
6. 1st Meeting of the Working Group on Planning (WGplan), December 1-3, 2010, in Rio de Janeiro, Brazil (http://www.cp-idea.org/documentos/grupotrabajo/Acta_GT_Trabajo_Plan_RioJaneiro_1a3dec2010_ING.pdf).
7. Participation of the President in the Geospatial World Forum, in Hyderabad, India, January 16-21, 2011. (<http://www.cp-idea.org/>).
8. Participation of the President, Representatives of the Board (Chile, Mexico, Guatemala), United States, Canada, Colombia and the Executive Secretary in the Third Preparatory Meeting of the Proposed United Nations Committee on Global Geospatial Information Management, April 4-6, 2011, in New York (<http://ggim.un.org/meeting3.html>).
9. 2nd Meeting of the Working Group on Planning (WGplan), April 6-7, 2011, in New York, United States (http://www.cp-idea.org/documentos/grupotrabajo/Acta_GT_Trabajo_Plan_NewYork_6y7abr2011_ENG.pdf).
10. 7th Meeting of the PC-IDEA, August, 18-19, 2011, in Rio de Janeiro, Brazil (http://www.cp-idea.org/documentos/Ata_7a_Reuniao_CPIDEA_Rio_ago2011_ING.pdf), along with the Latin American Geospatial Forum 2011.
11. 3rd Meeting of the Working Group on Planning (WGplan), August 19, 2011, in Rio de Janeiro, Brazil (http://www.cp-idea.org/documentos/grupotrabajo/Acta_GT_Trabajo_Plan_RioJaneiro_19ago2011_ENG.pdf)

12. First High Level Forum on United Nations Global Geospatial Information Management - 1st HLF UN-GGIM", October 24-26, 2011, in Seoul, South Korea (<http://ggim.un.org/>).
13. First Session of the United Nations Committee of Experts on Global Geospatial Information Management – UNCE-GGIM, October 26, 2011, in Seoul, South Korea (<http://ggim.un.org/>).
14. 8th Meeting of the CP-IDEA, October 27, 2011, South Korea (http://www.cp-idea.org/documentos/Ata_8a_Reuniao_Seul_27out2011_ING_final.pdf).
15. 4th Meeting of the Working Group on Planning (WG-plan), February 8-9, 2012, in Rio de Janeiro, Brazil (http://www.cp-idea.org/documentos/grupotrabajo/Acta_GTplan_RioJaneiro_Feb2012_ESP_Versión%20Final_LP.pdf).
16. Participation of the President in the Forum on the Future Trends in Geospatial Information Management: the Five to Ten Year Vision, Geospatial World Forum, Amsterdam, Holland, April 24, 2012. (<http://www.cp-idea.org/>).
17. 5th Meeting of the Working Group on Planning (WG-plan), May 16, 2012, em Quebec City, Canadá (<http://www.cp-idea.org/Reuniones/Grupos de Trabajo>), along with the Global Geospatial Conference 2012/GSDI 13 World Conference.
18. Participation of the Vice President in Second Session of the United Nations Committee of Experts on Global Geospatial Information Management – UNCE-GGIM, August 13-15, in New York, United States (<http://ggim.un.org/>).
19. 9th Meeting of the PC-IDEA was set, in Rio de Janeiro, Brazil, for August 16, 2012.
20. 6th Meeting of Working Group on Planning (GTplan), August 16, 2012, Rio de Janeiro, Brazil.
21. Organization of the Symposium:- SDI as Natural Disasters Risk Management Services, in Rio de Janeiro, Brazil, August 17, 2012, as part of the Latin America Geospatial Forum 2012.
22. Participation of the Vice President on the Nineteenth United Nations Regional Cartographic Conference for Asia and the Pacific (19th UNRCC-AP), Bangkok, Thailand, October 29 to November 1, 2012.
23. Participation of the Executive Secretary, on behalf of the President, on the 44th Meeting of the Executive Board of Panamerican Institute of Geography and History (PAIGH), in Buenos Aires, Argentina, November 14 to 16 , 2012.
24. 7th Meeting of Working Group on Planning (GTplan), April 10 and 11 , 2013, in Rio de Janeiro, Brazil.
25. Participation of the Executive Secretary on the Geospatial World Forum 2013, in Rotterdam, Netherlands, May 12 to 16 , 2013.
26. Participation of the Executive Secretary on MundoGEO Connect, in São Paulo, Brasil, June 18 to 20, 2013.

