FROM VOLUME TO QUALITY
BRIDGING THE GAP FOR
SPATIAL DATA INFRASTRUCTURE
Iași 3|7 November 2016
WORKSHOP OBJECTIVES

I welcome you in Iasi. This is a good occasion to meet colleagues in the field of surveying and to follow the relationships of international members on the latest news regarding the collection, processing and control of SIM. It will be a three day workshop on the topic “from quantity to quality, bridging the gap for spatial data infrastructure”. The amount of data circulating within the public and private sectors is increasing. The necessary structure to manage, store and update is complex.

At the same time, the evolution of information technology and its spread involves the continuous updating of the processes for the verification of data quality. The workshop aims to focus on the role and significance of architectural structures of Geographic Information Systems in relation to the correct forms of managing spatial data through the Internet. The gap is resulting from processing a large volumes of spatial data (quantity) in the informatics environment, often uncontrollable, and thus must be filled by an appropriate approach to ensure to users the reliability of information, and to prevent incorrect decisions. The exchange of knowledge between the various members will also facilitate the synergy between public administrations that fulfill specific activities on the territory: from urbanism, to spatial planning, from the environment to civil defense, from roads to construction, from agriculture to forestry, from tourism to culture. Papers will present methods (academic, professional, corporate, etc.) valid to ensure the correctness of the data and its proper use by citizens. Crowdsourcing / Volunteered Geographic Information (VGI), are increasingly active to provide input and stimulate action.

The workshop will focus on possible answers to the scientific and theoretical questions on how we can fill the resulting gap to the processing of large amounts of spatial and environmental information to quality data and exact knowledge. This workshop will explore ideas and methods on how we can engage citizens through crowdsourcing (which together with VGI paradigms are increasingly active to provide input and stimulate action) within new reliable models of collaboration. The workshop will provide the opportunity for delegates and contributors to present their research and experience on development and use of VGI, GIS, SIM and SDI systems and procedures.

TOPICS

While the workshop focus is on effective utilization of VGI within the framework of SDI and SIM, a larger number of topics of interest related to SDI, SIM, VGI and crowdsourcing will be discussed. Topics will include, but are not limited to:

- SDI at all levels – local, regional, national and global;
- SIM challenges – natural and environmental risk prevention and disaster management, mitigation, waste management, etc.;
- VGI collection, dissemination, analysis, applications, maintenance and visualization;
- e-Governance and SDI in supporting decision making – theory, applications and best practice;
- Integration of SDIs – cadastre, land use, utilities, environment, socio-economic;
- SDI interoperability – standards, technical tools, metadata, portals;
- 3D/4D Cadastre;
- Utilization of VGI and Crowdsourcing with SDI, SIM and environmental information;
- 2D/3D/4D geospatial models, algorithms, visualization, standards and applications;
- Web and mobile GIS – challenges, services and real-time capabilities;
- Business models and SDI, public-private partnerships and economic aspect.
08:00 - 19:00  08:00 - 19:00  International Hotel, HALL
Registration

10:00 - 10:30  Opening exhibition
International Hotel, AUDITORIUM Room
Surveying and data processing technology
Chair: Ph. D. Eng. Valeriu Manolache,
President of APCGC (Romanian Association of Private Surveyors)

10:30 - 11:00  International Hotel, AUDITORIUM Room
General Presentation
National Program for Cadastre and Land Register (PNCCF)
Chair: Victor Grigorescu - Director of the Systematic Registration Department, ANCPI
(National Agency for the Cadastre and Land Registration)

11:00 - 12:00  International Hotel, AUDITORIUM Room
Panel Discussion 1
Expected role of surveyors in the frame of PNCCF from technical prospective
Chair: Prof. Cornel Păunescu - President UGR (Romanian Association of Surveyors)

12:00 - 13:00  International Hotel, AUDITORIUM Room
Panel Discussion 2
Expected role of surveyors in the frame of PNCCF from technical prospective
Chair: Ph.D. Eng. Ileana Spiroiu - Deputy General Manager of ANCPI (National Agency for the Cadastre and Land Registration)

12:00 - 13:00  Lunch Break
International Hotel PANORAMIC Restaurant

14:00 - 15:00  International Hotel, MAGNUM Room
Platinum sponsors presentations - Part 1
Surveying and Geomatics Engineering Technology
Chair: George Damian, Assoc. Prof. Sorin Herban
14:00 S.C. GAUSS S.R.L. TIMIȘOARA / Mircea Stoian
14:20 S.C. RAMBOLL SOUTH EAST EUROPE S.R.L.
BUCUREȘTI / Silviu Stoiica
14:40 S.C. HEVECO S.R.L. PLOIEȘTI / Alina Popescu

