

## FIG Commission 3

Dr. Sagi Dalyot, Chair, Commission Chair

Prof. Markus Schaffert, Chair WG1





# FIG Working Week 2024

19-24 May

Accra, Ghana

Your World, Our World:  
Resilient Environment  
and Sustainable  
Resource Management  
for All

**Cemal Özgür KIVILCIM, PhD**  
Vice chair, Com3



**Dr. Eng. Cemal Özgür Kivılcım,**  
passed away on 12.05.2024

We lost Dr. Eng. Cemal Özgür Kivılcım, the beloved son of Sevtap and Refik Kivılcım, the dear brother of Özlem, the loving father of Ada, and the cherished uncle of Candan.

Following the afternoon prayer held at Şakirin Mosque on May 13, 2024 (Monday), he will be laid to rest at Karacaahmet Cemetery.

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**Cemal Özgür KIVILCIM, PhD**  
Vice chair, Com3

- In 2006 he was involved in the creation of the FIG YS Network which occurred during FIG Congress in Munich.

- In 2007 he took the leadership of the newly created FIG YSN met in Cairo to formulate the plans and strategy for the new network. He was the secretary of the FIG YSN.

Since then, he was very active in almost all activities of FIG YSN and used to share his experience with the newcomers of the network.



**Dr. Eng. Cemal Özgür Kivılcım,**  
passed away on 12.05.2024

- Since 2018 he was an active member of the Com3 and became the first chair of Com 3 WG 5 - Geospatial Next

He was very a social, positive, knowledgeable, reliable and active character of our Commission, we already miss him



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## Commission 3



## Spatial Information Management

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## Equal, Liveable, Available and Affordable Spaces

- **Know-how dissemination:** Continue to push forward the role of Commission 3 as an international originator of spatial information expertise and excellence within the surveying domain.
- **Open data and supporting communities:** Introduce citizens as the greatest resource to mitigate urban challenges. Promote local involvement to improve urban infrastructure and living conditions.
- **Extend the scientific footprint:** Foster the publication of high-quality research reports and papers in the spatial domain. Extend FIG3 portfolio as a scientific platform.
- -> developing regions, sustainable urban development, local initiatives, **SDG**, outreach, cooperation.

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## Equal, Liveable, Available and Affordable Spaces

- **FIG com3 WGs focus on the pillars of spatial data and applications:**
  - collection and management, including contributed and user-generated geodata, ubiquities and emerging technologies, SDI and geodatabases, standards and ethics.
  - handling and processing, including data-mining and knowledge recovery, geoAI, and GIS.
  - usage, including nD cadaster, smart cities, land and city planning, and environmental knowledge.