Annex B

Presentations

(2009 – 2013)

1. ***“Importance of policies and legal instruments for the building of spatial data infrastructures in the Américas”***, 18th United Nations Cartographic Conference for Asia and the Pacific, Bangkok, October 26-29, 2009, by Luiz Paulo Souto Fortes (http://unstats.un.org/unsd/newsletter/globalstat_unsd_2010.htm#5-8October_2010)
2. ***“Perspectivas del CP-IDEA para 2009-2013”***, Taller CYTED IDEDES “IDEs Semánticas Sociales”, Playa Blanca, November 9-11, 2009, by Valéria Oliveira Henrique de Araújo (<http://www.cp-idea.org/Documentos de Referencia/Organización>)
3. ***“A Importância da Informação Geoespacial no Passado, Presente e Futuro das Américas”***, International Congress “Desastres y Ordenamiento Territorial en las Américas”, promoted by Instituto Geográfico Nacional do Peru e Instituto Panamericano de Geografía e História – IPGH, Lima, Peru, November, 2010, by Luiz Paulo Souto Fortes (<http://www.scribd.com/doc/43386131/Luis-Paulo-Soto-Fortes>)
4. ***“Panorama de la infraestructura de Datos Espaciales del Brasil – INDE”***, - Congreso Uruguayo de Infraestructura de Datos Espaciales, Montevideo, Uruguay, October, 2010, by Moema José de Carvalho Augusto (http://www.agesic.gub.uy/innovaportal/file/1183/1/Moema_Jose_de_Carvalho.pdf)
5. ***“Spatial Data Infrastructures”*** Joint Seminar Eurostat – IBGE/INEGI on Spatial Statistics, carried out by Eurostat in Luxembourg, June, 2010, by Rafael March (IBGE/Brasil)
6. ***“Geospatial Information Activities in the Americas (SDI Development in the Americas)”***, 2011 Cambridge Conference – June, 2011, by Luiz Paulo Souto Fortes (http://www.cp-idea.org/documentos/fortalecimiento/Infraestructura_Dados_Espaciais_Aspectos_Iniciativas_Brasil_Américas_Global.pdf e http://www.cp-idea.org/documentos/fortalecimiento/Fortes_SDI_Americas_2011.pdf)
7. ***“Atividades do CP-IDEA 2009-2011”***– 7th PC-IDEA Meeting during the Latin American Geospatial Forum, in Rio de Janeiro, August 18, 2011, by Luiz Paulo Souto Fortes and Valéria Oliveira Henrique de Araújo (http://www.cp-idea.org/documentos/reuniones/7a_Reuniao_CPIDEA_ago2011_Rio_PReSE.pdf)
8. ***“Creación de capacidades institucionales, educación y capacitación”***, 7th PC-IDEA Meeting, along the Latin American Geospatial Forum, Rio de Janeiro, August 18, 2011, by Dora Inés Rey Martinez (http://www.cp-idea.org/documentos/reuniones/7a_Reuniao_CPIDEA_ago2011_Rio_GT%20CAP.pdf)
9. ***“Normas y Especificaciones Técnicas”***, 7th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 18, 2011, by Luis Gerardo Esparza Ríos (http://www.cp-idea.org/documentos/reuniones/7a_Reuniao_CPIDEA_ago2011_Rio_GT%20NOR.pdf)