14:00 - 15:00  Coffee Break
International Hotel

15:00 - 16:20  International Hotel, MAGNUM Room
Gold and Silver sponsors presentations - Part 2
Surveying and Geomatics Engineering Technology
Chair: Andreea Călugaru,
Lecturer Loredana Crenganis
15:30 S.C. TOP GEOCART S.R.L.
BUCUREȘTI / George Damian
15:45 S.C. CORNEL & CORNEL TOPOEXIM S.R.L.
BUCUREȘTI / Cornel Păunescu
16:00 S.C. PRIMUL MERIDIAN S.R.L.
SLATINA / Cristian Gionț
16:10 S.C. THEOTOP S.R.L.
BUCUREȘTI / Valeriu Manolache

15:30 - 16:20  15:30 - 16:20  International Hotel, HALL
Registration

16:30 - 17:30  International Hotel, BELVEDERE Room
Opening session of Commission 3
Welcome speeches and introduction of the events: Chair Ionuț Săvoiu

16:30 - 17:30  Welcome speeches and introduction
Cornel Păunescu, President of the Association of Romanian Surveyors
Enrico Rispoli, Chair Commission 3 Spatial Information Management
Chryssy Potsiou, President of the International Federation of Surveyors
03 NOVEMBER  THURSDAY

17:30 - 18:30  
INTERNATIONAL HOTEL, BELVEDERE ROOM
Opening session of Commission 3

- Keynote speeches
  - Spatial Data and Infrastructure - Quality and Complexity
    Ralf W. Schroth, Germany
  - The ArcGIS Platform - Esri’s complete solution for Spatial Data Infrastructure
    Andreea Călugăru, Romania

18:00 - 19:00  
INTERNATIONAL HOTEL, ROOM 2 MAGNUM ROOM
Panel Discussion 3
Opportunities for cooperation between academic and business sector
Chair Assoc. Prof. Constantin Bofu
Vice-dean of Faculty of Hydrotechnics, Geodesy and Environmental Engineering, "Gheorghe Asachi" Technical University of Iasi

20:00 WELCOME RECEPTION  
INTERNATIONAL HOTEL SOFIA SKY LOUNGE
Welcome reception GEOMAT, FIG COMMISSION 3 and EGoS

04 NOVEMBER  FRIDAY

08:00 - 10:00  
INTERNATIONAL HOTEL
Registration

10:00 - 12:00  
INTERNATIONAL HOTEL, MAGNUM ROOM
Opening ceremony for GEOMAT 2016, Annual meeting of Commission 3 and EGoS

- Welcome speeches
  Chair Prof. Florian Stătescu Dean of Faculty of Hydrotechnics, Geodesy and Environmental Engineering
  Mihai Busuioc, Gen. Secretary MDRAP (Ministry of Regional Development and Public Administration)
  Radu Codruț Ștefănescu, President General Director of ANCPI (National Agency for Cadastre and Land Registry, Romania), President of INIS Board for Romania
  Maricel Popa, President of IASI County Council
  Marian Grigoraș, Prefect’s Institution of IASI County Council
  Mihai Chirica, Mayor of IASI CITY
  Prof. Dan Cașcaval, Rector of "Gheorghe Asachi" Technical University of Iasi
  Prof. Cornel Păunescu, President Romanian Association of Surveyors

12:30 - 12:50  
INTERNATIONAL HOTEL
Coffee Break

12:30 - 13:30  
INTERNATIONAL HOTEL, MAGNUM ROOM
Session presentations of Geomat - Part 1
Topics
- Geodesy and Cartography; Engineering Geodetic Measurements; Cadastre and Real Estate Publicity, Real Estate Valuation.
- Geographic Information Systems (GIS); Photogrammetry and Remote Sensing; Applied and Environmental Science.
04 NOVEMBER  FRIDAY

International Hotel, BELVEDERE Room
FIG Commission 3 technical session
“Spatial Data Information and INSPIRE”
Chair Charalabos Ioannidis

› Keynote speeches

» Earth Observation Missions as Technical, Scientific and Application Engine for New Developments for the Up-to-date Spatial Data of the Earth. The Role of Space Agencies on promoting the Benefits of Geospatial Data Exploitation
Alexandru Badea , Romanian Space Agency, Romania

» INSPIRE in Romania
Ene CONSTANTIN, ANCPI Director of Romanian INIS Committee

» Bridging the Gap for Spatial data Infrastructure in Romania
Ionuț Săvoiu, Romania

Lunch Break 13:30 - 14:30
International Hotel PANORAMIC Restaurant

Coffee Break 16:00 - 16:30
International Hotel

14:30 - 16:00
International Hotel, MAGNUM Room
FIG Commission 3 technical session
“Planning and 3D Models (Part I)”
Chair Nikolaos Zacharias

