

6-11 May 2018 **ISTANBUL**



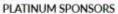




















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EMBRACING OUR SMART WORLD WHERE THE CONTINENTS CONNECT:

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The globalization of our profession

- Established by 7 European Associations in 1878
- During the last 50 years 8 out of the 13 Honorary FIG Presidents and 52 out of the total 67 FIG Honorary Members have been Europeans, with a vision:

To make FIG global!

140 years of FIG: a robust global Federation, with the same vision!

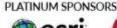


















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Our vision

The vision of FIG is of a modern and sustainable surveying profession in support of society, environment and economy by providing innovative, reliable and best practice solutions to our rapidly changing and complex world, acting with integrity and confidence about the usefulness of surveying, and translating these words into action.

FIG supports international collaboration:

- Members
- Sister associations, regional bodies,
- UN bodies, including FAO and the World Bank, and other professionals,

in support of governments for the implementation of the ambitious Sustainable Development Agenda 2030















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"global" surveyors

It is the mandate of FIG to create "global" surveyors capable to contribute to the sustainable development agenda.

Surveyors who will have a "global education" that covers all fields of surveying but also who will have an understanding of the "global challenges" and who will be capable to develop the profession and work efficiently everywhere in order to improve every part of our world, so that nobody will be left behind.

Surveyors all over the world are committed and encouraged to test and take advantage of the current and emerging technological developments in order to improve their service to society.















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The Global Surveyors' Day 21st of March

CLGE and NSPS FIG strongly supports this initiative

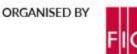
Celebrated during the WB conference

Land and Poverty Conference 2018: Land Governance in an Interconnected World

A good opportunity for MAs to inform their members about the values and the challenges of globalization and of participation in FIG.



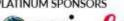


















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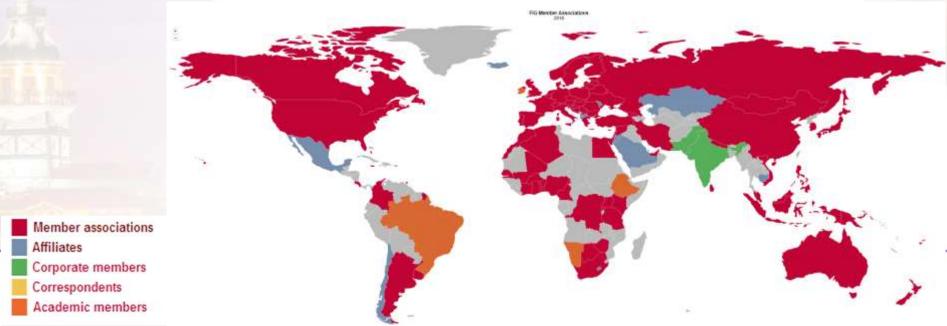
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Participation

More than 250000 surveyors

- Various levels of participation (www.fig.net)
- ✓ getting informed, networking
- ✓ teamwork engagement,
- ✓ goal setting, commitment to collective objectives,
- ✓ joint consultation in decision making, at all levels of administration
- ✓ We have the knowledge and the power to make global growth happen







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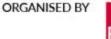
Diversity

- ✓ benefits All of us,
- ✓ means All of us,
- ✓ is the key to success for FIG & for All of us
- ✓ If we are not diverse, we are not global!

I personally thank the GA for the trust























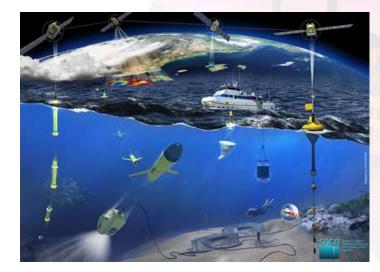
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The value of our evidence-based location information, tools and services

- The geospatial transformation of the society supports
 - Transportation
 - property markets, access to credit mechanisms,
 - > construction, city modeling, monitoring
 - ➤ fair taxation, disaster recovery, humanitarian support
 - > agriculture & water management,...
- we cannot measure or monitor sustainability and growth without the intelligent use of evidence-based geospatial data
- Technology & Internet has changed the way people work and live
- helps us to "uncover" the missing information and reduce inequalities...
- Development of indicators to monitor the progress



There are many data collection devices we collect: Authoritative and non-authoritative data, good enough for various purposes

From a "spatially enabled" society to a "spatially mature" society



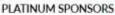




















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Surveyors' Role in the Age of Disruption

