



**FIG WORKING WEEK 2023**

28 May - 1 June, 2023, Orlando, Florida, USA



*Protecting Our World, Conquering New Frontiers*



**CALL FOR PAPERS**

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**28 MAY - 1 JUNE 2023**

**SIGNIA BY HILTON ORLANDO BONNET CREEK,  
ORLANDO, FLORIDA, USA**

*This Call for Papers is announced both for **peer review papers** and **non-peer review papers**.*

## Call for papers

It is our great pleasure to invite you to the largest and most prestigious conference of surveying and geospatial professionals in 2023, held in Orlando, Florida, USA. We expect around 2,000 surveying and geospatial experts from all over the world.

The International Federation of Surveyors (FIG) is a United Nations and World Bank recognised non-governmental international professional organisation. FIG was founded in 1878 and represents national associations of surveying, cadastre, valuation, national mapping professionals, geospatial experts and quantity surveyors working in both the public and private sectors, in the scientific, research and academic community, as well as from technology innovators and industry from more than 120 countries around the world.

Our member organizations measure, position, map, locate, appraise and value, estimate and cost, plan, construct, develop and manage the land, the seas and any man-made structures with a vision to extend the usefulness of surveying for the benefit of society, environment and economy.

Each year, FIG convenes a conference in cooperation with a national member association. The coming Working Week will be held in cooperation with our US member - the National Society of Professional Surveyors, NSPS.

One of the characteristics and a distinctive feature of FIG conferences are that experts from all the different areas of surveying – interpreted in the broadest sense including land surveyors, geospatial experts, valuers, quantity surveyors, hydrography surveyors etc. – are all represented. FIG brings these different surveying professions and professionals together to enhance the cooperation and understanding of each other's fields.

The FIG Working Week 2023 gives passionate professionals the opportunity to:

- Learn and share globally – with participation from around 80-90 countries
- Network across silos, from other countries, sectors and professional roles – with sessions and representation from the broad range of surveyors and geospatial experts
- Make impacts on careers, organizations and communities
- Ensure undisturbed on-site time to focus and concentrate

## THE THEME

The overall theme of the FIG Working Week is

### **Protecting Our World, Conquering New Frontiers**

The theme touches many relevant and current topics and refers to the importance of looking ahead and discovering what will be needed in the future for our profession and at the same time make sure to preserve what works well today. There can be many interpretations of how to look ahead, conquer new frontiers with an eye on how to protect our world. One large goal is right ahead of us, namely the Sustainable Development Goals (SDGs) with a deadline that comes closer. Many topics covered by the 10 Commissions cover areas that are directly related to the SDGs.

The theme is intended to inspire surveying and geospatial professionals to seek to expand our presence through technology, experience, collaboration and good will for a better tomorrow. As our world and climate changes around us, we aspire to leverage our knowledge base and tools for measuring, monitoring, and forecasting how to improve the outlook for our future generations.

## Specification of topics and themes

Proposals for papers non-peer review and peer review are requested in all topics of interest of the following:

### Professional Standards and Practice – FIG Commission 1

- The Aging Profession/Renewal of the profession (and also the profession itself) – make the profession younger.
- Diversity/inclusion within surveying, and also in provision of surveying services to the community

### Professional Education – FIG Commission 2

- Innovations in surveying education
- Blended learning: good practices and lessons learned
- Alternative teaching methodologies, activate students in the classroom

### Spatial Information Management – FIG Commission 3

- Spatial data collection and management, including contributed, crowdsourced and user-generated geodata, ubiquities and emerging technologies
- Standards and ethics related to the use and dissemination of spatial data
- Spatial data handling and processing, including data-mining and knowledge recovery, AI and ML models
- Spatial data usage, including nD cadaster, smart cities, land and city planning, and environmental knowledge

- Spatial intelligence / Space technologies / Digital transformation / Innovation
- Empowering communities through geospatial data know-how and best practice

## Hydrography – FIG Commission 4

- The surveying of wetlands
- Conquering new frontiers of Hydrography
- Hydrographic applications in blooming the blue economy
- Hydrographic datums and unified reference framework
- Hydrographic education and continual professional development (linked with commission 2)
- Marine environment protection and marine space administration

