Best practices and guidelines for the development of SDI

**Spatial Data Infrastructure Manual for the Americas** 



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### **Presentation Outline**

- 1. Project overview
- 2. Needs analysis
- 3. Guidelines for the Implementation of SDI in the Americas
  - Project development
  - SDI Manual for the Americas
  - Publication and use
- 4. Conclusion





# Best Practices Project (PRA)

Assessment and compilation of best practices for PC-IDEA

- 1. 2011 Survey of Best Practices and research (January September 2011)
- 2. Analysis of findings and needs (August November 2011)
- 3. Development of guidelines for the implementation of SDIs in the Americas (April 2012 – January 2013)
- 4. Preparation of guidelines for publication and outreach/communications (February – August 2013)
- 5. 2013 Survey of Best Practices and analysis (February July 2013)



# PRA Questionnaire

#### Address the key components of SDI:

**1. Policies** (Regulatory framework, privacy, licensing, etc.)

2. Standards (Implementation, metadata, Web Map Service, etc.)

**3. Technology** (Open source, cloud computing, data dissemination, etc.)

**4. Framework Data** (Dissemination practices, base layer development, etc.)

**5.** Other (Capacity building, governance, leadership, funding etc.)

#### Focus on:

- existing guidelines and documents within member country
- case studies and success stories for SDI implementation
- existing guidelines and best practices outside of PC-IDEA region
- needs for best practices and guidelines within member country (2011)
- needs by target audience (technical, managerial/policy, users) (2011)





# **Project Results**

### **FINAL PRODUCTS:**

Report on the results of the 2011 survey

Compilation of Best Practices

Guidelines for the implementation of SDI in the Americas

Special Chapter on monitoring impacts and benefits of SDI

Glossary of Terms

Report on the results of the 2013 survey



## **Needs for Best Practices**

The 2011 survey found that there is a lack of documentation and dissemination of best practices.

- PC-IDEA must promote this activity in the region
- Efficient mechanisms for disseminating best practices
- Solutions to the language barriers must be provided

Many nations need guidelines for monitoring social and economic impacts and benefits of SDI initiatives.





## Guidelines for the Implementation of SDI in the Americas

- Development of SDI Manual for the Americas
  - Glossary of terms
  - SDI Manual
  - Chapter on Measuring and Monitoring SDI Benefits and Impacts





# Development of SDI Manual

- ➤ Glossary of Terms as a tool to ensure consistency among the members of PC-IDEA in the use of specific terms (2011 -2012)
- Define project requirements
- Contract with Hickling Arthurs and Low Corporation to support development (July 2012 – January 2013)
- Review of compilation of existing best practices and research of case studies and success stories, especially in Latin America
- Draft structure and feedback (September 2012)
- Special chapter Measuring and Monitoring SDI Impacts and Benefits; contract with renowned expert in the field (September – November 2012)
- Draft manual and circulation for feedback (January 2013)
- Professional editing and review, final content (February 2013)



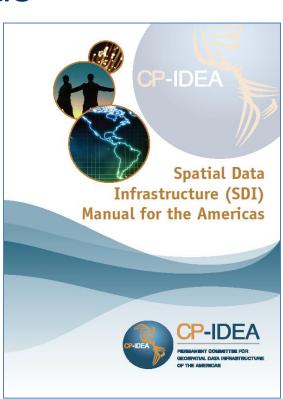


## SDI Manual for the Americas

- Introduction to the Manual
- SDI Users and their Needs
- 3. SDI Fconomics
- 4. SDI Development Fundamentals
- Framework Data
- 6. Standards
- 7. Policies
- **Technologies**
- 9. **Projects and Activities**
- Measuring and Monitoring Impacts and Benefits
- **Conclusions**

### Appendices:

References, Glossary of Terms, International Standards, Template for Documenting Good Practices







# **SDI Manual Highlights**

Manual incorporates and references existing guides, best practices and case studies from the Americas and elsewhere, new content was also developed.

### Examples:

Topic	Countries
Standards Adoption	Colombia, Ecuador, Brazil, Mexico, Chile, Canada
SDI Implementation Plans	Ecuador, Colombia, Mexico, Brazil
Public Private Partnership	Jamaica
SDI Economics and Financing	United States, Columbia, Canada, Europe





## Best Practice - Ecuador



The National Policies of Geospatial Information in Ecuador are developed in accordance with the principles of relevancy, opportunity, quality, publicity accessibility, transparency, interoperability, and interdependency and decentralization (Consejo Nacional de Geoinformatica - Registro Oficial-Ecuador, 2010).

Their strategic guidelines focus on the following:

- Generation and updating of geoinformation
- Use of geoinformation
- Diffusion of geoinformation
- Delivery, exchange and commercialization of spatial information







# **Best Practice - Uruguay**

Policy terms and conditions for the use of geographical data from the Spatial Data Infrastructure of Uruguay (IDE-Uruguay) are defined by the Agency for Electronic Government and Information Society (AGESIC, 2011) regarding the following issues:

- Information source
- Use of data
- Quality of information
- Treatment of information
- Responsibility of user
- Updating
- Refusal of access
- Safeguarding









## **Best Practice - Canada**



In Canada, a complete CGDI is designed to include not only strategic policies, but also a comprehensive suite of spatial operational policies, fully supported and available for adoption and implementation CGDI's national stakeholders.



### **Operational Policies:**

- Liability
- Data Quality
- Privacy
- Confidentiality, Sensitive Information and Security
- Intellectual Property and Licensing
- Archiving and Preservation
- Data Sharing and Integration
- Cloud Computing
- Volunteered Geographic Information (VGI)







# Manual Summary

- Manual over 190 pages long in English
- Best efforts to get case studies and input from PC-IDEA members – no content provided
- Many Canadian examples, which could be updated/replaced by examples from PC-IDEA nations/members
- Contributions
  - GeoConnections: Paula McLeod, Rhian Evans, Simon Riopel and Jean Brodeur, + Students
  - HAL: Ed Kennedy, Tatiana Delgado, Betty Anne Benes
  - Garfield Giff, Joep Crompvoets





### **Publication**

- Canada made a significant investment and Canada owns copyright (Her Majesty the Queen in Right of Canada 2013)
- Under current Licence http://geogratis.cgdi.gc.ca/geogratis/en/licence.jsp
- PC-IDEA secretariat and members (and others) can by accepting the terms of the Licence, translate, modify and distribute the Manual and acknowledge Canada according to the terms of the licence
- Manual currently in English and French must be translated to Spanish to address language barriers
- Currently accessible on the new PC-IDEA website





## Conclusion

- Manual is a comprehensive tool to support countries in developing and managing various facets of their SDI
- There is a need to increase case studies and best practices from Central America and the Caribbean
- The 2013 PC-IDEA Survey findings show an increase in countries documenting and sharing best practices and success stories for all aspects of SDI – which can be leveraged for future updates

The Manual provides an excellent opportunity to learn about SDI initiatives in the Americas.

All members are encouraged to use and adapt the Manual for their purposes.



## Thank You

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