

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



International Federation of Surveyors

## **XLI General Assembly**

### **AGENDA AND APPENDICES**

**6 and 11 May 2018  
Istanbul Conference Center**

**Istanbul, Turkey**

**INTERNATIONAL FEDERATION OF SURVEYORS****FIG 41<sup>st</sup> GENERAL ASSEMBLY  
6 and 11 May 2018  
Istanbul Congress Center, Istanbul, Turkey****PROGRAMME**

<b>Sunday, 6 May 2018</b>		
<b>Istanbul Congress Center, Istanbul, Turkey</b>		
Sunday 6 May	09:00-13:00 14:00-16:30 ÜSKÜDAR Room	General Assembly, First Session
<b>Monday, 7 May – Thursday, 10 May 2018</b>		
<b>FIG Congress 2018 and Exhibition, Istanbul Congress Center</b>		
<b><a href="http://www.fig.net/fig2018">www.fig.net/fig2018</a></b>		
Monday 7 May	14:00 – 15:30 Room TBA	Academic Members Forum joint with FAO
Tuesday 8 May	11:00 - 12:30 Room TBA	FIG Member Associations Forum This session is reserved for Presidents or Heads of delegation (or their representatives) of member associations to discuss issue of their common interest. By invitation only
Tuesday 8 May	11:00 – 12:30 Room TBA	FIG Director Generals Forum By invitation only
Tuesday 8 May	17:30 – 18:30	Annual Meetings of FIG Commissions
Tuesday 8 May	16:00 – 17:30 Room TBA	FIG Corporate Members Meeting
Day TBA	Time TBA Room TBA	Regional Bodies Forum
Friday 11 May	08:30 – 10:30 Room TBA	FIG Presidents' Meeting This event is convened by the FIG President and is reserved for Presidents or Heads of delegation of Member Associations (or their representatives) By invitation only
Friday 11 May	11:00–12:30 13:30-15:00 ÜSKÜDAR Room	General Assembly, Second Session including Closing Ceremony. Closing ceremony will start immediately after the conclusion of the General Assembly and will be followed by the Farewell Reception hosted by the hosts of FIG Working Week 2019, Vietnam Association of Geodesy - Cartography - Remote Sensing

For full Congress programme check: <http://www.fig.net/fig2018/program.htm>

## FIG 41<sup>st</sup> GENERAL ASSEMBLY

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# FIG 41<sup>st</sup> GENERAL ASSEMBLY

## AGENDA

for the meetings to be held on Sunday 6 May 2018 and on Friday 11 May 2018  
in ÜSKÜDAR Room at Istanbul Congress Center, Istanbul, Turkey

### SUNDAY, 6 MAY

**Sunday, 6 May, 09:00-13:00 and 14:00-16:30**  
**ÜSKÜDAR Room, Istanbul Congress Center**  
**General Assembly, First Session**

#### 1. OPENING PROCEEDINGS

President Chryssy Potsiou to open the 41st General Assembly.

#### 2. ROLL CALL

**Please note:** The roll call will be done for member associations only. Delegates representing affiliate members, academic members, corporate members and correspondents as well as honorary presidents and honorary members will be entered in the records, but they shall register before the meeting starts at the meeting venue to the staff of FIG Office. Member associations are asked to inform the FIG Office by **16 April 2018** about their attendance, at the same time to submit the names of their delegate(s) and to inform who their Head of the delegation is, if it is not the President or Chair. Please use this special link below to inform us about your delegation.

To register:

<https://docs.google.com/forms/d/e/1FAIpQLSfHdXE4DVVQ56kC6rDX2FLfPOfknqZ6pXD L51tjU8St3IHJtA/viewform?c=0&w=1>

Please note that only member associations that have paid all their membership fees to the end of 2017 are allowed to vote at the meeting. A list of member associations that are not allowed to vote will be published and posted on the FIG web site **16 April 2018**.

**Appendix to items 2 & 25:** Roll Call including information on member associations that are not allowed to vote at the General Assembly because of unpaid membership fees for 2017 and earlier. (will be posted 16 April 2018)

**Motion:** Those members present are recorded in the minutes.

**Decision:**

### 3. APPOINTMENT OF TELLERS

The General Assembly shall appoint two persons as tellers for the entire General Assembly. The tellers will represent the member associations hosting the current and the following General Assembly

- Mr Muzaffer Kahveci (Chamber of Surveying and Cadastre Engineers of Turkey)
- Mr Hoang Kim Quang (Vietnam Association of Geodesy - Cartography - Remote Sensing, Vietnam)

**Motion:** That the General Assembly appoints Muzaffer Kahveci from Chamber of Surveying and Cadastre Engineers of Turkey and Hoang Kim Quang as tellers for this General Assembly.

**Decision:**

### 4. ADOPTION OF THE AGENDA

The General Assembly was announced as mandated, two months prior the general Assembly by email and on FIG web site, and the Agenda for the General Assembly was also published on the web site and by email to all members.

**Motion:** That the agenda be adopted.

**Decision:**

### 5. ADOPTION OF THE MINUTES OF THE 40<sup>th</sup> GENERAL ASSEMBLY

Minutes have been circulated previously.

**Appendix to item 5:** Minutes of the General Assembly in Helsinki, Finland, May/June 2017, without appendices.

The minutes incl. appendices are also available on the FIG web site:

[http://fig.net/organisation/general\\_assembly/agendas\\_and\\_minutes/2017/minutes.asp](http://fig.net/organisation/general_assembly/agendas_and_minutes/2017/minutes.asp)

**Motion:** That the minutes be adopted as recorded.

**Decision:**

### 6. MEMBERSHIP

#### 6.1. Admittance of new Member Associations

FIG Council has so far received no applications for member association since the 40<sup>th</sup> General Assembly. FIG Council has received one application that will be included in the Council meeting on 4 May 2018.

**Motion:** That the General Assembly notes the update.

**Decision:**

## **6.2. Other Member Association Issues**

### **6.2.1. Colegio de Ingenieros Topógrafos de Costa Rica, MA-10019**

Colegio de Ingenieros Topógrafos de Costa Rica has unfortunately decided to resign from FIG. FIG thanks for their membership until the end of 2017.

**Motion:** That the General Assembly notes the update.

**Decision:**

## **6.3. Expulsion of member associations**

Subscriptions of following member associations are more than three years in arrears:

- Algeria: Order of Land Surveyors Expert (OGEF) MA-10001
- Mali: Ordre des Geometres Experts du Mali MA-10117
- St Lucia: The Institute of Surveyors (St. Lucia) Inc. ISSL, MA-10123

The General Assembly has power to expel from the Federation any member association whose fees are in arrears and shall under normal circumstances expel any member association whose fees are three years in arrears. (Article 4.3 of the Statutes). The FIG office has sent information to these associations informing that if their membership fees are still in arrears at the time of the General Assembly the General Assembly shall expel the above member associations in Istanbul.

After acceptance of new member associations and before expulsions the number of FIG member associations is 103 from 89 countries.

**Motion:** That the General Assembly expels:

- Algeria: Order of Land Surveyors Expert (OGEF) MA-10001
- Mali: Ordre des Geometres Experts du Mali MA-10117
- St Lucia: The Institute of Surveyors (St. Lucia) Inc. ISSL, MA-10123

if no payment has been received before the General Assembly takes place.

**Decision/Action:**

#### **6.4. Suspended status 2018**

In accordance with its administrative measures, FIG Council, has deferred to continue for 2018 the issuance of a membership subscription invoice to the following members and FIG Council deem their membership to be in suspension:

- the Order of Syrian Engineers and Architects, OSEA as all efforts to maintain contact with them has not yielded results and will deem their membership in suspension giving due consideration to its internal situation.
- Ukrainian Society of Geodesy and Cartography
- Licensed Surveyors Association in Palestine

Iranian Professional Society of Surveying Engineers (ISS) has paid their membership fee and has now returned to normal membership status.

The situation with these associations will be reconsidered by Council again in 2019.

**Motion:** That the General Assembly notes the members in suspension.

**Decision:**

#### **6.5. Other membership issues**

##### 6.5.1. Affiliate members

There have been two applications for affiliate membership since the General Assembly 2017.

- Danish Geo Data Agency, Denmark – AF-20063
- Ordnance Survey, United Kingdom – AF-20064

The council has expelled the following affiliate members because of unpaid membership subscriptions:

- Bahrain: Survey and Land Registration Bureau AF-20056
- Cambodia: Ministry of Land Management, Cambodia AF-20004
- Guatemala: Guatemalan Registry of Cadastral Information AF-20053
- Iraq: General Directorate for Surveying / Baghdad AF-20031

After these changes the number of Affiliate members is 43 from 41 countries.

##### 6.5.2. Corporate members

FIG Council has admitted the following Corporate Member:

- RKSOFT Turkey (CM-30070)



FIG Council has expelled the following member due to lack of payment of membership fee:

- Qatar: Concord Surveying Works Co. CM-30048
- Sri Lanka: JKO Surveyors & Consultants (Pvt) Ltd, Sri Lanka CM-30054

After these changes the number of corporate members is now 27.

#### 6.5.3. Academic members

FIG Council has admitted no further Universities to become Academic member since the General Assembly 2017.

The council has expelled the following 11 Academic Members due to lack of payment:

- Nigeria: University of Lagos AC-40049
- Nigeria: Nnamdi Azikiwe University AC-40050
- Russian Federation: Moscow State University of Geodesy and Cartography AC-40060
- Spain: Escuela Universitaria de Ingenieria Tecnica Topografica AC-40064
- United Kingdom: University of Nottingham Institute of Engineering Surveying & Space Geodesy AC-40078
- United Kingdom: University of West England Faculty of Built Environment AC-40079
- Mexico: Universidad Autonoma de Nuevo León AC-40101
- USA: University of Houston, College of Technology AC-40108
- Kazakhstan: East-Kazakhstan State Technica AC-40112
- Kazakhstan: Kazakh National technical University after K. I. Satpaev AC-40125
- Gabon: Ecole Nationale du Cadastre et des Sciences Geographique (ENCSG) AC-40132

The payment structure of the Academic Members was changed in 2013 so that Academic Members would be invoiced every 4 years instead of every year. The four-year payment will reward the members with a 50% discount. Academic members were invoiced in 2014, and again in 2018.

The number of Academic Members after these changes is 84 from 50 countries.

#### 6.5.4. Correspondents

The Council has admitted the following new correspondent:

- Jean Pierre Habiyaremye, Rwanda

The number of correspondent members is now 4.

**Motion:** That the General Assembly notes the actions that the Council has taken with other membership matters.

**Decision:**

## **7. PRESIDENT'S REPORT**

President Chryssy Potsiou has prepared the President's report on the activities of the Federation since the General Assembly in Helsinki, Finland, May 2017.

**Appendix to item 7:** President's report. (to be posted)

**Motion:** That the General Assembly accepts the President's report.

**Decision:**

## **8. REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2017-2018**

Mr. John Hohol, President of the FIG Foundation has prepared a report on the FIG Foundation activities from May 2017 to March 2018. He will make a short report to the General Assembly.

**Appendix to item 8:**

Report of the FIG Foundation activities 2017-2018  
Result 2017

**Motion:** That the General Assembly adopts the report of the President of the FIG Foundation and records its thanks to the President and members of the Board of Directors of the FIG Foundation.

**Decision:**

## **9. REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS 2017-2018**

### **9.1. International Office of Cadastre and Land Records (Office International du Cadastre et du Régime Foncier) OICRF**

Dr. Christiaan Lemmen, Director of OICRF has prepared a report on the OICRF activities since the General Assembly in Christchurch. He will make a short report to the General Assembly.

**Appendix to item 9.1:** Report from the International Office of Cadastre and Land Records (Office International du Cadastre et du Régime Foncier) OICRF.

**Motion:** That the General Assembly adopts the report and records its thanks to the members of OICRF for their past year's work and contribution.

**Decision:**

**9.2. International Institution for the History of Surveying and Measurement, Permanent Institution of FIG**

Mr. Jan de Graeve, Director of the IIHSM, Mr John Brock and Mr Jim Smith have prepared a report on the IIHSM activities since the General Assembly in Helsinki. IIHSM will make a short report to the General Assembly.

**Appendix to item 9.2:** Report from the International Institution for the History of Surveying and Measurement, Permanent Institution of FIG.

**Motion:** That the General Assembly adopts the report and records its thanks to the Director and the members of the permanent institution for their past year's work and contribution.

**Decision:**

**10. REPORTS OF FIG TASK FORCES (2015-2018)**

FIG has currently two Task Forces.

**10.1. Task Force on Real Property Markets**

The Task Force assesses the progress of establishing the real property markets in the countries with economies in transition. The Task Force is chaired by Pekka Halme, Finnish Association of Geodetic and Land Surveyors MIL. A session on Real Property Markets is included in the technical programme.

**Appendix to item 10.1** – Status Report from the Task Force

**Motion:** That the General Assembly records the report from the Task Force and records its thanks to the Chair of the Task Force and its members.

**Decision:**

**10.2. Task Force on Corporate Members**

The Task Force is established to strengthen the FIG relationship with corporate members. The Task Force is chaired by John Hohol, National Society of Professional Surveyors (NSPS) in cooperation with Bryn Fosburgh, Vice President of Trimble.

**Appendix to item 10.2** – Status Report from the Task Force.

**Motion:** That the General Assembly records the report from the Task Force and records its thanks to the Chair of the Task Force and its members.

## **11. REPORT FROM YOUNG SURVEYORS NETWORK**

FIG Young Surveyors Network is currently chaired by Ms. Eva-Maria Unger, Austria. She will give a status report on the activities of Young Surveyors Network.

Based on the changed election structure reported at the FIG General Assembly 2017, the Young Surveyors have appointed a new Chair for the term 2019-2020, Ms Melissa Harrington, which has been approved by FIG Council.

**Motion:** that the General Assembly notes the report and succession plan and records a thanks to the chair for her term of office 2015-2018, and a thanks to all the many active Young Surveyors.

**Decision:**

## **12. REPORTS FROM STANDARDS AND REGIONAL CAPACITY NETWORKS 2017-2018**

Each Network Chair has submitted a written report on their Network activities since the FIG Working Week in Helsinki. Each Network will give a short report on the Network activities to the General Assembly.

**Appendix to item 12:** Network reports:

- Standards Network (David Martin)
- Regional Capacity Network (Diane Dumashie)
  - Africa Network (Diane Dumashie)
  - Asia/Pacific Network (Rob Sarib)

**Motion:** that the General Assembly notes the reports and records a thanks to the chairs of the network.

**Decision:**

## **13. REPORTS FROM FIG COMMISSIONS**

Each Commission Chair has submitted a written report on their Commission activities since the FIG Working Week in Helsinki. These reports include progress reports of the Commission working groups. Each Commission will hold a meeting during the Working Week (Tuesday 8 May, 17:30-18:30). Each Commission will give a short report on Commission activities to the General Assembly.

**Appendix to item 11:** Commission reports:

- Commission 1
  - Working Group 1.1 - International Ethical Standards proposal on an updated code on ethics (also to be discussed during the week in session TS01A - 1.2 - Ethics and the practicing surveyor on Monday 7 May at 14:00-15:30)
- Commission 2
- Commission 3
- Commission 4
- Commission 5
- Commission 6
- Commission 7
- Commission 8
- Commission 9
- Commission 10

Two prizes have been introduced. Survey Review offers a biennial prize to a peer review paper. There will be a trial period for 2018 and 2020 In 2018 selection will be among the successfully peer reviewed papers.

Last year Commission 5 introduced the NavXperience Award that again in 2018 will be given to a selected Commission 5 paper.

The prize winners will be announced at the General Assembly.

**Motion:** That the General Assembly adopts the reports of the Commission Chairs and records its thanks to the chairs and other officers of the Commissions for their ongoing contributions.

**Decision:**

**14. TERMS OF REFERENCE FOR GROUP TO WORK ON FIG GOVERNANCE**

At the General Assembly 2017, as an outcome of the Task Force on Commission Structure, it was decided that:

*Based on the Task Force Recommendations, comments and feedback from the members, the President established a new group of volunteers among the members to contribute to the definition of a Terms of Reference for a future Working Group on a review of the overall FIG Governance.*

And that these Terms of Reference will be presented at the General Assembly 2018 on 6 May.

Council action will be to establish of a group to work on the ToR. The current council suggests to let the incoming Council establish this group.

**Appendix to item 14:**

- Draft terms of Reference

**Motion:** that the General Assembly notes the Terms of Reference and Council action.

**Decision:**

## 15. CO-OPERATION WITH THE UNITED NATIONS AND THE WORLD BANK

Since the 40th General Assembly, FIG has continued to collaborate with the World Bank and various agencies and structures within the United Nations.

The main activities in the co-operation with the United Nations and the World Bank during this period have been:

Participation to FAO and the Voluntary Guidelines, VGGT.

At FIG Working Week 2017 two special sessions, one of them being the FIG Academic Forum, were organised. The second session was about Land Consolidation

At the Congress 2018 there will be three sessions in cooperation with FAO: FIG Academic Forum a special session on Land Consolidation and a session on VGGT.

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
- Special sessions in the Congress 2018 technical programme

UN-Habitat/GLTN-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 competence with the needs of GLTN, particularly in GLTN's county level implementation plans and programs. 13 Young Surveyors from Senegal, Nigeria, Nepal, New Zealand Uganda, England, Namibia, Australia and Zimbabwe have successfully been working on GLTN Projects for 2-4 weeks in DR Congo, Kenya, Nepal, Uganda, Philippines and Zambia.

FIG Publication 52 FIG Publication no 52 The Social Tenure Domain Model - A Pro-Poor Land Tool on Social Tenure Domain Model. FIG Report, 2010.

<http://www.fig.net/pub/figpub/pub52/figpub52.pdf>

has now been translated into three languages:

Arabic: [http://www.fig.net/resources/publications/figpub/pub52/Figpub52\\_arabic.pdf](http://www.fig.net/resources/publications/figpub/pub52/Figpub52_arabic.pdf)

French: [https://www.fig.net/resources/publications/figpub/pub52/Figpub52\\_french.pdf](https://www.fig.net/resources/publications/figpub/pub52/Figpub52_french.pdf)

Japanese: [https://www.fig.net/resources/publications/figpub/pub52/Figpub52\\_japanese.pdf](https://www.fig.net/resources/publications/figpub/pub52/Figpub52_japanese.pdf)

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 5<sup>th</sup> 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 in March 2018.

World Bank and FIG have organised two special sessions at the FIG Congress 2018.

**Motion:** That the General Assembly adopts the report on the co-operation between FIG and the United Nations, its agencies and the World Bank and records its thanks to all those who have contributed to this co-operation

**Decision:**

## 16. LIAISON WITH INTERNATIONAL PROFESSIONAL ORGANISATIONS

The Joint Board of Spatial Information Societies JB-GIS was formally established during the FIG Working Week in Cairo in 2005. The name was in 2017 changed to UN-GGIM-Geospatial Societies. The Geospatial Societies meet annually during the United Nations Committee of Experts on Global Geospatial Information Management meetings. The meeting of UN-GGIM-GS in 2017 was held in August 2017. The Geospatial Societies also met in Prague in August 2017.

FIG has collaborative MoUs with a number of the organizations who are part of the Geospatial Societies.

FIG has further bilateral agreements of co-operation with several other international associations like ISM, IFHP, CIB, ION, ICEC, FIABCI, IFHS, PAIGH and PAQS.

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

FIG is represented in the International Construction Measurement Standard Coalition by Chair of FIG Commission 10, See Lian Ong who has been appointed chair of the Standard Setting Committee. FIG is represented in the Trustee Board by the President.

FIG is represented in International Land Measurement Standard Coalition by Mr. Maurice Barbieri.

FIG Council has in 2017 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.

CLGE and NSPS initiated the first Global Surveyors day on 21 March 2018, supported by FIG, and this was launched during the World Bank Conference in Washington.

**Motion:** That the General Assembly records the report on the liaison with other international associations.

**Decision:**

## **17. NEW FIG PUBLICATIONS**

There are several publications under preparation and some of these will be ready by the Congress in Istanbul and the rest by the end of 2018. Publications will be added when finalised.

**Motion:** That the General Assembly records the publications for information and records its thanks to editors and authors of these publications.

**Decision:**

## **18. FIG ACCOUNTS FOR 2017, AUDITOR'S REPORT AND BUDGETS 2018-2021**

Vice President Rudolf Staiger will present the report to the General Assembly. This report includes the auditor's report from 2017, official accounts (income statement 2017) and balance sheet 31 December 2017, a summary of 2017 accounts, an updated budget for 2018 and proposals for budgets 2019-2021 and proposal for membership fees for member associations in 2020.

### **Appendix to item 18:**

Report on Financial Issues (including 2017 accounts and budgets 2018-2021)

Annexes:

- **18A** Auditor's Report, Income Statement for 2017 and Balance Sheet at 31 December 2017.
- **18B** FIG Result 2017
- **18C** FIG Budgets 2018-2021
- **18D** List of member associations whose membership fees are in arrears for 2017 and earlier and that are not allowed to vote - to be published on the FIG web site **16 April 2018** (in roll call).

**Motion:** That the General Assembly

- adopts the audited accounts for 2017,
- adopts the Finance Report, and
- adopts budgets for 2018–2021

**Decision:**



## 19. SUBSCRIPTION RATES FOR 2020

The General Assembly has to set levels of fees for member associations two years in advance of the year in which they become payable. Fees are payable in respect of each individual member up to a maximum of 5,500 members. The membership fee structure was changed in 2009. Membership fees have been discussed as part of the finance report, **appendix to item 18**.

The 2017 General Assembly approved membership fees for 2019 as follows:

Year	Per capita fee	Minimum fee	Maximum fee
2019	€4.80 per member up to a maximum of 5,500 members Member associations from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay €2.40 per member up to a maximum of 5,500 members.	25 members or €50 (whichever is greater)	5,500 members (€26,400)

The World Bank lists of the low-income economies and the lower-middle-income economies are available at: <http://data.worldbank.org/about/country-classifications/country-and-lending-groups>

The 2018 subscription fees were kept at the same level as for the years 2012-2018, and General Assembly agreed to increase the fee with 8% for 2019. Since increase has been made for 2019, Council suggest keeping this same rate for 2020.

**Motion:** That the General Assembly adopts following membership fees payable by member associations in 2020:

Year	Per capita fee	Minimum fee	Maximum fee
2020	€4.80 per member up to a maximum of 5,500 members Member associations from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay €2.40 per member up to a maximum of 5,500 members.	25 members or €50 (whichever is greater)	5,500 members (€26,400)

**Decision:**

## **20. ELECTION OF COMMISSION CHAIRS FOR THE TERM 2019-2022 – PRESENTATION OF CANDIDATES**

The General Assembly decided in 2016 to postpone the election of Commission Chairs (Elects) until 2018 due to the work that was being done by the Task Force on Commission structure. Thus, the General Assembly shall appoint Commission Chairs Elects for the term of office 12 May 2018 until 31.12.2018 and these Chairs Elects will then become Commission Chairs for the term of office 2019-2022.

Member associations have made following nominations for the open posts during the nomination period:

Commission 1: Winnie Shiu, CSSMG, China

Commission 2: vacant

Commission 3: Hartmut Müller, DVW, Germany

Commission 4: vacant

Commission 5: Daniel Roman, NSPS, USA

Commission 6: Maria João Henriques, OE-CEG, Portugal

Commission 7: Daniel Paez, Colombian Society for Surveyors, Colombia

Commission 8: Marije Louwsma, GIN, the Netherlands

Commission 9: Ben Elder, RICS, UK

Commission 10: Alan Muse, RICS, UK

One application was received late and therefore unfortunately rejected.

As there were no nominations for Commission 2 and Commission 4 Council has discussed about the situation and has decided according to the FIG Statutes that the positions will be appointed by Council.

The profile templates of each candidate are attached to this agenda. In the first session of the General Assembly each candidate will be given equal time (not more than 5 minutes, which will be timed) to introduce her/him and make a presentation focusing on his/her ideas and goals for developing the FIG agenda within the commission

The elections will take place at the second session of the General Assembly by blind votes in on Friday 11 May 2018.

**Appendix** to item 20 and 27: Profiles of the candidates for FIG Commission Chairs 1.1.2019-31.12.2022

Commission 1: Winnie Shiu, CSSMG, China

Commission 2: vacant

Commission 3: Hartmut Müller, DVW, Germany

Commission 4: vacant

Commission 5: Daniel Roman, NSPS, USA

Commission 6: Maria João Henriques, OE-CEG, Portugal

Commission 7: Daniel Paez, Colombian Society for Surveyors, Colombia

Commission 8: Marije Louwsma, GIN, the Netherlands

Commission 9: Ben Elder, RICS, UK

Commission 10: Alan Muse, RICS, UK

**Motion:** That the General Assembly notes the presentations and decides to make the election at the second session of the General Assembly on the 11 of May.

**Decision:**

## **21. ELECTION OF VICE PRESIDENTS FOR THE TERM 2019-2022 – PRESENTATION OF CANDIDATES**

FIG Council has received three nominations for the two posts of FIG Vice President:

- a) Diane Dumashie, RICS, UK
- b) Alojz Kopacik, Chamber of Surveyors and Cartographers, Slovakia
- c) Jixian Zhang, CSSMG, China

The profile templates of each candidate are attached to this agenda. In the first session of the General Assembly each candidate will be given equal time (not more than 6 minutes which will be timed) to introduce her/him and make a presentation focussing on his/her ideas and goals for developing the FIG agenda to the General Assembly.

The elections will take place at the second session of the General Assembly by blind votes in on Friday 11 May. The elections will take place one position at a time. If there will be no absolute majority in the first voting, second vote will be organised between those two candidates that have most votes.

**Appendix to item 21 and 28:** Profiles of the candidates for FIG Vice President 1.1.2019-31.12.2022:

- a) Diane Dumashie, RICS, UK
- b) Alojz Kopacik, Chamber of Surveyors and Cartographers, Slovakia
- c) Jixian Zhang, CSSMG, China

**Motion:** That the General Assembly notes the presentations and decides to make the election at the second session of the General Assembly on the 11 of May.

**Decision:**

## **22. ELECTION OF PRESIDENT FOR THE TERM 2019-2022 – PRESENTATION OF CANDIDATES**

The Council has received two nominations for the post of FIG President:

- a) Brian Coutts, NZIS, New Zealand
- b) Rudolf Staiger, DVW, Germany

In the first session of the General Assembly the candidates will be given time (not more than 10 minutes) to introduce themselves and make a presentation focusing on their ideas, goals and agenda for furthering FIG's objects and global stature.

The election will take place at the second session of the General Assembly by blind votes on Friday 11 May 2018.

**Appendices to item 22 and 29:** Nomination templates of candidate to FIG President 1.1.2019-31.12.2022:

- a) Brian Coutts, NZIS, New Zealand
- b) Rudolf Staiger, DVW, Germany

**Motion:** That the General Assembly notes the presentations and decides to make the election at the second session of the General Assembly on the 11 of May.

**Decision:**

### **23. DECISION ON THE VENUE FOR FIG CONGRESS 2022 – PRESENTATION OF CANDIDATES**

The FIG Congresses are organised by FIG together with a local member association. FIG will together with the local member association have full responsibility of the arrangements and of the financial result. This offers FIG better opportunities in terms of organising events and generating revenue. Therefore, the Council has to ensure that all candidates are aware of the role of FIG and split of responsibilities for organising the Congress. This General Assembly will decide on the host for the 2022 Congress.

The FIG Council has received two bids to host the FIG Congress 2022, and FIG Council thanks all bidding member associations for their special engagement and contribution to FIG.

The Council has prepared a desktop summary on the bids. In the summary report the following considerations, as laid out in the invitation documentation, are described for comparison:

- Rotation of the conferences (region);
- Country (hosting of earlier FIG events, experience);
- Member association (its activeness, commitment to FIG and to the Working Week, execution ability for local association);
- Supporting organisations (local support to the Working Week, governmental support, financial support, general support);
- Host city (characteristics and interest from congress programme point of view, host city attractiveness, host city offerings);

- Venue (price/affordability, location of venue, internet availability suitability of rooms, size of venue, structure and layout of the venue, catering, value for money, hotels nearby facilities for exhibition);
- Accessibility (flight connections, several access possibilities, security, visa issues, air fare to destination);
- Safety and security (political stability, airport safety, city safety, political stability in the country - rating must be 3 or higher);
- Proposed dates (must meet FIG requirements, Following FIG statutes, practical dates, availability of venue, other conferences at the same time)
- Technical programme (coverage of all FIG Commissions, potential partners, originality, special ideas);
- Technical tours (coverage of all FIG Commissions, originality, ideas proposed);
- Social programme (attractiveness and variety, proposals for dinners, attractiveness of offered dinners, proposals for tours, is the programme following the overall FIG concept);
- Attendance (expectation of international, regional and local attendance, realistic number of international and national participants);
- Finances (estimate of surplus and financial risks, realistic fees proposed, fees in an acceptable price range, difference between international and national fees, realistic budget, estimated revenue);
- Sponsorship (estimate sponsorship and exhibition income, proposed income, how realistic is proposed income, local sponsor offerings, sponsor interest to conference);
- Why host (reason for hosting);
- Objectives and outcomes (thought through why conference should be held at destination, difference to other destinations, short term outcome, long term outcome);
- Suggested theme (thought of possible theme that fits to local/regional situation);
- Events organised in the past three years (how experienced is the host in organising events)
- Major events planned in the proposed city (many events might affect the price level):
- Initiatives for sustainable conference environment (is host city, venue and local host paying attention to environmental issues);
- New initiatives or activities (originality – but within the overall FIG concept)
- What legacy to leave locally from the Working Week (with host, hosting city, for the surveying community)

The summary report will not give a recommendation or a preference to any candidate but it will provide useful information on each items listed above and summarise the pros and cons of each candidate to assist the member association in making their decision. The General Assembly must note that, especially in these past years, the issue of security and financial viability has come to the fore. The purpose of the evaluation process is to maintain the continued viability, high standard and quality of the FIG Congress.

