

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  *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, ANCP (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 ANCP (National Agency for the Cadastre and Land Registration)

 **Lunch Break** **13:00 - 14:00**
 *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 Stoica
 **14:40 S.C. HEVECO S.R.L. PLOIEȘTI** / Alina Popescu

 **Coffee Break** **15:00 - 15:30**
 *International Hotel*

15:30 - 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 Glonț
 **16:10 S.C. THEOTOP S.R.L.**
BUCUREȘTI / Valeriu Manolache

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

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

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 ANCP (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
- › 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

- › Dott. Enrico Rispoli Chair Commission 3 Spatial Information Management
- › Prof. Chryssy Potsiou, President of the International Federation of Surveyors
- › Nikolaos Zacharias, President of EGoS (European Group of Surveyors)
- › Vasile Chiriac, Secretary General of CLGE (Council of European Geodetic Surveyors)

› **Conference official photo**

☕ **Coffee Break**

12:00 - 12:30


📍 *International Hotel*

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.**

 *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, ANCPD 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*
Session presentations Geomat - Part 2
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**

 *International Hotel, BELVEDERE 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 POTSIUO, 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*
Session presentations - Part 3
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**

 *International Hotel, BELVEDERE Room*
FIG Commission 3 technical session
“Crowdsourcing and GIS”
Chair Randolph Camilleri

› **The value of data collection from the Ground**
Nikolaos 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*

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

- › Keynote speeches
- › **Newest Technologies for mapping the Future**
George DAMIAN, General Manager of Topgeocart, Leica Romania
- › **Expanded Data Quality Model for Increased Reliability in Mashed-Up Environments**
Luethy Juerg, Switzerland

📍 *International Hotel, Executive Board Room A*
Opening meeting of EGoS GA – EGoS Representative



Coffee Break

10:30 - 11:00

📍 *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.**

📍 *International Hotel, Executive Lounge*
FIG Commission 3 technical session "Planning and 3D Models (Part II)"

Chair Pietro Grimaldi

- › **Rectilinear Approach to 3D Generalization of Building Models**
Alexey NOSKOV, Yerach DOYTSHER, Israel
- › **A Proposal for Affordable Housing Policy in Greece**
Maria FILIPPAKOPOULOU, Chryssy POTSIUO, Greece

› **Spatial Accessibility to Primary Health care in Urban and Rural Areas in Germany on a Small Area Level**

Hartmut MÜLLER, Germany

📍 *International Hotel, Executive Board Room A*
EGoS GA – EGoS Representative



Lunch Break

12:30 - 14:00

📍 *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.**

14:00 - 15:30

📍 *International Hotel, Executive Lounge*
**FIG Commission 3 technical session
"VGI – Cadastre – Crowdsourcing"**
Chair Yerach Doytsher

› **Distributed Data Collection and Computing for Prediction and Prevention of Coastal Dike Failure in an Early Warning System**
Ralph BECKER, Stefan HERLE and Jörg BLANKENBACH, Germany

› **GeoArch – Design of a Spatial Base for Archeological Surface Survey**
Christian HICKEL, Franziska LANG, Germany

› **A proposal for fast, flexible, low-cost and reliable Cadastral Surveys**
Konstantinos APOSTOLOPOULOS, Charalabos IOANNIDIS, Chryssy POTSIU, Greece

📍 *International Hotel, Executive Board Room A*
EGoS GA – EGoS Representative



Coffee Break

15:30 - 16:00

📍 *International Hotel*

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

📍 *International Hotel, Executive Board Room A*
EGoS GA – EGoS Representative

17:00 - 17:30

📍 *International Hotel, Belvedere Room*
The closing ceremony of Geomat symposium



19:00 Optional Geomat dinner

📍 *International Hotel PANORAMIC Restaurant*



20:00 Commission 3 Dinner

by invitation only

📍 *Venue to be decided*

09:00 - 10:30

📍 *International Hotel, Executive Board Room B*
› **FIG Commission 3 closing session - Highlights of the Conference and Closing**

› **Proclamation of the best paper of Commission 3**

› **Summary - Conclusions**

Cornel Păunescu, President of the Association of Romanian Surveyors

Chryssy Potsiou, President of FIG

Nikolaos Zacharias, President of EGoS

Enrico Rispoli, Chair Commission 3 Spatial Information Management

11:00 - 17:30

Optional Iasi City Tour (including Lunch) or

11:00 - 19:00

Optional Excursion to Neamt fortresses (including Lunch)

10:00 - 18:00

Optional Excursion to northern Moldavia
(Romanian orthodox monasteries,
PLUS Lunch)

SCIENTIFIC COMMITTEE

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FIG COMMISSION 3 ORGANIZING COMMITTEE

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

SYMPOSIUM VENUE

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