From the need for providing society with

reliable, evidence-based, open or low cost data

for decision-making, toward the need to manage a "tsunami" of geodata

- extended use of affordable smart devices; crowdsourcing
- > 5G mobile network technology, 40-60% higher speeds by 2020: massive creation & consumption of data
- the Internet of Me, Internet of Things,
- Internet of Value, Blockchain & Distributed Ledger Technology (DLT)
- Machine learning, cognitive computing for all to improve human decision-making
- > Autonomous vehicles & drones

























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See the opportunity not the complexity

- "with a 10% increase in high-speed Internet connections, economic growth increases by 1.3%" and leads to "democratization of innovation."
- "in a world where only 40% of the population have access to the internet; we could boost the global GDP by \$1 trillion by connecting another 327 million people." 5G will enable low-cost, low-power sensors to be embedded in building, appliances, and vehicles. It will be a key enabler of the "internet of things."

The World Economic Forum



















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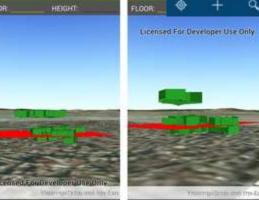
Examples of crowdsourced 2d (2015) and 3d cadastral surveying (2018)



Licensed For Developer Use Only







- every person has something of value to contribute; what is the "risk"?
- work may be done faster and cheaper and with fewer errors when validation systems are in place
- validation is critical in surveying
- when crowdsourcing is used in surveying, <u>it</u>
 <u>requires training of volunteers</u>
- easy application for data-collection that is not positionally critical

General Rule

- it may involve the collection of information that is required to be neither positionally precise nor dimensionally accurate, yet, important enough to achieve the SDGs, and
- as long as positioning and validation improve the use of VGI information will be extended.







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Our mission

Assess & Increase the value of geospatial data, our land tools and our services for all people to maximize benefits

Our mission:

- to deliver more benefit, more transparency, more safety, more environmental quality, more growth, more fairness, more education, more gender equality, more efficiency in governance of urban and rural areas....more freedom
- This is our contribution to the dream of a future intelligent city, a happy city, and a sustainable management of natural resources. Our contribution to the Sustainable Development Agenda 2030.
- Since 2012 UN World Happiness Reports (Happiness: a Holistic Definition of Development) GNH variables: real GDP per capita, social support, healthy life expectancy, freedom to make life choices, generosity, and perceptions of corruption
- Value of our geospatial data can be measured: Efficiency gain & Productivity gain















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Where is the Data: increase our skills

- Have compassion, cooperate-work with others, deal with diversity,
- increase our digital fluency & computing skills to ensure democratization and make digitalization a peaceful transition power for the benefit of all
- In the digitalized world to be capable to infuse codes and algorithms with our values

















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Collaboration with UNGGIM

- > UN GGIM Expert Group on Land Administration, March, Amsterdam, (C. Lemmen)
- > UN-GGIM: Europe Fourth Plenary Meeting, June, Belgium (VP Lilje
- ➤ **Technical Seminar on Reference** by FIG Com 5 and FIG APCDN, in cooperation with Japan Federation of Surveyors, IAG, UN-GGIM-AP and ICG, July, Japan, R.Sarib
- > the 7TH UNGGIM Session NY, August 2016:

President participated (presentation at UNGGIM Academic Network), VP Lilje, G.Schennach

- > 6th UN-GGIM-AP Plenary Meeting & FIG APCDN, October, Japan VP Lilje, Rob Sarib
- > 5th UN-GGIM High Level Forum, subcommittee on Geodesy, Nov, Mexico, VP Lilje







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SDGs: do your homework!

- ✓ Use the crowd in a powerful way.
- ✓ "bring the people to the data" increase the usability of the data
- ✓ secure **property rights for all**! "**informal settlements** and the missing data",

 The great economic divide: 2.5 billion people can register property rights and 5 billion they can't.