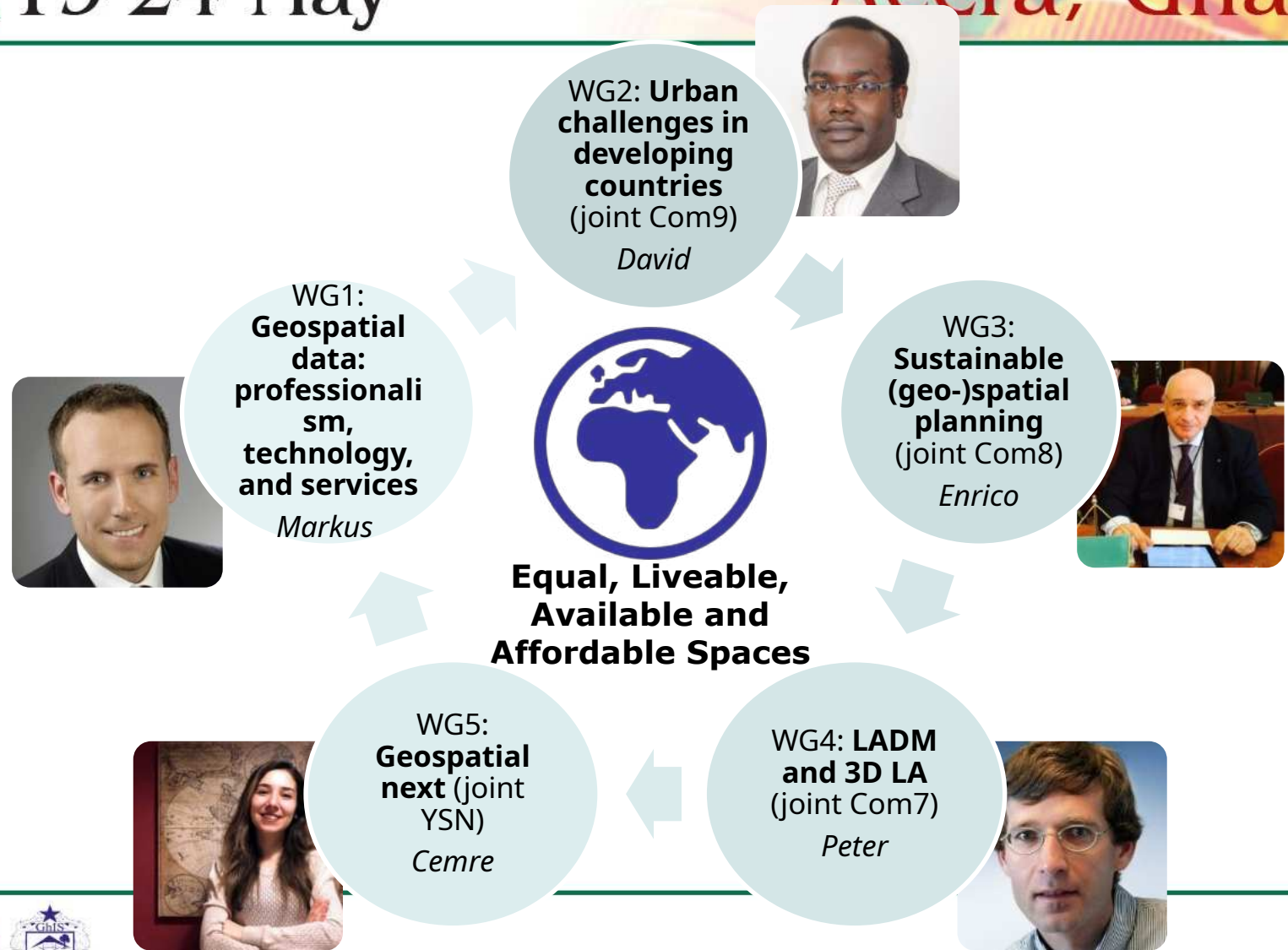


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## ■ Tackling global challenges

- Map critical global risks and hazards. Focus on the timely critical risks to
  - Encourage local community involvement and action in mitigating risks through a campaign/project using UGC/OD, in developing countries (**WG2**-urban challenges+**WG5**-geospatial next/YSN).
  - Develop risk-indicators of spatial (open) data and information in national-scale applications and services (**WG1**-geospatial data+**WG3**-sustainable planning+**WG4**-LADM).
  - Provide a critical overview of the global role of SIM through case-studies (all **WGs**).







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## Events

- 2023
  - FIG 2023 WW – Orlando, Florida, USA





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## Events

### 2024

- Joint Com3 and Com9 workshop on “Surveying - Registration – Valuation: How we gather and deal with our data today” – February 5-7, Malta
- FIG 2024 WW Ghana – May 19-24 Accra, Ghana
- Joint Com3 and Erasmus+ workshop on “Challenges and opportunities in BIM-GIS integration” – June 17-19, Varaždins, Croatia
- FIG Commission 3 Annual Meeting 2024 – December 3-5, Tel-Aviv, Israel (in conjunction with [GeoInt360](#))

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# FIG Working Week 2024

19-24 May

6-10 April 2025, Brisbane Australia

**FIG Working Week 2025.**

**Accra, Ghana**

**Your World, Our World:  
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## Events

### 2025

- Joint Com3, WB and UNECE, TBD, June 18-20, Athens, Greece
- FIG Working Week 2025, 6-10 April, Brisbane Australia
- FIG Commission 3 Annual Meeting 2025 – TBD (Nairobi, Kenya)

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*Working Group 3.5*

**Geospatial Next**

**(joint with the Young Surveyors Network)**

Cemre Şahinkaya - Chair of Working Group 3.5

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## **Working Group 3.5** Geospatial Next

