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



## "Ensuring the Rapid Response to Change, Ensuring the Surveyor of Tomorrow"

# ANNUAL REVIEW

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# Greeting from the President



"Ensuring the Rapid Response to Change, Ensuring the Surveyor of Tomorrow"

FIG motto for 2015-2018

**THE YEAR 2017** was rich with activities and experiences for all of us.

We learnt to recognize the value of the globalization of our profession.

In fact, the globalization of our profession had its start with the establishment of FIG on the 18th of July, 1878 by seven European national surveying associations. The European surveyors have been, since then, committed to make FIG a robust global Federation. 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. Today, 140 years since its establishment, FIG has 103 member associations from 89 countries, 43 affiliate members from 41 countries, 27 corporate members and 84 academic members from 50 countries, representing more than 250,000 individuals from around the world who have joined those original seven European associations, making us a truly global organization.

With the systematic work of the European surveyors and NSPS/U.S. we managed to establish a Global Surveyors' Day to be celebrated on the 21st of March each year. Through our international collaboration with our members, the sister professional associations, regional professional bodies as well as UN bodies and the World Bank, we aim to transform all surveyors into global surveyors. Surveyors who will have a global education for the progress of surveying in all its fields and applications everywhere; but also surveyors who will have an understanding of global challenges and will be able to develop the profession for the betterment of all parts of our world, so that no one is left behind.

We also learnt to recognize the value of participation in FIG. By networking, engagement in our Commissions and Task Forces, commitment to our collective objectives and teamwork, presentation of our work, and participation in the joint consultation for decision making and goal setting we realize that we actually have the knowledge and the power to make global growth happen. My vision is to see an even greater diversity of participation in FIG commissions as well as in the top level of FIG administration. Participation in FIG brings satisfaction by knowing that through our evidence-based geospatial data, land tools and services we manage to enable the geospatial transformation of our society and to contribute to the ambitious Global Sustainable Development Agenda 2030 and to the dream of a happy city and a sustainable management of natural resources.

In the 2017 Working Week we analyzed the importance of the digitalization of our society: the need to increase our technical skills in order to provide the needed data in a timely manner for smart decision-making; the need to improve our skills to be able to use the crowd in a powerful way and to manage and process authoritative and non-authoritative data; the need to open geospatial data to society; and the need to increase the usability of data to ensure that data and tools are practical for use by all for maximum benefits.

Our major efforts in 2017 focused on raising awareness and providing fit-for-purpose land administration tools for secure property rights for all. We recognize that the great economic divide in the world today is between the 2.5 billion people who can register property rights and the 5 billion who are impoverished, in part because they cannot. The reality of private rights provides the assurance people need in order to invest and protect their property from abuse and is one of the drivers of economic growth and economic freedom. In 2017 we worked mainly in the support of urban property markets. Our products include the publication of an excellent, thorough research on global progress in 3d cadasters, and the compilation of technical guidelines for fit-for-purpose formalization of informal development based on the experience from UNECE region. The guidelines are still under development and FIG has signed an agreement with the International Real Estate Federation (FIABCI) to work closely in this field.

In response to global digitalization trends our affiliate members – NMCAs – started to introduce new technologies and a new mindset to gain the public's trust in new technologies, IoTs, cadaster 4.0, e-processing, e-legislation, e-systems, e-customers, e-trusting, and finally e-agencies. FIG has delivered an initial, informative publication on blockchain technology. FIG also contributed in the development of the International Ethics Standard. In addition, the compilation of the International Construction Management Standard, launched in 2017, is one of FIG's major contributions; training seminars

Cover photos reflecting the year 2017 with its many activities spanning from the FIG Working Week 2017 in Helsinki, Finland, the visit of Vice President Diane Dumashie to Ghana meeting President of GHIS, Surv Emmanuel T Martey, FIG President Chryssy Potsiou who has represented FIG at many events, the active Young Surveyors and finally an interior view of Topkapi Palace in Istanbul, Turkey.

Cover photo on far left: Lauri Rotko / Visit Helsinki; and far right: Valeriya Potapova / Dreamstime.com



FIG President Chryssy Potsiou signs the agreement of collaboration between FIG and the International Real Estate Federation (FIABCI).

on BIM is anticipated to raise efficiency in this field. In such a process standards become even more important but acquiring ISO standardization is still a problem for developing countries. FIG is working for an upgraded version of LADM. We work closely with GLTN and FAO; FIG held more STDM training, and finalized the important publication on Valuation of Unregistered Lands. These are some of our 2017 activities that prove our critical role as change agents.

On the occasion of Workshops, I have had the honor to be in contact with many of our member associations. I wish to express my gratitude and to congratulate them again for the excellent organization of those events. Following our 2017 FIG Working Week I participated in the UNGGIM general assembly in New York; the celebrations of the 200years of the Austrian cadaster; INTERGEO in Berlin; the joint FIG Com 7,8 and 9 conference in Romania; the FIG Com 3 workshop in Lisbon: the 78th session of the UNECE Committee on Housing and Land Management in Geneva; the International Geographic Information Systems Congress in Adana; DGI Geospatial Intelligence for Security conference in London; the World Bank conference; the Com7 LADM conference in Zagreb; the FIABCI event in Greece; the MIPIM-The World's Leading Property Market congress in France; and the CLGE conference in Kosovo. I wish to congratulate all other organizers of FIG events in which I had not managed to participate, and every member who has taken active part in FIG functions during 2017. Without the active and dedicated engagement of its members FIG would not be able to accomplish its goals.

