



International Federation of Surveyors  
Fédération Internationale des Géomètres  
International Vereinigung der Vermessungsingenieure

# FIG Update on Activities

**Partner Presentation to UN-GGCE;  
4<sup>th</sup> Meeting IAC UN-GGCE; 6<sup>th</sup> Plenary of the UN-GGIM SCoG**



**UN-GGIM**  
UNITED NATIONS  
COMMITTEE OF EXPERTS ON  
GLOBAL GEOSPATIAL  
INFORMATION MANAGEMENT



United Nations  
Global Geodetic  
Centre of Excellence

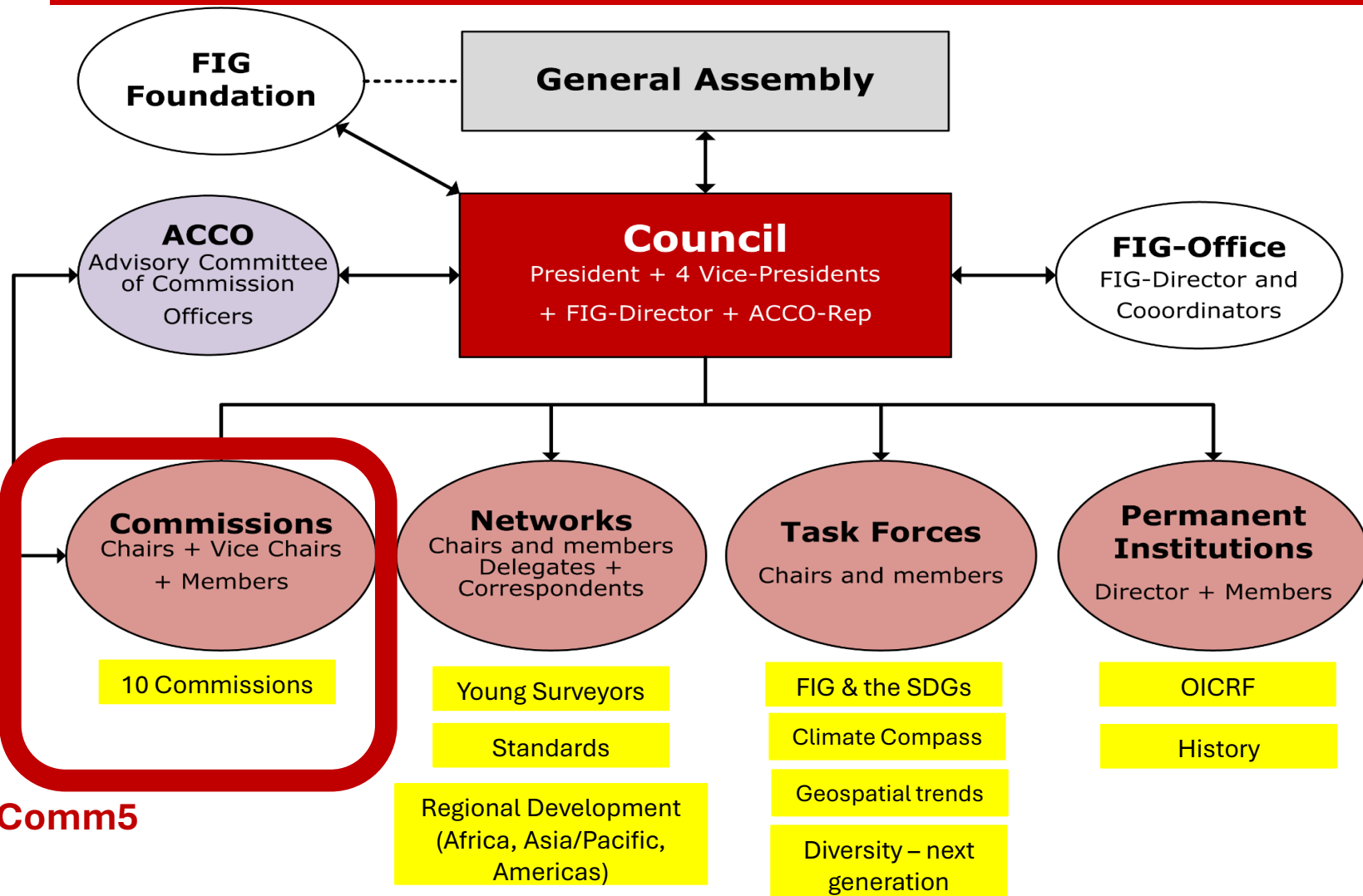
13 March 2026 – Bonn, Germany

**Ryan Keenan** – Chair, Commission 5; Member: FIG Council;

Member: TF IT&FE, AP CDN; Member, IAC-UN-GGCE