10. **“ Best Practice and Guidelines for the development of SDI”**, 7th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 18, 2011, by Paula McLeod (http://www.cp-idea.org/documentos/reuniones/7a_Reuniao_CPIDEA_ago2011_Rio_GT%20PRA.pdf)
11. **“ Levantamento acerca de temas relevantes sobre las IDES para la Región”**, 7th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 18, 2011, by Paula McLeod, by Oscar Figueroa (http://www.cp-idea.org/documentos/reuniones/7a_Reuniao_CPIDEA_ago2011_Rio_GT%20REL.pdf)
12. **“Innovaciones en los organismos nacionales de cartografía en materias propias de su quehacer “**, 7th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 18, 2011, by Moema José de Carvalho Augusto (http://www.cp-idea.org/documentos/reuniones/7a_Reuniao_CPIDEA_ago2011_Rio_GT%20INN.pdf)
13. **“Implementación de medios tecnológicos para la discusión relacionada con el acceso a la información geoespacial y el rol de los gobiernos en la disseminación de estos datos”**, 7th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 18, 2011, by Esteban Toha Gonzalez (http://www.cp-idea.org/documentos/reuniones/7a_Reuniao_CPIDEA_ago2011_Rio_GT%20TEC.pdf)
14. **“Reporte de las actividades del grupo de trabajo de Planificación GTplan CP-IDEA”**, 7th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 18, 2011, by Álvaro Monett Hernández
15. **“Análise da Aplicação do Questionário e Atividades Futuras”** – 3rd PC-IDEA GTplan Meeting, during the Latin American Geospatial Forum, in Rio de Janeiro, August 19, 2011, by Valéria Oliveira Henrique de Araújo (http://www.cp-idea.org/documentos/grupotrabajo/3a_Reuniao_CPIDEA_GTPLAN_SE.pdf)
16. **“Infraestrutura de Dados Espaciais – Aspectos das Iniciativas do Brasil, das Américas e Global”**, Curso de Infraestrutura de Dados Espaciales – Madrid, October 5, 2011, by Valéria Oliveira Henrique de Araújo (http://www.cp-idea.org/documentos/fortalecimiento/Infraestrutura_Dados_Espaciais_Aspectos_Iniciativas_Brasil_Americas_Global.pdf)
17. **“Challenges in Geospatial Policy Formulation and Institutional Arrangements”**, First High Level Forum on United Nations Global Geospatial Information Management - 1st HLF UN-GGIM” - Seoul, South Korea, October 24, 2011, by Luiz Paulo Souto Fortes (http://www.cp-idea.org/documentos/fortalecimiento/PCIDEA_Policy_Formulation_InstArrangements_HLF_GGIM.pdf)
18. **“PC-IDEA Perspectives on SDI Policy and Standards”**, OGC Korea Interoperability Day, Seoul, South Korea, October 27, 2011, by Luiz Paulo Souto Fortes (http://www.cp-idea.org/documentos/fortalecimiento/CPIDEA_OGC_Interoperability_Oct_27_2011.pdf)

19. ***“Infraestruturas de Dados Espaciais na América do Sul - Taller on Cartographic Agendas – Buenos Aires, Argentina, November 11, 2011, by Valéria Oliveira Henrique de Araújo***(http://www.cp-idea.org/documentos/fortalecimiento/Valeria_Araujo_IIRSA_Buenos%20Aires_nov2011.pdf)

20. ***“A Iniciativa da ONU para o Gerenciamento Global da Informação Geoespacial - GGIM”***, IBGE Seminar, Rio de Janeiro, Brazil, December 13, 2011, by Luiz Paulo Souto Fortes and Valéria Oliveira Henrique de Araújo (http://www.cp-idea.org/documentos/CONCAR/Seminario_GGIM_IBGE_13_dez_2011_final.pdf)

21. ***“Planificación CP-IDEA 2012-2013”***, 4th PC-IDEA GTplan Meeting, in Rio de Janeiro, February 8-9, 2012, by Álvaro Monett Hernández (<http://www.cp-idea.org/>)

22. ***“Cuestionario 2011 CP-IDEA: proceso de aplicación, resultados, conclusiones y alternativas de difusión”***, 4th PC-IDEA GTplan Meeting, in Rio de Janeiro, February 8-9, 2012, by Álvaro Monett Hernández (<http://www.cp-idea.org/>)

23. ***“Propuesta de Normas “Core” para la Región”***, 4th PC-IDEA GT plan Meeting, in Rio de Janeiro, February 8-9, 2012, by Luis Gerardo Esparza Ríos (<http://www.cp-idea.org/>)

24. ***“A Common Glossary for PC-IDEA”***, 4th PC-IDEA GT plan Meeting, in Rio de Janeiro, February 8-9, 2012, by Paula McLeod (<http://www.cp-idea.org/>)

