Item 8 of the Provisional Agenda:
Activities relating to the Working Group on Toponymic
Data Files and Gazetteers

Software for the Service and Management of Information of Administrative Regions and Geographical Names

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Data Files and Gazetteers

Software for the Service and Management of Information of Administrative Regions and Geographical Names

Software for the Service and Management of Information of Administrative Regions and Geographical Names is used for establishing database of geographical names and administrative regions in China. The database is based on Chinese map at 1:500,000 scale and larger scales.

A standard named *Classification and Data Items of Basic Geographical Names Database* has been drafted to develop the software. The classification is based on the national standard GB/T 18521-2001 *Rules for Classification of Geographical Names and Code Representation*. Other related standards, such as GB/T 13923-1992 *Classify and Codes for the National Land Information*, are also be referenced. A few modifications have been made for easy to use. All geographical names are divided into four levels for convenient query. The first level divided them into natural features and populated features. The second level divided them into administrative regions, residential sites and others. The fourth level divided them into 58 kinds of geographical names finally. Data items are designed for the 58 kinds of geographical names. All data items are made up of general items and special items. The general items are common information, such as longitude and latitude. The special items are individual information, such as the length of rivers and the altitude of mountains. The general items are showed on digital maps usually.

The Ministry of Civil Affairs is responsible for the management of geographical names and administrative division. So the software is designed as a integrated tool. There are 6 subsystems: basic GIS platform, geographical names management, administrative division management, boundary management, geographical names services, and system maintenance. The subsystem of basic GIS platform adopts the technology of Web GIS (Geographical Information System). Digital map at 1:6,000,000, 1:500,000 and larger scales are contained in the subsystem. The common functions of GIS are provided, such as edit, browse, thematic cartography, output etc. The attribute data is managed by SQL Server. The file can be transformed into common formats such as .DBF, .XML, .MDB etc. The map file can be transformed into common formats of spatial data, such as .shp, .mif etc. The subsystem of geographical names management is designed for the management of geographical names database. The main functions include input, edit, query, statistic, decision support, web browse, output etc. The subsystem of geographical names services is designed for the public services of geographical names. The main functions are offering services of querying, path analysis etc.

The development of the subsystem of basic GIS platform has been finished. Experiments will be made in Hebei Sheng and Jilin Sheng in 2006. The software will be used in the nation after the experiments.