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China’s Second National Survey of Geographical Names
Submitted by China **
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Summary: In order to find out the details of geographical names nationwide, to promote the construction of IT-based service, the Chinese government decided to carry out the Second National Survey of Geographical Names from July 2014 to June 2018. During the survey the government investigated the basic situation of geographical names including the attribute information, standardized the names of geographical entities, set up toponymic signs, made progress in publications and IT-based service.

At the beginning of 2014, the Chinese government decided to conduct the Second National Survey of Geographical Names from July 2014 to June 2018. The scope of the survey is the whole land territory of China, excluding Hong Kong Special Administrative Region, Macao Special Administrative Region and Taiwan Province. The whole process of the survey is divided into three phases: July to December 2014 for survey preparation, January 2015 to June 2017 for implementation of the survey, July 2017 to June 2018 for the transformation of the survey results.

I. Main Tasks of the Survey
Investigate the basic situation of geographical names, including the attribute information of 11 categories of geographical names, such as administrative regions, non-administrative regions, residential areas, commemorative sites, tourist attractions, inland water systems, and terrestrial features. Standardize the names of the geographic entities, name the geographic entities which have no names yet play the toponymic function, standardize the non-standard geographical names, solve such problems as one place having several names, same name for different places, non-standard use of Chinese characters in geographical names, and unhealthy meanings of geographical names. Set toponymic signs based on the actual needs and in accordance with the relevant national standards. Make use of the survey results to compile and publish maps, records, dictionaries, and annals of geographical names, establish and improve the database of administrative regions and geographical names at all levels, provide IT-based service of geographical names and develop relevant products. Establish toponymic survey files, and have digitalized management of toponymic survey files.

II. Implementation Methods and Steps of the Survey
(1) Collect and catalogue geographical names and relevant materials, including historical files and materials regarding naming and renaming of geographic entities, chronicles of geographical names, gazetteers of geographical names, dictionaries of geographical names, maps, local chronicles, historical materials and relevant ancient books; the survey materials and data of the Party and government organs; basic geographic data and remote sensing image data.

(2) Produce a catalogue of geographical names. Based on the toponymic information from the survey maps, and other maps and materials that have been collected during the survey, we will produce a catalogue in which the sources of the collected information are indicated, and document the collected information for record.
(3) Fill out the registration form of geographical names. This is done on the basis of the above-mentioned catalogue of geographical names and by collating, referencing and verifying relevant materials.

(4) Conduct field investigation of geographical names. Get access to the useful classified information with the support of relevant government departments, distribute the questionnaires, conduct field investigation and collect information by district, convene symposiums attended by local people, interview the insiders, conduct on-site reconnaissance, or use other approaches for the investigation. Verify the collected toponymic information and mark the base map.

(5) Collate the registration forms of geographical names. Conduct information consolidation, verification, ratification, and other office work, based on the confirmed information collected in the field investigation, and collate, modify, improve the information in the registration forms of geographical names. Where field investigation cannot be conducted for certain geographical names, the office work shall be done to collect and collate their information, further verify and supplement the registration form.

(6) Measure the locations of geographic entities and toponymic signs. Where the locations of geographic entities and toponymic signs can be determined accurately on the survey map, the coordinates may be determined by graphical measurement; where the locations cannot be determined accurately on the survey map, field measurement shall be conducted. As for graphical measurement, determine the point location of the geographic entity or toponymic sign on the survey map, measure the geographical coordinates of the point position, and the level of accuracy for graphic coordinates shall be set to second. As for field measurement, determine the point location on site, then determine the geographical coordinates by the use of appropriate satellite navigation system, and the measurement error shall be less than 20 meters under the premise of ensuring the relative accuracy of the location.

(7) Toponymic voice collection. The pronunciations of standard geographical names should be made into voice files and kept in the national database of geographical names and administration regions. The voice files may be made in two forms: synthetic voice or human voice. Synthetic voice can be generated automatically by the national database of geographical names and administration regions. Where the generated pronunciation is different from the actual pronunciation—in the case of polyphonic word, uncommon word, etc., human voice should be recorded and made into voice file. The native pronunciation of minority names, the pronunciation of special characters in geographical names, and the dialect pronunciation shall be recorded on site, to ensure the pronunciation is clear and accurate, and then voice files shall be made and kept in the national database of geographical names and administration regions.