The Council has considered the bids and has decided to present the submitted bids to the General Assembly for its decision:

- a) Cape Town, South Africa, The South African Geomatics Institute (SAGI)
- b) Florida, USA, National Society of Professional Surveyors (NSPS)

The General Assembly is recommended to read the summaries and the bids carefully.

### **Appendix to item 23 and 30**

- Summary Reports on the Bids for FIG Congress 2022 (to be added)
- Bidding documents for FIG Congress 2022:
  - a) Cape Town, South Africa, The South African Geomatics Institute (SAGI)
  - b) Florida, USA, National Society of Professional Surveyors (NSPS)

At the session each candidate will be given the same time (not more than 10 minutes, will be timed) to make a presentation of their proposal and framework of the Congress and their bid.

Decision on the venue of FIG Congress 2022 will be made at the second session of the General Assembly on 11 May. The voting will be made by blind votes.

**Motion:** That the General Assembly notes the submission, the summary report and the presentations, makes its careful consideration and decision during the second session of the General Assembly on 11 May.

**Decision:**

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**FRIDAY 11 MAY 2018**

**Friday, 11 MAY, 08:30-10:30**

**Room BEYLERBEYİ 1-2,  
ICC, Istanbul Turkey**

**Presidents' Meeting** (by invitation only)

### **24. FIG PRESIDENT'S MEETING**

Separate invitation is sent to Presidents of the Member Associations.

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**Friday, 11 May, 11:00–12:30 and 13:30-15:00**

**Room ÜSKÜDAR  
ICC, Istanbul Turkey  
General Assembly, Second Session and Closing Ceremony**

## **25. ROLL CALL**

**Please note:** The roll call will be done for member associations only. Delegates representing affiliate members, academic members, corporate members and correspondents as well as honorary presidents and honorary members will be entered in the records, but they shall register before the meeting starts at the meeting venue to the staff of FIG Office.

Please note that only member associations that have paid all their membership fees to the end of 2017 are allowed to vote at the meeting. A list of member associations that are not allowed to vote will be published and posted on the FIG web site **16 April 2018**.

**Appendix to items 2 & 25:** Roll Call including information on member associations that are not allowed to vote at the General Assembly because of unpaid membership fees for 2017 and earlier. (will be posted 16 April 2018)

**Motion:** Those members present are recorded in the minutes.

**Decision:**

## **26. MEMBERSHIP MATTERS**

The Council will decide on other membership issues, if any, considered in Istanbul and bring them for the General Assembly for decision or information as necessary.

**Decision:**

## **27. ELECTION OF COMMISSION CHAIRS**

According to the FIG Statutes and Internal Rules the General Assembly shall elect Commission Chairs Elects. These Chairs Elect will then become Chairs of the Commissions for the next term of office, 2019-2022. Thus the General Assembly shall appoint at this meeting Commission Chairs for the term of office 1.1.2019-31.12.2022. Their respective nominating member associations have reconfirmed all nominated Chairs 2019-2022.

The election will take place on the following candidates:

Commission 1: Winnie Shiu, CSSMG, China

Commission 2: vacant

Commission 3: Hartmut Müller, DVW, Germany

Commission 4: vacant  
Commission 5: Daniel Roman, NSPS, USA  
Commission 6: Maria João Henriques, OE-CEG, Portugal  
Commission 7: Daniel Paez, Colombian Society for Surveyors, Colombia  
Commission 8: Marije Louwsma, GIN, the Netherlands  
Commission 9: Ben Elder, RICS, UK  
Commission 10: Alan Muse, RICS, UK

Because there is only one candidate for Commission 1, 3, 5, 6, 7, 8, 9, and 10 these candidates will be elected through a simple voting.

For commission 2 and 4, as there were no nominations, Council has appointed Chairs for these positions and is bringing these two chairs forward to the General Assembly.

**Appendix to item 20 and 27: Profiles of the candidates for FIG Commission Chairs**  
1.1.2019-31.12.2022

Commission 1: Winnie Shiu, CSSMG, China  
Commission 2: vacant  
Commission 3: Hartmut Müller, DVW, Germany  
Commission 4: vacant  
Commission 5: Daniel Roman, NSPS, USA  
Commission 6: Maria João Henriques, OE-CEG, Portugal  
Commission 7: Daniel Paez, Colombian Society for Surveyors, Colombia  
Commission 8: Marije Louwsma, GIN, the Netherlands  
Commission 9: Ben Elder, RICS, UK  
Commission 10: Alan Muse, RICS, UK

**Motion:** That the General Assembly:

- elects the Chairs Elects to commissions 1, 3, 5, 6, 7, 8, 9, 10 as described above,
- notes the appointment of the Chairs Elects to commission 2 and 4,
- appoints the Chairs Elects for Chairs for the term 2019-2022.

**Decision:**

## **28. ELECTION OF TWO VICE PRESIDENTS FOR 2019-2022**

The General Assembly have heard presentation of the three candidates for the two positions for FIG Vice President 2019-2022 at the first session. The election will take place between:

- a) Diane Dumashie, RICS, UK
- b) Alojz Kopacik, Chamber of Surveyors and Cartographers, Slovakia
- c) Jixian Zhang, CSSMG, China



The elections will take place by blind votes following the FIG statutes and internal rules. The elections will take place one position at a time. If there will be no absolute majority in the first voting, second vote will be organised between those two candidates that have most votes.

**Appendix to item 21 and 28:** Profiles of the candidates for FIG Vice President 1.1.2019-31.12.2022:

- a) Diane Dumashie, RICS, UK
- b) Alojz Kopacik, Chamber of Surveyors and Cartographers, Slovakia
- c) Jixian Zhang, CSSMG, China

**Motion:** This General Assembly elects two Vice Presidents for the term 1.1.2019-31.12.2022.

**Decision:**

## **29. ELECTION OF PRESIDENT FOR 2019-2022**

The General Assembly have heard presentation of the two candidates for the FIG President 2019-2022 at the first session. The election will take place between

- a) Brian Coutts, NZIS, New Zealand
- b) Rudolf Staiger, DVW, Germany

The election will take place by blind votes following the FIG statutes and internal rules.

**Appendix to item 22 and 29:** Profiles of the candidates for FIG President 2019-2022:

- a) Brian Coutts, NZIS, New Zealand
- b) Rudolf Staiger, DVW, Germany

**Motion:** That the General Assembly elects the President for FIG for term of office 1.1.2019-31.12.2022.

**Decision:**

## **30. DECISION ON THE VENUE FOR FIG CONGRESS 2022**

Candidates for FIG Congress 2022 have made their presentations in the first session of the General Assembly and FIG Council has presented its evaluation. The decision will be made between:

- a) Cape Town, South Africa, The South African Geomatics Institute (SAGI)
- b) Florida, USA, National Society of Professional Surveyors (NSPS)

The decision will take place by blind votes following the FIG statutes and internal rules.

**Motion:** That the General Assembly decides the host and venue for FIG Congress 2022.

**Decision:**

### **31. REPORTS FROM ASSOCIATION, AFFILIATE, ACADEMIC, REGIONAL BODIES, CORPORATE MEMBERS FORUM AND OTHER (IF ANY)**

During the Congress there will be Member Association Forum, the Director General's/Affiliate Members Forum, Academic Members Forum, Regional Bodies Forum and Corporate Members Meeting. They may report back to the General Assembly on any issues that may need the endorsement of or are of general interest to the General Assembly.

**Motion:** That the General Assembly records the report(s)

**Decision:**

### **32. REPORTS FROM COMMISSIONS**

FIG Commissions will have their annual meetings, administrative meetings and technical sessions during the Congress. They may report back to the General Assembly on any issues that may need the endorsement of or are of general interest to the General Assembly. Any other activities from the Congress may be reported back to the General Assembly on any issues that may need the endorsement of or are of general interest to the General Assembly.

**Motion:** That the General Assembly records the report(s).

**Decision:**

### **33. REPORTS FROM NETWORKS, TASK FORCES, PERMANENT INSTITUTIONS, FIG FOUNDATION AND OTHER WORKING WEEK ACTIVITIES (IF ANY)**

Networks, Task Forces, Permanent Institutions, FIG Foundation and others will have meetings and technical sessions in Istanbul. They may report back to the General Assembly on any issues that may need the endorsement of or are of general interest to the General Assembly. Any other activities from the Working Week may be reported back to the General Assembly on any issues that may need the endorsement of or are of general interest to the General Assembly.

**Motion:** That the General Assembly records the report(s).

**Decision:**

### **34. OTHER ISSUES**

Any other issues that the members want to raise for discussion.

**Motion:** That the discussion will be recorded and the Council will consider action that will be required.

**Decision:**

### **35. REPORT ON THE FIG WORKING WEEK 2021 IN ACCRA, GHANA**

Representatives from the Local Organising Committee from Licensed Surveyors Association of Ghana and Ghana Institution of Surveyors will give a presentation on preparations of FIG Working Week 2021.

**Motion:** That the General Assembly records the report.

**Decision:**

### **36. REPORT ON THE FIG WORKING WEEK 2020 IN AMSTERDAM, THE NETHERLANDS**

Representatives from the Local Organising Committee from Geo-Information Netherlands, GIN will give a presentation on preparations of FIG Working Week 2020.

**Motion:** That the General Assembly records the report.

**Decision:**

### **37. REPORT ON THE FIG WORKING WEEK 2019 IN HANOI, VIETNAM**

Representatives from the Local Organising Committee from the Vietnam Association of Geodesy - Cartography - Remote Sensing will give a presentation on preparations of FIG Working Week 2019.

**Motion:** That the General Assembly records the report.

**Decision:**

### **38. PRESENTATION OF CERTIFICATES OF APPRECIATION AND CLOSING CEREMONY**

**INTERNATIONAL FEDERATION OF SURVEYORS**

**FIG 40<sup>th</sup> GENERAL ASSEMBLY**

**29 May and 2 June 2017**

**Messukeskus Conference Centre, Helsinki, Finland**

**FIG 40<sup>th</sup> GENERAL ASSEMBLY**

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# FIG 40<sup>th</sup> GENERAL ASSEMBLY

## MINUTES

for the meetings held on Monday 29 May 2017 and on Friday 2 June 2017 in Hall 101 at Messukeskus Conference Centre, Helsinki, Finland

### MONDAY, 29 MAY

**Monday, 29 May, 09:00-12:30 and 13:30-15:30**

**Hall 101, Messukeskus Conference Centre**

**General Assembly, First Session**

#### 1. OPENING PROCEEDINGS

President Chryssy Potsiou opened the 40th General Assembly by welcoming all delegates to Helsinki, Finland and to the third General Assembly during this four-year term. The President expressed her gratitude to members and delegates for their participation. She acknowledged the hard work of the local organising committee, the two participating associations MIL and MAKLI and especially National Land Survey, Finland (NLS), for the initial idea to host the Working week in Helsinki in 2017 giving the possibility to also celebrate the 100<sup>th</sup> year of Finland's independence, and for the support that NLS has provided throughout the preparations and during the Working Week.

The President welcomed Honorary Presidents Juha Talvitie, Bob Foster, Stig Enemark and Teo CheeHai to the meeting and noted several greetings and apologies that were received from member associations and other members. The President also warmly welcomed former FIG Director Markku Villikka.

The President held a moment of silence for past president of DVW, Germany, Karl-Friedrich Thoene and other notabilities who have passed away since the last General Assembly.

#### 2. ROLL CALL

Vice President Rudolf Staiger took the roll call. The roll call was done for member associations only. It was noted that only member associations that have paid all their membership fees to the end of 2016 were allowed to vote at the meeting. A list of member associations that were not allowed to vote was published and posted on the FIG web site 26 April 2017. Some associations have after this date settled their arrears.

**Appendix to items 2 & 21:** Roll Call including information on member associations that were not allowed to vote at the General Assembly because of unpaid membership fees for 2016, as updated on 29 May and on 2 June 2017.

63 member associations out of 107 were present at this session, which is more than one third of the membership needed for the General Assembly to be constitutionally valid.

**Motion:** Those members present are recorded in the minutes.

**Decision:** The motion was adopted.

### 3. APPOINTMENT OF TELLERS

The General Assembly shall appoint two persons as tellers for the entire General Assembly. The tellers will represent the member associations hosting the current and the following General Assembly

- Martti Pietikainen (MIL/MAKLI, Finland),
- Muzaffer Kahveci (Chamber of Surveying and Cadastre Engineers of Turkey)

**Motion:** That the General Assembly appoints Martti Pietikainen from MIL/MAKLI and Muzaffer Kahveci from Chamber of Surveying and Cadastre Engineers of Turkey as tellers for this General Assembly.

**Decision:** The motion was adopted.

### 4. ADOPTION OF THE AGENDA

The Agenda for the General Assembly was issued as mandated, two months prior the General Assembly on the FIG web site and also sent by email to all members.

**Motion:** That the agenda be adopted.

**Decision:** The motion was adopted.

### 5. ADOPTION OF THE MINUTES OF THE 39<sup>th</sup> GENERAL ASSEMBLY

Minutes have been circulated previously.

**Appendix to item 5:** Minutes of the General Assembly in Christchurch, New Zealand, May 2016, without appendices.

**Motion:** That the minutes be adopted as recorded.

**Decision:** The motion was adopted.

### 6. MEMBERSHIP

#### 6.1. Admittance of new Member Associations

FIG Council has received four applications for member association since the 39<sup>th</sup> General Assembly.

#### 6.1.1. Ordre des Géomètres Experts de Côte d'Ivoire (OGECI) (MA-10129)

Ordre des Géomètres Experts de Côte d'Ivoire (OGECI) has applied for association membership. The association was established in 1970. Their total membership (all categories) is 35. Ordre des Géomètres Experts de Côte d'Ivoire (OGECI) fulfills the criteria of FIG Member association. Application form is attached as **appendix to agenda item 6.1.1**

##### **Appendix to item 6.1.1:**

- Membership application from Ordre des Géomètres Experts de Côte d'Ivoire
- Objectives and Ethics

**Motion:** That the General Assembly admits Ordre des Géomètres Experts de Côte d'Ivoire to become a member association of FIG.

**Decision:** The motion was adopted, and the membership certificate was handed over by FIG President.

#### 6.1.2. Tanzania Institution of Valuers and Estate Agents (TIVEA) (MA-10130)

Tanzania Institution of Valuers and Estate Agents (TIVEA) has applied for association membership. The association was established in 1997. Their membership of qualified surveyors is 334 and qualifying is over 600. Tanzania Institution of Valuers and Estate Agents (TIVEA) fulfills the criteria of FIG Member association. Application form is attached as **appendix to agenda item 4.1.2**

**Appendix to item 6.1.2:** Membership application from Tanzania Institution of Valuers and Estate Agents (TIVEA)

**Motion:** That the General Assembly admits Tanzania Institution of Valuers and Estate Agents (TIVEA) to become a member association of FIG.

**Decision:** The motion was adopted, and the membership certificate was handed over by FIG President.

#### 6.1.3. Society Of Engineers – UAE (MA-10131)

The Society of Engineers – United Arab Emirates has sent an application for membership. The association was formed 1979, and has 1200 members in the category surveyors. This number includes both Title holders and Sub- profession that are practicing members. The application is attached as **appendix to agenda item 6.1.3**

**Motion:** That the General Assembly admits The Society of Engineers – UAE to become a member association of FIG.



**Decision:** The motion was adopted, and the membership certificate was handed over by FIG President.

#### 6.1.4. Institution of Surveyors of Uganda (MA-10132)

Institution of Surveyors of Uganda, ISU has sent an application for membership. Their association was formed in 1968 and has 280 qualified members. Institution of Surveyors of Uganda fulfills the criteria of FIG Member association.

The application is attached as **appendix to agenda item 6.1.4**

**Motion:** That the General Assembly admits Institution of Surveyors of Uganda, ISU to become a member association of FIG.

**Decision:** The motion was adopted, and the membership certificate was handed over by FIG President.

### 6.2. Other Member Association Issues

#### 6.2.1. GEOTHECO Uganda change from member association to corporate membership

Géographie, Topographie, Hydraulique, Energie et Construction (GEOTHECO), Uganda was in 2016 admitted as Member Association. However, the correct membership category is Corporate Membership. They have submitted a new application form for corporate membership, category D.

**Motion:** That the General Assembly notes the change of membership category from Member Association to Corporate member for GEOTHECO

**Decision:** The motion was adopted.

### 6.3. Expulsion of member associations

Subscriptions of following member associations are more than three years in arrears:

- Brasil: Sociedade Brasileira de Cartografia, Geodésia, Fotogrametria e Sensoriamento Remoto MA-10011
- Togo: Ordre des Geometre du Togo MA-10084
- Benin: Ordre Des Geometres Experts Du Benin MA-10113
- Ethiopia: Ethiopian Surveying Professionals Association (ESPA) MA-10115
- Nigeria: Nigerian Institution of Estate Surveyors and Valuers (NIESV) MA-10118

- Gabon: Association des Professionnels de l'Ingenierie Topographique du Gabon, APIT MA-10122

The General Assembly has power to expel from the Federation any member association whose fees are in arrears and shall under normal circumstances expel any member association whose fees are three years in arrears. (Article 4.3 of the Statutes). The FIG office has sent information to these associations informing that if their membership fees are still in arrears at the time of the General Assembly the General Assembly shall expel the above member associations in Helsinki.

After acceptance of new member associations and before expulsions the number of FIG member associations is 107 from 92 countries.

**Motion:** That the General Assembly expels:

- Brasil: Sociedade Brasileira de Cartografia, Geodésia, Fotogrametria e Sensoriamento Remoto MA-10011
- Togo: Ordre des Geometre du Togo MA-10084
- Benin: Ordre des Geometres Experts du Benin MA-10113
- Ethiopia: Ethiopian Surveying Professionals Association (ESPA) MA-10115
- Nigeria: Nigerian Institution of Estate Surveyors and Valuers (NIESV) MA-10118
- Gabon: Association des Professionnels de l'Ingenierie Topographique du Gabon, APIT MA-10122

from the FIG Membership if their membership fees are still in arrears 29 May 2017.

**Decision/Action:** The motion was adopted. It was noted that Ordre des Geometre du Togo and Ordre des Geometres Experts du Benin paid their arrears during the Working Week and their membership was restored at the second session of the General Assembly.

#### **6.4. Suspended status 2017**

In accordance with its administrative measures, FIG Council, has deferred to continue for 2017 the issuance of a membership subscription invoice to the Order of Syrian Engineers and Architects, OSEA as all efforts to maintain contact with them has not yielded results, will deem their membership in suspension giving due consideration to its internal situation. As reported in the General Assembly 2016, there remain existing sanctions on Iran, but this might change during 2017. The FIG office in Denmark cannot for the time being receive payments from Iranian Professional Society of Surveying Engineers (ISS). Ukrainian Society of Geodesy and Cartography has also gained suspended status and has not been invoiced for 2017. Again in accordance with its administrative measures, FIG Council deem their membership to be in suspension. The situation with these associations will be reconsidered by Council again in 2018.

**Motion:** That the General Assembly notes the members with suspension status.

**Decision:** The motion was adopted. It was noted that Iranian Professional Society of Surveying Engineers (ISS) paid their arrears during the Working Week and their suspension status was changed to normal member at the second session of the General Assembly.

## **6.5. Other membership issues**

### **6.5.1. Affiliate members**

There have been no applications for affiliate membership since the General Assembly 2016.

The council has expelled the following affiliate members because of unpaid membership subscriptions:

- a) Argentina: Consejo Federal De Catastro De La Republica Argentina (C.F.C) AF-20047
- b) Azerbaijan: State Committee for Land and Cartography, State Aerogeodesy Corporation, Azerbaijan AF-20048
- c) Fiji: Ministry of Lands and Mineral Resources AF-20039

Fiji has promised to pay during the WW 2017. If FIG office receives payment they will be re-installed as AF member.

General Administration of the patrimonial Documentation, Belgium (AF-20002) has terminated their membership.

After these changes the number of Affiliate members is 45 from 44 countries.

### **6.5.2. Corporate members**

FIG Council has admitted the following Corporate Members:

- a) Géographie, Topographie, Hydraulique, Energie et Construction (GEOTHECO), Uganda (CM-30062) moved from MA membership)
- b) Génie Congo Sarl, République Démocratique du Congo – Category F (CM-30063)
- c) GEOIDE GEOSYSTEMS S.A., Portugal – Category E (CM-30064)
- d) M/s. Survey Scale Pvt. Limited., Karachi, Pakistan – Category F (CM-30065)
- e) M/s Accord Marine Surveyors, India – Category F (CM-30066)
- f) GIS/Transport Ltd., Nigeria – Category D (CM-30067)
- g) Topcon Europe Positioning b.v Category C (CM-30068)

The State Enterprise, Ukraine has terminated their corporate membership of FIG.

Expelled:

- a) Russian Federation Meridian + (CM-30049)
- b) KQ Geo Technologies Co. Ltd. (CM-30050)

After these changes the number of corporate members is now 27.

### 6.5.3. Academic members

FIG Council has admitted the following University to become Academic member:

- a) University of Oradea – Faculty of Construction, Cadastre and Architecture, Romania (AC-40145)
- b) Selcuk University, Geomatic Engineering, Turkey (AC-40147)
- c) Institute of Surveying and Mapping, Survey Department, Sri Lanka (AC-40146)
- d) Tafe NSW - Riverina Institute, Australia (AC-40148)

University of Mines and Technology, Ghana (AC-40030) were expelled at the end of 2015 but they paid their arrears in 2016 and have been reinstalled.

The number of Academic Members after these changes is 95 from 53 countries.

### 6.5.4. Correspondents

The Council has admitted following new correspondents:

- Ahmed Nuaim, Maldives, Managing Director Foresight Surveyors (Pvt) Ltd. (CR-50026)
- Mr Javaid Akhtar, Pakistan (CR-50027)

The number of correspondents is now 3.

**Motion:** That the General Assembly notes the actions that the Council has taken with other membership matters.

**Decision:** The motion was adopted.

## 7. PRESIDENT'S REPORT

President Chryssy Potsiou has prepared the President's report on the activities of the Federation since the General Assembly in Christchurch, New Zealand, May 2016.

**Appendix to item 7:** Hand-outs of the Presidents presentation.

**Motion:** That the General Assembly accepts the President's report.

**Decision:** The motion was adopted.

## 8. REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2016-2017

Mr. John Hohol, President of the FIG Foundation has prepared a report on the FIG

Foundation activities from May 2016 to March 2017. He made a short report to the General Assembly.

The FIG Council has appointed Dr. Daniel Steudler from Switzerland as a new Director in the Board of Directors for 2017-2018 since Paul van der Molen, now retired, has decided to resign as board member. The new Council representative in the Board of Directors is Vice President Orhan Ercan.

**Appendix to item 8:**

Report of the FIG Foundation activities 2016-2017

Result 2016

**Motion:** That the General Assembly:

- adopts the report of the President of the FIG Foundation
- records its thanks to the President and members of the Board of Directors of the FIG Foundation for their past year's work
- records the resignation of Paul van der Molen after 6 years as director and extends its special thanks for his commitment to the FIG Foundation including his generous financial donations for these many years
- appoints the President and Directors of the FIG Foundation for term of office 1.1.2017-31.12.2018: President: Mr. **John Hohol** (USA) and Directors: Prof. **Michael Barry** (Canada), Dr. **Daniel Steudler** (Switzerland), Ir. **Liza Groenendijk** (FIG Commission 2 representative), and FIG Vice President **Orhan Ercan** (Turkey) as the Council representative.

**Decision:** The motion was adopted

## **9. REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS 2016-2017**

### **9.1. International Office of Cadastre and Land Records (Office International du Cadastre et du Régime Foncier) OICRF**

Dr. Christiaan Lemmen, Director of OICRF has prepared a report on the OICRF activities since the General Assembly in Christchurch. He made a short report to the General Assembly.

**Appendix to item 9.1:** Report from the International Office of Cadastre and Land Records (Office International du Cadastre et du Régime Foncier) OICRF.

**Motion:** That the General Assembly adopts the report and records its thanks to the members of OICRF for their past year's work and contribution.

**Decision:** The motion was adopted

### **9.2. International Institution for the History of Surveying and Measurement, Permanent Institution of FIG**

Mr. Jan de Graeve, Director of the IIHSM has prepared a report on the IIHSM activities since the General Assembly in Christchurch. IIHSM made a short report to the General Assembly.

**Appendix to item 9.2:** Report from the International Institution for the History of Surveying and Measurement, Permanent Institution of FIG.

**Motion:** That the General Assembly adopts the report and records its thanks to the Director and the members of the permanent institution for their past year's work and contribution.

**Decision:** The motion was adopted

## **10. FIG REGIONAL BODIES FORUM**

At the FIG Working Week 2016, regional bodies held a forum session for the first time. Again in 2017, there was a Regional Bodies Forum scheduled during the Working Week on Thursday 1 June 11:00 – 12:30. Maurice Barbieri made a short update report on FIG Regional Bodies Forum.

**Motion:** that the General Assembly notes the report.

**Decision:** The motion was adopted.

## **11. REPORTS FROM FIG COMMISSIONS AND NETWORKS 2016-2017**

Each Commission Chair has submitted a written report on their Commission activities since the FIG Working Week in Christchurch. These reports include progress reports of the Commission working groups. Each Commission will hold a meeting during the Working Week (Wednesday 31 May, 17:30-18:30). Each Commission gave a short report on Commission activities to the General Assembly. The reports were grouped into three panels and were followed by questions and comments from the delegates.

**Appendix to item 11:** Commission reports:

- Commission 1
- Commission 2
- Commission 3
- Commission 4
- Commission 5
- Commission 6
- Commission 7
- Commission 8
- Commission 9
- Commission 10

Hand-out of presentations

New publication from FIG Commission 9: Property Taxation for Developing Economies, joint FIG Commission 9/UN-Habitat/GLTN – Valuation and the Management of Real Estate, FIG Report 2016: <http://www.fig.net/resources/publications/figpub/pub67/Figpub67.asp>

Each Network Chair has submitted a written report on their Network activities since the FIG Working Week in Christchurch. Each Network gave a short report on the Network activities to the General Assembly.

**Appendix to item 11:** Network reports:

- Standards Network – hand-outs
- Regional Capacity Network – hand-outs
- Young Surveyors Network

### **Election Structure for Chair of Young Surveyors**

Young Surveyors Network has so far elected their chairs for a 4 year term like the commissions. FIG Council has approved the chair. Young surveyors have proposed to FIG Council to change this structure. FIG Council and Young Surveyors Network have decided on the following structure for the future proposed by the Young Surveyors:

#### ***Shortlist of candidates by YSN and decision by FIG Council***

*YSN has an internal consultation process that can include application for the position, together with key and active YS from regions identify candidates and recommend to FIG Council a shortlist of candidates (e.g. three). FIG Council decides and appoints one as YSN Chair-elect. This process should include consulting the candidate's member association.*

The above structure has been adopted by FIG Council with the caveat that Council and YS retain the possibility to nominate an alternative Chair if the Chair elect has not proven active.

**Motion:** That the General Assembly:

- adopts the reports of the Commission Chairs and records its thanks to the chairs and other officers of the Commissions for their ongoing contributions.
- adopts the reports of the Network Chairs and records its thanks to the chairs and other officers of the Networks for their ongoing contributions
- records the structure on voting of Chair for Young Surveyors

**Decision:** The motion was adopted

## **12. HONORARY MEMBERS**

The Council has received two nominations for Honorary Members:

Association of Licensed Surveyors in Israel (ALSI) from Israel has nominated Professor Dr. **Yerach Doytsher**, and Swiss Association for Geomatics and Land Management (geosuisse) has nominated Dr. **Daniel Steudler**.

Appendix to item 12: The nomination letters for:

- Professor Dr. **Yerach Doytsher**, Association of Licensed Surveyors in Israel (ALSI)
- Dr. **Daniel Steudler**, Swiss Association for Geomatics and Land Management (geosuisse)

According to the Statutes paragraph 3.1.7 an individual who has materially assisted the development and promotion of the surveying profession at the international level can be appointed as an honorary member. Nomination for this appointment shall be made by a member association or the Council, which will consider it and submit it to a vote of the General Assembly.