# Our Place in the FIG Organisation

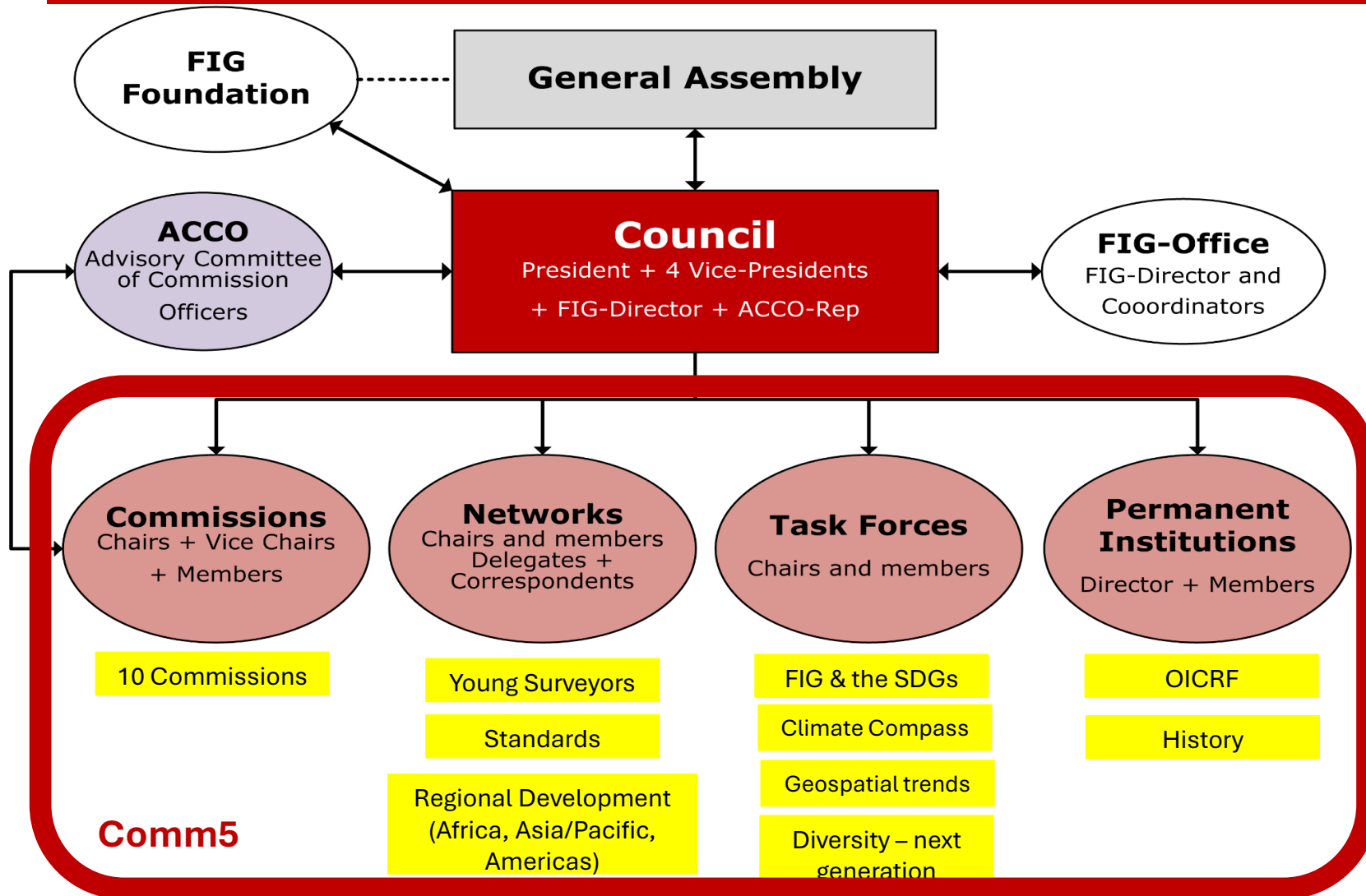


- "FIG Commission 5 focuses on delivering fit-for-purpose performance in Positioning and Measurement.
- It provides the tools, techniques and procedures to educate and train surveying professionals everywhere.
- Appropriate methodology for data collection and processing are required to be successful in an era of global, integrated geospatial data."

**Comm5**



# Our Place in the FIG Organisation



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=> 'Capacity Development'

**FIG**

FIG Commission 5  
Positioning and Measurement

# Partners of Commission 5



International Committee on  