25. ***“Providing Data to SDI: the Role of the Public and Private Sectors”***, Geospatial Forum World, in Amsterdam, Holland, April, 2012, by Luiz Paulo Souto Fortes (http://www.geospatialworldforum.org/2012/gwf_PDF/Luiz%20Paulo%20Souto%20Fortes.pdf)

26. ***“La Infraestructura Nacional de Datos Espaciales de Brasil (INDE) y el Escenario de América Latina a través de lo CP-IDEA”***, XI Congreso Nacional y VIII Latinoamericano de Agrimensura, Villa Carlos Paz – Córdoba, Argentina, May 4, 2012, by Valéria Oliveira Henrique de Araújo (<http://congreso.agrimensorescordoba.org.ar/programa>)

27. ***“PC-IDEA Initiatives towards Spatially Enabling the Americas”***, GSDI 13, Québec, Canada, May, 2012, by Luiz Paulo Souto Fortes (<http://www.gsdi.org/gsdiconf/gsd13/abstracts.html#ab61>)

28. ***“An overview on the status of SDI relevant issues in PC-IDEA members countries”***, GSDI 13, Québec, Canada, May 2012, por Alvaro Monett Hernández e Paula McLeod (<http://www.gsdi.org/gsdiconf/gsd13/abstracts.html#ab96>)

29. ***“A Iniciativa da ONU para o Gerenciamento Global da Informação Geoespacial – GGIM”***– MundoGeo#connect 2012, Fórum Internacional de Geotendências, May 29, 2012, by Luiz Paulo Souto Fortes (http://www.mundogeoconnect.com/2012/arquivos/29abcd/LuizPauloFortes_MundoGEOConnect2012.pdf)

30. ***“Atividades do CP-IDEA na construção das Infraestruturas de Dados Geoespaciais das Américas”***, MundoGEO#Geoconnect 2012, Fórum Internacional de Geotendências, May 29, 2012 by Valéria Oliveira Henrique de Araújo (http://www.mundogeoconnect.com/2012/arquivos/29abcd/ValeriaOliveiraAraujo_MundoGEOConnect2012.pdf)

31. ***"Monitoring Sustainable Development – Why Location Matters"***, Rio + 20, Rio de Janeiro, Brazil, June 20, 2012, by Luiz Paulo Souto Fortes (<http://www.uncsd2012.org/>)

32. ***"PC-IDEA Activities - Status and perspectives"***, Second Session of the United Nations Committee of Experts on Global Geospatial Information Management – UNCE-GGIM, August 13-15, 2012, New York, United States, by Esteban Tohá (<http://www.cp-idea.org/>)

33. ***"Atividades do CP-IDEA na construção das IDE nas Américas e a Iniciativa da ONU para o Gerenciamento Global da Informação Geoespacial (GGIM)"***, VIII Encontro do Grupo Estratégico de Geotecnologias da Companhia Vale do Rio Doce – CVRD, *Rio de Janeiro / Brasil – August 14, 2012*, by Valéria Oliveira Henrique de Araújo (<http://www.cp-idea.org/>)

34. ***"Atividades do CP-IDEA / 2011 – 2012"***, 9th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 16, 2012, by Valéria Oliveira Henrique de Araújo (<http://www.cp-idea.org/>)

35. ***"Cuestionario CP-IDEA: conclusiones y perspectivas de aplicación 2013"*** 9th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 16, 2012, by Alvaro Monett Hernández and Paula McLeod (<http://www.cp-idea.org/>)

36. ***"Creación de Capacidades Institucionales, Educación y Capacitación"***, 9th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 16, 2012, by *Dora Inés Rey Martínez e Carolina Morera* (<http://www.cp-idea.org/>)

37. ***"Avanços no GT Normas y Especificaciones Técnicas"***, 9th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 16, 2012, by Luis Gerardo Esparza Ríos (<http://www.cp-idea.org/>)

38. ***"Best practices and guidelines for the development of SDI"*** - 9th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 16, 2012, by Paula McLeod (<http://www.cp-idea.org/>)

39. ***"Sitio Web CP-IDEA: un espacio para la difusión, colaboración e intercambio"***, 9th PC-IDEA Meeting along the Latin American Geospatial Forum, in Rio de Janeiro, August 16, 2012, by Esteban Tohá (<http://www.cp-idea.org/>)