The Council has considered both proposals and decided to propose to the General Assembly that it appoints Yerach Doytsher, ALSI, Israel and Daniel Steudler as Honorary Members of the Federation for the outstanding services they have provided to the Federation in different positions and functions.

**Paul Munro-Faure**, FAO, has worked closely with FIG for many years and is now standing down from FAO. FIG Council would like to acknowledge the longstanding cooperation with Paul Munro-Faure. As a special consideration FIG Council has decided to appreciate him as Honorary Ambassador. His certificate will be presented to him by the President during the Opening Ceremony on 30 May.

**Motion:** That the General Assembly appoints Yerach Doytsher and Daniel Steudler Honorary Members of FIG, and that the General Assembly notes the appreciation as Honorary Ambassador for Paul Munro-Faure that will be presented to him at the Opening Ceremony.

**Decision:** The motion was adopted with applause.

### **13. REPORTS FROM THE FIG TASK FORCES 2016-2017**

FIG has currently four Task Forces.

#### **13.1. Task Force on Real Property Markets**

The Task Force assesses the progress of establishing the real property markets in the countries with economies in transition. The Task Force is chaired by Pekka Halme, Finnish Association of Geodetic and Land Surveyors MIL. A session on Real Property Markets is included in the technical programme.

**Appendix to item 13.1** – Status Report from the Task Force. Hand-outs.

**Motion:** That the General Assembly adopts the report from the Task Force and records its thanks to the Chair of the Task Force and its members.

**Decision:** The motion was adopted



### **13.2. Task Force on Corporate Members**

The Task Force is established to strengthen the FIG relationship with corporate members. The Task Force is chaired by John Hohol, National Society of Professional Surveyors (NSPS) in cooperation with Bryn Fosburgh, Vice President of Trimble.

**Appendix to item 13.2** – Status Report from the Task Force.

**Motion:** That the General Assembly records the report from the Task Force and records its thanks to the Chair of the Task Force and its members.

**Decision:** The motion was adopted.

### **13.3. Task Force on Scientific Journal**

The Task Force is established to investigate the usefulness and need and if justified, the steps forward in order to introduce an FIG peer review Journal (electronic or printed). The Task Force is chaired by Yerach Doytsher, Association of Licensed Surveyors in Israel (ALSI). The Task Force has written a final report and proposal to be presented and adopted at the General Assembly 2017. After the reporting, the Task Force has completed its task, and FIG Council will decide on the next steps. The report closes the task force.

**Appendix to item 13.3** – Final Report from the Task Force. Presentation Hand-outs

**Motion:** That the General Assembly:

- records the final report and recommendations from the Task Force,
- records its thanks to the Chair of the Task Force and its members
- decides to close the FIG Task Force on Scientific Journal as its work has come to an end

**Decision:** The motion was adopted. The President thanked the Task Force for its work and the recommendations, and said that the recommendations as well as comments from the General Assembly will be discussed by council. The editorial board of the FIG peer review will also be included in the discussions.

### **13.4. Task Force on Commission Structure**

The Task Force assesses the Commissions and investigates if there is a need to revise their structure and to provide a proposal on possible improvements. The Task Force is chaired by Mikael Lilje, Swedish professionals for the built environment, Samhällsbyggarna.

The Task Force has written a final report and proposal to be presented and adopted at the General Assembly 2017. The final report is based on the discussions and feed back from the Task Force sessions at FIG Working Week 2016, and the regional meetings held during the autumn 2016.

Members of FIG had another possibility to discuss the proposal in more details with the Task Force at a lunch meeting on Thursday 1 June 2017.

A summary of the comments received during the first General Assembly session and the Task Force session will be presented at the 2<sup>nd</sup> General Assembly together with a final proposal for the General Assembly.

Votings for Commission Chairs for the term 2019-2022 for the current 10 commissions will be done at the General Assembly 2018 in Istanbul, Turkey. The bid for nominations will be published in July/August.

#### **Appendix to item 13.4 – Report from the Task Force**

**Motion:** That the General Assembly

- records the final report and recommendations from the Task Force,
- records its thanks to the Chair of the Task Force and its members
- notes the discussion session during the Working Week
- decides to take the Task Force proposal with amendments, if any, to a voting at the second General Assembly Session
- notes the voting schedule for commission chairs for the term 2019-2022

**Decision:** The motion was adopted

## **14. CO-OPERATION WITH THE UNITED NATIONS AND THE WORLD BANK**

Since the 39th General Assembly, FIG has continued to collaborate with the World Bank and various agencies and structures within the United Nations.

The main activities in the co-operation with the United Nations and the World Bank during this period have been:

At FIG Working Week 2016, a pre-workshop was organised in cooperation with UN-Habitat/GLTN, FAO, AUS-Aid and NZ-Aid on Climate Change and Tenure Insecurity in Small Island Developing States, SIDS. Outcome of the workshop was a declaration which has been published in the FIG Publication series:

The FIG Christchurch Declaration - Responding to Climate Change and Tenure Insecurity in Small Island Developing States. The Role of Land Professionals SIDS Workshop, FIG Working Week, Christchurch, New Zealand 30 April – 1 May 2016. FIG Report 2016

<http://www.fig.net/resources/publications/figpub/pub68/figpub68.asp>

Participation to FAO and the Voluntary Guidelines, VGGT.

At FIG Working Week 2016 two special sessions, one of them being the FIG Academic Forum, were organised. A result of the Working Week 2016 was an action statement.

Appendix to agenda item 14:

- FIG/FAO Action statement

- Article published in the Magazine GeoConnexion on the outcome of the cooperation and the action statements

Again in 2017 at the Working Week there will be two sessions, FIG Academic Forum and a special 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 workshops in cooperation with FIG Young Surveyors
- Expert Group Meetings
- Special sessions in the Working Week 2017 technical programme

FIG Publication 52 FIG Publication no 52 The Social Tenure Domain Model - A Pro-Poor Land Tool on Social Tenure Domain Model. FIG Report, 2010.

<http://www.fig.net/pub/figpub/pub52/figpub52.pdf>

has now been translated into three languages:

Arabic: [http://www.fig.net/resources/publications/figpub/pub52/Figpub52\\_arabic.pdf](http://www.fig.net/resources/publications/figpub/pub52/Figpub52_arabic.pdf)

French: link will follow – under preparation

Japanese: link will follow – under preparation

Participation at the Habitat III meeting organised by UN-Habitat

Participation to the work of UN-GGIM

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

Participation to UN-OOSA

Participation at the World Bank Conference in March 2017.

**Motion:** That the General Assembly

- adopts the report on the co-operation between FIG and the United Nations, its agencies and the World Bank
- endorses the Christchurch Declaration
- endorses the FAO/FIG statement
- records its thanks to all those who have contributed to this co-operation

**Decision:** The motion was adopted.

## 15. LIAISON WITH INTERNATIONAL PROFESSIONAL ORGANISATIONS

The Joint Board of Spatial Information Societies JB-GIS was formally established during the FIG Working Week in Cairo in 2005 and meets annually during a major conference. The meeting of JB-GIS in 2016 was held in August 2016. FIG has collaborative MoUs with a number of the organizations who are part of JB-GIS.

FIG has further bilateral agreements of co-operation with several other international associations like ISM, IFHP, CIB, ION, ICEC, FIABCI, IFHS, PAIGH and PAQS.

FIG is represented in International Construction Measurement Standard Coalition by Chair of FIG Commission 10, See Lian Ong who has been appointed chair of the Standard Setting Committee. FIG is represented in the Trustee Board by the President.

FIG is represented in International Land Measurement Standard Coalition by Mr. Maurice Barbieri.

FIG Council has furthermore 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.

**Motion:** That the General Assembly records the report on the liaison with other international associations.

**Decision:** The motion was adopted.

**16. AMENDMENT TO STATUTES AND INTERNAL RULES**

The following two agenda items, 17.1 and 17.2 were introduced at the first session of the General Assembly, and voting will take place at the second session on 2 June, under agenda item 24.

**16.1. Amendment proposed by DVW Society of Geodesy, Geoinformation and Land Management, Germany**

FIG President and Council has received letter from DVW with proposal for amendment of the FIG Statutes:

Existing provision	Proposed amendment ( <i>amendment here shown in italics</i> )
<p>5.5 The term of office for all elected members of the Council is four years subject to the provisions of section 5.6. No individual may serve for more than two consecutive periods on the Council and the term of office of the president is limited to one period of four years. The term of office for the President, Vice Presidents and the ACCO representative starts on 1 January in the year immediately following their election. For the purposes of this section a single term of two years or less shall not be considered as a term of office.</p>	<p>5.5 The term of office for all elected members of the Council is four years subject to the provisions of section 5.6. No individual may serve for more than two consecutive periods on the Council <i>as vice president</i>. The term of office of the president is limited to one period of four years. The term of office for the President, Vice Presidents and the ACCO representative starts on 1 January in the year immediately following their election. For the purposes of this section a single term of two years or less shall not be considered as a term of office.</p>

The proposal was presented by President of the German Association DVW and hereafter discussed by the General Assembly. Comments included:

- A change should be done on thorough research
- A proper review is needed before a discussion
- Qualified candidates for the posts are needed
- It is a principle matter, and therefore it needs to be considered carefully
- A potential candidate will already have had 8 years to implement ideas
- Experience is important
- There was a major governance change in 2001 that was a result of many discussions, and which was fully operational in 2007
- Important to encourage global influence
- 16 years since FIG has examined itself. Much has happened since then – perhaps good idea to study FIG overall – finances, administrations, commissions, everything
- FIG provides an open platform

Attached to item 16.1 and 23: Letter from DVW

**Motion:** That the General Assembly notes the presentation of the proposed change and decides to make the elections at the second session of the General Assembly.

**Decision:** The motion was adopted.

## **16.2. Amendment proposed by Council**

FIG President introduced the rationale behind “Suspended status” for FIG members.

FIG Council has in the later years experienced on several occasions where a member (member association, affiliate or academic member):

- had difficulty in remitting its membership dues to FIG;
- could not be contacted; and
- experienced internal financial distress,

due to circumstances beyond the member’s or FIG’s control such as domestic civil strife, external economic sanctions or sharp sudden domestic economic turmoil, but desirous of remaining a member of FIG.

FIG Council has adopted guidelines to handle the above situation, and suggests that the already adopted paper on membership suspension will be added to the FIG Statutes, Internal Rules and Guidelines as a new Guideline for Council and FIG Office.

**Appendix to agenda item 16.2:** Guidelines for membership suspension by decision of council.

**Motion:** That the General Assembly endorses the Guidelines for membership suspension by decision of council.

**Decision:** The motion was adopted.

## 17. FIG ACCOUNTS FOR 2016, AUDITOR'S REPORT AND BUDGETS 2017-2020

Vice President Rudolf Staiger presented the report to the General Assembly. This report included the auditors report from 2016, official accounts (income statement 2016) and balance sheet 31 December 2016, a summary of 2016 accounts, an updated budget for 2017 and proposals for budgets 2018-2020 and proposal for membership fees for member associations in 2019.

### **Appendix to item 17:**

Report on Financial Issues (including 2016 accounts and budgets 2017-2020)

Annexes:

- **17A** Auditor's Report, Income Statement for 2016 and Balance Sheet at 31 December 2016.
- **17B** FIG Result 2016
- **17C** FIG Budgets 2017-2020
- **17D** List of member associations whose membership fees are in arrears for 2016 and earlier and that are not allowed to vote - to be published on the FIG web site **26 April 2017** (in roll call).
- **Hand-outs**

**Motion:** That the General Assembly

- adopts the audited accounts for 2016,
- adopts the Finance Report, and
- adopts budgets for 2017–2020

**Decision:** The motion was adopted.

## 18. SUBSCRIPTION RATES FOR 2019

The General Assembly has to set levels of fees for member associations two years in advance of the year in which they become payable. Fees are payable in respect of each individual member up to a maximum of 5,500 members. The membership fee structure was changed in 2009. Membership fees have been discussed as part of the finance report, **appendix to item 17**.

The 2016 General Assembly approved membership fees for 2018 as follows:

<b>Year</b>	<b>Per capita fee</b>	<b>Minimum fee</b>	<b>Maximum fee</b>
2018	€4.48 per member up to a maximum of 5,500 members Member associations from countries listed by the World	20 members or €50 (whichever is greater)	5,500 members (€24,640)

	Bank as low-income economies or lower-middle-income economies shall pay €2.24 member up to a maximum of 5,500 members.		
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The World Bank lists of the low-income economies and the lower-middle-income economies are available at: <http://data.worldbank.org/about/country-classifications/country-and-lending-groups>

The 2018 subscription fees have been kept at the same level as for the years 2012-2018.

Although FIG Council knows that budgets are tight among the member associations, it has decided to propose to the General Assembly an increase of the subscription rates of 8% to €4.80 per member from €4.48. The rates have been kept stable since 2012, Council and office have been very cost conscious, but must also face that there is a general increase in costs.

**Motion:** That the General Assembly adopts following membership fees payable by member associations in 2019:

Year	Per capita fee	Minimum fee	Maximum fee
2019	€4.80 per member up to a maximum of 5,500 members Member associations from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay €2.40 per member up to a maximum of 5,500 members.	25 members or €50 (whichever is greater)	5,500 members (€26,400)

**Decision:** The motion was adopted.

## 19. DECISION ON THE VENUE FOR FIG WORKING WEEK 2021 – PRESENTATION OF CANDIDATES

The FIG Working Weeks are organised by FIG together with a local member association. FIG will together with the local member association have full responsibility of the arrangements and of the financial result. This offers FIG better opportunities in terms of organising events and generating revenue. Therefore the Council has to ensure that all candidates are aware of the role of FIG and split of responsibilities for organising the Working Week. This General Assembly will decide on the host for the 2021 Working Week.

The FIG Council has received two bids to host the FIG Working Week 2021, and FIG Council thanks all bidding member associations for their special engagement and contribution to FIG.

The Council has considered the bids and has decided to present the submitted bids to the General Assembly for its decision:

- a) Accra, Ghana, Licensed Surveyors Association of Ghana and Ghana Institution of Surveyors
- b) Krakow, Poland, Association of Polish Surveyors (SGP)

#### **Appendix to item 19 and 24**

- Summary Reports on the Bids for FIG 2021 Working Week (to be added)
- Bidding documents for FIG 2020 Working Week:

- a) Accra, Ghana, Licensed Surveyors Association of Ghana and Ghana Institution of Surveyors - Presentation
- b) Krakow, Poland, Association of Polish Surveyors (SGP) - Presentation

At the session each candidate got exactly 10 minutes to make a presentation of their proposal and framework of the Working Week and their bid.

Decision on the venue of FIG 2021 Working Week will be made at the second session of the General Assembly on 2 June. The voting will be made by blind votes.

**Motion:** That the General Assembly notes the submission, the summary report and the presentations, makes its careful consideration and decision during the second session of the General Assembly on 2 June.

**Decision:** The motion was adopted

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### **Monday 29 May 16:00 – 17:30, Room 102**

Session for Presidents/Heads of Delegation of Member Associations and other FIG members (affiliate, academic, corporate): Developing Professional Networks and Mutual Recognition Agreements Around the Globe.

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### **FRIDAY 2 JUNE 2017**

**Friday, 2 June, 08:30-10:30**

**Room 103,  
Messukeskus Conference Centre, Helsinki, Finland**

**Presidents' Meeting** (by invitation only)

## **20. FIG PRESIDENT'S MEETING**



Totally 59 persons attended the Presidents' Meeting. At the meeting challenges facing the member associations and relations between member associations and FIG were discussed, hereunder the fact that next year at the Congress 2018 in Istanbul, Turkey there will be election for the positions in FIG as President, two Vice Presidents and for the chairs of the 10 commission, as well as experiences from the FIG Working Week 2017. A separate memorandum of this meeting is circulated to the participants of the meeting and to the Presidents of member associations.

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**Friday, 2 June, 11:00–12:30 and 13:30-15:00**

**Plenary Hall, 101,  
Messukeskus Conference Centre, Helsinki, Finland  
General Assembly, Second Session and Closing Ceremony**

## **21. ROLL CALL**

Vice President Rudolf Staiger took the roll call. The roll call was done for member associations only.

It was noted that only member associations that have paid all their membership fees to the end of 2016 were allowed to vote at the meeting. A list of member associations that were not allowed to vote was published and posted on the FIG web site 26 April 2017. Some associations have after this date settled their arrears.

At the second General Assembly 69 member associations out of 104 were present representing 86 votes. Together with observers around 300 persons participated in the General Assembly

**Appendix to items 2 & 21:** Roll Call including information about member associations that are not allowed to vote at the General Assembly because of unpaid membership fees for 2016 and earlier.

To be noted that the General Assembly at its first meeting on 29 May has appointed two representatives as tellers.

*Tellers: The tellers will represent the member association hosting the current General Assembly (MIL/MAKLI, Finland) **Martti Pietikainen** and the host of the proceeding following General Assembly (Chamber of Surveying and Cadastre Engineers of Turkey) **Muzaffer Kahveci**.*

**Motion:** Those members present are recorded in the minutes.

**Decision:** The motion was adopted.

## 22. MEMBERSHIP

During the Working Week the following member associations that in the first General Assembly were expelled have paid:

- Togo: Ordre des Geometre du Togo MA-10084
- Benin: Ordre Des Geometres Experts Du Benin MA-10113

These member associations will therefore be reinstated as member of FIG.

Iranian Professional Society of Surveying Engineers (ISS) has paid their arrears, and their status is now changed from suspended to normal membership.

After reinstallation of the above mentioned members the number of FIG member associations is 104 from 89 countries.

Geo-tech Surveys LTD, Ghana has applied for corporate membership category F. FIG Council has approved their membership. Hereafter the number of corporate members is 28.

**Motion:** That the General Assembly decide that the members who have paid their membership fees will be reinstated as members, note that Iranian Professional Society of Surveying Engineers (ISS) has paid arrears and their status is changed from suspended to normal membership and that the General Assembly note the approval of the new Corporate member Geo-tech Surveys LTD, Ghana

**Decision:** The motion was adopted.

## 23. AMENDMENT TO STATUTES AND INTERNAL RULES

### 23.1. Amendment proposed by DVW Society of Geodesy, Geoinformation and Land Management, Germany

FIG President and Council has received letter from DVW with proposal for amendment of the FIG Statutes which was presented at the first General Assembly on 29 May 2017

Existing provision	Proposed amendment ( <i>amendment here shown in italics</i> )
5.5 The term of office for all elected members of the Council is four years subject to the provisions of section 5.6. No individual may serve for more than two consecutive periods on the Council and the term of office of the president is limited to one period of four years. The term of office for the President, Vice Presidents and the ACCO	5.5 The term of office for all elected members of the Council is four years subject to the provisions of section 5.6. No individual may serve for more than two consecutive periods on the Council <i>as Vice President</i> . The term of office of the president is limited to one period of four years. The term of office for the President, Vice Presidents and the

representative starts on 1 January in the year immediately following their election. For the purposes of this section a single term of two years or less shall not be considered as a term of office.	ACCO representative starts on 1 January in the year immediately following their election. For the purposes of this section a single term of two years or less shall not be considered as a term of office.
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The decision took place by blind votes following the FIG statutes and internal rules.

The voting was made by ballot. 49 voted in favour of the change and 37 voted against the change.

Attached to agenda item 16.1 and 23: Letter from DVW

**Motion:** That FIG General Assembly adopts the proposed change to FIG Statutes item 5.5 to: 5.5 The term of office for all elected members of the Council is four years subject to the provisions of section 5.6. No individual may serve for more than two consecutive periods on the Council as vice president. The term of office of the president is limited to one period of four years. The term of office for the President, Vice Presidents and the ACCO representative starts on 1 January in the year immediately following their election. For the purposes of this section a single term of two years or less shall not be considered as a term of office.

**Decision:** The motion was adopted.

## 24. DECISION ON THE VENUE FOR 2021 FIG WORKING WEEK

Candidates for FIG 2021 Working Week have made their presentations in the first session of the General Assembly and FIG Council has presented its evaluation. The decision will be made between:

- Accra, Ghana, Licensed Surveyors Association of Ghana and Ghana Institution of Surveyors
- Krakow, Poland, Association of Polish Surveyors (SGP)

The decision took place by blind votes following the FIG statutes and internal rules.

In the voting Accra, Ghana received 47 votes and Krakow, Poland 39 votes

**Motion:** That the General Assembly decides the host and venue for FIG Working Week 2021.

**Decision:** The General Assembly decided that the FIG Working Week 2021 will be hosted jointly by Licensed Surveyors Association of Ghana, Ghana Institution of Surveyors and FIG and will take place in Accra Ghana.

## 25. FIG TASK FORCE ON COMMISSION STRUCTURE

At the first General Assembly session the final report from the Task Force on Commission Structure was presented and there was allocated time for discussion. Furthermore, on Thursday, 1 June 14:00–15:30 the Members of FIG had a possibility to discuss the proposal in more details with the Task Force.

A summary of the comments received during the first General Assembly session and the Task Force Session was presented at the 2<sup>nd</sup> General Assembly together with the recommendations from the final report.

Voting for Commission Chairs for the term 2019-2022 for the current 10 commissions will be done at the General Assembly 2018 in Istanbul, Turkey. The bid for nominations will be published in July/August.

### Appendix to item 13.4 – Report from the Task Force

**Motion:** That the General Assembly

- Notes the update report
- Adopts the Task Force proposal

**Decision:** The motion was adopted. The Task Force was closed down and the President thanked the Task Force for its contribution. Based on the Task Force Recommendations, comments and feedback from the members, the President established a new group of volunteers among the members to contribute to the definition of a Terms of Reference for a future Working Group on a review of the overall FIG Governance. The Terms of Reference are planned to be presented at the General Assembly on 6 May 2018 during the Congress 2018.

## 26. REPORTS FROM FIG TASK FORCES

Chair of FIG Task Force on Corporate Members, John Hohol, reported back to the General Assembly.

Appendix: Presentation hand-outs

**Motion:** That the General Assembly records the report.

**Decision:** The motion was adopted.

## 27. REPORTS FROM ASSOCIATION, AFFILIATE, ACADEMIC, REGIONAL BODIES AND CORPORATE MEMBERS FORUM (IF ANY)

During the Working Week there were Member Association Forum, the Director General's/Affiliate Members Forum, Academic Members Forum, Regional Bodies Forum and Corporate Members Meeting. There were reports from

Regional Bodies Forum: hand-outs

Corporate Members Forum: hand-outs

**Motion:** That the General Assembly records the report(s)

**Decision:** The motion was adopted.

## **28. REPORTS FROM NETWORKS, PERMANENT INSTITUTIONS, FIG FOUNDATION AND OTHER WORKING WEEK ACTIVITIES (IF ANY)**

Networks, Permanent Institutions, FIG Foundation and others had meetings and technical sessions in Helsinki. The following reported back to the General Assembly:

FIG Regional Capacity Development Network – presentation hand outs

Young Surveyors Network: presentation hand-outs

On behalf of the Chair of the Standards Network Christiaan Lemmen gave a short oral report including two recommendations:

- to set up a Cross Commission Working Group or may be a Task Force to discuss the implications of blockchain technology for FIG and for the profession.
- to propose a new Working Item Proposal to TC 211 on Geographic Information of ISO for a revision of the Land Administration Domain Model

FIG Foundation: presentation hand-outs

**Motion:** That the General Assembly records the reports.

**Decision:** The motion was adopted.

## **29. REPORTS FROM COMMISSIONS**

FIG Commissions had their annual meetings, administrative meetings and technical sessions during the Working Week. Vice President Diane Dumashie reported back on the commission activities based on input from all commissions.

FIG Commission 5 introduced a new prize. The Commission has decided to award the best Commission 5 paper of the FIG Working Week with the NavXperience Award. The award is donated by the company NavXperience GmbH Berlin, working in the field of navigation and location. The award consists of free registration for the next FIG Congress in Istanbul, a trophy, and 400 EUR. This year the prize was awarded to Hannu Koivula et al. for the contribution “Finish Permanent GNSS Network”, and the prize was handed over during the General Assembly.

Appendix: presentation hand-outs

**Motion:** That the General Assembly records the report.

**Decision:** The motion was adopted.

### **30. OTHER ISSUES**

There were no further issues raised for discussion.

**Motion:** That the discussion will be recorded and the Council will consider action that will be required.

**Decision:** The motion was adopted.

### **31. REPORT ON THE FIG WORKING WEEK 2020 IN AMSTERDAM, THE NETHERLANDS**

Representatives from the Local Organising Committee from Geo-Information Netherlands, GIN gave a presentation on preparations of FIG Working Week 2020.

Appendix: Presentation hand-outs.

**Motion:** That the General Assembly records the report.

**Decision:** The motion was adopted.

### **32. REPORT ON THE FIG WORKING WEEK 2019 IN HANOI, VIETNAM**

Representatives from the Local Organising Committee from the Vietnam Association of Geodesy - Cartography - Remote Sensing gave a presentation on preparations of FIG Working Week 2019.

Appendix: Presentation hand-outs.

**Motion:** That the General Assembly records the report.

**Decision:** The motion was adopted.

### **33. REPORT ON THE FIG CONGRESS 2018 IN ISTANBUL, TURKEY**

Co-congress director Orhan Ercan from the Chamber of Surveying Cadastre Engineers of Turkey gave a presentation on the preparations of FIG Congress 2018.

Appendix: Presentation hand-outs.

**Motion:** That the General Assembly records the report

**Decision:** The motion was adopted.

### **34. PRESENTATION OF CERTIFICATES OF APPRECIATION AND CLOSING CEREMONY**

FIG President Potsiou thanked FIG members and participants of the General Assembly. President Potsiou presented at the closing ceremony certificates of appreciation to the members of the local organising committee of the XL FIG General Assembly and the FIG Working Week 2017. Special thanks were recorded to MIL and MAKLI and their Presidents, Paavo Häikiö and Martti Pietikäinen, and Co-Conference Director Pekka Halme. There was also a special thanks to National Land Survey of Finland for their assistance before and during the Working Week.

At the closing ceremony the FIG banner was handed over by Mr Pekka Halme, Co-Conference Director of the Working Week 2017 to Mr. Orhan Ercan, Co-Conference Director of FIG Congress 2018. The FIG XXVI Congress will be held in Istanbul, Turkey, 6 - 11 May 2018.

President Chryssy Potsiou presented her closing address that summarises the findings and the main outcomes of the FIG Working Week 2017. The President formally closed the 40th General Assembly of FIG Working Week 2017 with the FIG Fanfare.

Appendix: Handouts of the President's Closing Address



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

## International Federation of Surveyors

### Application form for Membership as a Member Association

1. Name of association  
 in own language. . . . . طيئة ءة ءاعام ءة للهس احة .  
 . . . . .  
 in English (if different from above). . **General Commission for Survey**. . . . .  
 . . . . .
2. Address. . . **General Commission for Survey, Al-Olaya Street, P O Box 87918, Riyadh 11652, Kingdom of Saudi Arabia** . . . . .  
 . . . . .  
 . . . . .  
 . . . . .
3. Telephone no . . . . . **+(966) 920000427** . . . . .
4. Fax no. . . . . **+(966) 14647693**. . . . .
5. e-mail address. . . . . **geodesy@gcs.gov.sa**. . . . .  
Home page address. . . **http://www.gcs.gov.sa/** . . . . .  
 .
- Logo (please attach a high resolution logo of the association as .jpg file or add the link): **http://www.gcs.gov.sa/**
6. Name of President . . . **HE. Dr. AbdulAziz Al-Saab** . . . . .
7. Administration  
 Is the above address the address of the permanent office of the association? If so, please state the name of the chief executive and the number of any other permanent staff members.  
 . . . . . **Eng. Othman Alkerayef** . . . . . **General Director, Directorate of Geodesy**. . . . .  
 . . . . . **Eng. Mamdooh Al-Shahrani** . . . . . **Manager CORS Department** . . . . .
8. Date of formation of association. **13th, February 2006**. . . . .



9. Objectives and ethics

Please summarise on a separate sheet the objectives of the association and state whether it enforces disciplinary procedures; and enclose a copy of its constitution and rules (including, where applicable, its code of conduct).

1. **Identify the requirements for all mandated survey and geographical information and hydrographic data and information.**
2. **Establish standards and technical specifications for all mandated survey and mapping activities, production of geographical information and production of hydrographic data and information.**
3. **Identify, organize and monitor all mandated survey activities, mapping, production of geographical information and production of hydrographic data and information in accordance with national requirements.**
4. **Establish and maintain the databases needed to support and maintain the GCS core mission.**
5. **Carry out, or else, authorize, oversee and control all aerial photography conducted within the Kingdom of Saudi Arabia.**
6. **Establish, maintain, monitor and control the national geodetic reference systems and control networks.**
7. **Produce, supply, support and market mandated products and services.**
8. **Commission research and development needed to address emerging national requirements.**
9. **Concentrate on the development of human resources to meet the national requirements of professional development in survey, mapping, charting, production of geographical information, production of hydrographic data and information and related disciplines.**
10. **Increase public awareness in the field of survey, mapping, charting, production of geographical information, production of hydrographic data and information and related disciplines.**
11. **Identify and promote strategic partnerships needed to promote GCS objectives and needs.**
12. **Continually improve organizational and technical capabilities through performance-centered leadership to support GCS core values.**

All the above activities are undertaken by GCS staffs and temporary employed Consultants.