- Chair: Cemre Şahinkaya, PhD Candidate (Turkey/Germany), urban planner & geomatics engineer
- Working Group 5 – Geospatial Next was established in 2018 with the initiatives of former Young Surveyors and the support of FIG to develop cooperations with the Young Surveyors and other commissions in line with common themes focused on geospatial information and spatial information management.
- Strong collaboration was established between WG 3.5 and WG 3.1



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## Working Group 3.5 Geospatial Next

- Recently, the WG5 continued its work and prepared the work titled "Geospatial Data for Monitoring and Mobility: A Case Study on Aging in Rural Single-Family Home Areas" together with Working Group 3.1 chair Markus Schaffert at the Joint Workshop of EGOS and FIG Commissions 3 and 9 held in Malta in February 2024.
- In the paper, based on the RAFVINIERT project carried out at Mainz University of Applied Sciences, the sustainability of single-family houses in rural areas was studied by observing them through geospatial data/SDI knowledge (project funded by Carl Zeiss Stiftung, but designed with Com3-Vision in mind).

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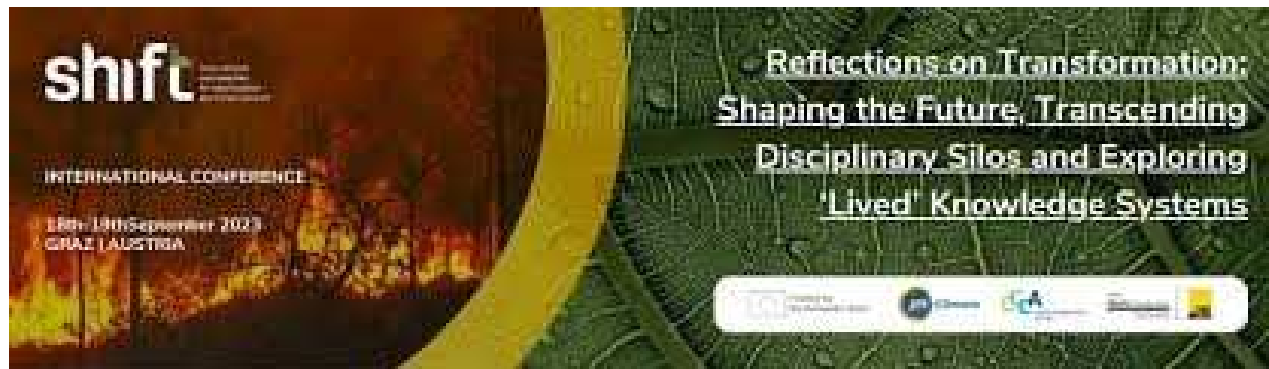
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## Working Group 3.5 Geospatial Next

- Besides, a short book chapter on the issue of urban sprawl mitigation by applying spatial storytelling has been elaborated with Markus Schaffert and currently, it is awaiting publication. The book evolved within the framework of EU Cost Action SHIFT



Social Sciences and Humanities for  
Transformation and Climate Resilience (SHiFT)

## Working Group 3.5 Geospatial Next

- In addition, another paper on the examination of the reduction of urban sprawl through Geo-IT applications was submitted and accepted for the IOER Conference 2024 (in Dresden) "Space & Transformation": Living in Harmony with Nature" to be held in June 2024. IOER is the Leibniz Institute of Ecological Urban and Regional Development.

### IOER Conference 2024

Space & Transformation: Living in Harmony with Nature





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## Working Group 3.5 Geospatial Next

- Lately, a paper has been submitted and accepted for the European Academy of Land Use and Development (EALD) Symposium to be held in September 2024 in Cracow. The paper is based on the subject of spatial analysis of give-away practices in Germany in the context of sustainability.
- All these publication activities were also undertaken in collaboration with Markus Schaffert.