Property rights are one of the drivers of economic growth as well economic freedom

- ✓ policy issues! technical issues! "make it simple...if you can"
- ✓ adopt fit-for-purpose land administration,
- ✓ standards and the blockchain technology, IoT
- ✓ the need to "focus and set priorities" for "implementation",















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Cooperation with GLTN

- ✓ Congress special sessions
- √ WB sessions
- ✓ IAB GLTN meeting in 2017, & 2018
- ✓ Publications
- ✓ YSN STDM training, Volunteer Community Surveyor Program

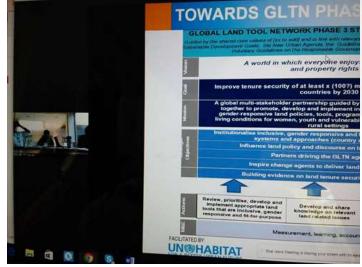
 VCSProgram

 GLT
- ✓ ARN FFP workshop
- √ FIG Foundation
- ✓ Professional cluster lead

GLTN IAB meeting, 2018



GLTN IAB virtual meeting, 2017























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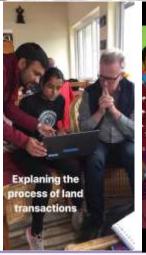
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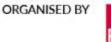
The YSN

- ✓ international network with strong regional engagement,
- ✓ Several regional events have been held,
- ✓ UN-Habitat/GLTN-FIG Young Surveyors Volunteer Community Surveyor Program (VCSP) is a powerful driver for both social impact and professional development. 13 YS participated in 7 GLTN Programs
- ✓ STDM Training of Trainers (280 YS from 65 countries trained)
- ✓ Charity events (walk/run, dance) during FIG WW and Congress to give back



























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FIG Publications 2015-May 2018

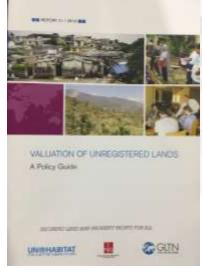
in cooperation with GLTN















The Social Tenure Domain Model - A Pro Poor Land Tool in English, Japanese, French, Arabic

















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Collaboration with FAO

- 2017 WW : FIG academic forum and commission 2 are doing excellent work to influence courses;
- FIG Action Plan for members: implement VGGT & policy topics; learn from existing experiences; promote VGGT technical guides & participate in reviewing them; establish national multi-stakeholder platforms in all countries; introduce UN-FAO e-learning programs in corresponding curricula
- > 1 session on land consolidation
- 2018 Congress: FIG academic forum focus on VGGT, 1 session on VGGT & 1 session on land consolidation

VOLUNTARY GUIDELINES ON THE

Responsible Governance of Tenure

OF LAND, FISHERIES AND FORESTS IN THE CONTEXT OF NATIONAL FOOD SECURITY

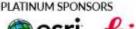


















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The World Bank

President, VP DD & VP OE as well as Com8 & 9 Chairs participated in the WB conferences March 2017 & 2018, master classes and strategic sessions

Finnish reception in USA, GLTN, HABITAT FOR HUMANITY receptions: networking events

- MoU FIG/WB on joint research & conferences in 2018 (Greece)
- President presented a paper, chaired TSs (2017&18)
 the progress on the compilation of the FIG / UNECE
 Guidelines for Formalizing the Informal
- Strategic sessions on FFP, Valuation of unregistered lands, Gender in 2017 & 2018
- Celebrations for the Global Surveyors Day

















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Cooperation with UNECE WPLA

- President presented her on-going research on informal development in the region and on formalization practices; as well as the progress of the compilation of the guidelines for formalization
- President participated in the 10th session of the Working Party on Land Administration and is elected as UNECE WPLA bureau member in March 2017 and made a presentation about a future joint research

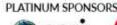




















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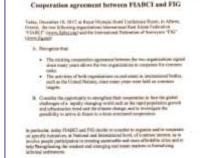
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Cooperation with FIABCI events, 2017, 2018

Agreement for Cooperation with the
International Real Estate Federation
(FIABCI) on Sustainable Real Estate
Markets and Formalization of Informal
Development









alterna

















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Cooperation with CLGE

- CLGE anniversary and meeting, April, Switzerland
- > President participated in the CLGE **Conference on** Procedures for the legalization and registration of buildings and building units-Challenges and Problems, K&CLGE, Pristina, 2018
- Cooperation in the fields of as IPMS, ILMS (M. Barbieri represents FIG), the Young Surveyors European Network and the Forum of Regional Bodies























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Cooperation with ISPRS

The 10th International
conference on Mobile
Mapping Technology
(MMT2017), May 6-8, 2017,
hosted by the Arab Academy for
Science, Technology, and
Maritime Transport (AASTMT),
Egypt





Cooperation with FIG MA

FIG Com 3, Lisbon, 2017

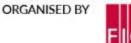






GIS Congress, Adana, 2017















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Cooperation with MA on the occasion of celebrations

2017: the year for celebrations

200 years of Austrian Cadaster





100 years of the Rural & Surveying Engineers, NTUA











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2017: the year for celebrations

Celebration of 185 year of Dutch Kadaster

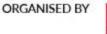
At the Tuschinski Theater
Amsterdam



Part of the Celebration was the exclusive premiere of the documentary 'ONTHEEMD' (DISPLACED).