Global Navigation Satellite Systems



Pacific  
Community  
Communauté  
du Pacifique



UN-GGIM  
UNITED NATIONS  
COMMITTEE OF EXPERTS ON  
GLOBAL GEOSPATIAL  
INFORMATION MANAGEMENT



United Nations  
Global Geodetic  
Centre of Excellence

## FIG Regional Capacity Development Networks



**Africa  
(ARN)**



**Asia/Pacific  
(AP-CPD)**



**Americas**



**FIG Young  
Surveyors Network**

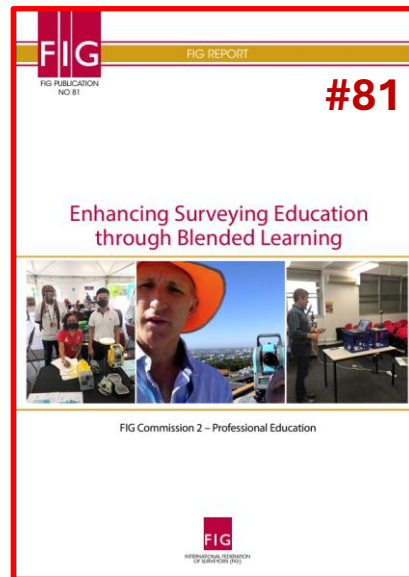
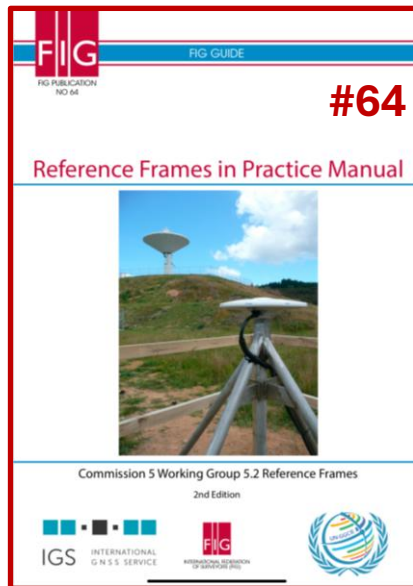


**FIG Standards Network**

# Recent Activities – 2025/26

## Publications

- #64 Reference Frames in Practice\* (updated)
- #81 Enhancing Surveying Education through Blended Learning