Chryssy Potsiou FIG President

#### **FIG VISION**

The FIG vision 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.

#### **ABOUT FIG**

FIG is the premier international organization representing the interests of surveyors worldwide. It is a federation of the national member associations and covers the whole range of professional fields within the global surveying community. It provides an international forum for discussion and development aiming to promote professional practice and standards.

FIG was founded in 1878 in Paris and was known as the Fédération Internationale des Géomètres. This has become anglicized to the International Federation of Surveyors. It is a UN-recognized non-government organization (NGO), representing more than 120 countries throughout the world, and its aim is to ensure that the disciplines of surveying and all who practise them meet the needs of the markets and communities that they serve.

# **FIG Activities**



The year 2017 has been eventful for FIG and the third year of the current leadership (2015–2018). In this Annual Review you can see a brief overview of FIG activities and the involvement with members and other organisations and entities.

### FIG Represents the Interests of Surveyors Worldwide

FIG is a United Nations and World Bank recognized non-governmental organization of national member associations and other affiliated members from over 120 countries and covers the whole range of professional fields within the global surveying community, hereunder surveying, cadastre, valuation, national mapping professionals, geodesy, geospatial experts and quantity surveyors. It provides an international forum for discussion and development aiming to promote professional practice and standards. Currently FIG has:

- 103 member associations from 89 countries
- 43 affiliate members from 41 countries
- 84 academic members from 50 countries

- 27 corporate members
- 4 correspondent members.

The Work Plan of the Council for the term 2015–2018 specifies: FIG vision 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.

With the overall motto for this presidency: "Ensuring the Rapid Response to Change, Ensuring the Surveyor of Tomorrow".

### The Work of FIG

Throughout the world, individuals and organisations support FIG with their contributions to the overall FIG agenda. Each member can appoint a delegate or correspondent to the ten commissions and the commission chairs together with all these many volunteers add to the FIG agenda and activities, contributing to the betterment of the world. 12th Meeting of the International Committee on Global Navigation atellite Systems









From right front row: Diane Dumashie, FIG Vice President responsible for the Commissions, Brian Coutts Commission 1, Fahria Masum Commission 2, Enrico Rispoli Commission 3, Angela Etuonovbe Commission 4, Volker Schwieger Commission 5, Remy Boudon Commission 6, Eva-Maria Unger Young Surveyors back row from right Gerda Schennach Commission 7, Kwame Tenadu Commission 8, Steven Nystrom Commission 9 and See Lian Ong Commission 10.

#### **FIG Commissions**

Commission 1 – Professional Standards and Practice Chair: Mr. Brian J. Coutts, NZIS, New Zealand

**Commission 2 – Professional Education** Chair: Ir. E.M.C. (Liza) Groenendijk, GIN, Netherlands / Fahria Masum, Germany

Commission 3 – Spatial Information Management Chair: Dr. Enrico Rispoli, CNGeGL, Italy

**Commission 4 – Hydrography** Chair: Ms. Angela Etuonovbe, NIS, Nigeria

Commission 5 – Positioning and Measurement Chair: Prof. Dr.-Ing. Volker Schwieger, DVW, Germany

**Commission 6 – Engineering Surveys** *Chair: Dr. Ivo Milev, USLMB, Bulgaria* 

Commission 7 - Cadastre and Land Management Chair: Ms. Gerda Schennach, OVG, Austria

#### Commission 8 – Spatial Planning and Development

Chair: Mr., M.A (Envt. Mgt & Policy) Kwame Tenadu, GHiS, Ghana

Commission 9 - Valuation and the Management of Real Estate Chair: Mr. Steven Nystrom, NSPS, USA

Commission 10 – Construction Economics and Management Chair: Mr. See Lian Ong, RICS, Malaysia

#### **FIG Networks**

FIG Standards Network Chair: Mr. David Martin, OGE, France

FIG Regional Capacity Development Network Chair: Dr. Diane Dumashie, RICS, United Kingdom

Africa Regional Network Chair: Dr. Diane Dumashie, RICS, United Kingdom

Asia-Pacific Regional Network Chair: Mr. Rob Sarib, SSSI, Australia Young Surveyors Network

Chair: Ms. Eva-Maria Unger, OVG, Austria

#### Permanent Institutions

**The International Office of Cadastre and Land Records (OICRF)** *Director: Dr. Christiaan Lemmen, GIN, Nether lands* 

**The International Institution for the History of Surveying and Measurement** *Director: Mr. Jan de Graeve, UBGE, Belgium* 