## Positioning and Measurement – FIG Commission 5

- Dynamic Datums and working with resultant data (for both surveyors and geospatial experts)
- Novel Low-Cost Positioning Sensor Systems and their Applications
- GNSS Reference Stations and Networks
- Scanning the World around us
- Combining Positioning and Measurement Systems

## Engineering Surveys – FIG Commission 6

- New sensing technologies in surveying: Image assisted and scanning total stations, IoT Sensors, Laser scanners; Radar/SAR; Unmanned aerial or underwater vehicles (UAV & UUV) etc.
- Applications of augmented (AR) and virtual reality (VR) in Engineering Geodesy
- Deformation monitoring and analysis of engineering structures and environment; Mines and other geo-resources (including of energy); Landslides and other geohazards
- Dynamic monitoring of civil engineering structures: bridges, high rise buildings, towers, wind turbines etc.

## Cadastre and Land Management – FIG Commission 7

- Framework for Effective Land Administration, Fit-for-Purpose Land Administration and linkages to the Sustainable Development Goals (SDGs), 3D
- Implementing the Framework for Effective Land Administration (FELA)
- Digital transformation of cadastre and land registries, including issues of data quality and cybersecurity concerns (linked with Commission 8)
- 3D/4D Land administration (linked with Commission 3) – including technical aspects on data capture and boundary issues
- Land Administration Domain Model (LADM), BIM and Standards – including marine cadastres
- Women and vulnerable groups access to land, and participation in land administration systems (linked to other FIG initiatives)
- Capacity building and awareness raising for cadastres and land management (linked with Commission 2)

- Legal, policy, financing and institutional issues in land administration

## Spatial Planning and Development – FIG Commission 8

- The involvement of surveyors in climate crisis prevention
- Participation and Bottom-Up Implementation of Spatial and Land Use Planning Objectives
- Digital Transformation and Spatial Intelligence – including Digital Twins, Smart solutions, Digitising change intervention processes of spatial decisions (linked with Commission 3 and 7).
- Land Management tools for Spatial Governance - Evaluation of land management tools such as expropriation/compulsory purchase, land banking, land consolidation, land readjustment, pre-emption rights and others
- Land value change and spatial interventions (linked with Commission 9)

## Valuation and the Management of Real Estate – FIG Commission 9

- Approaches to a definition for the term "transparency on the real estate market"
- Legal regulations for valuation and transparency on the real estate market in your country
- Professional approaches for automatic mass appraisals of real estate properties
- Examples of transparent real estate markets through good data availability
- Visualisation of real estate market data via the internet for use by professionals and citizens
- Valuation and taxes - an important partnership and how it works well
- Future forecasts about the real estate market; are they at all meaningful and possible?

## Construction Economics and Management – FIG Commission 10

- Digital twins and building information model: what is the difference?
- What is the role of Construction Economics and Management as we build back better?

## FIG Permanent Institutions

The **Permanent Institution of History for Surveying and Measurement** invites contributions on the history of surveying and measurement, and the techniques and instrumentation involved.

## FIG Networks

**FIG Young Surveyors Network** would like to see contributions from young surveyors in all 10 Commissions.

Papers are also invited on the areas of the **FIG Networks**:

- FIG Standards Network
- Regional Capacity Development Network
  - Africa
  - Asia/Pacific



There will furthermore be a special focus on Latin America and South America and the challenges in this region.

## FIG WORKING WEEK 2023

### OPPORTUNITIES FOR

### CONTINUING EDUCATION UNITS OF PROFESSIONAL DEVELOPMENT HOURS (PDHs)\*

Workshops, seminars, technical tours, and paper presentations during FIG Working Week 2023 will qualify for Continuing Education Units of Professional Development Hours (CEU/PDH) as authorized by the Florida Board of Professional Surveyors and Mappers (the Florida's Surveying and Mapping licensing entity) through Florida Surveying and Mapping Society's (FSMS) Florida Continuing Education provider status.

\* PDHs are educational units used to fulfill continuing education requirements for licensure or certification.

## SUBMIT YOUR ABSTRACT

FIG Working Week is the main event of the year! Experts from academia, governments/public administration and industry gather to report on recent developments, trends and research results. The selection of technical papers is through the open call for papers procedure. The FIG Working Week is an exceptional platform to discuss experiences, innovations, best practices, research and much more to support the shaping of the future.