40. ***"A Importância da Informação Geoespacial no Gerenciamento de Riscos Naturais nas Américas"***, Symposium:- SDI as Natural Disasters Risk Management Services along the Latin American Geospatial Forum, in Rio de Janeiro, August 17, 2012, by Valéria Oliveira Henrique de Araújo (<http://www.cp-idea.org/>)

41. ***"Información geoespacial y gestión de riesgos en Chile"***, Symposium:- SDI as Natural Disasters Risk Management Services along the Latin American Geospatial Forum, in Rio de Janeiro, August 17, 2012, by Esteban Tohá (<http://www.cp-idea.org/>)

42. ***"Multi-Agency Situational Awareness System"***, Symposium:- SDI as Natural Disasters Risk Management Services along the Latin American Geospatial Forum, in Rio de Janeiro, August 17, 2012, by Paula McLeod (<http://www.cp-idea.org/>)

43. ***“Tecnologías de la Información para la Gestión del Riesgo de Panamá”***, Symposium:- SDI as Natural Disasters Risk Management Services along the Latin American Geospatial Forum, in Rio de Janeiro, August 17, 2012, by Israel Sanchez (<http://www.cp-idea.org/>)
44. ***“A Importância da Informação Geoespacial no Gerenciamento de Riscos Naturais nas Américas”***, GIS Workshop sponsored by the Brazilian Society of Cartography and the Rio de Janeiro State University, Rio de Janeiro, November 12 and 13, 2012, by Valéria Oliveira Henrique de Araújo (<http://www.cp-idea.org/>)
45. ***“The Development of a Regional Framework for Geo-spatial Information”***, The LICJ/URISA Caribbean Chapter High Level Regional Meeting on Geospatial Information Management, Montego Bay, Jamaica - November 14, 2012, by Cecille Blake (<http://www.cp-idea.org/>)
46. ***“Relatos Gerais do CP-IDEA”***, 7th Meeting of Working Group on Planning (GTplan), April 10 and 11, 2013, in Rio de Janeiro, Brazil, by Valéria Oliveira Henrique de Araújo (<http://www.cp-idea.org/>)
47. ***“Creación de Capacidades Institucionales, Educación e Capacitación”***, 7th Meeting of Working Group on Planning (GTplan), April 10 and 11, 2013, in Rio de Janeiro, Brazil, by Alberto Boada Rodríguez (vídeo conferência) (<http://www.cp-idea.org/>)
48. ***“Cuestionario CP-IDEA 2013 - Estado de avance y actividades inmediatas”*** 7th Meeting of Working Group on Planning (GTplan), April 10 and 11, 2013, in Rio de Janeiro, Brazil, by Alvaro Monett Hernández (<http://www.cp-idea.org/>)
49. ***“Innovaciones en los organismos nacionales de cartografía en materias propias de su quehacer”***, 7th Meeting of Working Group on Planning (GTplan), April 10 and 11, 2013, in Rio de Janeiro, Brazil, by Moema José de Carvalho Augusto (<http://www.cp-idea.org/>)
50. ***“Normas y Especificaciones Técnicas – Estágio dos Trabalho”***, 7th Meeting of Working Group on Planning (GTplan), April 10 and 11, 2013, in Rio de Janeiro, Brazil, by Héctor E. Aguayo Muñoz (<http://www.cp-idea.org/>)
51. ***“Best practices and guidelines for the development of SDI - Canada’s update to PC-IDEA GT-Plan activities”*** 7th Meeting of Working Group on Planning (GTplan), April 10 and 11, 2013, in Rio de Janeiro, Brazil, by Paula McLeod (<http://www.cp-idea.org/>)
52. ***“Sitio Web CP-IDEA: un espacio para la difusión, colaboración e intercambio”***, 7th Meeting of Working Group on Planning (GTplan), April 10 and 11, 2013, in Rio de Janeiro, Brazil, by Alvaro Monett Hernández (<http://www.cp-idea.org/>)
53. ***“Policies towards SDI development and implementation in Americas”***, Abstract and presentation – Geospatial World Forum, May 12 to 16, 2013, Beurs-World Trade Center, Rotterdam, Netherlands, by Valéria Oliveira Henrique de Araújo (<http://www.cp-idea.org/>)
54. ***“Iniciativas para beneficiar e desenvolver as IDE nas Américas”***, MundoGEO#Connect LatinAmerica 2013, June 18 to 20, 2013, Frei Caneca Convention Center, São Paulo, Brazil, by Valéria Oliveira Henrique de Araújo (<http://www.cp-idea.org/>)
55. ***“Actions taken on resolutions of the Ninth United Nations Regional Cartographic Conference for the Americas”***, Tenth UNRCC, August 19 to 23, 2013, New York, USA, by Valéria Oliveira Henrique de Araújo (<http://www.cp-idea.org/>)