#### Task Forces

FIG Task Force on Real Estate Market Study Chair: Mr. Pekka Halme, MIL, Finland

**FIG Task Force on Commission Structure** *Chair: Mr. Mikael Lilje, Swedish professionals for the built environment, Sweden* 

FIG Task Force on Scientific Journal Chair: Prof. Dr. Yerach Doytsher, ALSI, Israel

**FIG Task Force on Corporate Members** *Chairs: Mr John Hohol and Mr Bryn Fosburgh (Trimble), NSPS, USA* 



#### FIG General Assembly 2017

A record number of delegates had found their way to a cold but light Helsinki and the General Assembly. At the first session 63 member associations were represented along with other members of FIG and observers, in total around 300. At the second session on 2 June the representation of Member Associations had increased to 69, giving in total 86 votes. Together with other members and observers there were around 350 participants. In total 73 member associations have been present during the General Assembly.

The General Assembly approved four new member associations

- Ordre des Géomètres Experts de Côte d'Ivoire (OGECI)
- Tanzania Institution of Valuers and Estate Agents (TIVEA)
- The Society of Engineers United Arab Emirates
- Institution of Surveyors of Uganda, ISU The voting for the FIG Working Week 2021 was very close and only marginals differenti-

A record number of delegates and observers found their way to the General Assembly 2017.

Both Poland and Ghana presented exciting bids and creative promotion for the Working Week 2021, and it was finally a close run until it was clear that we can welcome the event to Accra, Ghana. ated the two bidders from Ghana and Poland, who both presented strong and appealing bids. There was a slight favour to Ghana which means that Accra will be the destination for the FIG Working Week 2021. There was furthermore an election of a change in statutes. Two new Honorary Members were welcomed as a thank for their long-standing work

for FIG, Daniel Steudler, Swiss Association for Geomatics and Land Management (geosuisse) Switzerland, and Yerach Doytsher, Association of Licensed Surveyors in Israel.

Two Task Forces were finalized. The Task Force on Scientific Journal presented its final report at the General Assembly, and the task force concluded the Working Week with a meeting together with the FIG Peer Review Editorial Board. The task Force on Commission Structure also presented a concluding report and the General Assembly decided that work should be done to identify a Terms of Reference for a future group on FIG Governance.

fig.net/organisation/general\_assembly/



Antero Aaltonen

#### FIG Working Week 2017 – "Change or Die"

The main activity for FIG is the yearly conference, called Working Week. The name Working Week for a Conference is quite unusual, but adequate for the activities that are going on during the conference. You will find both the yearly General Assembly, held over two days primarily for FIG members, technical sessions, and many meetings with commissions, working groups, task forces, forums and other groups. So, a Working Week is much more than a conference.

The Working Week 2017 was held 29 May – 2 June in Helsinki, Finland with the overall theme: "Surveying the World of Tomorrow – From Digitalisation to Augmented Reality". The theme of the FIG Working Week 2017 focused on the future and the possibilities of living in a digitalised world – not only digitalised, but digitalisation version 2.0. The three plenary sessions were a source of inspiration and responding to the overall theme with the three sub themes: 1 Living of Tomorrow – In a Digitalised World, 2. Professional behaviour – In a Digitalised World and 3. The Contribution of our Profession – In a Digitalised World. The most provocative key note came from Finnish Juha Hyyppä, the Director of Remote Sensing and Photogrammetry of the Finnish Geospatial

Research Institute who finalised the row of plenary speakers giving the audience a vision to think of while back home. His presentation 'Disruptive Technologies Threatening National Mapping and Agencies Centralized Mapping' included that in the next two decades,

new mobile laser scanning systems are making laser scanning more ubiquitous. Even au-

scanning more ubiquitous. Even autonomous robots using pointcloud-generating perception sensors may be added to the ecosystem during this timeframe. Juha is convinced that during the 2020s

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transform



Presidents and Heads of Delegations met on the last day of the Working Week to the traditional Presidents Meeting – this year with a record number of associations.



The Farewell Reception also marked a welcome to Istanbul to the Congress 2018 – here presented by the Turkish Local Organising Committee perfoming a traditional Turkish dance.

and 2030s there will be a great number of laser scanners omnipresent in everyday life. Mobile Laser Scanning is also one of the main techniques to create local virtual reality. Physical and virtual worlds will be merged. His presentation was illustrated with many examples – where cadastre was missing... Even if the use of imagery is promoted in that area. He proposed action items – amongst them a national topographic database with high-quality point clouds and images. 'Change or Die' was his final message.

Three pre-events started the Working Week: Building Information Management, History Symposium and Young surveyor European meeting. Almost 1,500 participants from 90 countries found their way to Finland with its light nights and fairly cold days during the May week, together with 22 exhibitors, and 400 papers presented in 57 sessions, which formed an outstanding and extraordinary Working Week, well organized by FIG Member Associations MIL and MAKLI, in cooperation with FIG and supported by National Land Survey of Finland initiated by Director General Arvo Kokkonen.