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*Working Group 3.4*

**LADM and 3D LA**

**(joint WG with Commission 7)**

Peter van Oosterom - Chair of Working Group 3.4

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## *Working Group 3.4* LADM and 3D LA

- Land Administration Model (LADM) and 3D Land Administration (LA)
- Chair: Prof. Peter van Oosterom (Netherlands)

The recent milestones are featuring the work of FIG joint commission 3 and 7 joint working group on the Land Administration Domain Model and 3D Land Administration

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## Working Group 3.4 LADM and 3D LA – recent milestones

### Progress in Standardisation:

- LADM revision part 1 published as ISO standard 19152-1:2024  
The LADM is developed at the initiative of FIG, ISO standard since 2012 (Revision since 2017)
- OGC TC meeting in Delft (Sessions organized by Domain Working Group on Land Administration)

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## **Working Group 3.4** LADM and 3D LA – recent milestones

- 11th FIG LADM & 3D LA Workshop, Gävle, Sweden, October 2023. The first combined onsite workshop of FIG workshops on 3D Land administration (Cadastres) and LADM.
- FIG-supported session „Success Factors in Land Administration“ at World Bank Land Conference, 13-17 May 2024, Washington, DC
- To come: 12th International FIG Workshop on LADM & 3D LA, Kuching, Malaysia, 24-26 September 2024

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## *Working Group 3.3*

# GIS for Sustainable Geo-Spatial Planning (Joint WG with Commission 8 and 9)



Enrico Rispoli (Italy) - Chair of Working Group 3.3  
Maria Scorza (Italy) - Adviser

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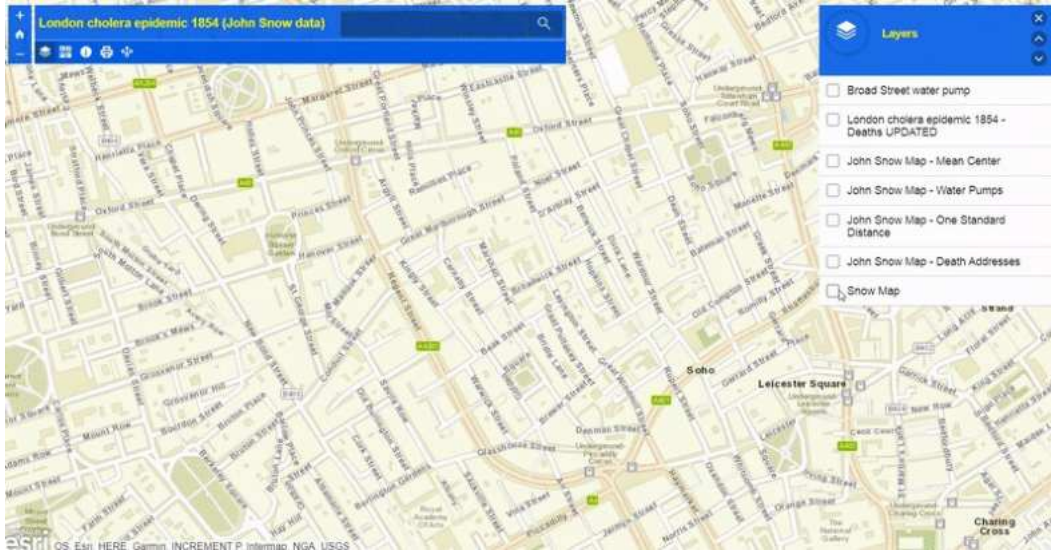


