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Economic and Social Council

Tenth United Nations Conference on the Standardization of Geographical Names
New York, 31 July-9 August 2012
Item 11 (d) of the provisional agenda*
Toponymic data files and gazetteers: data standards and interoperability

United Nations spatial data infrastructure: gazetteer framework for social protection in Indonesia

Submitted by Australia**

Summary*

   The gazetteer framework project aims to improve integration of, access to and use of data held in different government systems through the development of a framework to manage gazetteers (directories of place names or identifiers with associated location information).

   The gazetteer framework is envisaged to provide a mechanism to link spatial data to support a range of development, humanitarian and environmental activities at different scales. The disparate systems which require integration to support operational outcomes typically employ different approaches to the use of gazetteers. Consequently, it is time-consuming and expensive to discover access, interpret, transform and integrate information from different sources referenced using different gazetteers. Furthermore, when data change the process must be repeated.

   A particular challenge in this process is the interpretation and matching of spatial identifiers across multiple data sets, that is, determining whether different data sources are using the same or different place names and associated locations/boundaries to reference information. Therefore, to enable multisector analysis and the development of coherent, complementary, multisectoral responses,

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it is critical that the spatial dimension of information held by agencies working in different sectors can be easily understood.

The project aims to re-engineer gazetteer data management, publishing and access mechanisms through the use of "game changers" in computing and networking infrastructure. These include the use of linked data mechanisms and "cloud computing" to provide a ubiquitous, web-accessible and flexible infrastructure to enable the resolving of spatial location identifiers providing links to definitions, spatial representations and related data.

The project is being funded by the Australian Agency for International Development and the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and is initially focused on supporting social protection outcomes in Indonesia. The project has been jointly developed by CSIRO and the Office of the Assistant Secretary-General and Chief Information Technology Officer of the Secretariat of the United Nations and is a deliverable of the Centre of Excellence for the United Nations Spatial Data Infrastructure. The Centre of Excellence aims to support the development of standards and best practice methodologies for provisioning core data sets used within the United Nations system by strengthening capacities to create, maintain and publish spatial information. Within this context the United Nations gazetteer framework aims to provide standardized and easily exploitable means to reference geographic locations to support applications of the United Nations spatial data infrastructure.

As part of the standards and best practices activity of the United Nations spatial data infrastructure the project intends to collaborate with relevant expert groups including the United Nations Group of Experts on Geographical Names. Members of the Group of Experts are encouraged to participate actively in the project and avail themselves of the infrastructure being developed to support their ongoing activities. Demonstrations of the gazetteer framework will be provided during the Conference and members of the Group of Experts are invited to discuss collaboration potentials with the project team members.

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