As in previous years there were special sessions and Forums, hereunder Director General Forum and the Academic Members Forum organized jointly with FAO on the Voluntary Guidelines.

fig.net/fig2017





# FIG Meetings Around the Globe

FIG President Chryssy Potsiou, and Council, Commissions, Networks, and Task Forces together Le Gerraria Contraction Contra with many other volunteers have represented FIG in many events and activities throughout 2017. It is impossible to mention and include all here as well as their valuable outcome, so this will only give a small glimpse of activities.

INGEO 2017: 7th International Conference on Engineering Surveying held in Lisbon, Portugal. The series of INGEO conferences are organised under the umbrella of FIG Commission 6.

An Flustand at InterGeo.

Celebration of 200 years of the cadastre in Slovenian lands – here presentation of the Cadastre 4.0 concept by Gerda Schennach, Chair of FIG Commission 7.

At the opening of GeopreVi 2017 International Symposium, September 2017 in Bucharest, Romania "Smart Solutions for a secure and valuable property" organised by FIG Commission 7, 8 and 9.

# **Cooperation with Partners**



UN-GGIM Geospatial Societies, which has recently changed name from The Joint Board of Geospatial Information Societies – JBGIS met during the the Seventh Session of UN-GGIM.

#### **FIG and UN**

FIG continues to collaborate with the World Bank and various agencies and structures within the United Nations. The main activities in the cooperation with the United Nations and the World Bank during this period have been:

Participation to FAO and the Voluntary-Guidelines, VGGT

Two special sessions at FIG Working Week 2017:

- FIG Academic Forum
- Session on Land Consolidation

Participation to Global Land Tool Network GLTN

- Lead of Global Land Tool Network Professional Cluster 2016–17
- Participation in the GLTN International Advisory Board
- STDM workshop in cooperation with FIG Young Surveyors

- Expert Group Meeting on Fit-for-Purpose Land Administration in Rwanda
- Several sessions at FIG Working week 2017

The 26th session of the UN Governing Council 6-12 May 2017,

Nairobi, Kenya

The sub-themes for the GC26 are important to the FIG agenda, and include: Towards inclusive, sustainable and adequate housing for a better future (1),Synergies and financing for sustainable urbanization (2) and Integrated human settlements planning for sustainable urbanization (3).

Participation to the work of UN-GGIM

- UN-GGIM-Geospatial Societies Member (Previously Joint Board of Spatial Information Societies JB-GIS)
- Expert Group on Land Administration
- Associate member of Sub-committee on Geodesy

- Participation at the 5th UNGGIM High Level Forum in Mexico City, November 2017
- Participation at the Seventh Session of the United Nations Committee of Experts on Global Geospatial Information Management in New York, USA, August 2017
- Participation at UNGGIM Asia-Pacific sixth plenary meeting, October 2017, Kumamoto, Japan.

Participation to the work of the International Committee on Global Navigation Satellite Systems (ICG)

Participation to UN-OOSA – Co-chairing WG-D

Participation at the World Bank Conference and joint sessions at FIG Working Week 2017

#### The 17 UN Sustainable Development Goals (SDG) and FIG

In 2015 the world's leaders agreed on a plan consisting of 17 main goals and 169 targets to solve some of the world's greatest problems. The Sustainable Development Goals – also called SDGs



- cover a diverse range of issues including gender equity, sustainable cities, access to clean water, land issues, and good governance.

Surveyors play an essential role in several of the 17 SDGs. FIG aims to make an active effort on those goals that involve surveyors and surveying in order to assist in achieving the goals and their targets by 2030 and set the world on a path towards sustainable development.

In 2017 FIG has worked on the SDG's with the UN organisations e.g. on the Fit-for-Purpose Ap-

proach, Land Tools for Tenure Security e.g. the Social Tenure Domain Model (STDM), Valuation of Unregistered Land, and Implementation of capacity development initiatives e.g. Reference Frame and the Voluntary Guidelines (VGGT). FIG continues to have the SDGs high on the agenda and to contribute where possible.

#### **FIG and Sister Organisations**

The Joint Board of Spatial Information Societies JB-GIS was established during the FIG Working Week in Cairo in 2005. The name was in 2017 changed to UN-GGIM-Geospatial Societies. FIG has collaborative MoUs with a number of the organizations who are part of the Geospatial Societies. FIG has further bilateral agreements of cooperation with several other international associations like ISM, IFHP, CIB, ION, ICEC, FIABCI, IFHS, PAIGH and PAQS.

In December 2017 FIG President Potsiou signed a renewed Cooperation Agreement with the International Real Estate Federation, FIABCI.

FIG is represented in the International Construction Measurement Standard Coalition (ICMS) by Chair of FIG Commission 10, See Lian Ong.

FIG is furthermore represented in International Land Measurement Standard Coalition by



During the World Bank Conference there was a special meeting organised by National Land Survey of Finland. FIG President Chryssy Potsiou and Vice President Diane Dumashie met with Director General Arvo Kokkonen.

Mr. Maurice Barbieri. In 2017 FIG Council decided to join the Ethics Standard Committee.

FIG is a member of the International Council for Science (ICSU) and is working together with ISO and International Valuation Standards Committee (IVSC) on standards.

