



LISBOA  
27-30 NOVEMBER 2017

**FIG Commission 3 Workshop and Annual Meeting 2017 JOINT TO**  
**Ordem dos Engenheiros (the Portuguese Engineers Association) and**  
**EGoS General Assembly**

**Volunteered Geographic Information**  
**Emerging Applications in Public Science**  
**and Citizen Participation**



International Federation of Surveyors  
 Internationaler Verband der Geodäten  
 International Union of Geomatics Engineers  
**FIG COMMISSION 3**  
 Spatial Information Management



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FACULDADE DE CIÊNCIAS  
E TECNOLOGIA  
UNIVERSIDADE DE COIMBRA



**FIG COMMISSION 3 ORGANIZING COMMITTEE**

Dott. Geom. Enrico Rispoli - Commission Chair, Italy

Prof. Dr. Maria Teresa Sá Pereira, Chair Colégio Nacional de Engenharia Geográfica, Ordem dos Engenheiros

Eng. Maria Joao Henriques, Senior Research Officer, Applied Geodesy Division, The National Laboratory for Civil Engineering

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 and Web Master, Israel

Prof. Yerach Doytsher, Past President of Commission 3

Dott.ssa Maria Grazia Scorza - Vice Chair of Administration, Italy

**SCIENTIFIC COMMITTEE**

Enrico Rispoli, Chair of Commission 3 FIG – CNGeGL Italy

Sagi Dalyot, Technion - Israel Institute of Technology

Izabela Karsznia, Warsaw University

Hartmut Müller, HS Mainz University of Applied Sciences - Germany

Efi Dimopoulou, National Technical University of Athens - Greece

Jan-Henrik Haurert, Integrating and Generalising VGI - Universität Osnabrück - Hannover - Germany

Vyron Antoniou, Hellenic Military Geographical Service - Greece

Yerach Doytsher, Technion - Israel Institute of Technology - Israel

Danny Vandenbroucke, Division SADL (Spatial Applications Division Leuven) SADL/KU Leuven -Belgium

Charalabos Ioannidis, National Technical University of Athens - Greece

Joep Crompvoets, KU Leuven - Public Management Institute - Belgium

Bashkim Idrizi, Geo-SEE Institute Macedonia

Rahmi Nurhan Çelik, Istanbul Technical University - Turkey

Chryssy Potsiou, National Technical University of Athens - Greece

Frances Plimmer, Chartered Institution of Civil Engineering Surveyors (ICES) - The UK

Vlado Cetl, University of Zagreb - Croatia



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## VENUE

**Ordem dos Engenheiros** Headquarters  
Av. António Augusto de Aguiar, 3D  
1069-030 - Lisboa

**Monday** November 27

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**15:00** | Ordem dos Engenheiros  
Headquarters **Registration**

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**16:30** | Auditório  
**18:30** |

**Opening session of Commission 3**  
**Welcome speeches and Introduction of the events**  
Chair: Robert W. Foster - Honorary President of FIG - USA

Welcome speeches and Introduction

Maria Teresa Sá Pereira, Chair Colégio Nacional de Engenharia Geográfica, Ordem dos Engenheiros  
Carlos Mineiro Aires, President Colégio Nacional de Engenharia Geográfica, Ordem dos Engenheiros  
Enrico Rispoli, Chair Commission 3 Spatial Information Management - FIG  
Chryssy Potsiou, President of the International Federation of Surveyors - FIG  
Maurice Barbieri, President of the Council of European Geodetic Surveyors - CLGE  
Nikolaos Zacharias, President of the European Group of Surveyors - EGOS