(8) Data collation and storage. Check, collate, compile on the computer the texts, photos, audio and video recordings collected from field investigation, and import the data into the national database of geographical names and administration regions.

III. Standardization of Geographical Names

(1) Review and approval of geographical names imported into the database shall be conducted in accordance with the relevant laws and regulations regarding the management of geographical names, taking into account the historical data, current information, and the field investigation results that have been checked, analyzed and evaluated. Where the provinces (autonomous regions or municipalities directly under the Central Government) concerned have different names for the same transboundary geographic entity, consultations shall be conducted fully between such provinces before a consensus is reached. If no agreement is reached, the issue shall be reported to the leading group for national survey of geographical names of the State Council for solution, and the provisions regarding approval authority and procedures in the relevant regulations on the management of geographical names shall be followed.
(2) Naming and renaming of geographic entities. Name the geographic entities which have no names yet play the toponymic function. A standard name shall be given to a geographic entity which has several names, or which has one name written in different characters, or which has the same name as some other geographic entity within a certain geographical scope. The naming and renaming principles, approval authority, and procedures, as specified in the relevant regulations on the management of geographical names shall be followed.

(3) The use of roman alphabets in Chinese geographical names shall be subject to the national publication *Scheme for the Chinese Phonetic Alphabet*. The spelling of Han-Chinese geographical names shall follow the rules set in *The Chinese Phonetic Alphabet Spelling Rules for Chinese Geographical Names (Han-Chinese Geographical Names)* jointly issued by China Committee on Geographical Names, China Committee on Writing System Reform, State Bureau of Surveying and Mapping in 1984. The geographical names in Mongolian, Uygur, Tibetan languages, and the minority names of other ethnic minorities, who customarily use the Mongolian, Uygur, or Tibetan language in writing, shall be spelled in accordance with *Regulation of Phonetic Transcription in Hanyu Pinyin Letters of Place Names in Minority Nationality Languages* jointly revised by China Committee on Writing System Reform, and State Bureau of Surveying and Mapping. Apart from these, the Chinese translation of minority names of other ethnic minorities shall generally be subject to *The Chinese Phonetic Alphabet Spelling Rules for Chinese Geographical Names (Han-Chinese Geographical Names)*.

(4) The Chinese translation of minority names. The minority names shall be transliterated into Mandarin Chinese, based on the standard (general) pronunciations and characters in ethnic minority languages. The well-established Chinese translation shall not be changed. Where different ethnic minorities have different names for a single geographic entity in the multi-ethnic area and where there is no well-established Chinese translation, the local geographical name administration shall select one name widely used by local people for translation, upon consulting the opinions of the ethnic minorities concerned. During the Chinese translation of minority names, commonly used characters shall be used as far as possible, and the use of polyphones, words with derogatory meanings, or those that are prone to ambiguity, shall be avoided.

(5) Determination of pronunciations and characters shall be in compliance with the current provisions. Explain the origin, meaning and reason for the use of the special characters in geographical names and the special pronunciations of geographical names, which have regional characteristics or special cultural meanings.

**IV. Main Results that Have Been Achieved**

At present, the work is progressing in an orderly manner. All the survey counties (cities, districts) have completed field investigation and data collation, and more than 20 million geographical names have been investigated. China has conducted the survey of transboundary natural feature names, completed the survey of the first batch of transboundary natural geographic entity names, and resulted in written materials of more than 10 million characters and more than 20,000 thematic maps; initiated the compilation of maps, records, dictionaries, and annals of standard geographical names of the People’s Republic of China, and the provinces, autonomous regions and municipalities directly under the central government have started the compilation of maps, records, dictionaries, and annals of their own standard geographical names. The R&D of the national database of administrative regions and geographical names has been completed, and the national toponymic information governance and social service platform is under construction in an accelerated manner.