FIG is represented in: ISO TC 211 on Geographic Information/Geomatics by Nick Donnelly, ISO TC 307 on Blockchain by Manohar Velpuri, ISO TC 172/SC 6 on Geodetic and surveying instruments by Ingo Neumann, ISO 19152 on Land Administration Domain Model (LADM) by Christiaan Lemmen.

#### fig.net/partners/



The participants at the FIG/GLTN Fit-for-Purpose Workshop organised in Rwanda by FIG Vice President Diane Dumashie through the FIG Africa Regional Network.

### Young Surveyors

FIG Young Surveyors have built up an impressive international network with strong regional engagement. Several regional events have been held in 2017, and the 5th Young Surveyors European Meeting was held in connec-

tion with the FIG Working Week in Helsinki, Finland with the theme: "The evolution: Then, Now and Beyond and Delivering the Digital Dream".

UN-Habitat/GLTN-FIG Young Surveyors Volunteer Community Surveyor Programme (VCSP)

VCSP is an innovative volunteer program that is a powerful driver for both social impact and professional development. The VCSP leverages on the skills, experience, talents and education of young surveyors, matches this compe-



13 Young Surveyors from Senegal,

Nigeria, Nepal, New Zealand, Uganda, Denmark, Namibia, Philippines and Zimbabwe have successfully been working on GLTN Projects for 2–4 weeks in DR Congo, Kenya, Nepal, Uganda, Philippines and Zambia.

A special thanks to FIG Young Surveyor Chair Eva-Maria Unger for driving this new and exciting project.

fig.net/youngsurveyors



**Trained Trainers** 

### **New Publications in 2017**

FIG Publication no 52 *The Social Tenure Domain Model – A Pro-Poor Land Tool on Social Tenure Domain Model*. FIG Report, 2010 has now been translated into three languages: Arabic, French and Japanese.



In addition, FIG Publication No. 64, FIG Commission Guide *Reference Frames* 



*in Practice Manual,* was translated into Spanish.





### IT Development in 2017

The FIG data administration was further developed during 2017 e.g. with improvements in the massmailing. Conference management related features and FIG Conference Web App continued to be enhanced, as well.





From around 65 countries worldwide covering every region



Again in 2017 YS organized a Charity Run held in the city centre of Helsinki, for a cause to give back. Donations were given to Humanitarian Open Street Maps and FIG Foundation.

FIG FOUNDATION

South America



FIG Foundation grants in 2002–2017.

Surveyors to every yearly FIG Working Week/ Congress, all from different continents. In total 246,310 € has been spent on grants in this period of time.

fig.net/figfoundation

#### The FIG Foundation – How Can I Contribute?

Companies, associations, institutions, events, surveyors' groups and individuals may contribute to the Foundation by:

- Donations which will be recognised by a plaque or a certificate of different categories reflecting the sum of donation as follows:
  - platinum plaque 25,000 €
- gold plaque 10,000€
- silver plaque 5,000 €
- bronze plaque 1,000 €.
- Donations to support specific projects or by offering scholarships. Donors and Benefactors may use the FIG Foundation logo to promote their project donations or scholarships.

 Voluntary donation when registering to FIG events.

 Attending social functions such as the FIG Foundation Dinners held during every FIG Congress and Working Week and other events.

FIG

### FIG Foundation – Building a Sustainable Future

FIG Foundation has been established for the purpose of raising funds to finance educational and capacity building projects and scholarships.

The Board of Directors for 2017:

- John Hohol, President of the FIG Foundation (USA)
- Prof. Michael Barry, Director (Canada)
- Mr. Daniel Steudler, Director (Switzerland)
- FIG Vice President Orhan Ercan (Turkey)
- FIG Commission 2 Chair Ir. Liza Groenendijk, Director (Netherlands).

" I think my progression over the past months has been tremendous in part because of the peace of mind afforded by the FIG Foundation scholarship."

The FIG Foundation Ph.D Scholarship 2016 was awarded to Mr. Wallace Mukupa, Zambia for his research project: "Structural change detection and deformation monitoring". Wallace was at that time in the final stages of his PhD studies at the University of Nottingham, Ningbo, China. The scholarship helped him focus on his research: "I think my progression over the past months has been tremendous in part because of the peace of mind afforded by the FIG Foundation scholarship that I was awarded; I could focus on being the best researcher, I could be without worrying about finances," says Wallace.

His research paper submitted for the FIG Working Week 2017 was furthermore accepted as peer review paper, and for that reason he received a further grant from FIG Foundation to attend the Working Week 2017.

In 2017, two different grants were offered, an academic research grant and a PhD grant. Unfortunately there were no applications for the Academic Research grant that fulfilled the criteria, and the call was postponed to 2018.

FIG Foundation received one application for the 2017 PhD grant, which was accepted: Mr. Collins Mwungu, Department of Geospatial and Space Technology University of Nairobi, Kenya\_ "Spatial data infrastructure in Africa: a technical and institutional analysis".