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**20:00** | Bar

**Welcome reception**  
**FIG Commission 3**  
**EGoS - European Group of Surveyors**  
**Ordem dos Engenheiros**

**08:00** | Ordem dos Engenheiros    **Registration**

**09:00** | Headquarters

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**09:00** | Auditório

**10:30** |

**FIG Commission 3 - Keynote Session 1**

**“Spatial Management: Optical Imagery, Mapping and Environmental Risk Prevention”**

Chair: Charalabos Ioannidis - Greece

- » The Potentialities of Sentinel 2 Data for environmental risk prevention and disaster management  
Prof. Ana Cláudia Teodoro - University of Porto
  - » How can 3D models and augmented reality visualization based on mobile platforms enhance the value of urban heritage?  
Prof. José António Tenedório,  
Dr. Luis Marques - University of Lisbon
  - » Precise mobile mapping with action cameras  
Prof. José A. Gonçalves, Prof. André Pinha - University of Coimbra
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**10:30** |

**11:00** |

 **Coffee Break**

**Tuesday** November 28

**11:00** | Auditório **FIG Commission 3 technical session "Geographic Information and 3D Modelling"**  
**12:30** | Chair: Yerach Doytscher - Israel

- » The Future of GI in a Changing World  
**Maurice Barbieri – President of CLGE - Switzerland**
- » 3D Modelling from 3D Survey to BIM 3D Model  
**Malcolm Lelliott - Generl Secretary of EGoS - UK**
- » IFC standard as BIM interoperable format to apply into 3D GIS trends  
**Edgar Barreira, Inês Vilas Boas, Nuno Pinto - Portugal**
- » VGI in 3D Cadastre: A Modern Approach (Peer Review)  
**Maria Gkeli, Charalabos Ioannidis, Chryssy Potsiou - Greece**

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**12:30 / 14:00**  **Lunch**

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**14:00** | Auditório **FIG Commission 3 technical session "Topography and VGI in Public and Citizen participation"**  
**15:30** | Chair: Alessandro Dalmaso - Italy

- » Cliff and steep slope topography measurement by dense point cloud method  
**Cihan Altuntas - Turkey**
- » Quality assessment of VGI and CSD using semantics and Geographical Information Retrieval techniques (Peer review)  
**Saman Koswatte, Kevin McDougall, Xiaoye Liu – Australia**
- » Geodata management, a key enabler for e-governance and research infrastructures  
**Hartmut MÜLLER, Ulrike Klein - Germany**
- » Driving Sustainable Development through Public-Private-People Partnership in Land Information System and Land Governance in Nigeria  
**Muhammad Bashar Nuhu - Nigeria**

15:30 / 16:00

 Coffee Break

16:00 | Auditório

**FIG Commission 3 technical session "Expert Role of Surveyors in GIS"**

17:30 |

Chair: Maria Joao Henriques - Portugal

- » Collecting Typhoon Disaster Information from Twitter Based on Dynamic Keywords  
Zi Chen, Samsung Lim – Australia
- » The Role of the Professional Surveyor in the Land Management  
Nikolaos Zacharias – President of EGoS - Greece
- » GIS urbanism and architecture, case of Tbessa Algeria  
Abdelkrim Moulati – Algeria
- » Informal Real Estate in Greece: Assessment of the Formalization Framework  
Konstantinos Apostolopoulos, Giorgos Mittas, Chryssy Potsiou - Greece

09:30 | Auditório **FIG Commission 3 Keynote Session 2 "Emerging Applications in Geographic Information"**  
10:30 | Chair: Sagi Dalyot - Israel

- » Contribution of Internet of Things to Volunteered Geographic Information  
Prof. Dr. Rahmi Nurhan Celik - Department of Geomatic Engineering, Istanbul Technical University - Turkey
- » Adding value to existing VGI - Two case studies  
Prof. Cidália Fonte, University of Coimbra
- » The protection of harbours in coastal areas  
Prof. Fernando Soares, University of Lisbon

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10:30 / 11:00  **Coffee Break**

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11:00 | Sala 4° **Opening meeting of EGoS General Assembly – only for EGoS Representatives**  
12:30 | Poso

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11:00 | Auditório **FIG Commission 3 technical session**  
12:30 | **"Primary Topics and Opportunities for Professional Growth - Research in GPS Applications"**  
Chair: Pietro Grimaldi - Italy