## Involvement in UN-GGCE GCDW 2025

- Europe, Africa, Asia Pacific, Americas
- 210+ participants from 100 nations

	<p><b>UN-GGCE</b> Global Capacity Development Workshops 2025</p> <p>Summary Report: #1 Europe Dates: 17-21 Feb, 2025 Location: UN Bonn, Germany</p> <p>Dr. Ryan KEENAN Senior Consultant for UN-GGCE</p> <p>Submitted: 25 Feb 2025</p> 	 <p><b>UN-GGCE</b> Global Capacity Development Workshops 2025</p> <p>Summary Report: #2 Africa Dates: 19-23 May, 2025 Location: UN Nairobi, Kenya</p> <p>Dr. Ryan KEENAN Senior Consultant for UN-GGCE</p> <p>Submitted: 23 May 2025</p> 
	<p><b>UN-GGCE</b> Global Capacity Development Workshops 2025</p> <p>Summary Report: #3 Asia Pacific Dates: 30 Jun - 04 Jul, 2025 Location: UN Bangkok, Thailand</p> <p>Dr. Ryan KEENAN Senior Consultant for UN-GGCE</p> <p>Submitted: 09 July 2025</p> 	 <p><b>UN-GGCE</b> Global Capacity Development Workshops 2025</p> <p>Summary Report: #4 Americas Dates: 03 - 07 Nov, 2025 Location: UNECLAC - Santiago, Chile</p> <p>Dr. Ryan KEENAN Senior Consultant for UN-GGCE</p> <p>Submitted: 24 November 2025</p> 

# Recent Activities



[https://www.fig.net/resources/proceedings/fig\\_proceedings/fig2025/index.htm](https://www.fig.net/resources/proceedings/fig_proceedings/fig2025/index.htm)

- 1,250 attendees from 85 countries
- 100+ Sessions, 42 Sponsors & Exhibitors
- Two days of pre-events
- Three days of Technical Program
- Two days of General Assembly and Task Force workshops





FIG Commission 5  
Positioning and Measurement

# Commission 5 – Updates

## Presentation to General Assembly Session I

**Ryan Keenan** – Chair (2023-2026)



"FIG Commission 5 focuses on delivering fit-for-purpose performance for Positioning and Measurement. It provides the tools, techniques and procedures to educate and train surveying professionals everywhere. Appropriate methodology for data collection and processing are required to be successful in an era of global, integrated geospatial data."



**Positioning and Measurement Technologies: Answering the Question of Where**

### Working Groups

- 5.1 Standards
- 5.2 3D Reference Frames
- 5.3 Vertical Reference Frames (*with Comm 4*)
- 5.4 GNSS
- 5.5 Multi-Sensor Systems (*with Comm 6 / IAG*)
- 5.6 Cost-effective Positioning
- 5.7 Emerging Technologies for PNT (*with IAG*)



# Commission 5 Positioning and Measurement



**Ryan Keenan**  
Chair (2023-2026)



**5 days, 1 pre-event, 7 sessions,  
~55 presentations, ~670 attendees,  
1000s of great memories yet ONE vision..**

### Working Groups

- 5.1 Standards
- 5.2 3D Reference Frames
- 5.3 Vertical Reference Frames *(with Comm 4)*
- 5.4 GNSS
- 5.5 Multi-Sensor Systems *(with Comm 6 / IAG)*
- 5.6 Cost-effective Positioning
- 5.7 Emerging Technologies for PNT *(with IAG)*



**Positioning and Measurement Technologies: Answering the Question of Where**



FIG Commission 5  
Positioning and Measurement

# Strengthening the Global Geodetic Reference Frame for Everyone. Together.



**64 attendees | 22 countries | 5 continents** including 3 funded attendees ->  
- Nepal, Iran and Sri Lanka



Australian Government  
Geoscience Australia



United Nations  
Global Geodetic  
Centre of Excellence

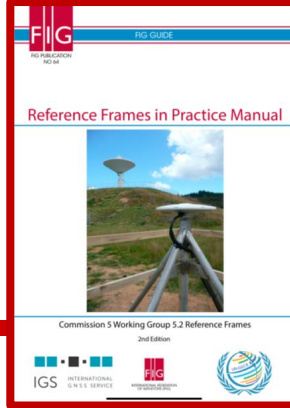




FIG Commission 5  
Positioning and Measurement

# C5 Activities in WW25

## Pre-event: Reference Frames in Practice (RFIP) Workshop Six Technical Session plus our Annual Open Meeting

Monday 14:00

SIDS / AP CDN -  
Geodesy  
Positioning  
Nations for the  
Future: Joint  
Session with  
Commission 5  
Positioning &  
Measurement

Tuesday 11:30

Reference Frames  
and Dynamic  
Datums: Moving  
with the Times  
(C5)