In 2017 the FIG Foundation awarded 3 grants to young surveyors to participate in the Working Week in Helsinki, Finland:

– Biplov Bhandari (Nepal)

- Mladen Femic (Montenegro)
  - Kaarina Toivo (Namibia).

Hereto, FIG Foundation sponsored various activities in Latin America, Europe, and the Volunteer Community Surveyor Program (VCSP) that is organized by the Young Surveyors in cooperation with GLTN.

Over the period from 2002– 2017 FIG Foundation has in total given 135 grants to young surveyors from 64 different countries. The Foundation aims at sponsoring 3–5 Young

# **FIG Members**

\*<sup>\*)</sup> New member associations; to be approved by General Assembly 2018 \*\*<sup>\*)</sup> New members from 2018 who have applied and were admitted into membership until April 2018

#### Member Associations (April 2018)

Algeria	Order of Land Surveyors Expert (OGEF)	Georgia	Society of Professionals of Land Information Technologies (SPLIT)		
Argentina	Federación Argentina de Agrimensores	Germany	Society of geodesy, geoinformation and landmanagement (DVW)		
Australia	Surveying and Spatial Sciences Institute(SSSI)	Ghana	Ghana Institution of Surveyors		
Austria	Austrian Society for Surveying and Geoinformation	0	Licensed Surveyors Association of Ghana (LISAG)		
Bahamas	Bahamas Association of Land Surveyors	Greece	Technical Chamber of Greece		
Belarus	Land Reform Association (NGO)	Hong Kong SAR, China	The Hong Kong Institution of Engineering Surveyors		
Belgium	Union Belge des Géomètres-Experts Immobiliers	• Hungary	Hungarian Society of Surveying, Mapping and Remote Sensing		
Benin	Order of the Expert Geometricians of Benin	Indonesia	Indonesian Surveyor Association		
Bosnia and Herzegovina	Geodetic Association of Herceg-Bosnia	Iran	Iranian Professional Society of Surveying Engineers (ISS)		
Botswana	Botswana Surveying and Mapping Association	Israel	Association of Licensed Surveyors in Israel		
Brunei Darussalam	Brunei Institution of Geomatics (B.I.G)	Italy	National Council of Italian Surveyors		
Bulgaria	Chamber of Graduated Surveyors	Jamaica	The Land Surveyors Association of Jamaica (LSAJ)		
	Union of Surveyors and Land Managers in Bulgaria	Japan	Japan Federation of Surveyors		
Burkina Faso	Association des Géomètres et Topographes du Burkina (AGT-B)	Kenya	Institution of Surveyors of Kenya (ISK)		
Cameroon	National Order of Cameroon Surveyors (NOCS)	Korea, Republic of	Korea Confederation of Surveyors		
Canada	Canadian Institute of Geomatics	Kosovo	Kosova Association of Surveyors		
China	China Institute of Real Estate Appraisers and Agents (CIREA)	• Latvia	Latvian Association of Surveyors (LMB)		
	China Land Science Society (CLSS)	Lebanon	Order of Surveyors		
	Chinese Society for Surveying, Mapping and Geoinformation (CSSMG)	Lithuania	Lithuanian Association of Surveyors		
Colombia	Colombian Society of Surveyors	Luxembourg	Ordre Luxembourgeois des Géomètres (OLG)		
Congo D.R.	Federation of Geometers and Surveyors	Malaysia	Association of Authorised Land Surveyors		
Costa Rica	Colegio de Ingenieros Topógrafos de Costa Rica	Mali	Ordre des Geometres Experts du Mali (OGE)		
Côte d'Ivoire	Ordre des Géomètres Experts de Côte d'Ivoire (OGECI)	Malta	Malta Institution of Surveyors		
Croatia	Croatian Geodetic Society	Mongolia	Mongolian Association of Geodesy Photogrammetry and Cartography		
Cyprus	Cyprus Association of Rural and Surveying Engineers	o	(MAGPC)		
	Cyprus Association of Valuers & Property Consultants	Morocco	National Order of Surveying Engineers and Surveyors		
Czech Republic	Czech Association of Certified Property Appraisers	Nepal	Nepal Institution of Chartered Surveyors (NICS)		
	Czech Union of Surveyors and Cartographers	Netherlands	Geo-Information Netherlands		
Denmark	The Danish Association of Surveyors	New Zealand	New Zealand Institute of Surveyors		
Egypt	Egyptian Committee of Surveying and Mapping	Nigeria	Nigerian Institution of Surveyors (NIS)		
Estonia	Association of Estonian Surveyors	•	The Nigerian Institute of Quantity Surveyors		
Fiji	Fiji Institute of Surveyors	Norway	Norwegian Association for Chartered Surveyors – GeoForum		
Finland	Finnish Association of Geodetic and Land Surveyors MIL	Palestinian Authority	Licensed Surveyors Association in Palestine		
	Finnish Association of Surveyors (MAKLI)	Papua New Guinea	Association of Surveyors of Papua New Guinea (ASPNG)		
France	French Association of Topography (AFT)	Philippines	Geodetic Engineers of the Philippines, Inc.		
	Ordre des Géomètres-Experts (OGE)	Poland	Association of Polish Surveyors		