56. ***“Final Report of Activities”***, Tenth UNRCC, August 19 to 23, 2013, New York, USA, by Luiz Paulo Souto Fortes (<http://www.cp-idea.org/>)
57. ***“Evaluación de la gestión de la información geoespacial en las Américas 2011-2013 ”***, Tenth UNRCC, August 19 to 23, 2013, New York, USA, by Alvaro Monett Hernández (<http://www.cp-idea.org/>)
58. ***“Spatial Data Infrastructure (SDI) Manual for the Americas”***, Tenth UNRCC, August 19 to 23, 2013, New York, USA, by Paula McLeod (<http://www.cp-idea.org/>)
59. ***“Grupo de Trabajo de Normas y Especificaciones Técnicas – GTnet - Informe Gestión 2009-2013”***, Tenth UNRCC, August 19 to 23, 2013, New York, USA, by Carlos Guerrero Elemen (<http://www.cp-idea.org/>)
60. ***“Sitio Web de CP-IDEA”***, Tenth UNRCC, August 19 to 23, 2013, New York, USA, by Alvaro Monett Hernández (<http://www.cp-idea.org/>)

Annex C









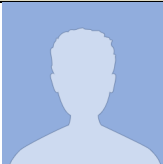

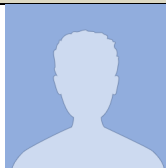
Current and Previous Members

(2009 – 2013)

Titular and Substitute Members (on August 2013)		Old Members (2009-2013)	
ARGENTINA			
	Sergio Rubén Cimbaro (T) Instituto Geográfico Nacional / IGN		Liliana Weisert
	Ricardo Ramón Mansilla (S) Instituto Geográfico Nacional / IGN		
BELIZE			
	Carren Williams (T) Ministry of Natural Resources and Agriculture / MNRA		Edgar Ek
	Elam Torres (S) Ministry of Natural Resources and Agriculture / MNRA		
BOLÍVIA			
	Adalid Cortez Verduquez (T) Instituto Geográfico Militar / IGM		Hugo Méndez Sarabia
	Santos Luis Quispe Choque (S) Instituto Geográfico Militar / IGM		Mario Sandoval Sandoval
			Sady Rojas Velásquez

BRAZIL			
	Luiz Paulo Souto Fortes (T) Instituto Brasileiro de Geografia e Estatística/IBGE		
	Valéria Oliveira Henrique de Araújo (S) Instituto Brasileiro de Geografia e Estatística/IBGE		
CANADÁ			
	Prashant Shukle (T) Natural Resources Canadá / NRCan		
	Paula McLeod (S) Natural Resources Canadá / NRCan		
CHILE			
	Matías Fortuño Soto (T) Ministerio de Bienes Nacionales / SNIT		Cristian Aqueveque Iglesias
	Álvaro Monett Hernández (S) Ministerio de Bienes Nacionales / SNIT		Esteban Tohá González
COLÓMBIA			
	Juan Antonio Nieto Escalante (T) Instituto Geográfico Agustín Codazzi / IGAC		Iván Darío Gómez Gúzman

	Alberto Boada Rodriguez (S) Instituto Geográfico Agustín Codazzi / IGAC		Dora Inez Reis
COSTA RICA			
	Max Lobo Hernández (T) Instituto Geográfico Nacional / IGN		
CUBA			
			Eloy Luis Alum Ortiz
			Cándido Regalado
ECUADOR			
	Pedro Cabezas Gallegos (T) Instituto Geográfico Militar / IGM		Iván F. Acosta Avaréz
	Edison Fernando Bravo Chancay (S) Instituto Geográfico Militar / IGM		Fabián Danilo Cárdenas F.
			Maria Fernanda Leon
			Milton Chamorro

