Methodology for Selection of Framework Data in China

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Abstract

China is in the process of developing a National Spatial Data Infrastructure (NSDI) based on so-called framework data. As China has a large number of sectors and users of geospatial data, an NSDI Coordinate Committee was set up in China in 2001 in order to administrate the design and implementation of this NSDI. One of the prominent problems is however still the content of the framework data.

This article describes a methodology for selection of themes and features of geo-spatial data as the framework data in China. This methodology is partly based on experiences in other parts of the world, such as the USA and in the UK, but aims to address the specific needs and users requirements in China. The methodology is founded on a two-staged users needs survey, from which a statistical cluster analysis is conducted. The aim of this analysis is to understand the importance of the features from users' point of view. An agglomerative hierarchical nesting method was chosen to meet the analysis requirements. The results reveal the difference of importance of the features. Two alternatives are derived from the clustering results. These alternatives are finalized for the contents of the framework data in China after refinement by analysis of spatial relationships between features.