#### ISPRS Joint-WG Workshop on Geospatial Data Infrastructure: from Data Acquisition and Updating to Smarter Services

## Guilin, China, Oct.20-21, 2011 By JIANG Jie (on behalf of the workshop committee)

# 1. Introduction

The goal of SDI is to improve quality and reduce costs related to geographic information, to increase the benefits of using available data, and to establish key partnerships with states, counties, cities, tribal nations, academia and the private sector to increase data availability. With efforts of previous years, datasets of various types have been produced at global, national, regional, city level. Recently much demand on service and application of SDI has been raised and much attention has been paid to data updating, data harmonization, and geo-spatial cyber-infrastructure that aims at solving the problem of efficiently connecting data, computers, and people over the Internet.

The objective of this workshop is to provide a platform for scholars and professionals in SDI areas to exchange research ideas and interests, to present the newest research results, to discuss the cutting-edge technology, and to promote the development and application of SDI and the international collaboration.

The workshop was co-organized by six ISPRS working groups. They are WG IV/1( Geospatial Data Infrastructure), WG IV/2(Automatic Geospatial Data Acquisition & Image-Based Databases), WG IV/4(Virtual Globes and Context-Aware Visualisation), WG IV/5(Distributed and Web-Based Geoinformation Services and Applications), WG IV/7(Planetary Mapping and Databases) and ICWG IV/VIII ( Updating and Maintenance of Core Spatial Databases). It was hosted by the National Geomatics Center of China, and sponsored by five companies in this field, including Beijing Geoway Information Technology Inc., Wuda Geoinformatics Co., Ltd., Geo-Compass Information Technology Co., Ltd., ESRI China (Beijing) Ltd., and TIANDITU Co., Ltd.

Chairs, co-chairs and secretaries of the working groups formed the Scientific Committee, which was chaired by Prof. LI Deren from Wuhan University, and co-chaired by Prof. CHEN Jun, Secretary General of ISPRS, and Prof. Marguerite Madden, President of ISPRS TC IV. The Organizing Committee of the workshop was chaired by Dr. JIANG Jie, chair of WG IV/1 and Dr.

ZHAO Renliang, co-chair of ICWG IV/VIII, with the help of Mr. LIAO Anping and Ms. HU Junhong from the National Geomatics Center of China.

The workshop venue was the LIjiang Waterfall Hotel in Guilin, .which is a five star hotel located in the beautiful downtown area of Guilin City. The artificial waterfall that rushes down from its top is one of the most attracting scenery in Guilin.

## 2. Papers, Participants, Sessions and Social Events

The workshop received total 52 abstracts and among them 30 full papers arrived finally, including one keynote paper, eleven papers on "SDI Construction and Services", nine on "Change Detection and Data Updating", five on "Data Acquiring and Applications" and four on "Planetary Mapping and Databases". All full papers have been re-formatted according to the ISPRS Orange Book included in the workshop proceedings (ISPRS Archives Vol. XXXVIII part 4/W25). The proceedings CDs were distributed to all of the participants.

There were total 89 registered participants from nine countries. Among them (71 from mainland China and Hong Kong, 8 from Germany, 4 from United States, 1 from Denmark, 1 from Italy, 1 from the Netherlands, 1 from Korea, 1 from Switzerland and 1 from Syria. There were more than 100 participants in the opening ceremony and the following sessions, with more than 20 participants from local surveying and mapping agencies.

The workshop received great support from the National Administration of Surveying, Mapping and Geoinformation(NASG), the National Geomatics Center of China (NGCC) and the local agency. Dr. LI Pengde, Deputy Director General of NASG, and Mr. LI Zhigang, President of NGCC, both made the special trip to Guilin to attend the workshop and delivered welcome addresses in the opening ceremony. Mr. CHEN Zhong-huai, Director General of the Guangxi Bureau of Surveying, Mapping and Geoinformation, and Mr. TANG Cheng, Deputy Secretary General of Guilin Municipality, also came to attend the opening ceremony and gave their welcome addresses.

We invited three keynote speakers. The first keynote speaker was Prof. LI Deren, Academician of the Chinese Academy of Sciences and the Chinese Academy of Engineering. He gave the speech titled "On Geospatial Service Web". The second is Dr. Raj Singh, Director of Interoperability Programs for Open Geospatial Consortium from United States. His topic was "Realizing Successful SDIs through Synergy of Policy, Partnerships and Technology". The third is Andreas Illert from Federal Agency for Cartography and Geodesy, Germany. He is in charge

the data specification of INSPIRE. His topic was "Smart Services to Create an ESDI from NSDI: The European Challenge".

There were eight ISPRS officers attended the workshop. They are Prof. Gottfried Konecny (ISPRS honorary member), Prof. CHEN Jun(Secretary General of ISPRS), Dr. JIANG Jie (Chair of ISPRS WG IV/1), Prof. Christian HEIPKE(Chair of ISPRS WG IV/2), Prof. LI Rongxing (Chair of ISPRS ICWG V/I during 2004-2008), Prof. DI Kaichang( Co-Chair of ISPRS WG IV/7), Dr. ZHAO Renliang (Co-Chair of ISPRS ICWG IV/VIII) and Dr. WANG Qian (Secretary of ISPRS WG IV/1). Prof. Chen Jun made a welcome address on behalf of ISPRS in the opening ceremony.

The workshop had 1 keynote session with 3 speakers, 2 plenary sessions with 8 presentations, and 7 technical sessions with 34 presentations. There also was a very short closing session where a brief summary of the workshop was presented. All of the sessions were well attended and almost every presentation raised some questions or comments.

A welcome dinner hosted by the National Geomatics Center of China was held in the evening of Oct.20 (free for registered participants and accompany person). In addition, tours were organized (charged by the tourist agency) in the evening of Oct.21 and daytime of Oct.22. The participants were impressed with the beautiful scenery of the city and the unique Karst landscape of the region.

# 3. Conclusions

In general, the workshop went well and the original objectives have been achieved. The following points were drawn from the presentations and discussions of the workshop.

- (1) In the field of SDI, data integration, updating and on-line service become key points, while emphasis of data acquisition comes to image-based methods and technology.
- (2) The role of standards in SDI has been further understood, with more and more practices have been conducted on data integration for multi-scope and cross-theme services and applications.
- (3) The workshop provided fruitful communication environment for earth and planetary teams. Both sides thought it interesting and helpful.
- (4) SDI should play essential and irreplaceable role in geographic monitoring to dynamic world, which has been included into plans in global and national levels.



Opening ceremony



Opening ceremony



Opening ceremony, Address by Dr. LI Pengde, Deputy Director General of NASG



Opening ceremony, Chaired by Dr. JIANG Jie



Keynote session, Chair by Prof. Konecny



Keynote session



Keynote session



Plenary Session



Technical Session



**Technical Session** 



**Technical Session** 



Software products exhibition



Software products exhibition



Software products exhibition



Software products exhibition