Tuesday 14:00

Multi-Purpose  
Positioning  
Infrastructure:  
Greater than the  
Sum of their Parts  
(C5)

Tuesday 16:00

Innovative  
Applications of  
Cost-Effective  
Positioning in  
Mitigating the  
Impact of Disasters  
& Climate (C5)

C5 meeting

17:30 Open Meeting

Wednesday 11:30

Resilient PNT:  
What, Why, How,  
Who and When?  
(C5)

Wednesday 14:00

An Analog Earth in  
Digital Models:  
Capturing the  
World Around Us  
(C5)



International Committee on  
Global Navigation Satellite Systems



Pacific  
Community  
Communauté  
du Pacifique





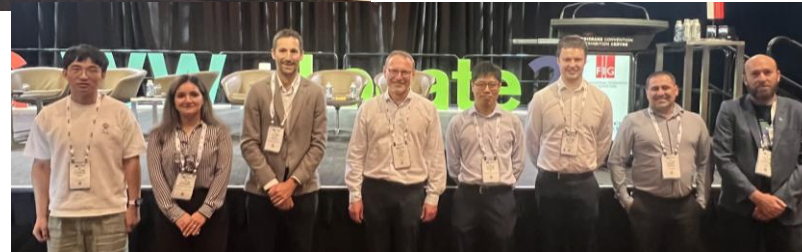
FIG Commission 5  
Positioning and Measurement

# Progress through Partnerships. Within FIG and beyond. Together.



Asia/Pacific  
(AP-CPD)

## SIDS with Asia Pacific CDN



Pacific Community  
Communauté du Pacifique



Australian Government  
Geoscience Australia



Toitū Te Whenua  
Land Information  
New Zealand



IGS  
INTERNATIONAL  
G N S S SERVICE



# Monday 07 April 2025: Geodesy in Small Island Development States (SIDS) with AP CDN



**Monday 14:00**

SIDS / AP CDN -  
Geodesy  
Positioning  
Nations for the  
Future: Joint  
Session with  
Commission 5  
Positioning &  
Measurement



**Presentations:** 7  
**Attendees:** ~100  
**Opportunities:** Unlimited !

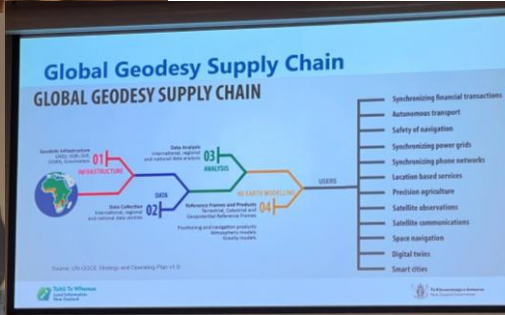




FIG Commission 5  
Positioning and Measurement

# Tuesday 08 April 2025: Reference Frames and Dynamic Datums: Moving with the Times

Tuesday 11:30

Reference Frames and Dynamic Datums: Moving with the Times (C5)



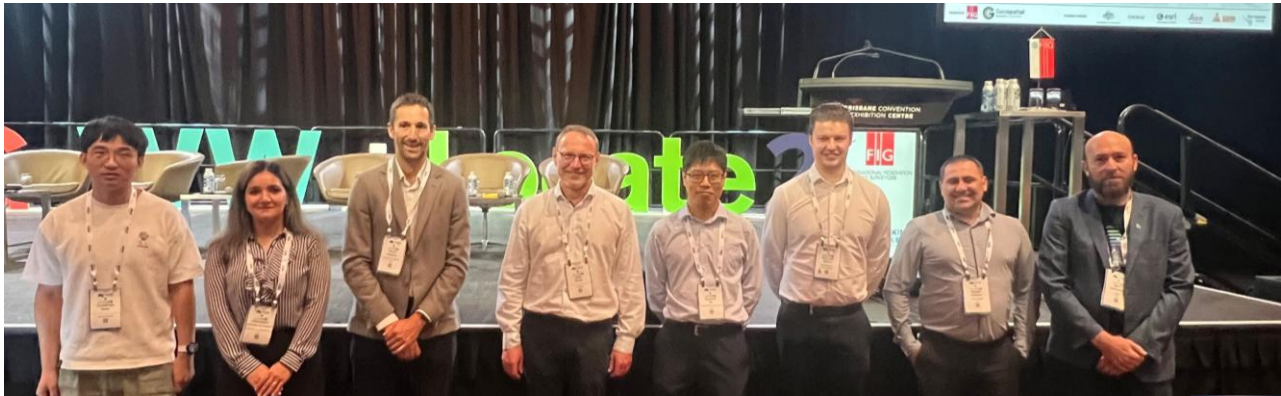
**Presentations:** 9  
**Attendees:** ~140  
**Opportunities:** Unlimited !



