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## **Eighth United Nations Regional Cartographic Conference for the Americas**

New York, 27 June-1 July 2005

Item 8 (c) of the provisional agenda\*

**Reports on achievements in geographic information in  
addressing national, regional and global issues, including  
geospatial data collection, management and dissemination**

### **Capacity-building: spatial data infrastructure readiness index\*\***

#### **Summary**

As in many development programmes, building national capacity is essential when starting to develop a spatial data infrastructure, particularly in developing countries.

The digital divide that exists in the world also affects disparity as regards progress towards spatial data infrastructures (SDIs). At the same time, national authorities and international organizations are becoming increasingly aware of the importance of having geospatial information and SDIs when making decisions on economic, social and environmental matters. The main causes for the absence of or slower progress made by some countries in their national SDI initiatives are not known as yet and therefore it is not possible to draw up effective strategies to deal with the main obstacles.

The purpose of this study is to demonstrate one method for determining a country's readiness to develop a spatial data infrastructure, based on an analysis of the main factors determining that readiness, which coincide with the universally recognized components of a spatial data infrastructure. The model also uses fuzzy-compensatory logic in order to model and assess the impact of each factor, using expert techniques.

The model was first applied to the Cuban initiative, *Infraestructura de Datos Espaciales de la República de Cuba* (IDERC), to assess the progress made between two points in time, namely, when the initiative was first started and the year the

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national geospatial portal was launched, the latter being regarded as a first outcome of the initiative.

With assistance from PC IDEA, the Global Spatial Data Infrastructure or other international agencies, the model described in this study might be used to conduct a regional survey of the readiness of countries in the area to develop spatial data infrastructures with a view to drawing up policies and recommendations that would promote development of such initiatives in our countries.

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