EL SALVADOR			
	<p>Rigoberto Ovidio Magaña Chavarria (T)</p> <p>Instituto Geográfico y del Catastro Nacional / CNR</p>		Melvin Héctor Membreño
	<p>Emma Flores (S)</p> <p>Instituto Geográfico y del Catastro Nacional / CNR</p>		Rafael Juárez
UNITED STATES			
	<p>Ivan Deloatch (T)</p> <p>Federal Geographic Data Committee / FGDC</p>		
GUATEMALA			
	<p>Edwin Guillermo Santos Mansilla (T)</p> <p>Instituto Geográfico Nacional / IGN</p>		Ronald Estuardo Arango Ordoñez
	<p>David Isaac Gomez Gomez (S)</p> <p>Instituto Geográfico Nacional / IGN</p>		Oscar Leonel Figueroa Cabrera
GUYANA			
			Naseem Nasir
HONDURAS			
	<p>Fausto Ramirez Garcia (T)</p> <p>Dirección General de Catastro y Geografía / DGCG</p>		Rigoberto Sierra Martínez

JAMAICA			
	Trevor Shaw (S) The National Land Agency / NLA		Cecile Blake
MÉXICO			
	Carlos Guerrero Elemen (T) Instituto Nacional de Estadística y Geografía / INEGI		
	Luis Gerardo Esparza Ríos (S) Instituto Nacional de Estadística y Geografía / INEGI		
NICARAGUA			
	Gonzalo Medina Pérez (T) Instituto Nicaragüense de Estudios Territoriales / INETER		
PANAMÁ			
	Israel Sanches (T) Instituto Geográfico Nacional Tommy Guardia / IGNTG		Jaime Alfredo Toral Boupet
	Isis Tejada (S) Instituto Geográfico Nacional Tommy Guardia / IGNTG		
PARAGUAY			
	Arnulio Asunción Cáceres Benitez (T) Servicio Geográfico Militar / SGM		Víctor Húgo López Olazar
	Moises Ramon Servin Estigarribia (S) Servicio Geográfico Militar / SGM		Agustín Gómez González
PERÚ			






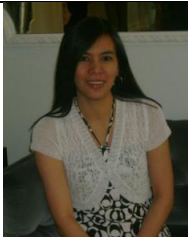
	Pedro Arturo Chocano Ochoa (T) Instituto Geográfico Nacional / IGN		Carlos Alfonso Tafur Ganoza
	Demetrio Chavez Mori (S) Instituto Geográfico Nacional / IGN		
DOMINICAN REPUBLIC			
	Francisco Miguel E. Corominas Sánchez (T) Instituto Cartográfico Militar / ICM		Ismael Antonio Alvarado
			Rosanna L. Pons Peguero
URUGUAY			
	César Rodríguez Tomeo Servicio Geográfico Militar / DSGM		José M. Lazo
	Norberto Suárez Servicio Geográfico Militar / DSGM		Hector C. Rovera
VENEZUELA			
	Sergio Rodríguez Adam (T) Instituto Geográfico de Venezuela Simón Bolívar / IGVS		

(T) Titular Member
(S) Substitute Member

Annex D

United Nations Members











(2009 – 2013)








UN Statistic Division			
	Stefan Schweinfest Acting Director		Paul Cheaung (Director until Dec 2012)
	Cecille Blake		Amor Laaribi
	Gregory Scott		Vilma Frani

Annex E

Members and Collaborators of the Working Group on Planning (GTplan)

Coordinator		
	Álvaro Monett Hernández	Ministerio de Bienes Nacionales / SNIT
Co-coordinator		
	Paula McLeod	Natural Resources Canadá / NRCan
Members		
Brasil		
	Moema José de Carvalho Augusto	Instituto Brasileiro de Geografia e Estatística / IBGE
	Anna Lucia Barreto de Freitas	Instituto Brasileiro de Geografia e Estatística / IBGE
Mexico		
	Carlos Agustín Guerrero Elemén	Instituto Nacional de Estadística y Geografía / INEGI
	Luis Gerardo Esparza Ríos	Instituto Nacional de Estadística y Geografía / INEGI

