

Agenda Item 6(c)

DEVELOPMENT ON AUTOMATED PROCESSING
OF GEOGRAPHICAL NAMES DATA IN CHINA

presented by China Division

With the successful progress of the investigation and standardization of geographical names, the technique of automated processing of geographical names data has developed rather fast in China since 1984.

I. The research on computer processing of data in Chinese languages was carried out, including computer input, management, retrieval, analysis, statistics, sequence composition, communication and output of Han characters and minority languages such as Mongolian, Tibetan, Uygur and Kazak. Up to now, more than 400 schemes for inputting Han characters into computer has been developed, including various types, e.g. Han character coding, hand-written form, phonetics identification. Decades of them have been used in large, medium or mini computers such as IBM, VAX, PDP, PRIME, HP computers. The microcomputer system with compatible functions for processing original language, Han characters, Mongolian, Tibetan, Uygur and Kazak languages, has come out.

II. Sequence composition of Han character data by computer is one of the key techniques for automatically compiling Chinese gazetteers. The program developed by the Research Institute of Surveying and Mapping may realize comprehensive sequence composition of geographical names in Han characters by phonetics, strokes and order of strokes of the characters according to the composition requirement of the gazetteer.

III. As regards computer output system for Chinese languages, in addition to the output of Han characters and minority languages in various written forms, shapes and sizes by a general dot printer, two types of special equipments were developed: the computer laser automated reproduction and composition system and the digital control map reproduction and composition system. The former as a computer controlled composition system is comprehensively used in editing newspapers, journals and books. The latter used on-line with geographical names information system may produce map lettering plates.

IV. On the basis of the above-mentioned development , the technique of automated processing of geographical names data is being developed and research and experiment on the establishment of geographical names information system is being carried out . The index of geographical names for "the China National General Atlas" , compiled by computer for the first time in China , has now entered the stage of the compilation examination. In some areas in China , toponymists has also gradually put the geographical names information of the area into computer , thus managing geographical names of that area with computer and providing the concerned departments with intensive service for geographical names information .