› Project BDI: The Socio-economic impact of comparable property analysis through GIS
Cromwell MANALOTO, Daniele BRANCATO, Alessandro DALMASSO, Luca DAL BUONO, Italy

› 3D Surveying via Point Cloud to 3D Model (Archicad 20) in reality
Malcolm LELLIOTT, UK

› A technical and policy tool for urban upgrading and affordable housing planning
Chryssy POTSIOU, Charalabos IOANNIDIS, Sofia SOILE, Styliani VERYKOKOU, Greece

› Positioning and Measurement – Structure and Activities of FIG Commission 5
Volker SCHWIEGER, Germany

16:30 - 18:00
International Hotel, MAGNUM Room
FIG Commission 3 technical session
“Crowdsourcing and GIS”
Chair Randolph Camilleri

› The value of data collection from the Ground
Nicolaos ZACHARIAS, Greece

› GIS Cultural Heritage Surveying – Results of International Summer School
Pietro GRIMALDI, ITALY

› Generation of Weighted Graph of Routing Network for Blind Pedestrian based on Open Street Map (OSM) Data
Achituv COHEN, Sagi DALYOT, Shiri AZENKOT, Israel - USA

20:00 Gala Dinner - Romanian traditional dance and music program
International Hotel MAGNUM BALLROOM
### 05 November Saturday

- **09:00 - 10:30**
  - **International Hotel, Executive Board Room B**
  - Session presentations - Part 4
    - Topics
      - Geodesy and Cartography; Engineering Geodetic Measurements; Cadastre and Real Estate Publicity; Real Estate Valuation.
  - **International Hotel, Belvedere Room**
  - Session presentations - Part 4
    - Topics
      - Geographic Information Systems (GIS); Photogrammetry and Remote Sensing; Applied and Environmental Science.
  - **International Hotel, Executive Lounge**
  - FIG Commission 3 technical session “Mapping and SDI”
    - Chair: Hartmut Müller

- **10:30 - 11:00**
  - **Coffee Break**
  - **International Hotel**

- **11:00 - 12:30**
  - **International Hotel, Executive Board Room B**
  - Session presentations - Part 5
    - Topics
      - Geodesy and Cartography; Engineering Geodetic Measurements; Cadastre and Real Estate Publicity; Real Estate Valuation.
  - **International Hotel, Belvedere Room**
  - Session presentations - Part 5
    - Topics
      - Geographic Information Systems (GIS); Photogrammetry and Remote Sensing; Applied and Environmental Science.

- **12:30 - 14:00**
  - **Lunch Break**
  - **International Hotel PANORAMIC Restaurant**

- **14:00 - 15:30**
  - **International Hotel, Executive Board Room B**
  - Session presentations - Part 6
    - Topics
      - Geographic Information Systems (GIS); Photogrammetry and Remote Sensing; Applied and Environmental Science.
  - **International Hotel, Belvedere Room**
  - Session presentations - Part 6
    - Topics
      - Geographic Information Systems (GIS); Photogrammetry and Remote Sensing; Applied and Environmental Science.
16:00 – 16:45
International Hotel, Belvedere Room
Session presentations - Part 7
Topics
Geographic Information Systems (GIS); Photogrammetry and Remote Sensing; Applied and Environmental Science; Real Estate Valuation.

16:00 - 17:00
International Hotel, Executive Lounge
Commission 3 Annual meeting
Only for Commission delegates

17:00 - 17:30
International Hotel, Belvedere Room
The closing ceremony of Geomat symposium
10:00 - 18:00
Optional Excursion to northern Moldavia
(Romanian orthodox monasteries, PLUS Lunch)

SCIENTIFIC COMMITTEE

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
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<th>Role</th>
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FIG COMMISSION 3 ORGANIZING COMMITTEE

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Dr. Enrico Rispoli</td>
<td>Commission Chair, Italy</td>
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<tr>
<td>Prof. Dr. Cornel Păunescu</td>
<td>Local Organizing Committee, President of the Romanian Surveyors Association, Romania</td>
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<tr>
<td>Mr. Ionuț Săvoiu</td>
<td>Local Organizing Committee, National Delegate to the FIG Commission 3, Romania</td>
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<td>Prof. Dr.-Ing. Hartmut Müller</td>
<td>Vice Chair and Chair of WG 3.1, Germany</td>
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<tr>
<td>Prof. Dr. Ioannidis Charalabos</td>
<td>Vice Chair and Chair of WG 3.2, Greece</td>
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<tr>
<td>Dr. Sagi Dalyot</td>
<td>Vice Chair and Chair of WG 3.4, Israel</td>
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<td>Prof. Yerach Doytsher</td>
<td>Past President of Commission 3</td>
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<td>Dott.ssa Maria Grazia Scorza</td>
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