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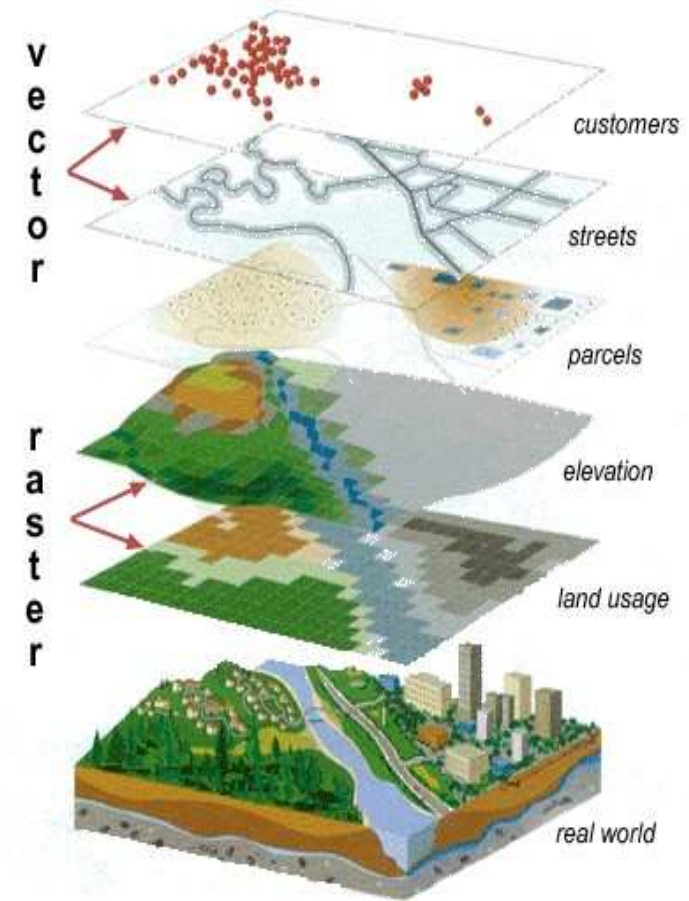
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Working Group 3 is continuing to focus on the study of current and future GIS - and other digital tools - for geospatial planning, services, and applications aimed to tackle global challenges. Focus will also be given to e-government applications, and data standards.

In a constantly changing society, it is advisable to interpret the data of the territory, and to identify the challenges of balanced economic growth that should be addressed, considering the needs and preferences of the inhabitants.