10. Routes of entry to membership

Please provide the following information on a separate sheet

- the title held by qualified members of the association
- the level of academic qualification required to obtain the title
- whether academic training programmes to this level are available in your country (if not, please state how and where members obtain their academic training)

- what approved professional experience is required on completion of academic training and prior to acquisition of the title
- what the requirements are for continuing professional development and whether this is mandatory or voluntary
- if the association also admits technician or sub-professional members and, if so, the qualifications required for entry to this grade of membership

11. Members

No. of holders the title	qualified . . . . .	<b>216</b> . . . . .
	qualifying . . . . .	<b>0</b> . . . . .
No. of technician or sub-professional members	qualified . . . . .	<b>112</b> . . . . .
	qualifying . . . . .	<b>0</b> . . . . .

12. Specialisations

% of qualified members whose principal specialisation is

- |                                    |                      |
|------------------------------------|----------------------|
| • hydrography                      | <b>6%</b> . . . . .  |
| • positioning/measurement          | <b>5%</b> . . . . .  |
| • engineering surveys              | <b>18%</b> . . . . . |
| • cadastre/land management         | <b>0%</b> . . . . .  |
| • spatial planning/development     | <b>2%</b> . . . . .  |
| • valuation/real estate management | <b>0%</b> . . . . .  |
| • construction cost management     | <b>0%</b> . . . . .  |

13. Statutory recognition

Is the association constituted by statute? . . . **YES** . . . . .

Please list on a separate sheet those activities undertaken by your members which are regulated by statute and state whether any or all of these can be performed only by members of your association. If not, please state who else can acquire the title to perform any of the activities.

14. Employment

% of qualified members

- self-employed and employed in private practice. ....
- teaching. ....
- employed by government. . . . **Employed by Government**. ....
- employed in the commercial or other sectors. ....

15. Subscriptions

Please state the annual subscription payable by each grade of membership

.....  
..... **.328 GCS graduates x 4.48 €** .....  
.....  
..... = **1469.44 €** .....  
.....

16. Services to members

Does the association publish a journal (if so, please state title and frequency) . . . **No** . . . . .

Please list on a separate sheet any other services that the association provides for its members.

- **Health Insurance policy**
- **Technical training**
- **Pension Plan**
- **Participation in international conferences and workshops**

As from 1 January 2016 the annual fee payable by a member association is 4.48 € per member of the association for a calendar year. Minimum fee is 20 members or 50 € per member association and maximum fee 5,500 members (24,640 €). Member associations from the poorest countries (countries listed by the World Bank as low-income economies or lower-middle-income economies) shall pay 2.24 € per member up to a maximum of 5,500 members in 2016.

Please send or fax to FIG office: International Federation of Surveyors, Kalvebod Brygge 31-33, DK-1780 Copenhagen V, DENMARK, E-mail: [FIG@fig.net](mailto:FIG@fig.net), tel. + 45 3886 1081

10. Routes of entry to membership

- **Title held by qualified members of the association**
  1. **Vice President**
  2. **General Director**
  3. **Director**

4. Deputy Director
5. Geodetic Expert
6. Senior Survey Engineer
7. Survey Engineer
8. Civil Engineer
9. Geophysist
10. Industrial Engineer
11. GIS Specialist
12. Cartographer
13. Marine Surveyor

- The level of academic qualification required to obtain the title

1. Doctor of Philosophy
2. Postgraduate Degree
3. Bachelor of Engineering
4. Bachelor of Science
5. Diploma

- Whether academic training programmes to this level are available in your country (if not, please state how and where members obtain their academic training)

**Yes, the academic training programs for the above level are available in Saudi Arabia.**

- What approved professional experience is required on completion of academic training and prior to acquisition of the title.

**Nil**

- What the requirements are for continuing professional development and whether this is mandatory or voluntary

**It is mandatory. We sponsor our staffs for B.Eng. and MSc degree from foreign Universities and other Industrial training from partner organisations and institutes across the world.**

- If the association also admits technician or sub-professional members and, if so, the qualifications required for entry to this grade of membership

**The lowest qualification for FIG Member entry for GCS is Diploma.**

### 13. Statutory recognition

- **Developing, implementing and maintaining technical specifications for geodetic, topographic and hydrographic survey works.**
- **Carrying out aerial photography related to its works as well as coordinate, arrange and overseeing the aerial photography activities done by other parties.**
- **Establishing and maintaining geodetic networks to support GCS activities and conduct earth gravity measurements as needed, as well as carrying out appropriate measurements needed for hydrographic charting.**
- **Conducting and sponsoring research and studies on the survey disciplines relevant to the GCS field of specialty and providing consulting services in the field.**
- **Marketing and selling its digital and conventional survey products and services and publishing its unclassified products from survey and geographical information.**
- **Establishing and executing training and development programs relevant to its areas of specialty, as well as addressing the professional development needs of national cadres, within and outside the kingdom.**

## 9. Objectives and ethics

Please summarise on a separate sheet the objectives of the association and state whether it enforces disciplinary procedures; and enclose a copy of its constitution and rules (including, where applicable, its code of conduct).

1. **Identify the requirements for all mandated survey and geographical information and hydrographic data and information.**
2. **Establish standards and technical specifications for all mandated survey and mapping activities, production of geographical information and production of hydrographic data and information.**
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## 10. Routes of entry to membership

Please provide the following information on a separate sheet

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- the level of academic qualification required to obtain the title
- whether academic training programmes to this level are available in your country (if not, please state how and where members obtain their academic training)

**Report to the 41st General Assembly  
FIG Congress, Istanbul, Turkey, May 2018**

**FIG Foundation  
Report of Activities 2017**



**1. Administration**

The FIG Foundation is located in and administered by the FIG Office in Copenhagen.

A Board of Directors chaired by the President of the FIG Foundation makes the decisions of the Foundation.

The Board of Directors for 2017 was as follows:

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

**2. Programmes with Corporate Members**

FIG Foundation Partners

Charter Foundation Partner Trimble Navigation continues to support the FIG Foundation by sponsorship of the FIG Foundation Dinner since 2010 and providing other support directly through the Foundation.

**3. Meetings 2017**

The board held its official meeting in Helsinki, Finland during the 2017 Working week.

Furthermore, the board has been in frequent contact through emails. This meeting was the first meeting for the new board members Orhan Ercan and Daniel Steudler.

Ir. Liza Groenendijk had sent her apologies to the meeting, but was represented by Fahria Masum, who substituted as chair of FIG Commission 2. All other members of the Board and the Charter Foundation partner Trimble, represented by William Marbell, were present at the meeting.

FIG Foundation introduced to FIG Council and Commission Chairs (ACCO) a FIG Commission Publication Author Support Grant of up to 28,000 EUR over a maximum of four years. These grants are aimed at increasing FIG Publications by authors who reside in low-income, lower-middle or upper-middle income countries, and contributing to the implementation of part of a Commission's Working Plan.

#### 4. Grants 2017

For 2017, two different grants were offered, an academic research grant and a PhD grant.

For the academic research grant FIG Foundation has received two applications, however both were rejected due to the fact that they did not fulfil the requirements.

FIG Foundation received one applications for PhD. grant, which was accepted:

Mr. Collins Mwangu, Department of Geospatial and Space Technology University of Nairobi, Kenya - Spatial data infrastructure in Africa: a technical and institutional analysis.

Mr. Collins Mwangu has received EUR 4,000 to obtain the FIG Foundation PhD scholarship and an additional grant of EUR 3,000 to enable him attend and present his published paper.

In 2016 Mr Wallace Mukupa received the FIG Foundation Ph.D. scholarship. In 2017 he succeeded in getting his peer review paper accepted and was therefore eligible for the additional grant of EUR 3,000 to support his trip to Helsinki to attend the Working Week. Mr Wallace Mukupa presented his paper in the Working Week.

Read his report: [http://fig.net/news/news\\_2017/08\\_foundation\\_phd-grant.asp](http://fig.net/news/news_2017/08_foundation_phd-grant.asp)

In 2017 the FIG Foundation awarded grants totalling EUR 3,143 to Young Surveyors to participate in the Working Week in Helsinki, Finland

The three Young Surveyors were:

- Biplov Bhandari (Nepal)
- Mladen Femic (Montenegro)
- Kaarina Toivo (Namibia)

Ms. Melissa Robert, Uruguay was approved a grant in 2017 of 2,800 EUR to support her attendance at various conferences in which she has promoted and informed about FIG and FIG Young Surveyors. At the same time FIG and FIG Foundation extend a special thanks to Ms Melissa Roberts for her work on the promotion of FIG in the Latin American area.

CLGeGL, Italy has received a grant of EUR 3,000 as support for their Summer School.

Together with UN-Habitat/Global Land Tool Network (GLTN) the FIG Young Surveyors introduced a new programme – Volunteer Community Surveyor program (VCSP). This programme makes it possible for young surveyors to apply for an exchange and to contribute to projects that GLTN is involved in at country levels implementing land tools. This project runs from October 2017-April 2018 and is supported by FIG Foundation with in total 5,000 EUR. Most expenses will be held in 2018.

Finally, at its meeting FIG Foundation agreed to invest in a video performance on how to apply for applications. Too many applications have been received that did not fulfil the criteria and it is the hope that this video can help and inspire to receive better applications to the Foundation, but also to help in general with grant application writing.

In total **15.190 EUR** was spent in 2017.



## 5. Donations in 2017

	EUR
Finnish Evening, Working Week	2,940.00
Charity run	642.00
Voluntary donations from registrations WW	1,374.00
Registrations WW+donation	21,380.00
Other donations	10,000
Personal donations	
Interest 2017	641
<b><u>Total Income FIG Foundation 2017</u></b>	<b><u>36,977</u></b>

### Donations from registrations:

Name	Country	Donation
Dib Mohammed Réda	Algeria	100
Hamed Yacouba Dagnoko	Cote D'Ivoire	100
Enemark Stig	Denmark	100
Foster Robert	United States	100
Hohol John	United States	100
Talvitie Juha	Finland	100
Teo CheeHai	Malaysia	100
Klaus Roland	Nigeria	100
Sinkner Robert	Czech Republic	55
Brock John	Australia	50
Camilleri J Randolph	Malta	50
Lemmen Christiaan	Netherlands	50
Song Wang Koh	Malaysia	50
Warren Jon	United States	50
Jibril Ibrahim Usman	Nigeria	30
Smejkal David	Czech Republic	30
De Zeeuw Cornelis	Netherlands	25
Dijkstra Paula	Netherlands	25
Djaba Stephen	Ghana	20
Koso William	Ghana	20
Nilipovskiy Vasily	Russian Federation	20
Oluwamotemi David	Nigeria	20
Agbevordi Obed	Ghana	10
Asare Kwasi Darko	Ghana	10
Dabiri Thomas	Nigeria	10
Darkey Emmanuel Kwasi	Ghana	10

Mjøs Leiv Bjarte	Norway	10
Gertrude Njar	Nigeria	10
Toivo Kaarina	Namibia	10
Weldegiorgis Habtemicael	Eritrea	5
Mugisha Turyahikayo Allan	Uganda	2
		1372

In December 2016 a special donation of 100 EUR was donated personally by Gerda Schennach, Austria.

Thanks to all who have contributed to the Foundation.

## 6. Grants 2018

Again for 2018 the call for Academic Research Grants and the FIG Foundation PhD Scholarships were published.

The FIG Foundation Academic Research Grants provide grant of up to 40,000 EUR spread over four years. The conditions are that applicants shall be based in a surveying/geomatics academic programme that teaches surveying in a country listed by the World Bank as a low-income, lower-middle or upper-middle income economy. Deadline 31 March 2018.

The FIG Foundation PhD Scholarships will be provided of up to 4,000 EUR to PhD students. Successful applicants will qualify for a further grant of up to 3,000 EUR to attend and present a peer reviewed paper at a FIG conference. Conditions are that applicants shall be studying for a PhD degree and registered solely in a surveying/geomatics academic programme that teaches surveying in a country listed by the World Bank as a low-income, lower-middle or upper-middle income economy. Deadline 1 February 2018.

## 7. Accounts 2017

The income statement for 2017 and the balance sheet at 31 December 2017 are attached to this report.

The total income in 2017 was 36,977 EUR and expenses 15,190 which gives the net result of 21,787 EUR.

The total assets are 261,944 EUR.

The FIG Foundation would like to sincerely thank all those who have generously donated in 2017 in support of the FIG Foundation.

The FIG Foundation would also like to sincerely thank Trimble Navigation for their generous contribution and support of the FIG Foundation over these many years.

## John Hohol

President of the FIG Foundation  
March 2018

Web page: [www.fig.net/figfoundation](http://www.fig.net/figfoundation)

## Income Statement for 1 January - 31 December 2017 for the FIG Founda

	<u>2017</u>	<u>2016</u>
	<i>EURO</i>	<i>EURO</i>
<b>Donations</b>		
Personal donations.....	1.374	97
Other donations.....	10.642	10.000
FIG Conferences.....	24.320	10.173
Financial income.....	<u>641</u>	<u>2.191</u>
<b>Total Income</b>	<b>36.977</b>	<b>22.461</b>
<b>Expenses</b>		
Grants.....	<u>(15.190)</u>	<u>(19.811)</u>
<b>Total Expenses</b>	<b>(15.190)</b>	<b>(19.811)</b>
<b>Final Result (Deficit)</b>	<b><u>21.787</u></b>	<b><u>2.650</u></b>

## Balance Sheet at 31 December 2017 for The FIG Foundation

	<u>2017</u>	<u>2016</u>
<b><u>Assets</u></b>	<i>EURO</i>	<i>EURO</i>
<b>Current assets:</b>		
Receivables:		
Account receivable, FIG.....	257.608	235.892
Other receivables.....	1.155	1.155
Cash at hand and bankaccounts.....	<u>3.181</u>	<u>3.110</u>
<b>Total current assets</b>	<b><u>261.944</u></b>	<b><u>240.157</u></b>
<b>Total assets</b>	<b><u><u>261.944</u></u></b>	<b><u><u>240.157</u></u></b>
<b><u>Equity and liabilities</u></b>		
<b>Equity:</b>		
Equity at the beginning of the year.....	239.158	236.508
Retained earnings.....	<u>21.787</u>	<u>2.650</u>
<b>Total equity</b>	<b><u>260.945</u></b>	<b><u>239.158</u></b>
<b>Liabilities:</b>		
Other debt.....	<u>999</u>	<u>999</u>
<b>Total liabilities</b>	<b><u>999</u></b>	<b><u>999</u></b>
<b>Total equity, reserves and liabilities</b>	<b><u><u>261.944</u></u></b>	<b><u><u>240.157</u></u></b>



OFFICE INTERNATIONAL DU CADASTRE ET DU RÉGIME FONCIER  
INTERNATIONAL OFFICE OF CADASTRE AND LAND RECORDS  
INTERNATIONALES AMT FÜR KATASTER UND GRUNDBUCHWESEN

### OICRF Annual Report 2017

OICRF - the International Office for Cadastre and Land Records - is one of the permanent bodies of the International Federation of Surveyors (FIG). OICRF serves as a documentation and study centre for land administration and is charged with the following tasks: collecting and systematically filing and indexing all documentation material relating to existing cadastres and land registration systems; conducting comparative studies of this material and publishing the results; providing information and advice on all cadastres and land registration systems to all interested persons and institutions for the purposes of study or to help countries wishing to set up a cadastre or land registration system or improve an existing system, and maintaining the documentation system on a daily basis.



### The digital Land Administration Library in 2017

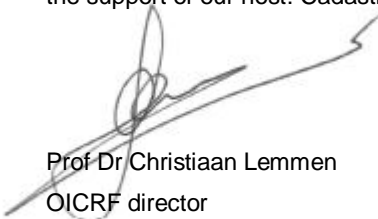
OICRF maintains a digital library that contains almost 18.000 publications (December 31, 2017). OICRF contents are available in different languages. All of the available documents and the most recent publications can be accessed electronically at [www.oicrf.org](http://www.oicrf.org). The website has been completely renewed in 2017 – see the screendump at the lefthandside.

### Standardisation

OICRF is strongly involved in the development of standards for Land Administration. This concerns the Land Administration Domain Model (LADM) and the Social Tenure Domain Model (STDM). Preparations have been made for the development of a second edition of LADM in ISO – including a valuation model and more comprehensive 3D and 4D functionality for cadastres. Inclusion of Blockchain is considered. Attention is given to operationalization of LADM in cooperation with the Open Geospatial Consortium. The World Bank is supporting those developments. And also the Expert Group on Land Administration and Management of UN-GGIM strongly supports those developments – initiated by FIG.

### Contact

OICRF does its utmost to provide the best possible service for anyone who requests information. This is made possible by the support of our host: Cadastre, Land Registry and Mapping Agency of the Netherlands.



Prof Dr Christiaan Lemmen  
OICRF director



Ms Pauline van Elsland  
OICRF secretary

## OICRF Comparative Studies in 2017

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# **International Institution for the History of Surveying and Measurement**

## **Report for 2017-2018**

Dear President and colleagues,

For many years we have warned you all, that the members of the History group within FIG are aging and we asked you to come and join us. David Wallis, our honorary treasurer is approaching 90, Jim Smith our devoted secretary (age 82) is now nearly housebound looking after his wife, and I had some medical problems for long flights so I could not attend the FIG meeting in New Zealand and I will probably not be able to attend the meeting in Istanbul. Younger members are encouraged to come and join the history group, and would be very welcome.

Since 1985 when we organized colloquia on the history of surveying, first as part of commission 1 then as commission 0, but we only obtained an official name in 1994 at the FIG gathering in Melbourne. There we became known as the International Institute of History of Surveying and Measurement. That year we had a lecture on Struve, presented by 3 authors, from 3 different countries in a joint presentation and as commission 1 chair I proposed to the General Assembly to prepare a dossier and submit a case to UNESCO to have the Struve Meridian Arc inscribed on the World Heritage List.

Jim Smith and I together with our colleagues of the 10 countries concerned: Norway, Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Belarus, Moldova and Ukraine researched and prepared the documentation to present the project to UNESCO, who approved the work and, with an unanimity vote of all the ambassadors to UNESCO, inscribed our project on the World Heritage List in 2005.

This was a great achievement for our profession world-wide, and it was the first scientific project as well as the first with such multi-national involvement on the World Heritage List. Then in 2008 Jim and myself have, on demand of all 10 countries concerned, translated the two-volume 1000 page Report compiled by Struve, written originally in 19<sup>th</sup> century French, into two similar volumes in English, to make it available for all. Unfortunately only Norway and Sweden have paid their contribution to the translation of the work and 8 countries have not yet paid their commitment, arguing the financial crisis.

Since then we have prepared for an enhancement of the Struve Arc, with the approval of UNESCO. Jan de Graeve met the delegation in Paris in May 2016 and we have contacts to include the 30<sup>th</sup> meridian through East Africa and also with delegates for the link between the European nations and northern Africa. That link was only realized in 1955, after 75 years of intermittent work.

South Africa reports that invitations to partake and technical details have been passed to 8 of the countries concerned. There is a possibility of around 50 points between Helwan in Egypt and Buffelsfontein in South Africa forming the representative points out of a total of 603 survey points over 63° 47' latitude. (For the Struve arc there were 34 points between Fuglenaes and Staro-Nekrassowka out of an overall total of 265 survey points over 25° 20' latitude.). Additionally the Governing Council of the RCMRD (Regional Centre for Mapping of Resources for Development) resolved at its meeting November 2017 to

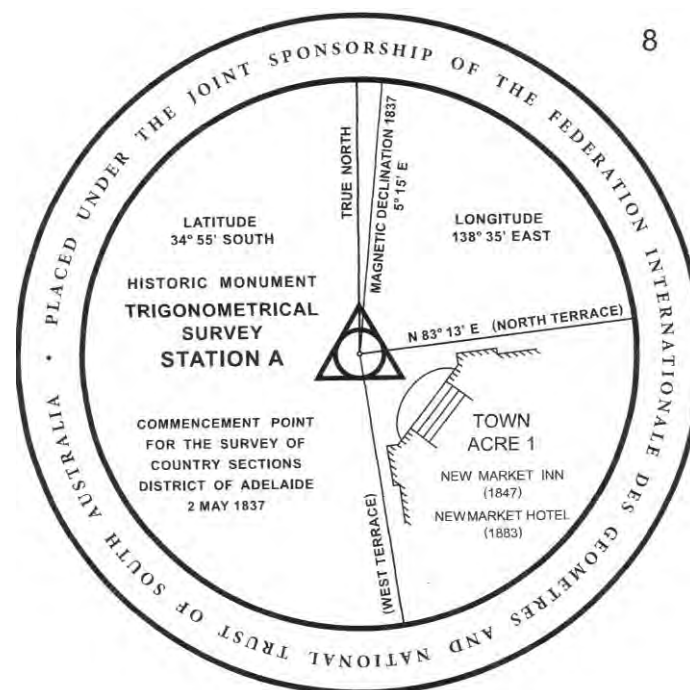
*Encourage those member States, through which the 30<sup>th</sup> Arc of Meridian traverses, to participate in the proposal for the inscription of the 30<sup>th</sup> Arc of Meridian as a World Heritage Site.*

For the connection between the 30<sup>th</sup> arc and an area towards the southern end of the Struve arc Ivan Aleksic is pursuing the possibilities. Any readers interested in assisting him in this can get in touch with Jan de Graeve via the FIG Office.

Every 2 years the delegates of the Struve concerned countries meet and the last meeting was in Estonia, where the extension to Spitzbergen (Nova- Zembla) was proposed by the Russian delegation so next year the meeting will be in Russia, possibly on Hogland (this island is a secret military base of submarines) situated between Scandinavia and the Baltic states, but more probably, in Saint Petersburg.

Jim Smith has worked with colleagues of South Africa on the meridian Arc and this Report has been presented during the IIHS&M conferences . This arc measurement has secured the scientific rigour of the cartography of the East African countries and made the infrastructures possible a great achievement. Jim is finalising the 650p book and will soon be seeking a publisher.

In Australia an historical trigonometrical station “A” in Adelaide at latitude 34° 55’ South and longitude 138° 35’ East is being commemorated by a bronze plaque sponsored jointly by FIG and the National Trust of South Australia. The idea for this has been pursued for some while by Kelly Henderson and Jan de Graeve and now the result will soon be visible.



Jim and I have been working together since 1985, that is over 30 years, compiling Notes on the History of Meridian Arc Measurements in determining the size and shape of the Earth. It is hoped that this work will be completed during this year. It will be some 2200pages of text and illustrations strictly in the form of Notes and will be available in 5 volumes, hopefully before next FIG general meeting.



The excellent History Symposium in Helsinki last year in connection with the Working Week had a full house crowd with superb presentations. The Symposium was organized by John Brock – the younger member of our Institution. John Brock also made it to the Article of the Month, which is now the fourth FIG Articles of the Month so far giving focus onto Surveying History.

Dear president and colleagues, personally I do regret that I will probably not be able to present this message at your General meeting , but I go on working to reconstruct the scientific library of Gerard Mercator, in the original 16<sup>th</sup> century books. Similarly Jim regrets that in the 50<sup>th</sup> year of his association with FIG it is unlikely that he will be able to attend. We welcome our colleagues to come and join us and we will continue to answer questions on the history of surveying/surveyors and past instrumentation. Hoping to meet you at the 2019 FIG Congress.

Jan De Graeve and Jim Smith

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1.2.2018

## FIG Task Force on Real Estate Market Study Progress Report

### 1. SETTING UP THE TASK FORCE

The Task Force on Real Estate Market Study was established at the GA of the FIG WW2015 in Sofia. The Task Force (TF) was to carry out a study on the real property markets concerning mainly countries in an economic transition process in its different phases. It was also proposed that the TF would focus on the ECE region where there are several countries struggling to improve their property markets and overcome crisis.

The Task Force is chaired by Pekka Halme, Director of Strategic Development, from the National Land Survey of Finland.

The other contributing members of the task force are:

- Orhan Ercan, Turkey
- Sonila Jazaj, Albania
- Dennis Lindén, Sweden
- Vasily Nilipovskiy, Russia
- Steven Nystrom, USA
- Chryssy Potsiou, Greece
- Ionut Savoiiu, Romania
- Winrich Voss, Germany

Also experts from the target countries in the region have been interviewed to assist the task force in its work.

### 2. THE TASK FORCE ACTIVITIES

The TF held its first meeting in Cape Sounio, Greece, on September 1, 2015. Six members had the opportunity to attend.

The second meeting was held on September 17, 2016 also in Cape Sounio, with seven members attending. The discussion at the meeting benefitted a lot from the input of several observing attendees: Rudolf Staiger, Anthony Boanada-Fuchs, Kauko Viitanen, Matt Myers, Bob Foster, Manohar Velpuri and Richard Grover.

A country visit and meeting of the TF was held in Bucharest, Romania on January 17-18, 2017. Several representatives of the Romanian real estate players were interviewed. See below.

- National Agency for Cadastre and Land Registration
  - Radu Stefanescu, General Director,
  - Victor Grigorescu, Director of Systematic Registration,

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- Ileana Spiroiu, Deputy General Director,
- National Union of Public Notary from Romania
  - Catalin Badin, Deputy Director,
- Romanian Association of Private Surveyors
  - Valeriu Manolache, President,
- Coldwell-Banker
  - Madalina Dinca, Senior Associated Broker,

The TF also had a session at the FIG WW in Christchurch 2016 with four papers and in Helsinki 2017 with three papers.

## 2.1. FOCUS/THEMES

The original list of relevant topics that was presented in the General Assembly in Sofia was discussed and developed in the first TF meeting.

- Government guarantees to register information; Security of ownership/tenure
- Property taxation, appropriate valuation
- Land-Use restrictions, Permitting procedures
- Legislation, relevant recent legislative and administrative reforms and involved governmental agencies for regulation
- Existing registers/databases, information services
- e-gov, m-gov, transparency
- Processes, efficiency of services, customer friendliness of procedures
- Players/actors, investigation of the investors' needs
- Time, fees and costs required
- Sustainable financing mechanisms, access to credit and mortgages
- Prerequisites for Sustainable Growth; conversion of unused or underused resources into productive capital to increase employment and reduce poverty; energy efficiency measures and investment in their implementation on new constructions and existing buildings' refurbishment
- Affordable housing
- Education, training, professional capacity development.

The TF saw that it cannot cover the whole spectrum of the factors mentioned above but rather wanted to prioritize and choose to focus on some aspects before the others.

The TF agreed to take a look at how the system functions in the countries in the region and try to find out if there is a gap between theory and reality and identify the major challenges in the countries under study.

## 2.2. WORK PLAN

The work will be carried out during the years 2015-2018 and the final report will be published at the FIG Conference in Istanbul in 2018.

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The work will comprise initially:

- task force meetings (at the FIG WWs and separately)
- decision on methodology or framework,
- desk study (existing data and reports),
- decision on target countries,
- decision on the topics,
- collection of additional information from target countries,
- potential field visits,
- potential coordination with the WB for a joint study,
- elaborating the results,
- drafting the report

The different steps of the project are:

1. TF meetings and other means of keeping contact

Most reporting within the TF is done by email and other electronic channels. The TF has had one or two meetings each year.

The TF organized a session at the FIG WW in Christchurch in 2016 and in Helsinki 2017.

The TF planned to arrange two focused seminars of which the first one was held in Athens, Greece on September 19-20, 2016. The seminar concentrated on getting additional information from the target area and discussions on the ideas and findings so far. The Task Force invited speakers to bring the additional knowledge they can offer.

The second seminar was not held due partly to scheduling difficulties and partly because a seminar was regarded as a non-optimal way to get relevant information.

2. Methodology or framework and target countries

A desk study was carried out concentrating on existing reports and materials.

- The International Property Market Scorecard was used as one of the corner stones for the work and provide the Task Force members with analysis early in 2016. The target countries were preliminarily Russia, Turkey, Greece, Ukraine, Armenia, Romania, and Bulgaria. At the end Greece, Turkey, and Romania, and Albania were chosen. A basic general study on the target countries has been carried out and will be elaborated further by target country representatives.
- Other promising materials that could be used are:
  - i. WB doing Business, UN country Data & CIA World Fact Book information
  - ii. the World Citizen Consulting (CIPE) Scorecard analysis
  - iii. <http://data.un.org/CountryProfile.aspx?crName=GREECE>
  - iv. <https://www.cia.gov/library/publications/the-world-factbook/geos/gr.html>

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- v. <http://www.doingbusiness.org/data/exploreeconomies/greece>
- vi. <http://www.realtor.org/sites/default/files/reports/2016/embargoes/forecast-11-2016-us-economic-outlook-11-04-2016.pdf>

- The basic desk study was finalized in late autumn 2016.