Portugal	Order of Engineers – College of Geographical Engineering			
Romania	Romanian Association of Private Surveyors			
	Union of Romanian Geodesy			
Russian Federation	Association "Self-regulated organization of activity of cadastral engineers"			
	The Federal Service for State Registration, Cadastre and Cartography (Rosreestr)			
Rwanda	Distinctive Engineering Group			
Saint Lucia	The Institute of Surveyors (St. Lucia) Inc. (ISSL)			
Senegal	National Order of Surveyors of Senegal			
Serbia	Serbian Union of Surveyors			
Slovakia	Chamber of Surveyors and Cartographers (CSC)			
	Slovak Union of Surveyors and Cartographers			
Slovenia	Association of Surveyors of Slovenia			
South Africa	South African Geomatics Council			
	The South African Geomatics Institute (SAGI)			
Spain Colegio Oficial de Ingenieros Técnicos en Topografia				

Sri Lanka Institute of Surveyors Sri Lanka			
Sweden	Swedish professionals for the built environment		
Switzerland	rland Swiss Association for Geomatics and Landmanagement		
Syria	Order of Syrian Engineers and Architects (OSEA)		
Tanzania	Tanzania Institution of Valuers and Estate Agents (TIVEA)		
Togo	Ordre des Géomètres du Togo (OGT)		
Trinidad and Tobago	Institute of Surveyors of Trinidad and Tobago		
Turkey	Chamber of Surveying and Cadastre Engineers of Turkey		
Uganda	Institution of Surveyors of Uganda		
Ukraine	Public Union		
United Arab Emirates	Society of Engineers-UAE		
United Kingdom	Chartered Institution of Civil Engineering Surveyors (ICES)		
	The Royal Institution of Chartered Surveyors (RICS)		
United States National Society of Professional Surveyors (NSPS)			
Uruguay Surveyors Association of Uruguay			
Vietnam Vietnam Association of Geodesy – Cartography – Remote Se			
Zimbabwe Survey Institute of Zimbabwe			

### Affiliate Members (April 2018)

Benin	General Direction of Land Registry, mapping and Cadastre	<ul> <li>Latvia</li> </ul>	The State Land Service of Latvia		
Brunei Darussalam	Survey Department	Lesotho	Land Administration Authority, Lesotho		
Bulgaria	Geodesy, Cartography and Cadastre Agency of Bulgaria	• Macedonia, FYR	The Agency for Real Estate Cadastre (AREC)		
Cambodia, Kingdom of	Ministry of Land Management	Mexico	National Institute of Statistics and Geography (INEGI)		
Chile	Servicio Hidrográfico y Oceanográfico de la Armada de Chile	Moldova, Republic of	Agency for Land Administration and Cadastre of Rep. of Moldova		
China	China Land Surveying and Planning Institute,	Mongolia	Agency for Land Administration and Management, Geodesy & Cartograp		
	Ministry of Land and Resources	Namibia	Office of the Surveyor General		
Colombia	Instituto Geográfico Agustin Codazzi	Nepal	Topographical Survey Branch, HMG Survey Department		
Croatia	State Geodetic Administration of Republic of Croatia	Netherlands	Cadastre, Land Registry and Mapping Agency		
Cyprus	Cyprus Lands and Surveys Department	New Zealand	Land Information New Zealand		
Denmark	Agency for Data Supply and Efficiency	Norway	Norwegian Mapping Authority		
	The Danish Geodata Agency ** <sup>)</sup>	Philippines	National Mapping and Resource Information Authority		
Fiji	iTaukei Land Trust Board	Romania	National Agency for Cadastre and Land Administration		
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Iceland	Registers Iceland	•	Geodesy(GDG)		
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Israel	Survey of Israel	Sri Lanka	Survey Department of Sri Lanka		
Italy	Italian Society of Photogrammetry and Topography (SIFET)	Sweden	Lantmäteriet – The Swedish mapping, cadastral and land registration		
Japan	Geospatial Information Authority of Japan	0	authority		
Jordan	Department of Lands & Survey	Switzerland	Swiss Federal Office of Topography swisstopo		
Kazakhstan	Non-Commercial Joint-Stock Company "State Corporation	United Arab Emirates	Geodesy & Hydrographic Survey Section – Dubai Municipality		
	"Government for Citizens", Republic of Kazakhstan	United Kingdom	Ordnance Survey **)		