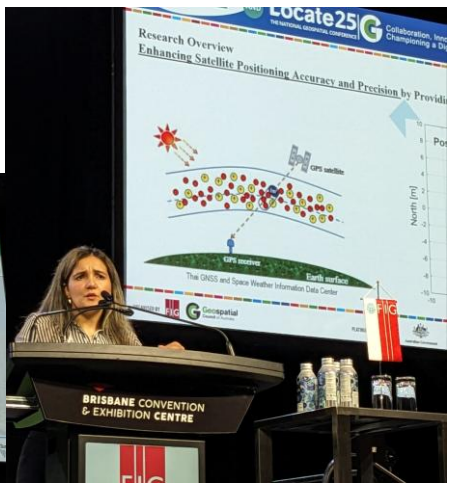


FIG Commission 5  
Positioning and Measurement

# Tuesday 08 April 2025: Multi-Purpose Positioning Infrastructure: Greater than the Sum of their Parts



**Multi-Purpose Positioning Infrastructure: Greater than the Sum of their Parts (C5) ★**  
📍 WHERE Plaza Ballroom  
🕒 WHEN 2:00pm - 3:30pm



**Presentations:** 7  
**Attendees:** ~130  
**Opportunities:** Unlimited!

IGS INTERNATIONAL GNSS SERVICE



# Tuesday 08 April 2025: Innovative Applications of Cost-Effective Positioning in Mitigating the Impact of Disasters & Climate

Innovative Applications of Cost-Effective Positioning in Mitigating the Impact of Disasters & Climate (C5) ★

📍 WHERE Plaza Ballroom  
🕒 WHEN 4:00pm - 5:30pm



**Presentations:** 4  
**Attendees:** ~50  
**Opportunities:** Unlimited !

# Tuesday 08 April 2025: Commission 5 Open Meeting

## Commission 5 Positioning and Measurement Annual Meeting ★

📍 **WHERE** Plaza Ballroom  
🕒 **WHEN** 5:30pm - 6:30pm



**Presentations:** 7  
**Attendees:** ~45  
**Opportunities:** Unlimited !



**FIG Highlights 2024/25**

- Publications**
  - #64 Reference Frames in Practice (upd 2024)
  - #74 Cost-Effective Positioning .... pending
- Involvement in UN-GGCE Listening Tours 2024**
  - FIG | IHO | ISO sessions
  - Regions – Americas, Asia Pacific, Australia
- Events (2024/25)**
  - 14<sup>th</sup> Experts UN-GGIM – New York, USA
  - UN-GGCE – Bonn, Germany
  - Intergeo 2024 – Stuttgart, Germany
  - FIG C7 Annual Meeting with C5 Sarawak, Malaysia
  - FIG RC 2024 – Kathmandu, Nepal
  - RFIP Seminar 2025 – Brisbane, Australia

**FIG Working Week 2024**  
19-24 May Accra, Ghana  
Your World, Our World. Resilient Environment and Sustainable Resource Management for All