### 3. Collecting additional information from target countries

Data collection was planned to be done either in the seminars, through national experts, or through field studies. The field studies however were considered time consuming and heavy.

It was also discussed whether any information from developed systems in the non-transitional countries like the U.S., Germany, or the Nordic Countries would be good for comparison. The TF decided to not do this part.

### 4. Elaboration of the results

The findings have been elaborated by the Task Force. Beside the conclusions concerning the situation in the target countries, the work aims at a more general or global level of thinking to assist government and professionals in all parts of the world to deal with the real property market issues.

### 5. Drafting the report

Drafting of the report itself is delayed from the planned deadline, which was set to the end of the year 2017. There is a risk that the report will not be finalized in time and will not be ready to be published in Istanbul.

The draft table of contents is shown below:

1. Foreword
2. Introduction
3. Summary Section
  - a. Country level data (The countries have to be decided: Greece, Turkey, Russia, Romania...)
  - b. Scorecard data
  - c. Summarized conclusions
4. Detailed Section (country by country)
  - a. Country level data
  - b. Scorecard data
  - c. Real estate sector data
    - i. Small residential
    - ii. Large residential / Multi-family projects
    - iii. Industrial
    - iv. Office
    - v. Retail
    - vi. Vacant and agricultural
  - d. Detailed conclusions

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### 3. FUNDING

There is no formal budget for the Task Force. The funding can basically be provided from three sources i.e. the TF members' own organizations, the FIG, and other actors.

Carrying out the task generates costs for travels, accommodation, and meeting facilities of the TF meetings themselves. Additional costs are caused by the meeting facilities and catering for the seminars as well as through participation of the TF members. The amount of these costs/expenses can be estimated as follows:

Item	2016	2017	2018
	Outcome		
TF meeting room	300 <sup>1</sup>	300	300
TF accommodation (6)	900 <sup>2</sup>	900	900
TF flights (6)	1500 <sup>2</sup>	1500	1500
Seminar meeting room	1000 <sup>1</sup>	1000	
Seminar catering	1000 <sup>1</sup>	1000	
TF attendance in seminars			
- accommodation	900 <sup>2</sup>	900	
- flights	1500 <sup>2</sup>	1500	
<b>Total</b>	<b>7100</b>	<b>7100</b>	<b>2700</b>

<sup>1</sup> Covered by GLTN, National Bank of Greece and Eurobank

<sup>2</sup> Covered by TF members

### 4. OUTCOME

A report on the situation in the target countries or the ECE Region overall has a value in itself for the countries in question. However, the target has to be set higher or the report should also give a non-region-specific view on the problems and challenges, and provide tools to deal with them for the governments and professionals on a more global scale.

The Final Report will contain a description of the current situation in the real property market in the target region, its challenges, and main lines of development as well as recommendations and views on potential ways of dealing with the real property market imperfections.

# REPORT

## FIG TASK FORCE ON CORPORATE MEMBERS

### BACKGROUND

The FIG Task Force on Corporate Members was established with the focus ***“to increase in number of FIG Corporate Members while providing better communication with FIG Council and interaction between the wider FIG organization and ultimately member associations.”***

With the aim of the task force being:

- Solicit input of current FIG Corporate Members to explore how they can participate more fully in the FIG Community
- Discuss with them what is important in their relationship in FIG
- Explore comprehensive benefit package for FIG Corporate Members
- Increase the number of FIG Corporate Members

### ACTIVITIES

In 2016, two Internet surveys using Survey Monkey were sent- one to current FIG Corporate Members and the second to potential members. Three follow-up email reminders with the survey questions were also sent. Unfortunately, there were few responses. With the corporate members four (of 23- 17%) responded. With the potential member survey six (of 18- 33%) replied.

This was followed up by another Internet survey in 2017 using Survey Monkey to an expanded list of potential members.

#### **Key questions in the corporate member questionnaire included:**

- Which FIG Corporate Member benefits do you use?

RESPONSES: Potential to network and communicate with surveying professionals from around the world; directly connected to surveyors worldwide as an FIG partner; using FIG Corporate Member logo to identify as FIG partner and enhance recognition in the surveying profession; participating in FIG technical commissions.

- What benefit(s) would you like to have and how would you like to better participate as an FIG Corporate Member?

RESPONSES: A more close co-operation with the Young Surveyors group; displaying information about my company at WW's where we are unable to attend; access to member lists of FIG; opportunity to provide input/recommendations for future conference sites and themes; special equipment calibration partnerships.

- What role does/should FIG perform in the global surveying community?

RESPONSES: The leader in communicating new standards, technology, education to surveyors in the world; Bringing surveyors around the world together; supporting recruiting surveyors; creating global recognition day for surveyors and providing toolkit for associations, vendors and surveyors to use to publicise it.

- Do you attend and participate in FIG Working Weeks/Congresses?

RESPONSES: Yes; when I am able; no; yes.

- Are you interested in participating in a task force of FIG Corporate Members?

RESPONSES: Yes; yes; yes; yes, when time permits.

#### **Key questions in the potential member questionnaire included:**

##### **First Internet Survey (2016)**

- Have you heard of FIG (International Federation of Surveyors)?

RESPONSES: Yes- 5 (83%) No- 1 (17%)

- If you heard of FIG do you what it is and what it does?

RESPONSES: Yes; 3 (50%) No- 3 (50%).

- Have you been contacted about becoming an FIG Corporate Member?

RESPONSES: Yes- 1 (17%) No 5 (83%).

- Would you like to receive more information about FIG and discuss becoming an FIG partner as an FIG Corporate Member?

RESPONSES: Yes- 4 (67%) No 2 (33%).

### **Second Internet Survey (2017)**

- Have you heard of FIG (International Federation of Surveyors)?

RESPONSES: Yes- 11 (69%) No- 5 (31%)

- If you heard of FIG do you what it is and what it does?

RESPONSES: Yes; 6 (38%) No- 10 (62%).

- Have you been contacted about becoming an FIG Corporate Member?

RESPONSES: Yes- 3 (19%) No 13 (81%).

- Would you like to receive more information about FIG and discuss becoming an FIG partner as an FIG Corporate Member?

RESPONSES: Yes- 10 (63%) No 6 (37%).

Because of the surveys the task force decided to first study the relationship of the current FIG Corporate Members by exploring ways to increase communication between FIG Corporate Members and FIG Council as well as between the Corporate Members and the FIG Community being followed by ways to grow the number of FIG Corporate Members.

Numerous discussions were held with current FIG Corporate Members as well as potential members in different venues, face-to-face and via email correspondence.

### **RECOMMENDATIONS FOR IMPLEMENTATION**

Recommendations for Current FIG Corporate Members:

- That continued efforts be made to solicit feedback from current FIG Corporate Members (CM)- at FIG events (during FIG CM meetings, individually with CM representatives and at events (example: Intergeo) where CM are present.
- Establish FIG Corporate Member Advisory Committee composed of key executive level (CEO, President, Vice President) members which will work directly under the auspices of the FIG Council to communicate and provide assistance and input under the direction of the council.
- Review CM benefits.
- Encourage CM to actively use the FIG logo on their websites, literature, and advertisements to publicize partnership with FIG which will aid in increasing visibility of FIG.
- Encourage CM and technical commissions to increase engagement with each other.
- Ask corporate members to contact their corporate partners to encourage them to become FIG Corporate Members.
- Invite FIG Platinum CM to attend the FIG Director Generals Forum and Presidents' Meeting.

Recommendations for recruiting new FIG Corporate Members:

- Increase visibility of who and what FIG is and the benefits of joining the Community by continued use of article columns in *GIM* and expanding to other geospatial publications.
- Create recruitment literature emphasizing opportunities to network with THE key decision makers at the national and global level and include testimonials from current CM.
- Include FIG CM recruitment advertising in Working Week/Congress exhibition and sponsor materials.
- Add-on option for non-CM exhibitors to join as part of their application process for exhibition space.
- Solicit support from FIG Member Associations to find and attract potential CM.
- Ask corporate members to contact their corporate partners to encourage them to become FIG Corporate Members.



## **OUTPUT**

FIG Platinum Corporate Members have been and are now successfully attending the FIG Director Generals Forum and Presidents' Meeting as observers.

The task force encourages this and the other recommendations to be fully implemented as soon as possible.

*Respectively submitted*

Task Force members:

John Hohol, co-Chair

Bryn Fosburgh, co-Chair (Vice President, Trimble Navigation)

Kengo Okada (CEO, Ripro Corporation)

Bhupinder Singh (Senior Vice President, Bentley Software)

**Report to the 41<sup>st</sup> General Assembly  
FIG Congress 2018, Istanbul, Turkey**

**FIG Regional Capacity Development Network (CDN)  
Report of Activities 2017 & end of Term Report**

The Chair is pleased to present the report of the Regional Capacity Development Network. This report sets out the overall direction during the term 2015- 18.

The FIG Capacity Development Network (CDN) aims to support FIG regional member associations and academic members. The network envisages regional approaches to working, and emerged in response to consideration by the FIG Council and approved by the General Assembly in Sofia, Bulgaria, in May 2015.

Over the term, the CDN has increased its members from the originating African Regional network to include the Asia Pacific region. *The Africa Regional Network (ARN)*, led by Diane Dumashie was the first to be established under this umbrella network, and an additional region followed with the establishment in the Asia Pacific region of the *Asia Pacific Capacity Development Network (AP CDN)*, led by Rob Sarib. Each region best understands its needs, thus within the CDN framework the Regions act independently.

There has been standout success in both Regions. First ARN is typified by innovation and resilience, demonstrated by a Member Association (Botswana) scheduling an additional workshop in 2018 and importantly, succession planning, with the identification of an African Member Association, South African Geomatics Institute willing to take over the leadership into the next term (2019-22). Second, the AP CDN is typified by building partnership with the government community linked to professionals, with positive engagement with the increasingly important **Nations Global Geospatial Information Management network, in the Asia Pacific region (UN GGIM AP)**

The CDN operates as an umbrella framework that enables individual members to unify into their own Regional networks to meet their specific capacity building needs. Although the geographical regions are not prescriptive it is anticipated that regions identify their own out-reach. Accordingly the focus is led by FIG Member Associations to understand and build the capacity of the surveying association and individual surveyors to act as agents of positive change and encourage the process of development and growth for the benefit of the Region and its people.

Looking forward to the next term, FIG Council will warmly welcome other regional initiatives from FIG members. All interested members should contact Vice President Dr D Dumashie during the FIG 2018 working week.

Finally, the chair is pleased to receive annual reports from the Chairs of the Africa region and Asia Pacific region.

**Dr Diane Dumashie FRICS  
FIG Vice President**

**Chair FIG Capacity Development Network 2015-18**

The Network terms of reference and supporting material can be viewed at [http://www.fig.net/organisation/networks/capacity\\_development/index.asp](http://www.fig.net/organisation/networks/capacity_development/index.asp)

**Report to the 41<sup>st</sup> General Assembly  
FIG Congress 2018, Istanbul, Turkey**

**Africa FIG Regional Development Network (ARN)  
Report of Activities 2017 & end of Term Report**

**1. Overview and Purpose**

This is the Chair's report on the activities of the Africa FIG Regional Network (ARN), it highlights the year 2017; and because it is the end of term it also overviews the current period (2015-18) and looks forward to the next term (2019-22).

Over the 2015- 18 period the key purpose of ARN is to enable the surveying profession in Sub Saharan Africa to deal with social responsibility in terms of contributing to achieving the UN Sustainable Development Goals (SGDs). In this regard, the role of the surveyors as change agents engaging with the politicians is important.

The Africa Network through workshop activities has considered and presented new and creative tools and other means to revitalise and strengthen Land professional members within Sub Saharan Africa. The focus will be led by FIG Member Associations to build the capacity of the surveying association and individual surveyors to act as agents of positive change and encourage the process of development and growth for the benefit of Africa and its people.

Key activities undertaken in 2017

**2. Cooperation**

Central to the activities of the ARN is the cooperation and collaboration with a range of stakeholders, foremost the African Young Surveyors Network who have been integral to deliver workshop content, in addition to partnering with FIG Commissions and FIG corporate members (i.e Trimble, Thomson Reuters, and ESRI) who over the period have provided unbiased content and sponsorship.

This year (2017) we cooperated specifically with ESRI -Rwanda to hold our annual ARN capacity development workshop their support both financially and with cutting edge, content enabling a highly successful workshop at the Ruhengeri Institute of Higher Education (INES) in Musanze, Rwanda.

**3. 2017 Seminar organisation**

In order to provide valuable outputs for the **network's** work over the term 2015- 2018, a series of thematic Regional workshops have been arranged in Africa between each FIG Working Week. These workshops will develop tools for use by the members and validated at Roundtable discussions at the following FIG Working weeks, the next and final roundtable meeting of this term is scheduled in Istanbul, Turkey 2018.

Accordingly, drawing upon the theme agreed in **ARN's terms of reference, and ratified by** General Assembly, the ARN 2017 workshop title – "Challenges and opportunities in facing SDG 11- Urban & Rural linkages: What does it take for land professionals to lead

**and support nation state's infrastructure endeavours",** was held in Musanze, Rwanda 21 – 23rd November 2017

Every year, ARN invites an African FIG member to partner in the ARN workshop activities. In 2017 the opportunity arose to cooperate with INES. Welcomed by Rector Father Dr. Fabien Hegenimama, a high profile opening of the workshop included the delivery of key notes and welcome speeches from the Bishop of Ruhengeri - Musanze, and the Permanent Secretary from the Ministry of Lands, with Dr D Dumashie providing an overview of FIG and wrap up words before the reception finale of traditional dance by INES students. Jossam Potel, Head of Land administration ensured the workshop progressed smoothly, supported by Mireille Biraio (INES) who was indispensably on logistical arrangements prior to the workshop.

The ARN workshop brought together 50 land professionals drawn from across the spectrum of land survey, valuation, QS and planning and who travelled from across the continent including, Zimbabwe, Botswana, Nigeria, Ghana, and hosted by the contingent from Rwanda (land surveyors and valuers). Hosting this workshop is particularly important because the Rwandan land professionals, led by Jean Pierre Habiyaremye, are addressing the challenge to establish their own national association, and the presence of the ARN workshop demonstrates FIG support to their endeavours.

The workshop focus on Infrastructure in the context of SDG11 was designed by Vice President Diane Dumashie who facilitated the training workshop assisted by Kasper Kundert (ESRI Rwanda), Importantly ARN collaborated with the Young Surveyors from West Africa, supported on this occasion by Daniel Brown, Sam Kingsley and Taiwo Taiwo.

#### **4. 2017 Seminar deliberations**

The workshop concentrated on the theme, "Challenges and opportunities in facing SDG 11- Urban & Rural linkages: What does it take for land professionals to lead and support **Nation state's infrastructure endeavours"**. It appealed to those wishing to have an understanding how the international land governance initiatives that will interface with large scale infrastructure sectors. Accordingly, working groups included national roads, railway, water schemes, renewable energy, airports, and telecom/ digital, focusing on our role in the context of the SDG11 (Cities)

On workshop Day 1 our workshop focus was on:

- Trends: to improve and recognise the nature of urbanisation in the context of SDG11 and infrastructure, and recap on what it means for good governance,
- Talent: to be more familiar with the nature of Leadership: theory & applied, enabling a clear understanding of personal skill development,
- Technology: to expose delegates to the role of Geospatial technology innovations for land tenure security and land management in East Africa and led by ESRI Rwanda,
- Ultimately, the workshop seeks to build land professionals awareness and confidence to lead strategic change and make a positive impact

Demonstrated in the context of the inter- relationships of urban/ rural linkages and infrastructure networks the participants considered our Professional role within this relationship considering the opportunity land professionals could make to improve the delivery of critical infrastructure and also recognising the extent of the land professional

skill sets (and other professions) to provide sustainable development and building livelihoods.

This revolved around linking the following:

- Urbanisation: Global trends related to SDG11, and
- Infrastructure: Recognition that infrastructure is one of the first key investment

**Leading to our:**

- Focus: provision of social and physical networked assets yet maintaining the relationship of the linkage between the Urban and Rural areas

The workshop was designed to complement ESRI- Rwanda contribution on Day 2. Specifically Kasper Kundert (ESRI Rwanda) focused on technology and the role of Geospatial technology innovations for land tenure security and land management in East Africa. Featured prominently was the Geoportals development and operationalisation at the Rwandan Authorities, as well as its4land – a current consortium approach seeking to deliver an innovative suite of land tenure recording tools that responds to sub Saharan **Africa's immense challenge to rapidly and cheaply map millions of unrecognized land rights** in the region

In addition, during day 2 the ARN 2017 cohorts were further treated to a tour of the INES campus that has a fabulous backdrop of four of the Rwandan Volcanoes. It was agreed by all, that the three days were informative, productive and the workshop activities were rounded as participants came together to share some fun with the opportunity of a field trip guided through the caverns and caves of Musanze.

The workshop outcome: Engaging and participation is an important design feature of the ARN workshops, accordingly deliberations included group work that considered:

How: The land and property professional engages with People in their Places, in the context of urban and the rural areas through infrastructure networks and thus ensuring societal beneficial development. Noting that Urban and Rural linkage is about the network between these areas and what goes on in-between. And

What: Articulating what this means, requiring the development of an outline stakeholder engagement methodology that is capable of informing appropriate practices and disseminated by member associations

The workshop successfully provoked thought and stimulated debate, along with achieving the following objectives:

- To raise awareness by coming together to consider the skill opportunity for intervention in large scale infrastructure assets
- To add value for participants through a learning experience to consider thought leadership, transformational trends, and
- To be exposed to Geospatial technological innovations for land tenure in East Africa
- And to explore how the profession may take a step-up to lead and promote the implement of networked infrastructure in the rural and urban environments to benefit society.

Full details of this workshop is reported on the ARN website at [http://www.fig.net/resources/proceedings/2017/2017\\_11\\_East\\_Africa\\_Capacity\\_Development\\_Workshop.asp](http://www.fig.net/resources/proceedings/2017/2017_11_East_Africa_Capacity_Development_Workshop.asp)

Over view of the Term 2015-18

## 5. Communications

In the current FIG term (2015-17), the ARN workshops addressed the *Challenges and Opportunities in Facing the SDGs*, we were looking ahead to the first real milestone of the 21st century: the year 2030. It may seem a long way off, but the pace of change is faster than ever before. This network forum has recorded before that change is inevitable, but it is being prepared that counts (ATF workshop, Ghana 2012).

Over this term, the chair with support from the ARN core team has:

- Delivered three successful capacity development workshops bringing together anglo phone and francophone land professionals from across the Continent. This enhanced knowledge and enabled them to share their experiences.
- Discussed and deliberated with over 150 professional attendees over the term during our workshop that have been implemented with the now trademark, highly participatory design and fast pace enabling the participants to communicate key engagements messages
- Empowered an African Member Association to propose a fourth workshop before the end of this term (i.e. in 2018)
- Developed a Strategic framework document with tangible reportable actions to the General Assembly
- Defined and continue to build partnerships with member associations and external strategic stakeholders including FAO, AU, FGF and GLTN (UN Habitat)
- Delivered communication platforms for Member associates, Academics and the Young surveyors network and gained new FIG Members from Africa

Above all,

- Delivered a robust and rigorous leadership succession plan proposal for consideration by Council in 2018

## 6. Closing remarks

The network is about equipping Land professionals to better contribute to society, to do this requires professionals to understand, adapt and embrace the future.

Within the **SDG's** and having ethics underpinning everything that Land professionals do the three workshops have considered the opportunity land professionals could make to improving governance of tenure, recognising the context that land and (other natural resources) provide humanity, among others, food and shelter and a basis for economic production and social, cultural and religious practices.

The members of the ARN network continue to prove that communicating to influence, purposefully collaborating and, in doing so, building connectivity to ensure that skills are developed that will reach out **to all stakeholders' community networks**.

I am so pleased that I will be able to hand over the leadership to Jennifer Whittle (UCT) and Peter Newmarch (SAGI) in the upcoming term 2019- 22 who I am sure will continue to strive to optimise and continue the **network's deliberations in Africa**.

**Dr Diane Dumashie FRICS**

**FIG Vice President**

**Chair Africa FIG** Regional Development Network 2015-18

# FIG STANDARDS NETWORK REPORT TO THE GENERAL ASSEMBLY

David Martin 9 April 2018

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## Standards Network Terms of Reference:

The Standards Network was formed in 2002. It works within Commission 1 and consists of representatives from each of FIG's Commissions. The terms of reference of the Network set out in the FIG Guide on Standardisation are:

- Building and maintaining relations with the secretariats of standardisation bodies,
- Proposing priorities on FIG's standardisation activities, including advising the Council on priorities for spending,
- Setting up necessary Liaison relationships with standardisation bodies,
- Ensuring that lead contacts to Technical Committees etc. are in place,
- Maintaining an information flow on standardisation to FIG members, including through the FIG website, and more directly to relevant Commission Officers,
- Maintaining the Standards Guide, and related material on the FIG website,
- Working with other NGOs, within the framework of the MOUs signed by the Council,
- Advising FIG's officers and members on standardisation activities as necessary.

## Key Activities

The Standards Network covers several key activities. At different periods, the commissions are more or less active or impacted by Standards. Some activities such as ISO 19152 on the Land Administration Domain Model (LADM) or the International Measurement Standard of Property (IPMS) are clearly linked to a specific commission – Commission 7 for the LADM and Commission 9 for IPMS. While other Standards issues relate to, or implicate, or could potentially implicate several commissions. The ISO/TC 211 concerning Geographic Information/Geomatics is an example.

Below is a summary of current Standards activities in FIG.

## ISO/TC 211 Geographic Information/Geomatics

Nic Donnelly of Land Information New Zealand (LINZ) is the lead liaison from FIG to ISO/TC 211. ISO/TC211 is involved with Standardization in the field of digital geographic information. ISO/TC 211 also appoints a liaison to FIG, a role which is currently held by Mr Larry Hothem, of the United States.

**Nic Donnelly reports:**

## ISO TC211 Liaison Report – March 2018

### Background

The International Organization for Standardization (ISO) develops and publishes standards in a comprehensive range of subject areas. Responsibility for a particular subject area resides with a Technical Committee (TC), comprising representatives of national standards bodies, liaisons from

other international organizations and subject matter experts. The technical committee responsible for Geographic Information/Geomatics is TC211. FIG is one of the organizations invited to appoint a special liaison to TC/211. Currently, this role is undertaken by Mr Nic Donnelly, of New Zealand. ISO/TC 211 also appoints a liaison to FIG, a role which is currently held by Mr Larry Hothem, of the United States.

#### **Liaison Involvement**

There were two meetings of the ISO technical committee in 2017; Stockholm, Sweden (June) and Wellington, New Zealand (December). The next meeting is in Copenhagen, Denmark 27 May – 1 June 2018.

In general the role of the liaison is to identify work items of interest and alert interested parties, who may then get directly involved through their national standards body.

#### **TC211 Secretariat**

The TC211 Secretariat is based in Sweden, through the Swedish Standards Institute. The Chair is Christina Wasström from Lantmäteriet, the Secretary is Therése Andrén from the Swedish Standards Institute and the Assistant Secretary is Christine Allanson from the Swedish Standards Institute.

#### **Key Work Items of Interest to FIG**

##### *Revision of ISO19152: Land Administration Domain Model (LADM)*

The drafting of the first edition of the LADM, published in 2012, was driven by FIG Commission 7, particularly Peter van Oosterom and Christiaan Lemmen. The LADM has gained considerable prominence since 2012 and work is underway to scope a revision. At the Stockholm TC211 meeting, FIG was invited to lead this revision, recognizing the significant expertise within FIG Commission 7, as well as the strong historical connection to the LADM.

The seventh Land Administration Domain Model Workshop in Zagreb, Croatia (11-13 April 2018) will focus on the scope and functionality of the revised standard. Potential extensions to the existing LADM include additional rights, restrictions and responsibilities; valuation; marine cadastre; relationship to Building Information Modelling (BIM); 3D/4D cadastre.

This will ultimately lead to the submission of a New Work Item Proposal through ISO TC211.

##### *Geodetic Registry*

This project aims to establish a registry of geodetic coordinate systems and transformations. Software has been developed in compliance with ISO19127: Geodetic Register. FIG is represented on the Control Body for the registry, which has responsibility for its management and strategic direction. Nic Donnelly is the principal representative, with Volker Schwieger of Germany as alternate. Larry Hothem is Vice-Chair of the Control Body, which is chaired by International Association of Geodesy representative Mike Craymer, of Canada.

The registry development is complete, so current work is focused on getting the software deployed with long-term technical support.



### *Review of ISO 19111:2007 Geographic Information – Spatial Referencing by Coordinates*

This standard describes coordinate systems, coordinate reference systems and datums and the relationships among them. It also describes coordinates and the operations that may be carried out on them.

A review of this standard is underway in conjunction with the Open Geospatial Consortium (OGC). Amongst other things, this review aims to update 19111 to better handle modern datums such as kinematic datums and those using the geoid as a reference surface.

### **ISO 19152:2012 Land Administration Domain Model (LADM)**

This Standard grew out of the Commission 7 work on the Core Cadastral Domain Model and was accepted into the ISO/TC 211 work programme in 2008. The Land Administration Domain Model (LADM) ISO 19152:2012 Edition 1 was published in 2012. It facilitates the efficient set-up of land administration and can function as the core of any land administration system. LADM is flexible, widely applicable and functions as a central source of state-of-the-art international knowledge on this topic. LADM is one of the first spatial domain standards. With a view to the future, trends in the domain and the maintenance of the standard are now under discussion.

#### **Chrit Lemmen reports:**

The 2018 workshop on the 7<sup>th</sup> Administration Domain (LADM) was held in Zagreb, Croatia, 11-13 April 2018. The focus of LADM2018 workshop was on sharpening the scope and extending functionality of LADM II. Extensions are about a fiscal/valuation module, Marine Cadastre, more explicit relations with Building Information Modelling, further modelling of LADM's survey and spatial representation and 3D/4D Cadastre. More attention was paid to the operational standards in Land Administration: CityGML, IndoorGML, LandInfra, InfraGML, LandXML, and GeoBIM. Also the aspects beyond Information models were discussed: Organization, Best practices, Legal/financial aspects, OpenCadastre approach, Crowd sourcing, Workflow modelling, Blockchain and ledger technologies.

The proceedings of the Workshop are published in co-operation with FIG.

During the Workshop in Zagreb there was also a discussion on a draft of a 'New Working Item Proposal' (NWIP) for LADM II. This NWIP will be discussed in the FIG Standard's Network meeting. This may result in an advice to the Council to submit the NWIP to ISO TC211 on Geographic information (Note: FIG is a liaison member of this Technical Committee).

The idea is to organise the development of LADM II in close cooperation with the Open Geospatial Consortium. A draft version of an OGC White Paper on Land Administration is available. This Draft White Paper was subject of discussion during a special session of the World Bank Land and Poverty Conference, held in March 2018 in Washington DC, US. This White Paper was also discussed in the Zagreb LADM Workshop – and needs attention of the FIG Standards Network.

The White Paper and the NWIP are available with the proceedings of the Zagreb Workshop:

[https://wiki.tudelft.nl/pub/Research/ISO19152/LADM2018Workshop/21-22\\_LADM\\_2018.pdf](https://wiki.tudelft.nl/pub/Research/ISO19152/LADM2018Workshop/21-22_LADM_2018.pdf)

See also:

<https://wiki.tudelft.nl/bin/view/Research/ISO19152/LADM2018Workshop>

<http://www.opengeospatial.org/projects/groups/landadmin>

<https://www.conftool.com/landandpoverty2018/sessions.php>

## ISO/TC 172 SC6 Survey Instrument Standards

ISO/TC 172 SC6 provides a comprehensive coverage of standards related to surveying instruments and their accessories including: handheld laser distance meters, levels, theodolites, EDM measurements to reflectors, total stations, GNSS field measurement systems in real-time kinematic (RTK), terrestrial laser scanners etc...

Standards and/or project under the direct responsibility of ISO/TC 172/SC 6 Secretariat (17)

ISO 12858 *Series Ancillary devices for geodetic instruments*

- ISO 12858-1:2014 Part 1: Invar levelling staffs
- ISO 12858-2:1999/Amd 1:2013 Part 2: Tripods
- ISO 12858-3:2005 Part 3: Tribrachs

ISO 16331 *Series Laboratory procedures for testing surveying and construction instruments*

- ISO 16331-1:2017 Part 1: Performance of handheld laser distance meters
- ISO/AWI 16331-2 Part 2: Terrestrial laser scanner *[Under development]*

ISO 17123 *Field procedures for testing geodetic and surveying instruments*

- ISO 17123-1:2014 Part 1: Theory
- ISO 17123-2:2001 Part 2: Levels
- ISO 17123-3:2001 Part 3: Theodolites
- ISO 17123-4:2012 Part 4: Electro-optical distance meters (EDM measurements to reflectors)
- ISO 17123-5:2018 Part 5: Total stations
- ISO 17123-6:2012 Part 6: Rotating lasers
- ISO 17123-7:2005 Part 7: Optical plumbing instruments
- ISO 17123-8:2015 Part 8: GNSS field measurement systems in real-time kinematic (RTK)
- ISO/CD 17123-9 Part 9: Terrestrial laser scanners *[Under development]*

ISO 9849 *Series Geodetic and surveying instruments*

- ISO 9849:2017 Vocabulary *[Under development]*

**Ingo Neumann is the FIG representative to ISO/TC 172 SC6. He reports:**

### Summary of the most important (current) work of the ISO/TC 172/SC 6 “Geodetic and surveying instruments”

#### Terrestrial laser scanning

The new standard ISO/DIS 17123-9 is close to publication (probably by the end of the year) - Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments -- Part 9: Terrestrial laser scanners.