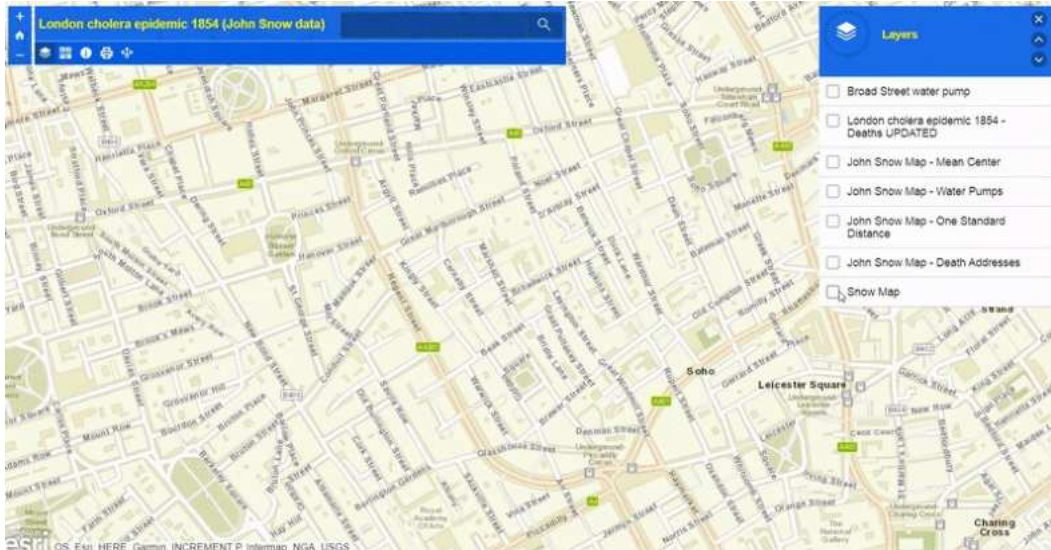


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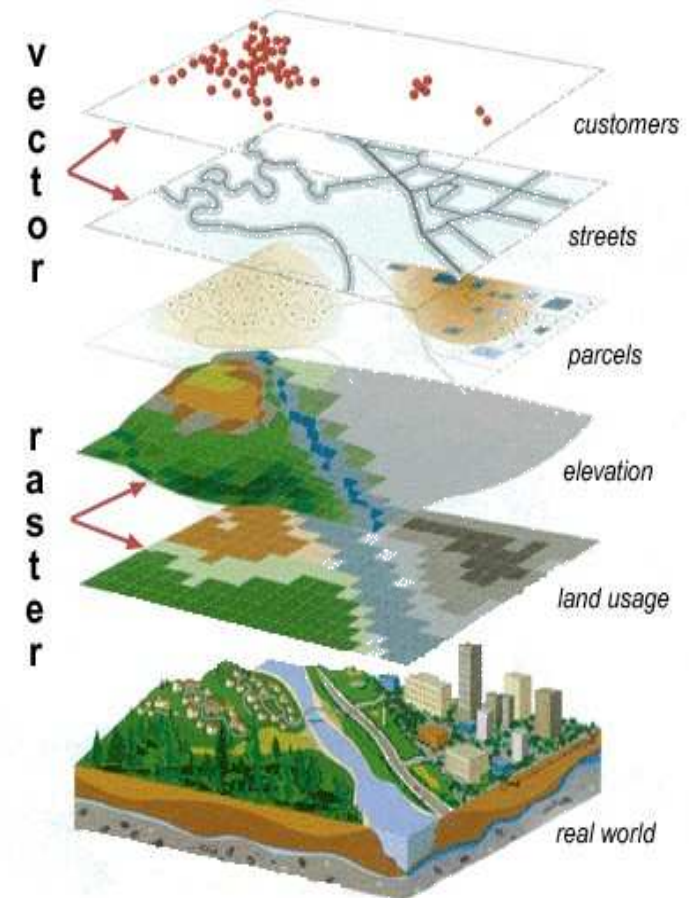
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## Accra, Ghana

### VISION:

- Promoting research and practices related to GIS and other digital methods and tools that support global sustainable development, especially of urban areas and emerging countries with high index of spatial development;
- Focusing on studies that monitor spaces as the first prerogative of control of the fragility and vulnerability of the territory;
- Supporting the use of spatial data and information tools by land surveyors, geodata professionals and decision-makers to serve the goals of good governance;
- Promoting suitable GIS and digital tools designed for spatial planning, based on the different phases of spatial planning lifecycle.
- Endorsing actions that present how the geodetic profession, at all levels, is committed to sustainability, ensuring maintaining a safe and habitable environment for future generations;
- Promoting the research and presentation of papers that represent best practice on the SDGs and Artificial Intelligence.



## XIV International Training Summer School

- Support to COIFA (Comitato Internazionale Fotogrammetria Architettonica) with the cooperation of **FIG Foundation**, of Politecnico di Bari and of other international universities for the XIV edition of International Training Summer School (ITSS) on: **“Survey for planning: new technologies and land protection”** in 2023







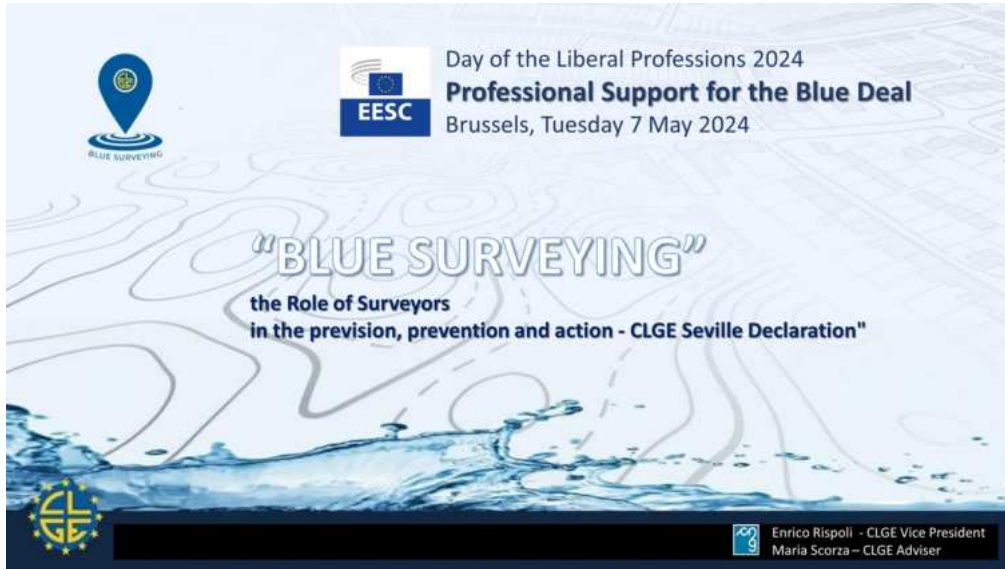


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- Involvement with other european associations as CLGE on the topic of SDGs, in particular on water, climate change;