**#64 Reference Frames in Practice Manual**

**IGS INTERNATIONAL GNSS SERVICE**

**United Nations Global Geospatial Centre of Excellence**

**UN-GGIM**

**ICG International Committee on Global Navigation Satellite Systems**

**FIG Rule of Surveyors in Lead Tenure Security, Climate Action & Disaster Resilience**

**FIG NICS Kathmandu, Nepal 14-16 November Regional Conference 2024**



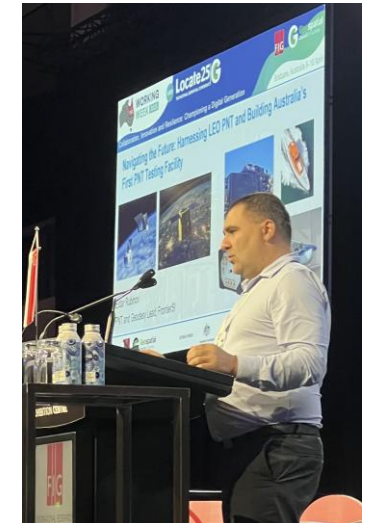
**FIG C5 Activities in WW25**

Pre-event: Reference Frames in Practice (RFIP) Workshop  
Six Technical Sessions plus our Annual Open Meeting

Monday 14:00	Tuesday 11:30	Tuesday 14:00	Tuesday 16:30	Wednesday 11:30	Wednesday 14:00
17:00-18:00 C5A: Geomatics Engineering and Surveying for the Future: Smart Infrastructure and Sustainable Development	Technical Papers and Experiences in Surveying and Geomatics Engineering	Technical Papers and Experiences in Surveying and Geomatics Engineering	Technical Papers and Experiences in Surveying and Geomatics Engineering	Technical Papers and Experiences in Surveying and Geomatics Engineering	Technical Papers and Experiences in Surveying and Geomatics Engineering
17:30 Open Meeting					

# Wednesday 09 April 2025: Resilient PNT: What, Why, How, Who and When? + Panel

**Resilient PNT: What, Why, How, Who and When? (C5) ★**  
📍 **WHERE** Plaza Ballroom  
🕒 **WHEN** 11:30am - 1:00pm



**Presentations:** 7  
**Attendees:** ~100  
**Opportunities:** Unlimited !



# Upcoming Events



**XXVIII FIG CONGRESS**  
**MAY 2026**  
**Cape Town, South Africa**

Solutions and Technologies  
towards the 2030 Sustainable  
Development Goals

The banner features the FIG logo on the left, a stylized globe with a red outline, and a background image of a beach with waves and mountains under a blue sky.

**FIG Working Week 2027**  
Stavanger Norway 23-27 May  
*The Power of Where for the new Generations*

The banner features the FIG logo on the left, a dark blue header with white text, and a photograph of a harbor at sunset with buildings and boats.

**FIG WORKING WEEK**  
**PARIS**  
**150 YEARS 25-29 JUNE 2028**

The banner features the FIG logo on the left, the word 'PARIS' in large red letters with a flame above the 'i', and the dates '150 YEARS 25-29 JUNE 2028' in white and red text on a dark grey background.

# Congress 2026 in Cape Town – our plans

## Planned Sessions:

- Reference Frames In Practice Workshop (1.5 day pre-event)
- ***C5-1 Multi-Purpose Positioning Infrastructure for Sustainable Land Administration and Development across Africa - Greater than the Sum of their Parts\**** (joint Session with Comm7 & ARN)
- ***C5-2 Reference Frames and Dynamic Datums across Land and Sea to support our Changing Planet***
- ***C5-3 Innovative Applications of Cost-Effective Positioning in Mitigating the Impact of Disasters & Climate\**** (joint with Comm6 and TF Climate Compass)
- ***C5-4 An Analog Earth in Digital Models: Capturing the World Around Us*** (joint with Comm6)
- ***C5-5 Education, Training and Capacity Building: Updates on Geodesy from around the World\**** (joint with YSN, IAG ECS and Africa CDN)
- ***C5-6 Where Positioning & Measurement is going*** – hosted by Commission 5



FIG Young  
Surveyors Network



Africa  
(ARN)



United Nations  
Global Geodetic  
Centre of Excellence



# An Open Invitation....

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FIG invites all to our upcoming Events, Commissions and **Networks**:

- Attend
- Participate
- Collaborate
- <https://fig.net>

For information, contact: Ryan Keenan – Chair, FIG Commission 5  
(<mailto:ryan@positioninginsights.com.au>)

Thank you!