### Academic Members (April 2018)

Australia	RMIT University	Latvia	Riga Technical University	
	Tafe NSW – Riverina Institute	Lebanon	Lebanese Canadian University (LCU)	
	The University of Melbourne	0	Lebanese International University (LIU)	
	University of New South Wales	Multinational	UNIGIS International Association	
	University of Southern Queensland Australia	Namibia	Namibia University of Science and Technology	
	University of Technology Sydney	<ul> <li>Nepal</li> </ul>	Land Management Training Centre	
Austria	Universität für Bodenkultur Wien BOKU	Netherlands	University of Twente – Faculty of Geo-Information Science and Earth	
Belgium	Antwerp Maritime Academy	•	Observation (ITC)	
	Ghent University	New Zealand	University of Otago	
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	Universite de Liege	•	Federal University of Technology	
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	The University of Nottingham	Palestine, State of	Palestine Polytechnic University	
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	Universidad Distrital Francisco José de Caldas	Romania	1 Decembrie 1918" University of Alba Iulia	
Croatia	University of Zagreb	0	Technical University of Civil Engineering Bucharest	
Czech Republic	Brno University of Technology	0	University of Oradea- Faculty of Construction, Cadastre and	
Denmark	Aalborg University	•	Architecture	
Ethiopia	Bahir Dar University – Institute of Land Administration	Russian Federation	Moscow State University of Geodesy and Cartography	
Fiji	University of the South Pacific	•	State University of Land Use Planning	
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Greece	School of Rural and Surveying Engineering	0	University West	
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Ireland	Dublin Institute of Technology	Turkey	Istanbul Technical University	
Israel	Technion Research & Development Foundation	Turkey	Selçuk Üniversitesi	
Jamaica	University of Technology	Uganda	Makerere University	

United Kingdom Oxford Brookes University		•
	Real Estate and Planning, Reading University	•
	Sheffield Hallam University	•
United States	New Mexico State University	•
	Texas A&M University – Corpus Christi	•

In addition, FIG has a correspondent in Maldives, Pakistan, Rwanda and Tonga.

### **Honorary Ambassadors**

Clarissa Augustinus (prev. UN-Habitat/GLTN) and Paul Munro-Faure (prev. FAO).

### **Corporate Members (April 2018)**

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<b>Bentley</b>	Bentley Systems	iS 数联空间	Beijing iSpatial Co., Ltd, PRC			
@esri	Environmental Systems Research Institute, Inc. (ESRI)		Derinsu Underwater Engineering & Consulting			
Leica Geosystems	Leica Geosystems AG	Geoide Geosystems S.a. NEH Engineering Survey and Mapping Limited Company, Vietnam				
Trimble.	Trimble Navigation Ltd	REGIONAL LEVEL				
SILVER LEVEL		•	Branco Etera Ltd, Kazakhstan			
GEO.	Geoweb S. p. A	DataLife Environmental				
	Thomson Reuters	<u>ف</u>	Génie Congo Sarl			
ΤΟΡΟΟΝ	Topcon Europe Positioning b.v.	GEO:connexion Ltd				
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GIS Transport in	GIS/Transport Ltd.	<del>C</del>	Orbits Engineering Firm			
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**RIPRO** Corporation, Japan

Chinese Society for Surveying, Mapping and Geoinformation, CSSMG Geo-Information Netherlands

### Income and Expenditure Account 2015–2017

REGULAR INCOME	Result 2017 *)	Budget 2017	Result 2016	Result 2015
Subscriptions	(all figures in Euro)			
Member associations	271,114	260,000	260,794	253,998
Affiliate members	29,260	30,000	33,441	30,351
Corporate members	80,025	85,000	79,450	80,046
Academic members	12,312	12,000	12,237	11,593
Less bad debts	-50,034	-15,000	-32,072	-25,611
Less change in provision for doubtful debts	20,000		-5,067	
v .	362,677	372,000	348,783	350,377
Financial income / expenses	4,366	3,000	6,277	3,907
Less banking costs	-766	-250	-523	-411
Currency diff	-12,155		4,126	-3,311
Advertising income	849			
Events – fees charged for services	56,000	45,000	50,000	44,549
Total regular income	410,971	419,750	408,663	395,111
REGULAR EXPENDITURE				
Administration	153,748	203,500	179,989	193,524
Marketing and publications	12,821	15,000	13,880	11,775
Council and executive management	147,089	158,000	151,524	145,998
Commission support	33,000	33,000	33,000	33,015
Total regular expenditure	346,658	409,500	378,393	384,312
Surplus/deficit of regular income over regular expenditure	64,313	10,250	30,270	10,799
PROJECTS AND DEVELOPMENT				
Events – funds received by FIG	17,008	15,000	24,025	-
Development spent	-16,778	-22,000	-16,822	-35,280
SURPLUS OF THE YEAR (REGULAR)	64,543	3,250	37,473	-24,481
RESULT				
Overall surplus/deficit in the year - normal activities	39,543 **)	3,250	17,473	-4,481
Total reserve at the year end	601,664	540,371	537,121	499,647
Events	50,000		25,000	25,000
T reserve	50,000		50,000	30,000
General reserve	501,664		462,121	444,647
Overall Reserve as % of annual expenditure	174%			
General reserve as a % of regular annual expenditure	145%		110%	116%

#### FIG Balances 2011–2017



\*) The accounts will be adopted by the General Assembly May 2018. The income and expenditure presentation follow the template approved by the General Assembly in 2009.

\*\*<sup>)</sup> 25,000 EUR of the surplus has been allocated to Events reserve which is increased to 50,000 EUR.

# Key Contacts

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FIG



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