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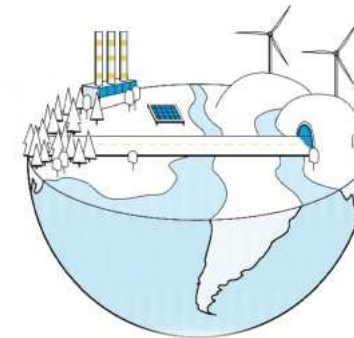
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## AGENDA:

- Continuing to organize workshops with other Commissions as 8, 9 and other partners as EGOS (The European Group of Surveyors), International Training Summer School - etc. (as the last one in Athens in December 2022);
- Continuing to promote specialized scientific and professional sessions during the FIG WWs, Commission 3 Annual Meetings - etc.
- Strengthen cooperation with stakeholders and industry.





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International Federation of Surveyors  
supports the Sustainable Development Goals

Serving Society for  
the Benefit of People  
and Planet

## Commission 3.3



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Enrico Rispoli - Chair of Working Group 3.3

Maria Scorza - Adviser

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## THANK YOU!

For your Attention

**FIG** Commission 3.3

*Enrico Rispoli, Chair of WG 3.3*



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Enrico Rispoli - Chair of Working Group 3.3

Maria Scorza - Adviser

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## *Working Group 3.2* Urban challenges in developing countries (joint WG with Commission 9)

David Siriba - Chair of Working Group 3.2

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## Working Group 3.1 Geospatial data: professionalism, technology, and services

The Department of Geospatial and Space Technology at the University of Nairobi in Kenya in Conjunction with the Geospatial Students Association (GESA) organized a number of activities that further the goals of FIG Commissions 3.

- *Youthmappers Summit (2<sup>nd</sup> March 2024)*  
a prestigious event that brought together young geospatial enthusiasts from around the country (Kenya). The summit featured engaging panel discussions and hands-on mapping activities, all designed to empower the next generation of mappers

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## *Working Group 3.1* Geospatial data: professionalism, technology, and services

- *Nairobi Geospatial Tech Meet Up (29th April 2024)*

As hosts, we facilitated a dynamic platform for sharing the latest advancements and trends in geospatial technology through insightful presentations, interactive sessions, and extensive networking opportunities. The meet-up was a tremendous success, enhancing our members' knowledge and fostering collaborations within the geospatial field.

→ *These two events highlights the SDG 10 and 11, which aim to reduce inequalities by encouraging extension of mapping to uncovered areas thereby supporting sustainable cities and communities efforts*



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## *Working Group 3.1* Geospatial data: professionalism, technology, and services

Markus Schaffert - Chair of Working Group 3.1

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## Working Group 3.1 Geospatial data: professionalism, technology, and services

Vision: Spatial data can play an important role in the transformation towards a more sustainable future. However, data alone is not enough for this purpose. They must be combined in a way that is application-oriented and appropriate for the respective target group.

Against this background, the aim of this Working Group is to disseminate geospatial/SDI knowledge, skills and know-how to expert domains outside the geospatial realm.

Currently focusing on municipalities and the local public



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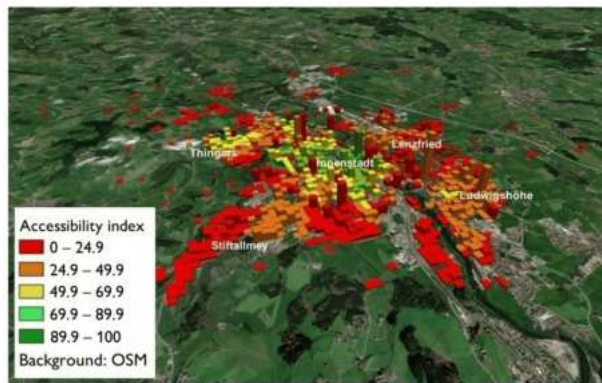
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## Progress / Publications / Conferences (in addition to joint work with WG 3.5)

- Working on walkable neighbourhoods for the elderly:

Schaffert, M., Geist, K., Albrecht, J., Enners, D., & Müller, H. (2023). Walk Score from 2D to 3D — Walkability for the Elderly in Two Medium-Sized Cities in Germany. ISPRS International Journal of Geo-Information, 12(4), 157.