Colaborators		
Brasil		
	Valéria Oliveira Henrique de Araújo	Instituto Brasileiro de Geografia e Estatística / IBGE
Canada		
	Rhian Evans	Natural Resources Canadá / NRCan
	Judy Guenette	Natural Resources Canadá / NRCan
	André Prigent	Natural Resources Canadá / NRCan
	Jean Brodeur	Natural Resources Canadá / NRCan
	Simon Riopel	Natural Resources Canadá / NRCan
	Kyra St-Pierre	University of Ottawa
	Adam Balogh	University of Waterloo
	Catherine Galiano-Lavallée	University of Ottawa
	Jenna Findlay	University of Ottawa

Chile		
	Jorge Montesinos Camino	Ministerio de Bienes Nacionales / SNIT
Colombia		
	Alberto Boada Rodriguez	Instituto Geográfico Agustín Codazzi / IGAC
	William Martínez	Instituto Geográfico Agustín Codazzi / IGAC
	Elena Posada	Instituto Geográfico Agustín Codazzi / IGAC
Mexico		
	Eva Luévano Orta	Instituto Nacional de Estadística y Geografía / INEGI
	Héctor Eduardo Aguayo Muñoz	Instituto Nacional de Estadística y Geografía / INEGI
Old Members and/or Collaborators		
	Tatiana Delgado Fernández	Cuba

	<p><i>Oscar Leonel Figueroa Cabrera</i></p>	<p>Guatemala</p>
	<p><i>Dora Ines Reyes</i></p>	<p>Colômbia</p>
	<p><i>Carolina Moreira</i></p>	<p>Colômbia</p>
	<p><i>Esteban Tohá Gonzáles</i></p>	<p>Chile</p>

Annex F

Members and Collaborators of Working Group on Standards and Technical Specifications (GTnet)

Coordinador		
	<i>Carlos Agustín Guerrero Elemén</i>	Instituto Nacional de Estadística y Geografía - INEGI
	<i>Luis Gerardo Esparza Ríos</i>	Instituto Nacional de Estadística y Geografía - INEGI
Members		
Brasil		
	<i>Moema José de Carvalho Augusto</i>	Instituto Brasileiro de Geografia e Estatística / IBGE
	<i>Silvana Philippi Camboim</i>	Universidade Federal do Paraná - UFPR
	<i>Omar Antônio Lunardi</i>	Diretoria do Serviço Geográfico do Exército - DSG
Canada		
	<i>Jean Brodeur</i>	Natural Resources Canada / NRCan
Colombia		
	<i>Alberto Boada Rodriguez</i>	Instituto Geográfico Agustín Codazzi / IGAC

	<i>Fredy Montealegre Martínez</i>	Instituto Geográfico Agustín Codazzi / IGAC
Honduras		
	<i>Daniel Leonardo Sierra Rápalo</i>	Dirección General de Catastro y Geografía / IP-DGCG
	<i>Alba Luz Castro Chacón</i>	Dirección General de Catastro y Geografía / IP-DGCG
	<i>Jimmy Rolis Swarton Padilla</i>	Dirección General de Catastro y Geografía / IP-DGCG
	<i>Alex Armando Martínez</i>	Dirección General de Catastro y Geografía / IP-DGCG
	<i>Jak Melem Uriarte</i>	Dirección General de Catastro y Geografía / IP-DGCG
Collaborators		
	<i>Trevor Taylor</i>	Canadá / Open Geospatial Consortium - OGC
	<i>Luis Bermudes</i>	Estados Unidos / Open Geospatial Consortium - OGC
	<i>Eva Luévano Orta</i>	Instituto Nacional de Estadística y Geografía - INEGI



***Héctor Eduardo Aguayo
Muñoz***

Instituto Nacional de Estadística y Geografía -
INEGI

Cover:

Eduardo Sidney Cabral Rodrigues de Araujo (IBGE)

Translation (Portuguese to English)

Report originally done in Portuguese and then translated into English.

Translators:

Leonardo Zechlinski Maya (IBGE)

Luiz Paulo Souto Fortes (IBGE / CP-IDEA)

Valéria Oliveira Henrique de Araújo (IBGE / CP-IDEA)

Vinicius Duarte Figueira (IBGE)

Normalization:

Valéria Oliveira Henrique de Araújo (IBGE / CP-IDEA)

www.cp-idea.org