New working group for ISO/NP 16331-2 Optics and optical instruments -- Laboratory procedures for testing surveying and construction instruments -- Part 2: Terrestrial laser scanner

This new working group has been established to work on a laboratory standard for terrestrial laser scanning. This version is in an early stage. However, it will be of interest in the future. A final version will take at least 2 to 3 years to complete.

### **Distance and angle measurements:**

The new ISO 16331-1 is published: - Optics and optical instruments -- Laboratory procedures for testing surveying and construction instruments -- Part 1: Performance of handheld laser distance meters

The ISO/DIS 17123-5 under revision until the end of the year: - Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments -- Part 5: Total stations

We will keep the general procedure but update some formulas (to correct for some small errors) and some layout issues. This version will be moved to final draft and probably be published by the end of the year.

### **Other important work**

The new Standard ISO 9849 is published – Optics and optical instruments -- Geodetic and surveying instruments – Vocabulary

This standard is maybe important for FIG because it summarizes the vocabulary used in the field of geodetic and surveying sensors. This standard shall be extended concerning the terms in the area of multi-sensor-systems in the future.

## **International Property Measurement Standards Coalition IPMS**

### **Jean-Yves Pirlot Member of the BoT for CLGE, (ex-Committee member of IPMS-C) reports:**

The IPMS Coalition aims at the creation of an International Property Measurement Standard.

It was created on May 1, 2013, in Washington. It has now existed for five years. The coalition has 89 members and continues to grow. Many partner organizations support IPMS from the outside.

Even if the final goal of the CLGE and FIG delegates to the IPMS Coalition is to develop one universal measurement code of all building types, the coalition started with developing a series of codes.

For the time being, we have the IPMS for Office buildings (2014), for Residential buildings (2016) and for Industrial buildings (2018). One IPMS standard has been added every two years.

Work is ongoing for Retail Buildings and we expect a finalized and approved version by 2019. Initial work has also started on the Mixed Use standard.

The Standard Setting Committee is working hard to keep all these standards harmonized and the aim is to follow CLGE's and FIG's wish to adopt one overall standard for all building types.

At the end of 2017, the IPMS Coalition has organized elections. The full Executive Committee was renewed, many of the old members stayed on the committee welcoming a few new comers. With the expanding coalition, it now makes sense to increase Executive Committee.

A new bureau was also elected. The incoming Chair is Lisa Prats (BOMA International), the former Chair, Ken Creighton (RICS) was appointed as Vice Chair, while Jean-Yves Pirlot (CLGE), outgoing Secretary General was replaced by Maurice Barbieri, current CLGE president and FIG delegate for the IPMS Coalition.

The Standard Setting Committee (SSC) was also partially renewed with new mandates for some outgoing members and two new experts appointed.

It appears that it would be nice to introduce a height reference, since this is needed for diverse applications such as Fire Fighting and Energy Certification. The SSC has announced that they are already considering this aspect. Once again, this is coherent and in the direction of both CLGE and FIG.

## International Land Measurement coalition ILMS

### **Maurice Maurice Barbieri reports:**

The initial consultation of the proposed ILMS Land transfer standard was held during the early months on 2018 and closed at the end of Feb. The draft was downloaded over 200 times and several substantial comments were made. The ILMS draft seems robust and most comments focussed on minor issues of language use, gender rights and most interestingly the 'GML/XML coding' of the ILMS final output. ILMS is fundamentally orientated on the key 7 land data elements needed for successful and effective land transfer, acquisition, valuation and compensation/taxation, the ILMS coalition have successfully keep the standard as high level as possible to enable flexibility and global application.

This post consultation draft was successfully presented at the World Bank Land conference. ILMS has also been highlighted by Thomson Reuters (Place) as a significant development within the land acquisition and tenure security sectors <http://www.thisisplace.org/i/?id=aadd9347-801f-48e7-8e27-e025db28a755> – this is quite a coup and the article has been picked up by multiple publications worldwide. ILMS is now moving towards its next stages of consultation (ILMS exposure draft - summer 2018) with expected publication in late 2018.

<https://consultations.intstandards.org/consult.ti/ilms/consultationHome>

The exposure draft of ILMS will be presented at FIG Istanbul during the main technical programme and at the Regional Bodies meeting. The ILMS coalition would like to thank FIG, and many member associations, for their support during this important collaborative initiative.

### **James Kavanagh, Maurice Barbieri, Pedro Ortiz add:**

ILMS - International principle-based standard for recording and reporting information and material relevant to land and property transfers:

- Both a standard and a framework for reporting
- Aim to reduce risks in the land transfer process by creating consistency of application and facilitating and supporting land governance, robust conveyancing, secure lending and land registration
- Goal: to support global consistency by setting standards for classifying, defining, measuring, analysing, presenting and reporting land information

- Can be applied at a project, regional, state, national or international level
- 7 key elements required during a 'due diligence' process
- Creates land data feedback 'loop' where elements such as valuation can be improved as land data becomes available.

Property Address/Identifier:							
	Component	Basis	Date (dd/mm/yy)	Conveyancer Verification (Formal/Informal)	Documentary Support	ILMS status	Risk Status
1	Land Tenure						
2	Parcel Identification (Boundaries)						
3	Site/Land Area						
4	Land Use						
5	Services						
6	Building						
7	Land Valuation (Transfer Price)						

## International Construction Measurement Standards

The International Construction Measurement Standards Coalition (ICMSC) is a growing group of more than 40 professional and not-for-profit organisations from around the world. It was launched in 2015 to develop and implement consistent international standards for benchmarking, measuring and reporting construction project cost.

**Dr See Lian Ong, commission 10 Chair reports:**

### Background

Against a backdrop of tightening public purse strings and growing investment demand, construction industry leaders have joined together to set out a radical new approach to calculate, report or compare costs for the world's building and civil engineering projects.

A pioneer group of about 20 professional bodies (including FIG) established the International Construction Measurement Standards (ICMS) Coalition, at the IMF in Washington D.C. in June 2015, calling for professionals across the globe to support the collaboration and help embed common standards at the heart of construction investment.

The ICMS Coalition is a rapidly growing partnership of leading organisations from around the world, committed to producing and supporting consistent shared standards for construction costs. To date more than 40 professional bodies have signed up to be partners of the Coalition.

### Modus Operandi of ICMS

The organisation structure of ICMS comprises the Trustee Board of the ICMS Coalition that is represented by representatives of all members of the Coalition.

The ICMS then appoints the Standard Setting Committee (SSC), which is independent and comprises of experts from across the world. The initial SSC comprises 27 professional experts. The SSC members elect their officers (Chairman, Vice-Chairman and Secretary) and Dr. See Lian Ong was appointed as the Chairman of SSC in late 2015.

ICMS adopts the operation model that no overheads will be incurred by the Coalition and no member is required to pay subscription to be a member of the Coalition. Most meetings are conducted through tele-conferencing and for face-to-face meetings; the Coalition member will have to pay their representative the cost of travel or accommodation for such meetings. The member hosting the meeting will provide the facilities for the meeting.

### **Progress of ICMS**

The Standard Setting Committee (SSC), which I chair, held regular meetings via tele-conferencing between November 2015 and November 2016 with its first physical meeting held on 5-6 March 2016 in Brussels hosted by the European Commission.

Much had been achieved at this meeting with the framework for the ICMS established and the drafting group was ready to go away to prepare the first draft of the ICMS. The first draft of ICMS was completed and circulated to the members and friends of the ICMS Coalition for comment in August 2016. With the comments received, the SSC proceeded to fine-tune the draft.

The final draft of ICMS was completed at the end of October 2016. Trustees of ICMS and the members of the SSC met in London on 10 November 2016 and the final draft of the ICMS was launched for the first public consultation at a ceremony held on 11 November 2016 at RICS Headquarters at Parliament Square, London.

The draft ICMS was well received and several constructive comments were received when dateline for receiving comments for the final draft closed on 15 January 2017.

Consequently, the SSC further fine-tuned the final draft with the comments received and publish for the Second public consultation draft in Mid-March 2017. The second public consultation closed on 1 May 2017 and the SSC then fine-tuned the final draft for publication.

The ICMS was published and launched at the annual congress Pacific Association of Quantity Surveyors (PAQS) held in Vancouver, Canada from 24 to 26 July 2017.

With the publication of ICMS, we hope that there will be wide adoption of ICMS so that there will be consistency in measurement and reporting of construction cost across the entire world.

### **The Way Forward**

The Trustee of ICMS Coalition has reconstituted the SSC and has mandated the SSC to consider the review of the ICMS that has been published and to incorporate new features such as Life Cycle Costing in the next edition of ICMS.

The SSC has just had its first meeting via tele-conferencing on 16 March 2018 and have set out plans over the next 12 months to publish the 2<sup>nd</sup> Edition of ICMS.

The 2<sup>nd</sup> Edition of ICMS will likely incorporate additional project categories for civil engineering works, life cycle costing and also to reformat the standard so that it will enable data capture digitally.

More information on ICMS can be obtained from the website: [www.icms-coalition.org](http://www.icms-coalition.org)

## Specific Standards Issues in the Commissions

### Standards issues related to FIG Commission 4

The International Board (IHO, FIG and ICA) publishes guidelines for establishing individual recognition for hydrographic surveyors, at both professional and technical levels, taking into account education and experience.

### Standards issues related to FIG Commission 5

Commission 5 follows ISO/TC 172 SC6 Work on Survey Instrument Standards, and ISO/TC 211 Geographic information/Geomatics.

### Standards issues related to FIG Commission 6

Commission 6 is interested in the ISO TC 172 and the ISO 17123 series of standards related to survey instruments. There is interest in helping to define standards in deformation measurement and monitoring and data analysis. Other points of interest include machine guidance, integrating BIM model and machine guidance, exchange of data etc....

### Standards issues related to FIG Commission 7

Commission 7 is very active – specifically in *ISO 19152 on the Land Administration Domain Model (LADM)*.

### Standards issues related to FIG Commission 9

Commission 9 is the FIG link to the *International Measurement Standard of Property (IPMS)* initiative.

### Standards issues related to FIG Commission 10

Commission 10 is actively involved with the International Construction Measurement Standards Coalition (ICMSC) aiming to develop and implement consistent international standards for benchmarking, measuring and reporting construction project cost.

## FIG 2018 Istanbul Working Week Standards Network Meeting

The next Network meeting will be held on Tuesday, 8 May 14:00–15:30 during the 2018 FIG Istanbul Congress.

## Summary

Standards are important in the surveying profession. Standards work in FIG ranges from input on the very specific ISO/TC 172 SC6 Survey Instrument Standards; to liaison with the much broader ISO/TC 211 Geographic Information/Geomatics which impacts on virtually every aspect of the surveying profession; to ISO 19152:2012 Land Administration Domain Model (LADM); and the implication of Commission 9 in the IPMSC coalition with the aim to develop and implement International Property Measurement Standards.

The Standards Network is responsible for building and maintaining relations with the different standardisation bodies, proposing priorities on FIG's standardisation activities and ensuring information flow on standardisation to FIG members. One of the principal ways these goals are accomplished is through a Standards Network meeting held during FIG working weeks and

Congresses. In principle each Commission appoints a representative to the Standards Network to discuss their Commission's interest and requirements in standards.



**Report to the 41<sup>th</sup> General Assembly  
FIG Congress 2018, Istanbul, Turkey**

**FIG Asia Pacific Capacity Development Network**

**Report of Activities 2017-18 (Term 2015-18)**

**1. General**

The FIG Asia Pacific Capacity Development Network (AP CDN) was officially formed after the Christchurch Working Week in 2016. Prior to that considerable effort and contributions from FIG Commission 5 and 7 delegates to establish the basis of this network, and to support emerging economies in this region was prevalent. The foundations and assistance was through numerous Reference Frame workshops and related Small Island Developing States initiatives relating to geospatial information and fit for purpose infrastructure for responsible land governance.

The work plan for the FIG AP CDN was initially focused on addressing the technical geospatial and surveying challenges, and the related socio and economic matters pertinent to the Pacific, but as the issues are global in nature, the scope of this network was rapidly broadened to include Asian nations. To facilitate this need it was necessary to establish an operational framework for the region and this was achieved through significant liaisons, relationship building, and alignment of objectives with the United Nations Global Geospatial Information Management for Asia and the Pacific (UN GGIM-AP) Work Group (WG) 1 Geodetic Reference Frames, and like-minded agencies from various countries.

**2. Steering Committee**

The present steering committee of the FIG AP CDN comprises of –

- Dr. Matt Amos – International Association of Geodesy, Land Information New Zealand
- Mr. Neil Ashcroft – Leica Geosystems Singapore
- Mr. Graeme Blick – UN Sub-Committee on Geodesy, Land Information New Zealand
- Dr. John Dawson – UN GGIM AP, Geoscience Australia
- Mr. Nic Donnelly – FIG Commission 5, Land Information New Zealand
- Mr. Jens Kruger – Pacific Community Geoscience Division
- Mr. Mikael Lilje – FIG Vice President
- Mr. Faatasi Malologa – Pacific Geospatial and Surveying Council Chair
- Mr. Basara Miyahara – UN GGIM AP, Geospatial Information Authority of Japan
- Mrs. Molly Powers-Tora – Pacific Community Geoscience Division
- Mr. Rob Sarib – Surveying and Spatial Sciences Institute (Australia) and Chair of FIG AP CDN

### 3. Cooperation

To date the activities and success of FIG AP CDN can be attributed to the hard work and willingness to collaborate by its FIG participants; members from our sister organization the International Association of Geodesy (IAG); United Nation representatives from the GGIM AP, and International Committee on GNSS (ICG); individuals from government based agencies - Pacific Geospatial Surveying Council, Pacific Community - Geoscience Division, Geoscience Australia, Bureau of Meteorology (Australia), Land Information New Zealand (LINZ), Geospatial Information Authority of Japan, JUPEM - Department of Survey and Mapping, Malaysia; and professional surveyors from ASEAN Flag, Surveying and Spatial Sciences Institute (Australia), New Zealand Institute of Surveyors, Fiji Institute of Surveyors, and the Japan Federation of Surveyors.

### 4. Events

The significant workshops, seminars and meetings for the term 2015 to 2018 were –

- Vertical Reference Frame In Practice Seminar (FIG Commission 5) – Singapore, July 2015
- Pacific Geospatial Surveying Council meeting – Suva, Dec 2015
- Pacific GIS / RS Users Conference – Suva, Dec 2015
- Datum Unification and Kinematics Technical Seminar (FIG Commission 5) – Christchurch, May 2016
- Geospatial / GNSS CORS Infrastructure and Systems Forum – Kuala Lumpur, Oct 2016
- Pacific Heights Datum Workshop, Suva, Nov 2016
- Pacific Geospatial Surveying Council meeting – Suva, Dec 2016
- Pacific GIS / RS Users Conference – Suva, Dec 2016
- FIG AP CDN meeting – Helsinki, May/June 2017
- Reference Frame in Practice Seminar – Kobe, July 2017
- Geodetic Data Sharing Meeting – Kumamoto, Oct 2017
- ASEAN Land Governance Summit – Manila, Dec 2017

Please note the following are the upcoming events in 2018 that the AP CDN will be involved in –

- Pacific Geospatial Surveying Council meeting and Legal Policy and Frameworks Workshop (UN GGIM AP) – Tonga, April 2018
- FIG AP CDN Special Forum and meeting – Istanbul, May 2018
- Geodetic Data & Infrastructure for Disaster or Emergency Response Management, Environmental Geo-Hazards Monitoring – Manila, mid 2018
- Geodetic Reference Frames Workshop (UN GGIM AP) – Deqing (China), Nov 2018
- UN ICG GNSS Workshop – Nadi, late 2018

### 5. Communication and publications

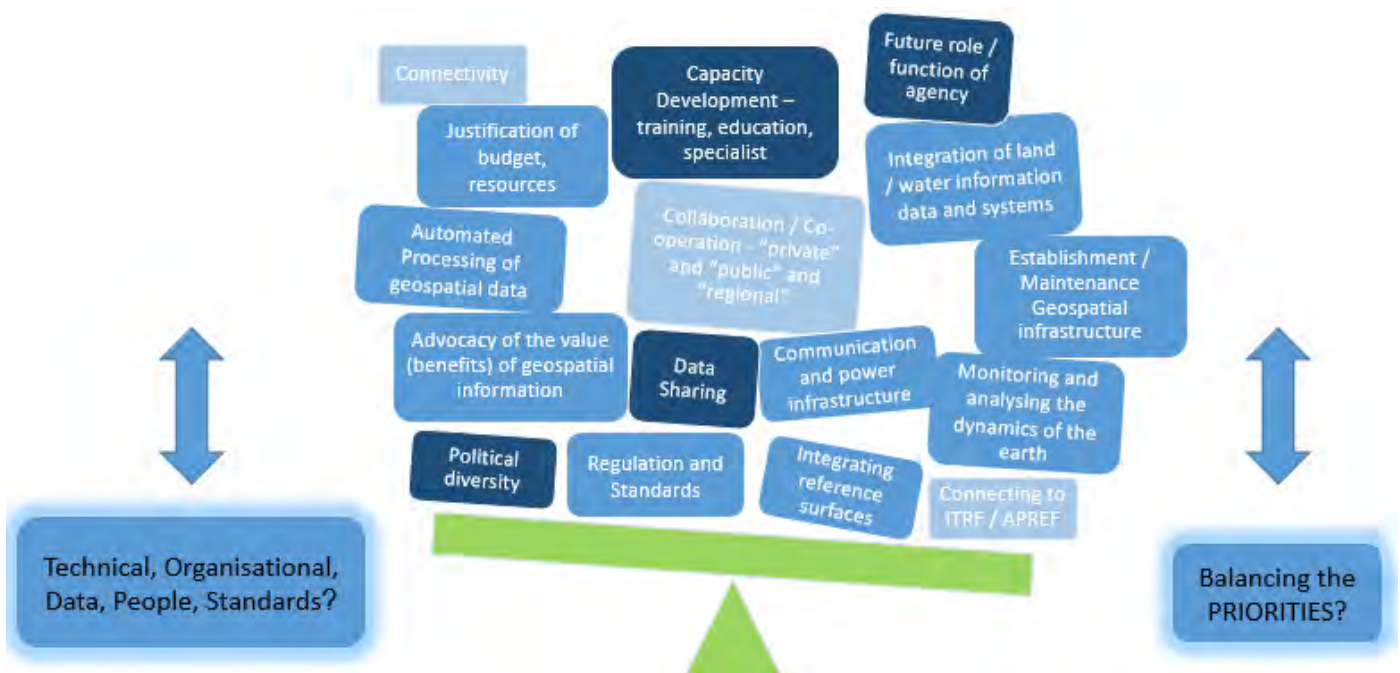
Reports on the outcomes / activities from events, as well as news and publications, can be found at the FIG AP CDN website - [http://www.fig.net/organisation/networks/capacity\\_development/asia\\_pacific/index.asp](http://www.fig.net/organisation/networks/capacity_development/asia_pacific/index.asp)  
Please note, the support and assistance from the FIG Office to manage and administer these webpages and the AP CDN is greatly appreciated.

## 6. Accomplishments and Challenges

From a work plan perspective, the FIG AP CDN has achieved the following –

- Establishment of an operational network of geospatial and surveying professionals to assist countries with the geospatial trends and capacity development challenges with respect to geospatial information and infrastructure.
- Assisted with the creation of a 10 year Positioning Strategic Plan for the Pacific Island Countries and Territories (PICTs).
- Facilitated capacity development initiatives for the Asia Pacific Reference Frame (APREF) in conjunction with the UN GGIM AP Working Group 1 – Reference Frames.
- Provision of advocacy to Asia and the Pacific geospatial industry through workshops, technical and professional advice, a website, and active attendance to meetings or events in the regions.
- Maintained and enhanced the profile of the FIG in Asia and the Pacific.

For the future, the challenges for AP CDN is to (a) assist with the capacity development of surveyors to manage the regional issues and trends affecting geospatial information and infrastructure, and (b) facilitate discussions on how to balance available resources and priorities to achieve geospatial objectives.



## ETHICS

### **Paper for General Assembly of FIG Congress Istanbul, May 2018**

**Gary Strong, United Kingdom  
Chair Commission 1 WG 1.1**

**Key words:** Standards, risk management, professional practice, International Ethical Standards (IES), trust, client and public protection, implementation, regulation.

#### INTRODUCTION

In 2014 FIG Commission 1 established an international Working Group on Ethics, to review the existing FIG Ethical Principles and also to participate in the growing International Ethics Standards (IES) Coalition which had been established in November 2014. Gary Strong was appointed by the Council to represent FIG in this forum with Brian Coutts (Chair Commission 1) as his substitute.

In 1997, a paper was published by FIG, which established new Ethical principles for surveyors. It was re-published in French in 2001. For ease of reference these are reproduced at the end of this paper.

Statement of Ethical Principles and Model Code of Professional Conduct. FIG Policy Statement, 1998.

Exposé des principes déontologiques et modèle de code de conduite professionnelle 2001

<http://www.fig.net/resources/publications/figpub/pub17/figpub17.asp>

#### THE INTERNATIONAL ETHICAL STANDARDS COALITION

The International Ethics Standards (IES) Coalition was established in 2014, and now has over 110 professional bodies around the world, who have come together through their Standard Setting Committee (SSC) of 19 experts from around the world, to establish and publish 10 high level principles of ethics for all professionals working in the land, property and construction sectors.

<https://ies-coalition.org/>

Many member associations of FIG are also members of the IES Coalition, see Appendix 3.

The Coalition SSC has worked collaboratively with the support of the United Nations and The World Bank, to develop these high level principles, and each member of the Coalition agrees to implement them in their own jurisdiction. There has been a lot of support and interest in the work of the Coalition, and organisations who are not members of the Coalition because of the nature of their business, can opt to be Supporters. There are currently 30+ supporters.

#### COMMISSION 1 PROGRESS AND PLAN

Commission 1 delivered a paper in 2015 which explored the opportunities and very real benefits that could be afforded not only to professional surveyors working in land, property and construction but also to clients, the public and society more generally, by the setting, promoting and monitoring

of international standards on ethics. Progress with the development of the International Ethical Standards have been reported to each FIG Working Week General Assembly since 2015 in the Commission Reports and have been the topic of several papers and discussions in each of the Working Week Technical Sessions.

Trust between businesses and society is still at a low point and there is a real danger that focusing on targets and regulations can drive dysfunctional and unethical behaviour. Ethical behaviour must be constantly monitored, codes updated, and above all, be relevant. Commission 1 believes the 1997 principles are due to be updated. To remain relevant, it is important that FIG is seen to have adopted the latest international standards and not be relying on those published 21 years ago. The International Ethics Standards are reproduced below.

FIG adopting a code of ethics on its own is potentially of limited use and Commission 1 Working Group recognise this, and so intends taking the subject further focusing on the following issues:

- Is just having ethics standards enough? – do you produce standards and leave it at that?  
Will that really get buy in?  
What does adoption look like and what are the risks to an organisations or country's reputation if people just pay lip service?
- The challenges the FIG member associations face in coming to terms with the varying global definitions of what is ethical, how the various members will be challenged to implement IES with their own guidance
- How FIG Commission 1 intend to provide guidance across our many diverse types of members working in different fields of surveying
- How FIG intend to get the message across to governments, the public and other stakeholders who use members across the world and how we are looking to embed ethics standards into our constituent professional bodies membership requirements, training and (critically) regulation.

Ethical behaviours by professional surveyors is critical to both business, consumers and society in general but more needs to be done to continue trying to change what for many is 'normal business practice'. FIG Commission 1 proposes to build on the growing interest generated in KL in 2014, Sofia in 2015, New Zealand in 2016, Helsinki in 2017, and the International Ethics Standards Coalition of over 110 professional bodies globally who have now come together on this topic, to hold a workshop in Istanbul to hear updates from countries and their representatives about real life examples of ethical issues they face as surveyors in their geographies. Please register for the event and come prepared to discuss your case examples.

This insight will help the FIG Commission 1 Working Group shape the new guidance which will be a major feature of the workplan for 2018-22 assuming FIG adopt IES.

### **IES ETHICAL PRINCIPLES**

In addition to the ethical principles below, practitioners are expected to observe all appropriate practice standards for their discipline. Practitioners are also expected to observe all laws and statutes applicable to their discipline in the jurisdictions where they practice, as well as all applicable international laws.

*The ethical principles below are listed in alphabetical order and are all of equal importance.*

1. **Confidentiality:** Practitioners shall not disclose any confidential or proprietary information without prior permission, unless such disclosure is required by applicable laws or regulations.

2. **Disclosure:** Practitioners shall make all appropriate disclosures before and during the performance of a service. If, after disclosure, a conflict cannot be removed or mitigated, the practitioner shall withdraw from the matter or obtain written consent of the parties affected to continue.
3. **Fiduciary Responsibility:** Practitioners shall be honest, transparent and trustworthy in all their financial dealings.
4. **High Standard of Service:** Practitioners shall only provide services for which they are competent and qualified and shall ensure that any employees or associates assisting with the provision of services have the necessary competence to undertake those services.
5. **Integrity:** Practitioners shall act with honesty and fairness in all their dealings, and shall not mislead or attempt to mislead. They shall base their advice on valid evidence.
6. **Respect:** Practitioners shall provide services that honor client, third party and stakeholder interests in the context of applicable rules of law and social and environmental concerns.
7. **Responsibility:** Practitioners owe a duty of care to their clients and due consideration to the rights and interests of third parties and stakeholders.
8. **Transparency:** Practitioners shall not misinform over the products or terms of service to be provided, and shall present relevant documentary or other material in plain and intelligible language.
9. **Trust:** Practitioners shall be truthful in their professional communications and recognize that their professional conduct bears upon the maintenance of public trust and confidence in the real estate professions.
10. **Verification:** Practitioners shall continually evaluate the services they provide to ensure they are consistent with the spirit and evolution of ethical principles and practice standards.

## CONCLUSION

**Commission 1 recommends to the General Assembly that FIG rescinds the “FIG Ethical Principles” (that is, retaining the FIG Model Code of Professional Conduct”) and adopts the International Ethics Standards (IES) given the widespread support by the United Nations, The World Bank, and over 110 other professional bodies in land, property & construction globally.**

Gary Strong  
UK RICS - Royal Institution of Chartered Surveyors  
Chair – FIG Commission 1 Ethics Working Group

## APPENDIX 1

### FIG Ethical Principles

#### Integrity

Surveyors

- maintain the highest standards of honesty and integrity towards those with whom they come into contact, either directly or indirectly; and
- accurately and conscientiously measure, record and interpret all data and offer impartial advice based thereon.

#### Independence

Surveyors

- diligently and faithfully execute their role according to the law; and
- maintain their objectivity and give their clients and employers unbiased advice, without prejudice or favour either towards or against other organisations or persons.

#### Care and competence

Surveyors

- maintain their knowledge and skills, keep abreast of developments in their fields of practice and apply their expertise for the benefit of society;
- only take on work that they reasonably believe they will be able to carry out in a professional manner; and
- exercise care in the performance of their duties.

#### Duty

Surveyors

- maintain confidentiality about the affairs of their current and former clients and employers unless required by law to make disclosures;
- avoid conflicts of interest;
- take environmental concerns into account in their operations and activities;
- recognise the interests of the public when providing services to their clients or employers; and
- conduct their work to the best of their ability, giving due consideration to the rights of all parties.

### The Public Interest

1. The first duty of surveyors is normally to their clients or employers but as professionals they also have a duty to the public. Surveyors are fact finders and providers of opinions and advice. It is important that they are diligent, competent, impartial and of unquestionable integrity in ensuring that the information they provide is true and complete and that the opinions and advice that they give are of the highest quality.
2. The work of surveyors has cumulative and long-term effects on future generations. Many of the functions of surveyors, even those performed for private clients, are by their nature functions that have a lasting impact on society. Most information becomes public information at some point in time and may be used for purposes other than those for which it was initially intended. The information recorded by early surveyors and explorers has, for example, subsequently been used for the expansion of geographical knowledge and for land development. Similarly, land management systems designed for today create an environment in which future generations will live, work and play. The principles of sustainable development require surveyors to work as much for the future as for the present.
3. Clients, employers and the public must be confident that surveyors have exercised objectivity in arriving at their professional opinions. These obligations may sometimes appear to be in conflict with the obligations that surveyors owe to their clients, their employers and their peers. Surveyors have a duty to the truth, even when it may not be in the best interest of their clients or employers.
4. All surveyors, whether they be private practitioners, employees in the private sector, public servants or educators, should discharge their professional duties and adhere to ethical principles in accordance with the following model code of professional conduct.