Prof. Hartmut Müller will be presenting further work of this topic in Varaždins (Joint Com3 and Erasmus+ workshop) in 2024



## Progress / Publications / Conferences (in addition to joint work with WG 3.5)

- Working on walkable neighbourhoods for the elderly:

Schaffert, M., Geist, K., Albrecht, J., Enners, D., & Müller, H. (2023). Walk Score from 2D to 3D — Walkability for the Elderly in Two Medium-Sized Cities in Germany. ISPRS International Journal of Geo-Information, 12(4), 157.



UGC is important for optimizing walkability routing to age-groups, like the elderly.

Progress / Publications / Conferences (in addition to joint work with WG 3.5)

- Workshops “Participatory GIS” in rural Germany

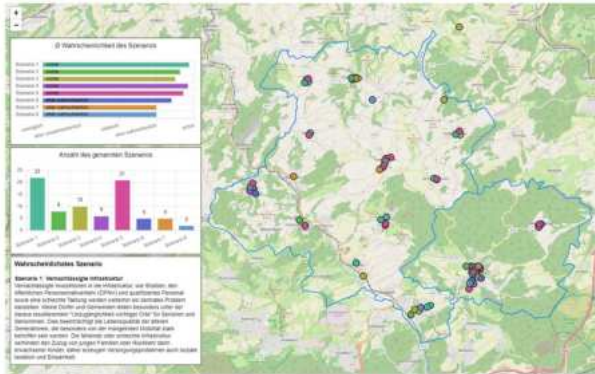
Kaminski, K., Schaffert, M., & Torakai, P. (2023). Scenario Planning and Participatory GIS for Place Research on Rural Transformation. Fourth International Symposium on Platial Information Science (PLATIAL'23), Dortmund, Germany.

17.10.2023  
 Zweiter Zukunfts-Workshop in Otterbach-Otterberg



Workshop in Otterbach-Otterberg Florian Brunn, CC BY SA 4.0

Der zweite Szenarioworkshop konnte RAFVINIERT an den ersten erfolg-  
 kshp dieser Art in der Verbandsgemeinde Otterbach-Otterberg an-



Partizipative Webanwendung zur Kartierung und Bewertung von Entwicklungsszenarien Kevin Kottink, CC BY-ND 4.0

The Workshops and the Walkability Work were conducted in the project RAFVINIERT

<https://i3mainz.hs-mainz.de/news/2023/10/17/zweiter-zukunfts-workshop-in-otterbach-otterberg.html>



Report of NIS - FIG comm 3 activities in Nigeria  
2nd programme of the year, 2023 (nov, 2023).

The commission workgroup in nigeria chose one of the topics for the term 2023-2026

Wg 3.1: geospatial data: professionalism, technology and services (medical).

Kehinde adetunji alao (Nis-fig comm 3 delegate  
Nigeria)



Group photo of the participants



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## FIG Task Force on the Role of FIG in International Trends and Future Geospatial Information Ecosystem (Prof. Hartmut Müller from Commission 3 is member)

### *Collaboration and presentations at UN/UNECE in 2023:*

- Digital transformation and land administration – Sustainable practices from the UNECE region and beyond, Thirteenth Session of the UNECE Working Party on Land Administration, Geneva, Switzerland, 4 and 5 April 2023
- Geospatial Information Ecosystems, Thirteenth Session of the UNECE Working Party on Land Administration, Geneva, Switzerland, 4 and 5 April 2023
- Current and future land administration ecosystems - Report on the keynote segment of the 13th session, 84th session of the UNECE Committee on Urban Development, Housing and Land Management, Geneva, 04-06/10/2023
- The role of geospatial information management to ensure tenure security in disaster scenarios, UNECE Working Party on Land Administration, Workshop "Ensuring tenure security after natural and man-made disasters", Madrid, 02-03 November 2023

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## Open Discussion



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## Commission Dinner:

**Afrikiko Restaurant**

**Today, 7 PM (Shuttle 6:30 PM)**

together with Com. 1,2,3,10

By self payment

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# Thank you

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