This documentary, by directors
John Appel and Heddy Honigmann,
portrays residents from the
Netherlands, Colombia and Nepal
and their land rights.

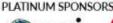
The documentary was quite extraordinary and showed in a special and very personal way what land rights mean.



















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Cooperation with MA

- meeting in Baku, Feb 2017 Real Estate Committee and the Cadastre
- ✓ Chintergeo, Oct 2017
- ✓ World Geospatial Forum, Hyderabad, Jan 2018.
- ✓ "Survey of India" an FIG affiliate member
- ✓ RK Soft, software company an FIG corporate member from Turkey















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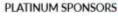




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DGI 2018 Geospatial Intelligence for National Security Conference

































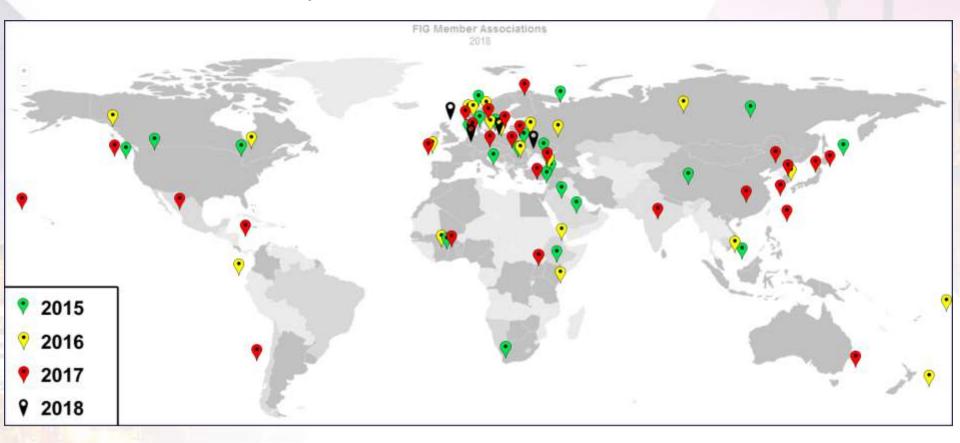


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Global FIG representation in activities and events

















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Commission 1

✓ follow-up

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Marking, by end of 2018

✓ Contributed to IES

Commission 2 **FAO-VGGT**







Commission 3

- ✓ FIG Pub on New Trends in Spatial *Information:* Surveyors' Role in the Era of Crowdsourcing to be finalized by end of 2018
- ✓ 4 workshops
- ✓ Cooperation with FAO, UNESCO, UNHABITAT, ILMS



Special issues in peer reviewed journals YSN support/cooperation















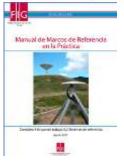




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Commission 6 ✓ 1 workshop

✓ 2 Joint events

✓ LADM implementation

✓ LADM II will be developed: valuation, blockchain, 4D

✓ Operationalization by the Open Geospatial Consortium

✓ GLTN STDM widely used



√ Nautical charts Standard pub

✓ IPMS coalition

Commission 5

- √ 4 seminars, 2 workshops
- **Commission 4**√ plan to revise the publication "Cost Effective GNSS Positioning Techniques"
 - ✓ Pub on "Reference Frames in Practice" in Spanish,
 - √ Manual under review
 - ✓ Positioning pub under review
 - ✓ papers in Journal

Commission 7

4 annual workshops & several joint events

- ✓ Land Consolidation and Readjustment & Apeldoorn Declaration
- ✓ 2 Workshops Delft 2017& Zagreb 2018
- ✓ Thematic Sessions: World Bank L&P Conference 2017 and 2018
- ✓ Sessions in FIG Events
- ✓ Cadastral template 2.0 56 countries















THE SCIENCE OF WHERE



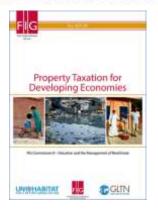


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Commission 8

- ✓ Pub on Water management (end of 2018)
- ✓ Rural development
- ✓ Contribution to several intercommission activities
- √ worskhops

