Speech at Director Generals' Forum of FIG Working Week 2009

By Xu Deming

Vice Minister of Ministry of Land and Resources of P.R.China Director General of State Bureau of Surveying and Mapping of China

Dear Professor Enemark, Dear Dr. Srebro, Director Generals Ladies and Gentlemen, Friends,

Good afternoon. It's my pleasure to be here in Eilat, a beautiful seaside city to attend FIG Working Week. On behalf of the Chinese delegation I'd like to extend my warm congratulations to this conference. Taking this opportunity, I'd like to give you a briefing of the status of China's surveying and mapping.

The State Bureau of Surveying and Mapping of China (SBSM) is the national administrative agency of surveying and mapping of China. The major responsibilities of SBSM include: to draw up laws, regulations, policies, plans and standards of surveying and mapping, to organize the implementation of national basic surveying and mapping plans, to manage the national basic surveying and mapping results, to provide surveying and mapping services for the public, to supervise the qualification and quality control of surveying and mapping, and to guide the development of geographic information industry. At present, more than 10,000 certified organizations are engaged in surveying and mapping in China, with over 300,000 employees. In 2007, the system of registered surveyors was established in China.

China's surveying and mapping has witnessed fast development in the past 60 years since the founding of New China. The surveying and mapping legal system, with the Surveying and Mapping Law of China as the core, has been basically established. We have set up the digital surveying and mapping systems which are characterized by remote sensing, GIS, GPS, and network communication technology. We have built up the national horizontal control network, the national vertical control network, the national high precision satellite positioning network and the national fundamental gravity network. China National Geodetic Coordinate 2000 was put to use in 2008. The national basic scale map series have been produced and updated. The 1:1,000,000, 1:250,000 and 1:100,000 topographic maps have covered all the territory of China. The 1:50,000 and 1:10,000 maps cover 90% and 50% percent of the land area in China respectively. All the township areas have their 1:2,000 and larger scale topographic maps. We have set up the basic

geographic information databases and geodetic databases at the scales of 1:4,000,000, 1:1,000,000, 1:250,000 and 1:50,000. Thirty provinces began to build their local 1:10,000 fundamental geographic information databases. Many cities and towns are building their 1:2,000 or larger scale geographic information databases. We have obtained aerial and satellite remote sensing images of various resolutions and various time phases covering all the land areas of China. We measured the height of Mount Qomolangma and published in 2005 its new height of 8844.43 meters. SBSM provided surveying and mapping services for China's Antarctic expeditions. We also undertake the international border survey and the domestic administrative border survey.

In the past decades, SBSM played active roles in China's social and economic development and provided good services for government decision making, the implementation of major national strategies and programs, energy conservation, ecology and environment protection, and emergency response. Chinese surveyors took part in all the major projects in recent years such as the Three Gorges Dam, the Qinghai-Tibet Railway, West-east Gas Transmission, and South-north Water Transmission. Particularly in the rescue work for Wenchuan earthquake last year, SBSM set up a monitoring and data capture system with integration of satellite imagery and aerial photography immediately after the quake. We instantly captured and processed the data and produced various maps and GIS systems for earthquake rescue work to satisfy the needs of disaster monitoring and evaluation.

Since 2008, to address the influence of the global financial recession, Chinese government has injected a large amount of funds into infrastructure, low-income housing, countryside development, eco-environment construction and reconstruction of quake-hit areas, made a series programs and policies to revitalize industries and to stimulate economic growth. As a fundamental part of the social and economic development, surveying and mapping is indispensable in the implementation of those programs. The current international financial crisis has not caused any recession of surveying and mapping in China. Instead, it brought good opportunities for its development.

For some time in the future, SBSM will make efforts to build Digital China, develop the

construction of IT-based surveying and mapping systems, and promote the development of geographic information industry. We will do the following to advance our surveying and mapping undertaking:

- 1. Speed up the construction of China's modern surveying and mapping datum system. We will set up 360 new GPS reference stations and 4500 national geodetic control points, remeasure the Class A leveling line of 12,200 kilometers, and set up 50 new gravity points to establish a modern national surveying and mapping datum system.
- 2. Make efforts to develop a series surveying and mapping satellites to improve the capacity of instant capture of high resolution remote sensing images.
- 3. Speed up the 1:50,000 topographic mapping for China's west region of 2 million square meters to realize the complete coverage of 1:50,000 maps over China. Fulfill the basic marine charting to unify China's land and marine surveying and mapping datum systems.
- 4. Make timely update of the national basic geographic information databases of the scales of 1:1,000,000, 1:250,000 and 1:50,000, and promote the construction of provincial databases of 1:10,000 and city level databases of 1:1,000 and 1:500.
- 5. Speed up the building of the geographic information platform which connects the national, provincial and city level databases to provide the one-stop service of geographic information and improve the capacity of surveying and mapping emergency response.
- 6. Speed up the technical progress to promote the building of IT-based surveying and mapping systems which are characterized by real time data capture, automatic data process, network service and socialized application of geographic information.
- 7. Promote the application of surveying and mapping results and improve the public service system of surveying and mapping to promote the development of geographic information industry.

Encourage the development of intelligent transportation, personal mobile positioning, network information service and modern logistics to allow public sharing of surveying and mapping

results.

Ladies and gentlemen, friends, China's surveying and mapping cause can not develop without the

supports from international colleagues and organizations. Over the past years, SBSM has

established cooperative relations with more than 50 countries and regions and joined all the major

international surveying and mapping organizations including FIG to carry out cooperative and

exchange in various forms. We successfully hosted in China the FIG Executive Board Meeting

and Workshop in 1991 and the 21st Congress of ISPRS in 2008. Bound by current globalization,

China and other countries in the world are faced with common risks, opportunities and challenges.

I believe that through discussions and communications, the FIG Working Week held in Eilat will

strengthen the understanding and promote the cooperation and common development between

FIG member nations and related international organizations. SBSM are willing to work with our

colleagues of all nations to create a prosperous future.

2009 is the 60th anniversary of the Peoples' Republic of China. You are warmly welcome to China

to visit SBSM, to see by yourself the great changes in China, to experience the charm of the

Chinese culture, and to understand the development of China' surveying and mapping

undertaking.

I wish the Working Week a great success and wish you all the best.

Thank you.