### We invite you to submit:

- an abstract and full paper for peer review by: **15 November 2022**
- an abstract for non-peer-review by: **15 January 2023**

We encourage you to consider the overall theme of FIG Working Week 2023: **Protecting our World, conquering new frontiers** and the main topics when submitting your abstract and paper. Many topics are multi-disciplinary and are relevant in both developing and developed world contexts. We encourage submissions of cross-disciplinary nature cutting across many disciplines/subject-areas.

You are encouraged to submit an abstract. Abstracts will be reviewed and if your abstract is accepted, you will be asked to submit a full paper and a video presentation. The video presentation must not be longer than 4 minutes. All abstracts, papers, presentation handouts and videos will be included in the final proceedings for this conference.

The sessions will be designed so that they fit best to the topic, this can be e.g., presentation sessions, discussion panels, interview sessions, open discussion sessions or a mixture of different types. A selection of onsite participating authors from the open Call for Papers will be invited to directly take part in a session. All onsite authors connected to a session are encouraged to participate actively and engage in the discussions. Online participating authors will have their papers and video presentation included in the final proceedings as inspirational material, but the video presentation will not be played onsite in a session.

## DEADLINES

The deadlines are as follows:

### Non peer review

#### **Submission of:**

- Abstracts: 15 January 2023
- Full paper: 28 February 2023
- Video presentation: 25 April 2023

### Peer review

#### **Submission of:**

- Abstract AND full paper: **15 November 2022**

- Video presentation: 25 April 2023

## How to submit

We invite you to submit an abstract for the FIG Working Week.

## Before you begin - To submit your abstract you will need to have the following items ready:

- Your 250-500 words abstract describing the objectives, results, conclusions and significance of your work. Please feel free to submit an abstract on any topic related to the specific topics of FIG Working Week 2023.
- The names and email addresses of all contributing authors.
- The full title of the paper as you would like it to appear in the programme book / proceedings.
- Your choice of maximum three (3) commissions/task forces etc. in prioritized order, which best corresponds to the subject of your paper.
- Keywords for your paper.
- Whether you want to submit your paper as a peer review paper or non-peer review paper.
- Choice of author(s) as the presenter(s) at the Working Week.

## Submitting your abstract

- Begin by filling in the abstract submission form. Ensuring that you fill in all mandatory fields. Please note that submission of an abstract is NOT equivalent to registering for the Working Week. The abstract submission form will open on 14 October 2022
- Please note that when you submit your abstract the number of abstracts is limited to a maximum of two per author; **one** as first author and **one** as co-author. Further, an author can only present **one paper**.
- An email from [fig@fig.net](mailto:fig@fig.net) will serve as confirmation of a successful abstract submission. Your contribution ID will be contained in the confirmation email.
- Please note that abstracts must be submitted for **non-peer review papers by 15 January 2023** and submission of **full paper and abstract for peer review papers is 15 November 2022**.



## IMPORTANT DATES

### Non Peer Reviewed Papers

### Peer Reviewed Papers

**15 January 2022**

Deadline for authors to submit non peer reviewed **abstracts**.

**15 November 2022**

Deadline for authors to submit **full papers** for peer review.

**20 February 2023**

Confirmation to authors of acceptance of non peer reviewed **abstracts**.

**10 January 2023**

First notification to authors of acceptance of peer reviewed papers.

For accepted papers, authors will also be notified of any modifications required by the reviewers.

Authors of papers not accepted for peer review will be offered to convert the paper to the non peer review process.

**30 January 2022**

Deadline for authors to submit revised **full paper** for 2nd round of peer review (depending on proposed corrections from reviewers).

**15 February 2023**

Second notification to authors of acceptance of peer reviewed papers with the possibility of further modifications from the 2<sup>nd</sup> round of peer review.

### All Papers (peer reviewed and non peer reviewed)

**28 February 2023**

Early bird registration closes  
Deadline for all authors to register.

**28 February 2023**

Deadline for all authors to submit **Full Papers**.

**24 March 2023**

First draft of the technical programme will be published on the web.

**25 April 2023**

Deadline for normal registration. Deadline for submission of video presentation

**28 May 2023 – 1 June 2023**

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## FURTHER INFORMATION

Any inquiries on call for Papers, abstracts, peer review process, technical programme or video presentation, please contact the FIG Office (Email: [fig@fig.net](mailto:fig@fig.net), tel +45 9391 0813).