Commission9

- ✓ Publication on Blockchain, almost readv
- ✓ Property Taxation for Developing **Economies**
- ✓ Contribution to the Task Force on **Property Markets**
- (2 publications by end of 2018)

Commission 10

- ✓ *ICMS*, *July 2017*
- ✓ BIM pub
- ✓ Pub on Professional Competencies for Q/S & Construction Economists / Cost Engineers





















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Africa Regional Network

- ✓ Publication 70
- ✓ Promoted ownership of the network
- ✓ Built strategic alliances
- ✓ Great visibility and clarity of FIG benefits to member associations
- √ annual Workshop our contribution to the SDG themes:

2015 Kenya SDG5,

2016 Ivory Coast: SDG1 &

The VGGT

2017 Rwanda: SDG11 &

NUA

2018: Turkey: Publication

launch

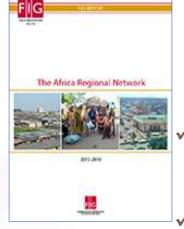


Asia Pacific Capacity Development Network

- √ 2 events in Japan (Kobe and Kumamoto) with UN GGIM AP Working Group 1 - Reference **Frames**
- ✓ Release of the Pacific Geospatial and Surveying Council (PGSC) 2017-2027 Strategy - "Positioning the Pacific Island Countries and *Territories for the Future"*
- Awareness about the value of capacity and professional development
- ✓ United Nations Subcommittee on Geodesy
- ✓ Education Training program.





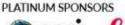
















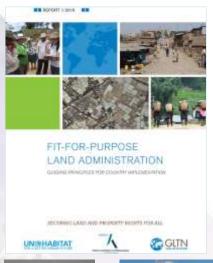


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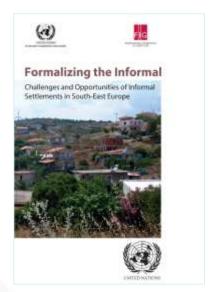
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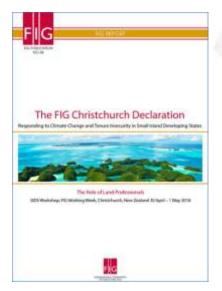
FIG Publications 2015- May 2018



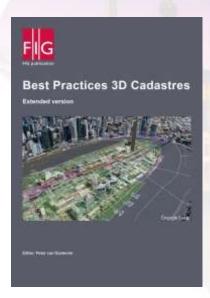










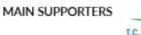


























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2016: 7000 € **PhD FIG F Scholarship** to Mr. Mukupa (Zambia)

2017:

- ✓ Introduction of **FIG Commission Publication Author Support Grant** of up to 28,000 € over a maximum of four years
- ✓ 7000 € FIG Foundation **PhD Scholarship** awarded to Mr. Collins Mwungu (Kenya)
- ✓ FIG Foundation grant in support of new initiative by UN-Habitat/GLTN (Global Land Tool Network) and FIG Young Surveyors Network Volunteer Community Surveyor Program (VCSP)
- ✓ Creation of informational **videos** on applying for grants
- **74,227 €** *Grants awarded (2015-2017)*
- 80,140 € Income (2015-2017)

33 Total Grants awarded (2015-2017)

Thanks to Trimble- Charter Foundation Partner and William Marbell for continued generous support since 2002 and sponsor of **FIG Foundation dinner** since 2010.



Directors
John Hohol,
Mike Barry,
Pengfei Cheng,
Orhan Ercan,
L. Groenendijk,
Daniel Steudler,
Paul van der
Molen















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FIG Task Forces

Task Force on Real Estate Market Study

- ✓ Conference
- √ Workshops
- ✓ Reports delivered
- ✓ Pub in preparation



FIG Task Force on FIG Commission Structure

- ✓ Meetings
- ✓ Round table discussions
- ✓ Reports delivered



FIG Task Force on Scientific Journal

- ✓ Meetings
- ✓ Report delivered



FIG Task Force on FIG Corporate Members

- ✓ Meetings
- √ Report delivered





















6-11 May 2018 ISTANBUL

EMBRACING OUR SMART WORLD WHERE THE CONTINENTS CONNECT:

ENHANCING THE GEOSPATIAL MATURITY OF SOCIETIES

FIG Office FIG Council FIG Commission Chairs FIG TF Chairs **Chairs of Permanent Institutions and** Networks FIG members

Thank you all for the great cooperation and your valuable contributions in 2017











