A Contextual ICA Stakeholder Model Approach for the Namibian Spatial Data Infrastructure (NamSDI)

Kisco M Sinvula*, Serena Coetzee*, Antony K Cooper*,**, Emma Nangolo***, Wiafe Owusu-Banahene*, Victoria Rautenbach*, Martin Hipondoka****

*Centre for Geoinformation Science, University of Pretoria, Pretoria, 0002, South Africa. Email: ksinvula@gmail.com

- **Built Environment, CSIR PO Box 395, Pretoria 0001, South Africa
- ***Independent Researcher, Windhoek, Namibia
- ****Department of Geography, History and Environmental Studies, University of Namibia

Abstract

In 2011, the Namibian parliament presented and promulgated the Namibian Spatial Data Infrastructure (NamSDI) with the aim of promoting the sharing and improved access and use of geospatial data and services across Namibia. Notable SDI models, developed from the enterprise, information and computational viewpoints of the Reference Model for Open Distributed Processing (RM-ODP), comprise direct and indirect roles of stakeholders and special cases of each general role in an SDI. Hence, the International Cartographic Association (ICA) model was used to identify the stakeholders in and around NamSDI, which is still at the infancy stage of development. The application of a high-level ICA model proved to be relevant and useful in discriminating and categorizing NamSDI stakeholders according to their roles and vested interests. Some stakeholders, such as official government mapping agencies, assume multiple roles, while others, such as database administrators, are not yet active. In the absence of baseline data and given the infancy status of NamSDI, attributes such as skills, capacity of producers and service providers, were not considered. Modelling NamSDI stakeholders in the context of ICA's stakeholder model contributed significantly to a better understanding of NamSDI stakeholder types and subtypes and pointed out gaps that may hinder its successful and effective implementation.