- » Garante Privacy – the Challenges of Open Data in Italy  
Cromwell Manaloto, Alessandro Dalmasso, Daniele Brancato, Luca Dal Buono - Italy
- » Globalized Ethics  
Robert W. Foster – USA
- » GIS and GPS applications in East Africa: Building the Technical Office of Gabiley-Somaliland  
Maurizio Foderà - Italy  
Monitoring the vertical and horizontal displacements of the Poiana Mărului dam  
Roxana-Augustina Stanescu, Florin Nache, Cornel Paunescu - Romania



12:30 / 14:00



Lunch

14:00 | Auditório  
15:30 |

**FIG Commission 3 technical session "Emerging Applications in Geographic Information n. 2"**  
Chair: Harmut MÜLLER

- » Positional Accuracy Analysis of OpenStreetMap using Historical Versions of Node Locations  
Talía Dror, Yerach Doytsher, Sagi Dalyot - Israel
- » Volunteered Status Updates of Geodetic Control Points  
Eva Lucas Harbula, Andras Kolesar - Bulgaria
- » A tool for 5D Urban Real Estate Sustainable Management  
Akritidou Kleio, Doulamis Nikos, Soile Sofia, Potsiou Chryssy – Greece
- » Survey to Planning: New Technologies and Land Protection  
Pietro Grimaldi, Italy

Sala 4°  
Piso

**EGoS General Assembly – only for EGoS Representatives**

15:30 / 16:00



Coffee Break

## Wednesday November 29

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**16:00** | Auditório      **EgoS Workshop open to Commission 3 Delegates**  
**18:15** |                      **Chair: Malcolm Lelliott - UK**

- » Presentation about EgoS  
**Nikolaos Zacharias, President of EgoS – Greece**
  - » The Professional Card  
**Malcolm Lelliott – General Secretary of EgoS, Kevin Sheridan – General Secretary of AEEBC, UK**
  - » International Young Surveyors Training Courses  
**Randolph Camilleri, Past President of EgoS – Malta**
  - » The problems of the Professional Associations in nowadays  
**Nikolaos Zacharias, President of EgoS – Greece**
  - » The Problems of the Professional Associations in nowadays in Portugal  
**Maria Teresa Sá Pereira, Chair Colégio Nacional de Engenharia Geográfica, Ordem dos Engenheiros - Portugal**
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**18:30** | Sala Sande      **Commission 3 Annual meeting - only for Commission delegates**  
**19:30** | Lemos

**20:00** | Venue to      **Commission 3 Dinner**  
| be decided


09:00 | Auditório **FIG Commission 3 - Keynote Session 3 "GNSS Surveying"**  
09:30 | Chair: Cromwell Manaloto, Italy

High Precision "GNSS Surveying": state of the art and future perspectives  
Ing. Roberto Capua, RLD – SOGEI Ricerca e Laboratorio Digitale – Italy

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09:30 | Auditório **FIG Commission 3 technical session "Expert Role of Surveyors in GIS 2"**  
10:30 |

- » Analyzing Folklore Dance Similarities via Spatial and Temporal Embedding and Signal Analysis  
Eftychios Protopapadakis, Anastasios Doulamis, Charalabos Ioannidis,  
Sofia Soile, Stephanos Camarinopoulos, Nikolaos Doulamis – Greece
  - » Toward a methodology for noise mapping using VGI (Peer Review)  
Efthimios Bakogiannis, Charalampos Kyriakidis, Maria Siti, Filippos Iliadis, Chryssy Potsiou – Greece
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10:30 / 11:00  Coffee Break

11:00 | Auditório  
12:30 |

**FIG Commission 3 closing session - Highlights of the Conference and Closing Proclamation of the best paper of Commission 3**

- » Summary - Conclusions  
Maria Teresa Sá Pereira, Chair Colégio Nacional de Engenharia Geográfica, Ordem dos Engenheiros
- » Chryssy Potsiou, President of FIG  
Enrico Rispoli, Chair Commission 3 Spatial Information Management

12:30 / 14:00



Lunch

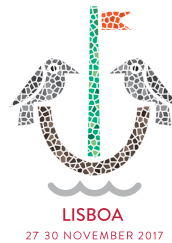
14:00

**FIG Commission 3 Technical Visit**









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