## FIG Model Code of Professional Conduct

FIG recommends the following code of conduct as the minimum to be expected of all professional surveyors.

### 1. In general, surveyors

- exercise unbiased independent professional judgement;
- act competently and do not accept assignments that are outside the scope of their professional competence;
- advance their knowledge and skills by participating in relevant programmes of continuing professional development;
- ensure that they understand the fundamental principles involved when working in new areas of expertise, conducting thorough research and consulting with other experts as appropriate; and
- do not accept assignments that are beyond their resources to complete in a reasonable time and in a professional manner.

### 2. As employers, surveyors:

- assume responsibility for all work carried out by their professional and non-professional staff;
- assist their employees to achieve their optimum levels of technical or professional advancement;
- ensure that their employees have proper working conditions and equitable remuneration; and
- cultivate in their employees integrity and an understanding of the professional obligations of surveyors to society.

### 3. When dealing with clients, surveyors:

- avoid any appearance of professional impropriety;
- disclose any potential conflicts of interest, affiliations or prior involvement that could affect the quality of service to be provided;
- avoid associating with any persons or enterprises of doubtful character;
- do not receive remuneration for one project from multiple sources without the knowledge of the parties involved;
- **preserve the confidences and regard as privileged all information about their clients' affairs; and**
- maintain confidentiality during as well as after the completion of their service.

### 4. When providing professional services, surveyors:

- seek remuneration commensurate with the technical complexity, level of responsibility and liability for the services rendered;
- make no fraudulent charges for services rendered;
- provide details on the determination of remuneration at the request of their clients; and
- do not sign certificates, reports or plans unless these were prepared and completed under their personal supervision.

### 5. As members of a professional association, surveyors:

- do not enter into arrangements that would enable unqualified persons to practise as if they were professionally qualified;
- report any unauthorised practice to the governing body of the profession;
- refuse to advance the application for professional status of any person known to be unqualified by education, experience or character; and
- promote the surveying profession to clients and the public.

### 6. As business practitioners, surveyors:

- do not make false or misleading statements in advertising or other marketing media;
- do not, either directly or indirectly, act to undermine the reputation or business prospects of other surveyors;
- do not supplant other surveyors under agreement with their clients; and
- do not establish branch offices that purport to be under the direction and management of a responsible professional surveyor unless this is actually the case.



## **7. As resource managers, surveyors:**

- approach environmental concerns with perception, diligence and integrity;
- develop and maintain a reasonable level of understanding of environmental issues and the principles of sustainable development;
- bring any matter of concern relating to the physical environment and sustainable development to the attention of their clients or employers;
- employ the expertise of others when their knowledge and ability are inadequate for addressing specific environmental issues;
- include the costs of environmental protection and remediation among the essential factors used for project evaluation;
- ensure that environmental assessment, planning and management are integrated into projects that are likely to impact on the environment; and

encourage additional environmental protection when the benefits to society justify the costs.

## APPENDIX 2

### International Ethics Standards (IES)



International Ethics  
Standards (final).pdf

[click on the icon above to launch the pdf](#)

## APPENDIX 3

# IES members

The latest list of professional bodies and non-governmental organisations that have signed up to develop and implement the International Ethics Standards:

### A

- [Australian Property Institute \(API\)](#)
- [ABRI Foundation](#)
- [American Society of Appraisers \(ASA\)](#)
- [American Society of Farm Managers and Rural Appraisers \(ASFMRA\)](#)
- [Appraisal Foundation \(TAF\)](#)
- [Arab Union of Surveyors](#)
- [Asian association for Investors in Non-listed Real Estate Vehicles \(ANREV\)](#)
- [Asia-Pacific Real Estate Association \(APREA\)](#)
- [Asian Real Estate Association of America \(AREAA\)](#)
- [La Asociacion Espanola de Analisis de Valor \(AEV\)](#)
- [Asociacion Espanola de Geometras Expertos \(AEGEX\)](#)
- [Asociacion Profesional de Sociedades de Valoracion \(ATASA\)](#)
- [Association for the Advancement of Cost Engineering \(AACEi\)](#)
- [Association of Estonian Surveyors](#)
- [Association of International Property Professionals \(AIPP\)](#)
- [Association of Residential Managing Agents \(ARMA\)](#)
- [Assoimmobiliare](#)
- [Australian Institute of Quantity Surveyors \(AIQS\)](#)
- [Associazione Società di Valutazioni Immobiliari per le Banche \(ASSOVIB\)](#)

### B

- [Botswana Surveying and Mapping Association \(BSMA\)](#)
- [British Czech Chamber of Commerce](#)
- [British Polish Chamber of Commerce](#)
- [Bulgarian Chamber of Professional Valuers \(KPO\)](#)

### C

- [Câmara Brasileira da Indústria da Construção \(CBIC\)](#)
- [Canadian Institute of Chartered Business Valuators \(CICBV\)](#)
- [CGATE](#)
- [Chartered Association of Building Engineers. \(CABE\)](#)
- [Chartered Institute of Architectural Technologists \(CIAT\)](#)
- [Chartered Institute of Building \(CIOB\)](#)
- [Chartered institute of Housing \(CIH\)](#)
- [Chartered Institution of Civil Engineering Surveyors \(ICES\)](#)
- [Chartered Institute of Procurement & Supply \(CIPS\)](#)
- [Chartered Institution of Water and Environmental Management \(CIWEM\)](#)
- [China Electricity Council](#)
- [China Institute of Real Estate Appraisers and Agents \(CIREA\)](#)

- [China Real Estate Valuers Association \(CREVA\)](#)
- [Colegio Oficial de Ingeniería Geomática y Topográfica \(COIGT\)](#)
- [CORFAC International](#)
- [Commonwealth Association of Surveying and Land Economy \(CASLE\)](#)
- [Council of European Geodetic Surveyors \(CLGE\)](#)
- [Counselors of Real Estate \(CRE\)](#)

## D

- [Dubai Real Estate Institute \(DREI\)](#)

## E

- [Engineers Without Borders](#)
- [ETEK, the Cyprus Scientific and Technical Chamber](#)
- [European Association for Investors in Non-Listed Real Estate Vehicles \(INREV\)](#)

## F

- [Federação Nacional dos Corretores de Imóveis \(FENACI\)](#)
- [Fédération Nationale de l'Immobilier \(FNAIM\)](#)
- [French- Polish Chamber of Commerce](#)

## G

- [Ghana Institute of Construction \(GIOC\)](#)
- [Ghana Institute of Planners \(GhIP\)](#)
- [Ghana Institution of Surveyors – GhIS](#)
- [Ghana Real Estate Professionals Association \(GREPA\)](#)
- [Green Building Council – Croatia](#)
- [Green Building Council – Poland](#)
- [Green Building Council – Romania](#)

## H

- [Hellenic Association of Realtors \(HAR\)](#)
- [Hong Kong Association of Property Management Companies \(HKAPMC\)](#)
- [Hong Kong Institute of Surveyors \(HKIS\)](#)
- [HypZert](#)

## I

- [International Facility Management Association – International \(IFMA\)](#)
- [IFMA – Poland](#)
- [Indian Institute of Quantity Surveyors \(IIQS\)](#)
- [Indonesian Society of Appraisers \(MAPPI\)](#)
- [Institute for Corporate Governance in the German Real Estate Industry](#)
- [Institute of Estate Agents, Singapore \(IEA\)](#)
- [Institute of Philippines Real Estate Appraisers \(IPREA\)](#)
- [Institute of Quantity Surveyors Indonesia \(IQSI\)](#)
- [Institute of Real Estate Management \(IREM\)](#)
- [Institute of Residential Property Management \(IRPM\)](#)

- [Institution of Civil Engineers \(ICE\)](#)
- [Institution of Structural Engineers \(IStructE\)](#)
- [Institution of Surveyors of Uganda](#)
- [Institution of Surveyors of Kenya \(ISK\)](#)
- [International Consortium of Real Estate Associations \(ICREA\)](#)
- [International Cost Engineering Council \(ICES\)](#)
- [International Housing Coalition](#)
- [International Real Estate Federation \(FIABCI\)](#)
- [International Society of City and Regional Planners \(ISOCARP\)](#)
- [International Right of Way Association \(IRWA\)](#)
- [International Valuation Standards Council \(IVSC\)](#)

## J

- [Japan Association of Real Estate Counselors \(JAREC\)](#)
- [Japanese Society of Independent Appraisers \(JASIA\)](#)

## L

- [Landscape Institute \(LI\)](#)
- [Lonja De Propriedad De Bogota](#)

## M

- [Middle East Council of Shopping Centres. \(MECSC\)](#)

## N

- [National Association of Realtors India \(NAR India\)](#)
- [National Association of Valuers of Serbia \(NAVS\)](#)
- [National Order of Surveyors of Senegal \(ONGRES\)](#)
- [National Real Estate Association of Bulgaria](#)
- [National Society of Professional Surveyors \(NSPS\)](#)
- [New Zealand Institute of Building Surveyors \(NZIBS\)](#)
- [New Zealand Institute of Quantity Surveyors \(NZIQS\)](#)
- [Nigerian Institution of Estate Surveyors and Valuers \(NIESV\)](#)
- [Nigerian Institute of Quantity Surveyors \(NIQS\)](#)
- [Nigerian Institution of Surveyors \(NIS\)](#)

## P

- [Philippine Association of Realty Appraisers](#)
- [Philippine Institute of Certified Quantity Surveyors \(PICQS\)](#)
- [Property Institute of New Zealand \(PINZ\)](#)
- [Proprogressio](#)

## R

- [Real Estate Institute of Australia \(REIA\)](#)
- [Real Estate Insitute of Botswana](#)
- [Real Estate Institute of Victoria \(REIV\)](#)
- [Real Estate Syndicate of Lebanon](#)

- [Real Property Association of Canada \(REALpac\)](#)
- [Royal Architectural Institute of Canada \(RAIC\)](#)
- [Royal Institute of British Architects \(RIBA\)](#)
- [Royal Institution of Chartered Surveyors \(RICS\)](#)
- [Royal Institution of Surveyors, Malaysia \(RISM\)](#)
- [Royal Town Planning Institute \(RTPI\)](#)
- [Russian Society of Appraisers](#)

## S

- [SECOVI-SP](#)
- [Singapore Institute of Building Limited \(SIBL\)](#)
- [Society of Chartered Surveyors Ireland \(SCSI\)](#)
- [Society of Engineers \(UAE\)](#)
- [Society of Property Researchers \(SPR\)](#)
- [South African Geomatics Institute \(SAGI\)](#)
- [South African Property Owners Association \(SAPOA\)](#)

## T

## U

- [Union of Construction Economists \(UNTEC\)](#)
- [Union Mediterranean des Geometres \(UMG\)](#)

## Z

- [Zentraler Immobilien Ausschuss \(ZIA\)](#)

**Report to the 41<sup>th</sup> General Assembly  
FIG Congress 2018, Istanbul, Turkey**

**FIG Commission 1 – Professional Practice and Standards**

**Report of Activities 2017-18 (15-18)**

**1. General**

Through its Work Plan for this quadrennium, Commission 1 was originally structured in 5 Working Groups (WGs) with a Vice Chair allocated to each. After the first 12 months and following the Working Week (WW) in Christchurch in 2016 WG 1.4 *Engaging Private Practice* was disbanded through lack of support and interest. This was despite the WG being established at the suggestion of a number of delegates and individuals at the WW in Kuala Lumpur in 2014. This, therefore, was somewhat disappointing but without the commitment of people to structure a Working Group it was expedient to disestablish the WG and concentrate on those where support was forthcoming.

Nevertheless, the other 4 WGs have performed well and have all have produced, or are producing, produced some outcomes, though in some cases their task may not be completed within the term of this 2015-18 period. In these cases, the topics will roll over into the next quadrennium under the direction of the new Commission Chair.

**2. Working Groups**

**2.1 WG 1.1 International Ethics and Standards (Gary Strong)**

Gary Strong has represented FIG as a Trustee on the International Ethics Standards Coalition (IESC) with Brian Coutts as his substitute. FIG is fortunate that this is also a part of Gary's regular work at the RICS and as a result no costs have been incurred. The IESC has produced a 10-point international ethical standard. Quite a number of FIG Member Associations have already adopted this new ethical statement for themselves. Commission 1 recommends that FIG also replace its current statement on ethics with this international standard, and this recommendation has been placed on the Agenda of the General Assembly in Istanbul.

**2.2 WG 1.2 Women in Surveying (Robyn McCutcheon and Winnie Shiu)**

The question that the Commission 1 WG 1.2 asked in the 2015 /18 plan for was - *are women still underrepresented in the surveying industry?* It also asked if there was a need for a Women in Surveying Network (WISN), to 'spin-off' from Commission 1 in the same way the YSN was created. The WG is now attempting to find out if anything has changed from the results of earlier studies that indicated low numbers of women in the industry. Statistics have been gathered over the years to monitor the number of women and their work in the surveying and spatial industry in Australia and New Zealand.

The current study includes data collected through a survey of FIG member organisations. The aim was to use social networking and online communications to analyse the status of women in the surveying workforce across the FIG community. Using this data, the WG has been investigating if the situation is similar across the international FIG community. The latest results indicate that there is little difference in the relative numbers of women across the Member Associations but that there is a positive climate for change. It is anticipated that the WG will recommend that a Women in Surveying Network be created and will provide recommendations on ways to actively promote women in the surveying industry resulting from discussions at the Congress in Istanbul.

### **2.3 WG 1.3 International Boundary Settlement and Demarcation (Don Grant)**

Don Grant and his Working Group members have been preparing a follow-up publication to FIG Publication 59 *International Boundary Marking* edited by Hiam Srebro, which was produced through Commission 1 in 2013. This new volume is an addendum to # 59 and will consequently be considerably smaller than the original. It is expected to be published before the end of 2018.

### **2.4 WG 1.4 Forum on Engagement of Private Practitioners**

This Working Group was disbanded following the Working Week in Christchurch in 2016 through lack of interest and support.

### **2.5 WG 1.5 Forum on Mutual Recognition (Kate Fairlie)**

A successful series of workshops were held during the WW in Helsinki in 2017. Significant interest was generated in the topic and there were good attendances and much discussion at each of the sessions. A core outcome from the sessions was agreement on the need for a platform to assist in the sharing of information and guiding documents between professional associations. There was also considerable discussion around support for assessing international qualifications (such as academic), as the prerequisite step for jurisdictional registration. The next steps for the Working Group will be to update the current FIG Publication No. 27 *Mutual Recognition of Professional Qualifications* and to undertake a preliminary scoping for the development of a information sharing platform. Necessary on-going work in this area may be outside the ambit of Commission 1.

## **3. Events**

It has not been necessary or appropriate for Commission 1 to undertake any events beyond the Congress and the intervening Working Weeks.

## **4. Communication and publications**

Two newsletters have been generated by the Commission, prepared for publication by Vice Chair Communication and Administration Winnie Shiu, one in 2015 and one in October 2017. As already indicated, it is anticipated that a formal publication will be available by the end of 2018.





**Report to the 41<sup>st</sup> General Assembly  
FIG Congress 2018, Istanbul, Turkey**

**FIG Commission 2 – Professional Education**

**Report 2017**

**1. General**

FIG Commission 2 is the domain of professional surveying education. The traditional core areas for the commission are: 1) curriculum and core surveying body of knowledge, 2) teaching and learning methodology, 3) marketing and management of professional education and 4) accreditation and quality assurance. For its term 2015 – 2018 these core areas are being addressed by the four following working groups:

- Working Group 2.1 – Towards educating the land professional
- Working Group 2.2 – Innovative learning and teaching
- Working Group 2.3 – Demand for and supply of Professional Education
- Working Group 2.4 - Accreditation and Quality Assurance

Traditionally Commission 2 has a leading role in the Academic Forum. The Academic Forum is the platform for FIG Academic Members. FIG Commission 2 further supports the FIG Young Surveyors Network, the OICRF and participates in the FIG Foundation.

**2. Working Groups**

**2.1 WG      Towards educating the land professional**

Chair: Dr. Fahria Masum ([masum@landguidance.com](mailto:masum@landguidance.com))

Working Group 2.1 and Working Group 2.2. jointly came up with a proposal for a FIG Publication titled *Surveying Education on the Move: New Challenges, New Tools, New Competencies* . A paper 'Enhancing the role of surveyors: bridging the gap between demand for and supply of professional education' dedicated to this publication was presented during the FIG Working Week in Helsinki.

FIG Commission 2 Publication Team		
Dr. Fahria Masum	Land Management Consultant, Munich, Germany	<a href="mailto:masum@landguidance.com">masum@landguidance.com</a>
Dr. Reinfried Mansberger	University of Natural Resources and Life Sciences (BOKU), Austria	<a href="mailto:mansberger@boku.ac.at">mansberger@boku.ac.at</a>
Dr. Audrey Martin	Dublin Institute of Technology (DIT), Ireland	<a href="mailto:audrey.martin@dit.ie">audrey.martin@dit.ie</a>
Liza Groenendijk	ITC -University of Twente, The Netherlands	<a href="mailto:e.m.c.groenendijk@utwente.nl">e.m.c.groenendijk@utwente.nl</a>
Dr. Gerhard Navratil	University of Natural Resources and Life Sciences (BOKU), Austria	<a href="mailto:Gerhard.Navratil@geo.tuwien.ac.at">Gerhard.Navratil@geo.tuwien.ac.at</a>
Dr. Eugene McGovern	Dublin Institute of Technology (DIT), Ireland	<a href="mailto:eugene.mcgovern@dit.ie">eugene.mcgovern@dit.ie</a>

Though the team finalized the draft by the end of November 2017, later the team decided to postpone the publication entirely.

## **2.2 WG Innovative learning and teaching**

Chair: Dr. Audrey Martin ([audrey.martin@dit.ie](mailto:audrey.martin@dit.ie))

WG 2.2 worked in close cooperation with WG 2.1 on the publication 'Surveying Education on the Move: New Challenges, New Tools, New Competencies'.

## **2.3 WG Demand for and supply of Professional Education**

Chair: Dr. Nadezda Kamynina ([kamyninan@gmail.com](mailto:kamyninan@gmail.com))

No remarkable activities were undertaken by Working Group 2.3 in 2017.

## **2.4 WG Accreditation and Quality Assurance**

Chair: Prof. Alias Abdul Rahman ([alias.fksg@gmail.com](mailto:alias.fksg@gmail.com))

No remarkable activities were undertaken by Working Group 2.4 in 2017.

## **3. Academic Forum Working Group on the VGGT**

The 2017 FIG Academic Members Forum was the platform within the 40th FIG General Assembly where the Academic Members of FIG and other academicians gather to discuss about academic responsibilities and to prepare actions. The Working Group 'Exploring the VGGT in Practice' presented 3 papers based on the results from two online surveys. In a Roundtable setting the results were discussed resulting in an agreement on the way forward. This session was organized together with FAO and was chaired by Prof. Walter de Vries, Technical University of Munich, Germany. On behalf of FAO Paul Munro-Faure, Tea Dabrundashvili and Dr. Morten Hartvigsen joined the session. The forum received 20 academics who were present during the entire period of the session. Due to overlapping sessions some attendees joined the session intermittently. Unfortunately in 2017 (after WW in Helsinki) the working group did not have any remarkable activities.

#### 4. Cooperation and Activities at International Level

Commission 2 was active at international level. Dr. Fahria Masum, Vice-Chair, represented Commission 2 in the following events in 2017.

- VGGT 5<sup>th</sup> Year Anniversary Technical Thematic Forum organized by FAO in Rome, October 5-6, 2017.
- Summer School on 'Current Aspects of Land Development and Land Use based on SDGs' organized by Renmin University, China, July 3-7, 2017. Dr. Masum gave a public lecture on 'Attaining Sustainable Development Goals (SDGs): Capacity Development for Land Management'.
- International Conference on 'Integrated Approach of Rural Development and Territorial Governance' organized by Hanns Seidel Foundation in Jinan, China, May 11-13, 2017. Dr. Masum gave a presentation on 'Capacity Development in Response to Changing Concept of Rural Development'.

#### 5. FIG Working Week in Helsinki, Finland, May 2017

##### *Commission 2 Annual Meeting and Commission Dinner*

During absence of Chair Ms. Liza Groenendijk, Dr. Fahria Masum, Vice-Chair chaired the annual meeting. 11 new and old members joined the meeting. Young professionals expressed their interest in joining Commission 2 activities. Commission 2 publication status, expansion of existing network, application for FIG Foundation Grant, selection of Chair 2019-2022 were on the agenda for discussion. Furthermore, Commission members and participants suggested several measures (i.e. to avoid overlapping schedules and to publicize properly the schedules of Commission meetings) to take by the FIG Council in order to increase the number of participants in commission meeting.

Like previous years, the Commission had a nice and lively dinner at Konstan Molja, a typical Finnish restaurant together with Commission 1.



##### **NEW MEMBERS IN COMMISSION 2**

**Paul F Kenny LS**, Consultant Surveyor, Australia

**Ivan Detchev**, Instructor in Surveying and Mapping, Department of Geomatics Engineering, University of Calgary, Canada

**Lam Lityin**, the Hong Kong Institution of Engineering Surveyors (HKIES), Hong Kong

**Robert Kingdon**, Department of Geodesy and Geomatics Engineering, University of New Brunswick, Canada

**Jennifer Whittal**, Associate Professor, Department of Geomatics, University of Cape Town, South Africa

### ***Technical Sessions***

Commission 2 had 3 technical sessions – Curriculum on the Move, Innovation in Education, Demand, Quality and Accreditation of Education. 14 papers with a large diversified topics were presented followed by thought provoking and interactive discussions.

The sessions received a good number of participants. Chairs and rapporteurs contributed greatly to the success of the technical sessions.



## **6. Communication and Publications**

In August the Commission 2 Newsletter was published. Available at [http://www.fig.net/organisation/comm/2/activities/newsletters/com\\_2\\_newsletter\\_september\\_2017.pdf](http://www.fig.net/organisation/comm/2/activities/newsletters/com_2_newsletter_september_2017.pdf)

## **7. FIG Foundation**

Traditionally the chair of FIG Commission 2 is a member of the Board of the FIG Foundation. The annual meeting of the Foundation took place on 4<sup>th</sup> of May during the Working Week in Helsinki. During absence of Chair Ms. Liza Groenendijk, Dr. Fahria Masum, Vice-Chair joined the meeting.

Report to the 41th General Assembly  
FIG Congress 2018, Istanbul, Turkey  
FIG Commission 3 – Spatial Information Management

Report of Activities 2017-18 (15-18)

The activities of the FIG Commission 3 during the year 2017 is continuing in the study, research and experiences in the field of development and use of VGI, Crowdsourcing, GIS systems and SIM and SDI procedures.

Commission 3, through the coordination of the Chair Enrico Rispoli and the contribution of the four working groups, composed of professionals and academics from around the world, has achieved excellent results in participations and involvements of members.

Thanks to the cooperation of the delegates, more research have been in simple and reliable method of collecting, monitoring and managing data concerning the territory (geographical, aero photogrammetric, geomorphological, economic, land, statistics, etc.).

The technical and working sessions focused on the following matters:

- 1) SIM Infrastructure;
- 2) Technical Aspects of SIM;
- 3) 3D Cadastre;
- 4) Crowdsourcing and VGI supporting SDI.
- 5) SDI at all levels – local, regional, national and global;
- 6) SIM challenges – natural and environmental risk prevention and disaster management, mitigation, waste management, etc.;
- 7) VGI collection, dissemination, analysis, applications, maintenance and visualization;
- 8) e-Governance and SDI in supporting decision making – theory, applications and best practice;
- 9) Integration of SDIs – cadastre, land use, utilities, environment, socio-economic;
- 10) SDI interoperability – standards, technical tools, metadata, portals;
- 11) 3D/4D Cadastre;
- 12) Utilization of VGI and Crowdsourcing with SDI, SIM and environmental information;
- 13) 2D/3D/4D geospatial models, algorithms, visualization, standards and applications;
- 14) Web and mobile GIS – challenges, services and real-time capabilities;
- 15) Business models and SDI, public-private partnerships and economic aspect.

The importance of the general topics as SDI, SIM, GIS, etc. together with VGI and Crowdsourcing has drawn the attention of many delegates who have allowed to carry out interesting working

sessions during the FIG Working Week in Helsinki and during the Commission 3 Annual Meeting and Workshop.

**Talking about Finland**, FIG Commission 3 participated in Helsinki for the FIG Working Week with 5 technical sessions, 1 joint session with Commission 7 and with about 50 presentations.

All presentations were of high scientific level, well linked to both the traditional topics of Commission 3 and the topic of the FIG WW 2017 “Surveying the World of tomorrow: from digitalisation to augmented reality”. In the technical sessions of Commission 3 significant results were illustrated coming from the latest research about how we collect, compare, control and manage the data concerning the territory. The speakers, coming from professional or academic world, reported and commented on their specific research or work. Such research has been the concrete contribution to the activity of the territorial administration of the relative countries. Governments which decide and make the choices need more updated spatial data for sustainable development, environmental protection and, above all, for the prevention of disasters.

During the week, on Wednesday 31st May, the Annual Meeting of the Commission was held.

During this meeting, where also new delegates participated in, the chair of the Commission, Enrico Rispoli, presented the structure of the Commission, gave the floor to each of the chair of the Working Groups to present their plans, presented the current work plan, the results of the past events held in Christchurch for the FIG WW 2017 and above all the results of the event in Iasi November 2016 for the Annual Meeting of Commission 3 and Workshop.

Enrico Rispoli underlined to the delegates the future commitment of the researchers participating in the working groups of Commission that will be to identify systems that facilitate the transition from the considerable amount of data to be selected and controlled to the availability of useful, accurate and of quality spatial information.

Before closing the Annual Meeting the venue of the next meeting and workshop of the Commission was discussed and it was decided to hold this meeting in Lisbon (Portugal) from 27<sup>th</sup> till 30<sup>th</sup> November 2017 organized by the Ordem dos Engenheiros (the Portuguese Engineers Association) and joint to the General Assembly of EGoS (European Association of Surveyors).

Commission 3 was involved in the **8th edition of the International Summer School “Survey to Planning and Land Protection”**

Immediately after the Working Week in Finland, Commission participated in the **8th edition of the International Summer School “Survey to Planning and Land Protection”** held in Bari and Alberobello from 24<sup>th</sup> July to 3<sup>rd</sup> August 2017. The event, which this year had as major topic the water, "in particular the water that runs through the architecture of the Pugliese and Lucanian heritage: from the rock caves to the shapes, public fountains, trulli, quarries, Sassi di Matera ", was organized by the International Committee for Architectural Photogrammetry - COIFA and saw the participation of over 70 scholarship from around 12 countries. Commission 3 supported the participation of some Young Surveyors thanks also to the contribute received by FIG Foundation.

### **Commission 3 Annual Meeting and Workshop 2017**

Coming back to **Commission 3 Annual Meeting and Workshop 2017** - The European city of Lisbon was fabulous, as expected.

More than seventy members from five Continents and so many different Countries participated in, from the field of surveying to academics and universities, expertises and Young Surveyors.

The opening ceremony that took place on 27th in the afternoon, saw the presence of important institutional, national and international representatives; to mention some of them:

- Seniora Célia Ramos - Secretary of State for Spatial Planning and Nature Conservation in the Committee on Environment, Spatial Planning, Decentralization, Local Government and Housing;
- Chryssy Potsiou, President of the International Federation of Surveyors, always present at FIG Commission 3 events with high scientific contributions;
- Enrico Rispoli – President of FIG Commission 3 and Board Member CNGeGL;
- Bob Foster, Honorary President of FIG;
- Eng. Carlos Loureiro, Vice-President of the Association of the Ordem dos Engenheiros;
- Teresa Sà Pereira, Chair Colegio Nacional of the Ordem dos Engenheiros;
- Maurice Barbieri – President of the Council of European Geodetic Surveyors
- Nikolaos Zacharias – President of the Euroean Group of Surveyors.

President Potsiou, congratulated FIG Commission 3 chair Enrico Rispoli and Vice chair of Administration Maria Scorza, as well as the Portuguese Engineers Association and its President Carlos Mineiro Aires and chair Maria Tereza Sa Pereira, for setting the themes, exploring the background and defining the goals of the workshop and for bringing together such important experts in the same place. She also congratulated the planners and the organizers of this event, all the distinguished members of both the organizing and the scientific committees for their valuable contributions.

