



**Dear colleagues,**

We are pleased to invite you to our third ISPRS Working Group IV/2 Workshop *“Global Geospatial Information and High Resolution Global Land Cover/Land Use Mapping”* hosted by the XII<sup>th</sup> International exhibition and scientific forum *“Interexpo GEO-Siberia - 2016”* that will be held on **April 21, 2016** at the Novosibirsk Expo Centre (Russia).

ISPRS Council has offered in November 2011 to the new initiative of the United Nations Global Geospatial Information Management (UNGGIM) of the U.N. Statistics Division and the U.N.G.G.I.M. Secretariat in New York to cooperate in a joint project to determine the current status of topographic mapping and data base updating in the world due to the following reasons: the issue is of global interest; new technologies, such as GNSS (GPS, GLONASS), digital aerial mapping, high resolution satellites for mapping, digital photogrammetry and GIS have taken over as new mapping methodologies for the national mapping agencies, conducting authoritative mapping; moreover large private organizations such as the navigation industry (HERE, TomTom), Google Earth and Microsoft Bingmaps have entered the mapping effort, which was previously the domain of the national mapping agencies. In the meantime a questionnaire was drafted, which the U.N. circulated to the 193 U.N. member countries requesting pertinent information from them. The questionnaire with 27 questions was designed to give answers, not only on the progress in area coverage of mapping during the last 26 years, and the status of up-to-dateness of the maps, but also on the status of introducing new technology and expanded tests in the different countries, characterizing the existing national infrastructure for mapping. Until June 2015 altogether 115 responses have been received from 193 UN member states or regions thereof. The UNGGIM-ISPRS Project has essentially been completed by issuing a printed ISPRS report for the UNGGIM5 Conference in New York in August 2015. To make the task sustainable, the ISPRS Working Group IV-2 *“Global Status of Mapping and Geodatabase Updating”* (chairman - Prof. Vladimir Seredovich, co-chairman - Em. Prof. Gottfried Konecny) was instituted in 2012. ISPRS Working group IV/2 not only helped to complete the report to UNGGIM, but continues to monitor information on the global cartographic coverage at various scales and to solicit missing national contribution in Europe, Latin America, Africa, Arab and Islamic countries, Asia and Oceania, and the former socialist countries, to add input from provinces and territories of Canada, India, Australia, and to establish links with the major private enterprises (Google, Microsoft, Tomtom, Here), to keep the joint project up to date. The working group will attempt to add to the information and its quality in a sustainable manner, also including initiatives of private industry, with initial contacts already made.

As land cover mapping is one of the declared priorities of ISPRS and as this topic is also of great interest to the United Nations as well, a strategy discussion for the activities of the Working Group was held with ISPRS President Prof. Chen Jun to expand the mutual efforts for the next two years in the direction to obtain metadata for global land cover data in cooperation with UNGGIM and GEO and to complete the status of global mapping by a final publication in 2015. This global land cover dataset will help to better understand, monitor and manage changes in land cover and land use all over our planet and be freely available to Member States and the international community. Land cover is an important variable for many studies involving the earth surface: climatology, hydrology, soil erosion, atmospheric quality, conservation biology, and plant functioning. Timely and reliable information on global land cover and its changes plays an important role in the studies of global environment and climate change. A large amount of research on global land cover mapping has been carried out and many new studies are underway. The theme issue intends to bring together a volume of high quality research papers on the current situation in terms of progresses, challenges, and opportunities on the mapping and monitoring of global land cover conditions at various scales, particularly at 30 m resolution. In addition, innovative applications of global land cover data products will also be considered for disaster prevention, food security, global health, climate change, water resource and ecosystem management, biodiversity, renewable energy, environmental protection and other relevant fields.

The Working Group is asking industrial companies (Eastview Geospatial, ESRI, etc.) and geospatial industry, such as Google, Microsoft, Scanex, Yandex, Here, TomTom to supplement missing governmental information for the UNGGIM-ISPRS geospatial database which will be placed on the UNGGIM Knowledge Base and the GEO website for free and open use.

### **Organizer:**

- ISPRS Working Group IV/2

### **Supported by:**

- International Society for Photogrammetry and Remote Sensing (ISPRS)
- ISPRS Commission IV
- Siberian State University of Geosystems and Technologies (SSUGT)
- European Association of Remote Sensing Laboratories (EARSeL)
- Czech Technical University in Prague (CTU), Czech Republic

### **The key issues to be discussed are:**

The key issues to be discussed are:

- Global status of mapping and geospatial database updating using remote sensing, thematic and 3D mapping, UAV and laser scanning data
- Map accessibility and availability
- State-of-the-art procedures for mapping and map updating
- Innovative hardware and software for real-time production of cartographic products
- Geospatial data display, visualization, virtual reality, and 3D modelling
- Geospatial information processing & services
- Geodata analytics: big data, data mining, and knowledge discovery
- Open and publicly accessible geospatial data
- Geospatial database creation and their availability in the Internet
- Public geospatial data infrastructures
- High resolution global land cover (GLC)/land use mapping: current status and future trends
- New global land cover mapping procedures and monitoring
- New sensor data, SAR data, and longer and denser time-series data for GLC mapping and monitoring, 3D visualization
- Object-oriented data models for the integration data sets and updating land cover maps
- Global land cover validation and user engagement
- Global assessment of land cover changes
- Hierarchical classification methods used for the GLC mapping
- Web services for GLC data sharing, updating, and processing

The workshop language is **English**. All accepted papers will be published in the proceedings.

**Deadline** for papers – **March 9, 2016**

### Workshop site



The workshop “*Global Geospatial Information and Global Land Cover/Land Use Mapping*” will be held at the Novosibirsk Expocentre, the main exhibition area not only in Novosibirsk, but in whole Siberian region. The main trade exhibitions are hold here.

### Hotel accommodation



The **AZIMUT Hotel Siberia** is a modern 14-storey business hotel located in the heart of Novosibirsk, close to the State Academic Opera and Ballet Theatre. All the rooms are equipped with air conditioning system, telephone, refrigerator, satellite television and free WI-FI.

[http://en.azimuthotels.com/russia/novosibirsk/azimut\\_hotel\\_siberia](http://en.azimuthotels.com/russia/novosibirsk/azimut_hotel_siberia)



The **Park Inn by Radisson** is an international hotel located in the city center in a walking distance from the most remarkable sights, business and shopping centers, just 200 m from the from the main railway station ‘Novosibirsk-Glavny’. The rooms are equipped with all necessary facilities, free Wireless High-speed Internet and satellite television.

<http://www.parkinn.com/hotel-novosibirsk>

**We look forward of welcoming you in Novosibirsk.**

Sincerely yours,

Prof. Vladimir Seredovich  
WG Chair



Em. Prof. Gottfried onecny  
WG Co-Chair



**Further information is available from:**

Mrs. **Argina Novitskaya**  
ISPRS Working Group IV/2 Secretary  
Siberian State University of Geosystems and Technologies (SSUGT)  
10, Plakhotnogo St.  
Novosibirsk, 630108  
Russian Federation  
Mobile: +7 913 936 04 56  
Email: [argina.novitskaya@gmail.com](mailto:argina.novitskaya@gmail.com); [argina@mail.ru](mailto:argina@mail.ru)