The FIG President in her speech referred to the value of geospatial information and its importance in implementation of the Sustainable Development Agenda by 2030. She also stated that in order to achieve this vision it will be necessary to improve our capacity in collecting and providing the necessary information reliably, affordably and timely, and she suggested that crowdsourcing is a developing methodology with a potential to support our efforts. She said that “the principle of crowdsourcing is, apparently, that more heads are better than one, and that every person has something of value to contribute”, and that “much of what we read about crowd sourcing has to do with so-called ideation meaning that the technique is applied in a search for new ideas, e.g., to support the Sustainable Development Goals (SDGs). It is used for problem solving. Crowdsourcing is often used in micro-tasking, that is, in breaking work up into very small tasks and sending the work out to the crowd.” President Potsiou clarified that “The theory is that work may be done faster and cheaper and with fewer errors when validation systems are in place. When used in the context of surveying the issue of validation is critical, and assumes a certain amount of preparation and training of volunteers as well as control of crowdsourced data prior to their integration with official databases. It may involve the collection of information that is required to be neither positionally nor dimensionally precise, yet important enough to achieve the SDGs, including cadaster and first registration where missing; and as long as positioning and validation improve, the use of crowdsourced information will be extended.”

The topic proposed by Commission 3 – 2017 in Lisbon for Commission 3 Workshop “Volunteered Geographic Information: Emerging Applications in Public Science and Citizen Participation” was a theme followed with interest by the members who took part fully in all the sessions.



The event, this year organized by Commission 3 in cooperation with the Ordem dos Engenheiros (the Portuguese Engineers Association) and the EgoS European Group of Surveyors, was full of new research and experience on development and use of VGI, GIS, SIM, SDI, 2D/3D/4D geospatial models, algorithms, visualization, systems and procedures.

The technical sessions saw 8 Keynote Speakers and over 20 Papers (3 where peer reviews) from authors coming from Algeria, Australia, Germany, Greece, Hungary, Indonesia, Israel, Italy, Malta, Nigeria, Benin, Portugal, Romania, Sierra Leone, Spain, Switzerland, Turkey, United Kingdom, USA.

These papers explained how spatial information management is having great development, especially in relation to the ways in which geographic and territorial data are collected, processed and disseminated for public, commercial, historical and touristic use.

All the papers aroused the interest of important scientific journal in the field of surveying that promoted our event and asked to publish the proceedings. These journals are:

- 1) ISPRS International Journal of Geo-Information that has created a special edition website for our event and for more information you will find some flyers;
- 2) Cambridge Scholars Publishing that with the proceedings wants to create a Manual/Book.

This year the FIG Commission 3 Workshop elaborated better the fields where crowdsourcing is of great value for the surveying profession in order to obtain affordable geospatial data reliably and timely, as well as it will investigate what are the validation systems available to the surveyor in such an operation.

VGI, another theme of the workshop, in the age of the internet of things, is a capability and also an inescapable tool in the present and future for better and faster geospatial knowledge and, more than a threat for the surveyors community, it will have to be a source for their professional activity .

The integration of VGI in Spatial Data Infrastructure (SDI) is a big challenge for our community.

The three days workshop and meeting was a great opportunity to meet with professional and academic colleagues in the field of surveying and to follow the reports of international members about the latest and curious news.

As usually Commission 3 does, also this year was elected the best paper between the peer reviews ones (many papers deserved in the same way and over 35 participants voted) and also one paper was chosen as FIG paper of the month.

□ The best paper elected was “VGI in 3D Cadastre: A Modern Approach” by Maria Gkeli, Charalabos Iannodis and Chryssy Potsiou;

□ while the paper chosen as FIG article of the month was by Prof. José Antonio Tenedorio “How can 3D models and augmented reality visualization based on mobile platform enhance the value of urban heritage?”

Many papers have received special mention for the interesting content and also for the innovative style of illustration on the panel.

Joining FIG Commission 3 activities in Lisbon has been an excellent chance for increasing the international participation and this fact has helped every participant to exchange and enhance their experiences enabling all people to exchange new ideas and initiating new common projects. All

these will help the development of the Commission 3 activities and geodetic profession role in the society.

During the Workshop a **Meeting** was held between CLGE (Council of European Geodetic Surveyors) represented by the President Maurice Barbieri, SOGEI (Italian Society of Information and Communication Technology) represented by Ing. Roberto Capua and Commission 3 represented by the President Enrico Rispoli. This meeting was about the launch of a project regarding the European Global Navigation Satellite System within the proposal Horizon 2020 and will involve also another Italian Company which is GEOWEB (Italian Company providing Telematic Services for Users), and currently Corporate Member of FIG. A webinar between the partners above followed in the month of December 2017 and since January 2018 the project will be put into practice.

During the workshop, a very important exhibition took place for celebrating the “150 years of the Border Treaty: military missions of sovereignty and border representations”.

The exhibition, which was presented at the end of the Opening Ceremony, was very interesting and was about the history of demarcation of boundaries of Spain and Portugal: “With a centuries-old border dating to the Treaty of Alcanices (1297), Portugal and Spain began to more rigorously define and demarcate their border in the middle of the nineteenth century. The efforts involved Army officers, who always led, on the Portuguese side, the technical delegations established by the Ministry of Foreign Affairs. Initially comprising only two representatives of each country, the Commission expanded over time. Even today, the Centro de Informação Geoespacial do Exército [Army Center of Geospatial Information] continues to assume responsibility for its maintenance in tandem with its Spanish counterpart”. The exposition was guided by Prof. Dr. Maria Helena Dias and the President of the Army Geospatial Information Centre, Colonel José Rodrigues.

Joining FIG Commission 3 activities in Lisbon has been an excellent chance for increasing the international participation and this fact has helped every participant to exchange and enhance their experiences enabling all people to exchange new ideas and initiating new common projects. All these will help the development of the Commission 3 activities and geodetic profession role in the society.

As a result of this important scientific event, Commission 3 expects the presentation of numerous papers for the sessions of the upcoming Working Week and FIG Congress which will take place on 6-11 May 2018, in Istanbul, Turkey.

#### **Planned activities of Commission 3 in 2018:**

- participation in the Congress and FIG WW 2018 in Istanbul;
- 9th edition of the International Summer School;
- organization of the Commission Annual Meeting and Workshop that will be held in autumn 2018 (date and venue tbd);
- FIG Commission 3 Publication on New Trends in Spatial Information: Surveyors’ Role in the Era of Crowdsourcing and VGI - Possible Uses within the Surveying, Mapping and Geo-Science Communities.

Last but not at least, Commission 3 also this year under the presidency of Enrico Rispoli will continue its policy of supporting Young Surveyors for their involvement within FIG activities thanks to the contribute of FIG Foundation.

**Warm thanks** to the Vice Chairs of the Working Groups of Commission 3 for their contribution:

- |  |   |
|--|---|
| - Vice Chair and Chair of Workin Group 1 | Prof. Dr. Hartmut Müller - Germany            |
| - Vice Chair and Chair of Workin Group 2 | Prof. Dr. Ioannidis Charalabos - Greece       |
| - Vice Chair and Chair of Workin Group 3 | Prof. Dr. Peter Van Oosterom – The Netherland |
| - Vice Chair and Chair of Workin Group 4 | Prof. Dr. Sagi Daylot - Israel                |
| - Commission Vice Chair                  | Dott.ssa Maria Grazia Scorza – CNGeGL - Italy |

Warm thanks to the President of FIG, Chryssy Potsiou, for her support and to the President of FIG Foundation, John Hohol.

Warm thanks to FIG Office and its staff for the excellent work in supporting Commission 3.

Enrico Rispoli  
Chair Commission 3

## COMMISSION 4 EVENTS / ACTIVITIES / ACCOMPLISHMENTS FROM 2015 TO DATE (FEBRUARY 2018)

Any success of this Commission cannot be solely claimed by the Commission Chair because it is the accomplishments of the Commission's membership that make the Commission's successes. This opportunity is taken to deeply thank all Commission Chairs and members who positively contributed to the Commission since 2015 – their efforts are acknowledged and greatly appreciated, especially in spite of their busy professional commitments and in light of all the setbacks! Rising from a fall is victory!

### MEET COMMISSION 4 OFFICERS (2015-2018)



**Chair:**  
Angela Etuonovbe  
(Nigeria)



**Vice Chair: WG 4.1**  
Simon Ironside  
(New Zealand)



**Vice Chair: WG 4.2**  
Jonathan Li  
(Canada)



**Vice Chair: WG 4.3**  
Gordon Johnston  
United Kingdom

The Chair of Commission 4, Surv. Mrs. Angela Kesiena Etuonovbe, engaged in the expected guidance and coordination of Commission 4 activities. These include managing the activities of working groups, preparing annual and other reports, keeping Commission 4 stakeholders informed through FIG website contents, and organizing conference sessions at FIG working weeks, regional conferences, and Congress. Surv. Mrs. Angela Kesiena Etuonovbe also contributed as a peer reviewer of papers for FIG working weeks, regional conferences, and Congress.

Specifically invited to speak at certain international events, and gave the following Commission 4 relevant presentations:

- Etuonovbe (2015). “**Blue Economy A Panacea For Eradicating Poverty-Nigeria In Focus**”. Presented at the U.S.Hydro 2015, Gaylord National Harbor, Maryland, U.S.A., March 16-19.
- Etuonovbe (2015). “**The current climate for a sustainable Blue Economy**”. Presented at the Blue Economy Conference in Southampton, U.K. April 14.
- Specifically invited by the Surveyors Council of Nigeria (SURCON) to speak on “**The Benefits of Attending Professional Conferences**” at the Pre-induction Workshop of Newly Qualified Surveyors, February 1, 2017.

### WORKING GROUP 4.1 STANDARDS AND GUIDELINES FOR HYDROGRAPHY



Simon Ironside (New Zealand)



Peter Barr(Australia)

## Members

Working Group 4.1 (WG 4.1) consists of members from Australia and New Zealand and is supported by the respective FIG Member Associations; the Surveying and Spatial Sciences Institute (SSSI) in Australia (SSSI) and the New Zealand Institute of Surveyors (NZIS).

Simon Ironside	Chair	New Zealand
Mathieu Bestille	Vice Chair	Australia
Neil Hewitt		Australia
Peter Barr		Australia

## Background

The WG 4.1 2015-2018 Work Plan was approved at the Commission 4 Annual General Meeting on 18 May 2015 during the FIG Working Week 2015 in Sofia, Bulgaria. WG 4.1 was renamed (from WG 4.2) at the Commission 4 Annual General Meeting held on June 2014, during the FIG Congress 2014 in Kuala Lumpur, Malaysia. WG 4.2 had been moribund for a number of years and one of the goals of the incoming Commission 4 Chair, Mrs Angela Etuonovbe, was to focus the Commission's efforts on having relevant and meaningful input into hydrographic standards and guidelines, hence the WG's re-invigoration and renaming.

The intent of WG 4.1, as set out in the current work plan, is to deliver tangible but realistic outcomes based on the agreed objectives of:

- Assisting in the development and recognition of standards of competency for hydrographic surveyors.
- Assisting in the development of technical standards and guidelines.
- Assisting with review of standards and guidelines.
- Promoting the need for, and benefits of, professional hydrographic surveyor certification.

## Outcomes

WG 4.1 has committed itself to a number of specific outcomes based on these agreed objectives over the period of the work plan as follows:

- Broaden the membership of WG 4.1
- Support the International Hydrographic Organization (IHO) through the work of its Hydrographic Services and Standards Committee (HSSC) by participating in HSSC working groups to review hydrographic standards and guidelines, primarily:

S-44 – IHO Standards for Hydrographic Surveys (the most recent version is the 5th Edition, February 2008).

S-100 – IHO Universal Hydrographic Data Model (January 2010)

— Support FIG members on the FIG/IHO/ICA International Board of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) in reviewing and updating competency standards, namely:

S-5A – Standards of Competence for Category ‘A’ Hydrographic Surveyors (August 2016).

S-5B – Standards of Competence for Category ‘B’ Hydrographic Surveyors (February 2015).

— Represent Commission 4 on the FIG Standards Network and other international fora where appropriate.

— Support the work of other FIG Commissions and Working Groups, and participate in Commission 4 events where possible.

### **Progress Against WG 4.1 Objectives/Outcomes**

#### **— Broaden WG 4.1 membership**

Two members stood down from the WG in 2016 and two additional member, Mattieu Bestile (Australia) and Neil Hewitt have subsequently joined. Simon Ironside (New Zealand) assumed the role as Chair in February 2016.

Additional members will continue to be sought with the aim being to ensure the WG encompasses appropriate international expertise to be able to make meaningful contributions to WG outcomes/deliverables.

#### **— HSSC Involvement**

Working Group 4.1 is represented on the following HSSC Working Groups

#### **— S-44**

The IHO Project Team on Standards for Hydrographic Surveys (HSPT) was established on 3 March 2017. The HSPT Chair is Christophe Vrignaud (France). The Vice Chair is Nickolás de Andrade Roscher (Brazil). Working Group 4.1 is accredited to the HSPT with Observer Status and is actively involved with the S-44 review.

The HSPT remit is to review S-44 (5<sup>th</sup> Edition), identify any deficiencies and following the review update and prepare the 6<sup>th</sup> Edition of S-44. The first meeting of the HSPT was held at SHOM offices in Paris in June 2017. Unfortunately the WG 4.1 Chair was unable to attend. Outcomes from this meeting were:

### **Questions highlighted**

— Does the S-44 need to be more constrained or at the opposite, more flexible in order to accommodate data that might be less accurate but remain priceless when information is missing?

- Knowledge of the hydrographic surveys standards is very important not only for the hydrographic community, but also for private/public contracting bodies.
- Does the S-44 have to deal exclusively with safety of navigation or take into account other hydrographic needs?”

### **10 limitations identified**

- 1 - S-44 only focused on a final objective which is the nautical chart, with a depth classification (possible solution: matrix or updated table)
- 2 - Difficulty to have an overview of all requirements (possible solution: matrix or updated table)
- 3 - Limited number of definitions (possible solution: support and liaison with the DQWG and VIM3)
- 4 - Misalignment between S-44 and CATZOC (possible solution: contacts with S-101WG and DQWG)
- 5 - Grid resolution and bathymetric surfaces not addressed (contact with S-102)
- 6 - Confusion between a-priori TPU and a-posteriori Qualification (review specific chapters of the S-44)
- 7 - S-44 should remain specific technologies neutral (review specific chapters of the S-44)
- 8 - Confusion of attribute in metadata
- 9 - Outdated chapters
- 10 - Annexes A & B to be placed in C-13 - Manual on Hydrography

### **Questionnaire**

- 547 respondents to questionnaire designed to gauge views of S-44 users by closing date of end November 2017. The WG 4.1 Chair has been involved in the analysis of the questions, which is largely complete and will inform the preparation of the 6<sup>th</sup> Edition.

### **“Table 1” case**

- Three modifications to the S-44 “Table 1” are under consideration:
- Option A: “Table 1” with slight modifications, like new lines dealing with “current/tidal stream measurement”, “seafloor characterization” (already mandatory but not presented inside Table 1” so far). New information such as “survey grid resolution”, “grid sounding density” ... can be added.
- Option B: Option A + “Matrix Approach”. This Matrix approach keeps the same lines used in Table 1, but with other values, for other needs, but still focused on Hydrography but not necessary dedicated for safety of navigation.
- Option C: Option B + “Recommandations”. This last option adds a table with recommendations for dedicated surveys, like, Under Keel Clearance management, Marine Renewable Energy, Dredging ...

Next meeting of the HSPT is in July 2018 in Brazil and will be attended by WG 4.1 member Neil Hewitt.

### **S-100**

The S-100 Working Group is already established within the HSSC. The Chair is Julia Powell (USA) and Vice Chair is Yong BAEK (Republic of Korea). The WG 4.1 Chair has been awarded Expert Contributor status to the S-100 Working Group with the Vice Chair accepted as an alternate.

The Working Group's remit is to maintain, develop and extend S-100 Universal Hydrographic Data Model and S-99 Operational Procedures for the Organisation and Management of the S-100 Geospatial Information Registry.

The S-100 Working Group Chair has been advised that WG 4.1 will undertake any S-100 review work from a hydrographic surveying perspective and will assist the S-100 WG in any way we can.

### **IBSC Involvement**

WG 4.1 has reviewed the first draft of S-5A Standards of Competence for Category 'A' Hydrographic Surveyors. The consolidated Commission 4 submission was sent to the IBSC Secretariat on 6 April 2016. WG 4.1 is now recognised by IBSC as an Expert Contributor and has been asked to be involved in the review of S-8A&B Standards of Competence for Nautical Cartographers.

The WG 4.1 Chair attended the FIG/IHO/ICA IBSC40 Stakeholders meeting held in Wellington NZ on 29 March 2017 via teleconference. Highlights of the 40th IBSC meeting included

1. Review of eight (8) submissions from tertiary education providers seeking course recognition. After presentations the Board recognised the majority of the submissions with some conditions included for several of them
2. Review of annual reports from several institutions running IBSC recognised courses.
3. Review and completion of S-8A&B Member State feedback, preparation of response and final version.
4. Briefly review of the recently released S-5A&B.
5. Review of the S-8 Guidelines
6. Agreement to create an FAQ site with a list of Category B and A surveyors, initially internally, on the IHO IBSC web page.

There was also considerable discussion around the courses & table of recognition.

### **Professional Practice Working Group**

A Professional Practice Working Group consisting of NZIS Hydrography Professional Stream, SSSI Hydrography Commission and Australasian Hydrographic Society members has been set up to provide input into proposed Australasian hydrography regulatory changes and review of relevant standards and guidelines. Their brief also includes review of S-44, S-100 & possibly S-8 with feedback to the IHO Working Groups and IBSC via WG 4.1.

### **FIG Standards Network**

The Standards Network was advised of the WG 4.1 work plan at the Standards Network meeting at the FIG Working Week 2017 in Helsinki, Finland. Work on the relationship is ongoing.



### **FIG and Commission 4 Support**

This deliverable remains an ongoing WG 4.1 commitment. Only one development has arisen during the period:

#### **Royal Institution of Chartered Surveyors (RICS) Support**

WG 4.1 has been asked, and has agreed in principle, to contribute to the hydrographic component of the RICS International Property Measurement Standards (IPMS). FIG remains a key member of IPMS Coalition. However nothing has eventuated to date.

### **IHO South West Pacific Hydrographic Commission**

At the Commission 4 AGM held during FIG Working Week 2016 in Christchurch it was agreed that members would approach the IHO Hydrographic Commissions to offer hydrographic surveying assistance.

The South West Pacific Hydrographic Commission is yet to be engaged by WG 4.1. However, it is intended to work on this relationship in order to provide support and relevant technical input to the work of the Commission on behalf of FIG

### **WG 4.1 Webpage**

A [WG 4.1 page](#) has been established on the FIG (Commission 4) website and all reports, membership details, the Work Plan, Terms of Reference etc. have been posted there and will be updated as work progresses.

### **2019-2022 Work Plan**

Mathieu Bestille has agreed to become WG 4.1 Chair for this period. Simon Ironside will remain involved with the S-44 HSPT.



## **WORKING GROUP 4.2 – MARITIME AND MARINE SPATIAL INFORMATION MANAGEMENT**



Dr. Jonathan Li (Canada)

This Working Group was inactive as no work done throughout the period and no report submitted

## **WORKING GROUP 4.3 - THE BLUE ECONOMY**



Mr. Gordon Johnston(United Kingdom)

Mr. Gordon Johnston, Vice-Chair (Administration and Communication) as well as Vice Chair Working Group 4.3 - Blue Economy has over the last three plus years performed the usual duties of the position related to maintaining communication among Commission 4 members, communicating with the public on Commission 4 business, and handling the administrative tasks of the Commission. Mr. Johnston has been and still is an active member and FIG representative of the FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC). Mr. Johnston also acts as the de facto FIG-IHO Liaison, and since 2011 has worked to strengthen ties between the two organizations.

During 2017 it was a quieter period for the WG with a number of presentations and talks given at various professional and trade events to develop the beneficial aspects of surveying our oceans. These included:

- Canada: CARIS 2017 Trade Conference
- USA, Norway, Canada: Atlantic Seabed International Mapping Workgroup meetings
- Netherlands: Collaborative effort with Land Registry and Cadastre experts in Europe to assess the potential benefits of a Marine Cadastre.

## **FIG Representation At The Inaugural UN Ocean Conference**

A key event was the UN SGD 14 Ocean event in NY in June. See the document at the end of this report. The meeting was a first for the UN to dedicate their General Assembly to the Oceans. It was a really exciting and busy few days with dignitaries, media personalities, wealthy charitable figures lining up to support the reduction in pollution, better knowledge and management of the seas and oceans. Music to our ears although the awareness of Hydrography is still relatively low. That said the interest was in the dynamic groups who use social media and tag lines to promote their message.

**Strategically the UN represent a very important opportunity for FIG engage and build momentum on the importance of the oceans and their management.**

The main effort in this last period has to be consolidate and develop a final WG report on the Blue Economy as a vehicle to support FIG promote and further develop related topics and themes related to the economic and benefits of the oceans and a better understanding of them. What else has taken place?

**The final paper will be presented at this WW2018 on the Blue Economy and seek support and advice on possible future and forward elements related to this topic.**

It is fair to say the above events are only loosely tied and associated with the core issue of the Blue Economy and the socio-economic analysis and promotion of the importance of our oceans as a source of wealth and (food security, climate, safety etc) benefits to all. However the whole aspect of our Oceans and their importance is intimately tied to and integrated with wider regional land, political, food supply, rights and social benefits and as such cannot be viewed in complete isolation.

In fact this is potentially one of the challenges: that to generate interest and support for the preservation and economic sustainability of our oceans through hydrography we need to generate a compelling story with social interest, media attention but hopefully to avoid a disaster to make this happen.

Ongoing work is focused on developing the final WG4.3 report on Blue Growth and the Blue Economy which it is hoped will be complete and available at the FIG Working Week.

## **The UN Oceans Conference June 2017**

### **General**

This was the first UN conference to focus solely on our oceans and was very well attended by some 6000 delegates, UN member state representatives, civil society organizations and numerous and varied international organizations and NGO's.

The 5 day event comprises a series of plenary meetings in the UN's main congress hall, a number of partnership dialogue were also held throughout the week. The UN included a celebration of World Hydrography Day on the 8th June that included a celebration of ocean community and traditional living from Small Island Developing States. The remainder of the event was taken up

with over 100 Side Events that aimed to galvanize opinion and promote specific aspects of the SDG 14 in relation to climate change, pollution and sustainable food resources. These smaller focused events provided an opportunity to hear stakeholders and regional perspectives and to network amongst many representatives and delegates.

In representing Commission 4 it was difficult to know before hand which ones would be of value and could be of relevance to Hydrography. In sense each and every bit of the Ocean event was however it was necessary to identify possible opportunities to increase networks, links and collaborations. Also the venue and number of parallel sessions, meetings, events and delegates made for a hectic and at times challenging week.

### **Themes and Partner Dialogues:**

The Partner Dialogues developed as a series of 7 themes that provided a focus on the resources, initiatives and efforts of many of the volunteering organizations. These were expressed by contributions submitted as Concept Papers. In addition to these written papers from the Partner Dialogues there were over 1300 Volunteer Commitments submitted.

Of particular interest to FIG are themes 2, 4, 6 and 7 which are presented in the table below.

Theme 1	Addressing marine pollution
Theme 2	<b>Managing, protecting, conserving and restoring marine and coastal ecosystems</b>
Theme 3	Minimizing and addressing ocean acidification
Theme 4	<b>Making fisheries sustainable</b>
Theme 5	Increasing economic benefits to small island developing States and least developed countries and providing access for small-scale artisanal fishers to marine resources and markets
Theme 6	<b>Increasing scientific knowledge, and developing research capacity and transfer of marine technology</b>
Theme 7	<b>Enhancing the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea</b>

These themes were supported by two Member States as co-chairs, one from a developed country and one from a SIDS or developing country. Each theme was aired and presentations made on the topic however all real decisions were already formulated into the action plan. The connection for FIG to the action plan points is described later.

### **The FIG voluntary commitment**

<https://oceanconference.un.org/commitments/?id=18733>

The International Federation of Surveyors promotes and is committed to the development of a better understanding and knowledge of our environment. The use of geospatial information is considered critical to the successful implementation of the UNs Sustainable Development Goals (SDGs), in particular themes 2, 4, 6 and 7.

FIG maintains a commission (Commission 4 Hydrography) to focus on the challenges and opportunities associated with the seas and oceans and in relation to the UN Conference offers the following:

### **International Standards**

FIG Commission 4 shall continue to review and maintain International Standards for the Competency of Hydrographic Surveyors and Nautical Cartographers who work to collect and share marine and hydrographic geospatial data in support of capacity development, safety of transport and the responsible development and recovery of resources.

### **Capacity Development**

The oceans and seas are the majority of the earth's surface and as such require to properly managed in a responsible and sustainable manner. FIG Commission 4 will contribute and support initiatives to develop capacity in relation to surveying and monitoring of the oceans for the benefits of all. This may be in promoting the adoption of clear technical standards, creating centres of training and expertise as well as improving the understanding and awareness of governments of the importance in data collection, management and distribution.

### **FIG Foundation**

FIG Commission 4 members are able to apply to the FIG Foundation for contributions to a sustainable future for the seas and oceans through the granting of scholarships to develop curricula for surveying education, training and capacity development; encourage research into disciplines of surveying and geospatial data management; promote learning, knowledge management and continuing professional development in support of the disciplines of surveying and support and promote young professionals and events in cooperation with other international agencies and organizations.

### **The implications and impact on FIG**

This was a very busy and a totally inspiring event was really interesting in that showed just how many agencies, NGO's, charitable groups, societies, industry, academia and other organizations are active in supporting SDG14.

The Oceans are vital to our planet and this is already very much recognised and being promoted and developed by groups.

The potential is huge as the current situation has not matured nor developed into any mainstream activity. However the lack of geospatial data, cohesive and sustainable marine planning and an awareness of the importance of good governance and responsible management of the oceans and

seas represents a huge opportunity for FIG to play a crucial and influential role in developing and empowering areas, countries and regions to develop a sustainable food supply living in harmony with other stakeholders and user communities whilst maintaining and even preserving our natural world.

**The Voluntary Commitment covers three areas or themes:**

**International Standards:** we are already active but only in a narrow academic competency sense not the wider geospatial planning, legal frameworks and cadastral sense.

This is an area we are engaged with some other groups in Europe looking at studying and recommending how Marine Cadastre could develop and evolve.

We could develop a more concrete FIG approach that was directly related to the SDG targets and was visible on the main stage rather than in a Commission.

**Capacity Development:** again an area where we are engaged with the international community but only in the sense of raising awareness and offering a stakeholder view on the surveying of the seas and oceans.

Can we gather an army of volunteers to collect data, process data or teach and train eager students in less well developed regions? Who would fund such a charitable venture? What other practical actions can FIG take?

**FIG Foundation:** In supporting and encouraging our Young Surveyors we offer some hope and potential for the future. IN reality though this is not connected nor engaged with those who are involved in the seas and oceans and unless specifically allocated funds Commission 4 will struggle to obtain a) interest and applications and b) successful deployment of young surveyors.

This view can be challenged but overall the available funds are simply not sufficient to support more than 1 student per year. Again how do we develop and expand this when others too are promoting opportunities that may be argued as being more mainstream and therefore attractive.

A question for FIG Council to consider is if there is interest in FIG taking action of real value to impact and benefit the ocean based community and society. Either unilaterally or perhaps ideally in collaboration with other stakeholder groups.

**PHOTO SPEAK (Some sessions during FIG Working Week )**







**Report to the 41<sup>th</sup> General Assembly  
FIG Congress 2018, Istanbul, Turkey**

**FIG Commission 5 – Positioning and Measurement**

**Report of Activities 2017-18 (15-18)**

**1. General**

The Commission 5 2015-18 work plan consists of realising tangible outcomes for our already well-known FIVE missions, which are -

- FOCUS on modern technologies, technical developments and applications.
- FACILITATE and follow technical developments through collaborations with other FIG Commissions and like organisations.
- FOSTER and support research and development and stimulate new ideas in the fields of expertise represented within the commission.
- FORMULATE and formalise collaboration with manufacturers on the improvement of instrumentation and associated software.
- FIG EVENTS - present and promote the work of the Commission and its working groups through technical events and necessary media.

In year 2017, Commission 5 has been focused on the technical activities for the FIG operational surveyor. Our activities have been associated with the technical programme for the FIG 2017 Working Week on 29 May -2 June 2017 in Helsinki, Finland. On 20 April 2017, the *FIG/SSUGT Cost Effective Positioning and Geo Data Seminar* was held within the frame of "Interexpo GEO-Siberia 2017" in Novosibirsk, Russia. The *FIG/IAG/ UN-GGIM-AP/ICG/GSI/JFS Technical Seminar on Reference Frame in Practice* was held on 29-30 July 2017 in Kobe, Japan. The next Technical Seminar on Reference Frame in Practice will be held on 04-05 May 2018 in Istanbul, Turkey. One special session FIG Commission "Trends in GNSS" was organized by Commission 5 within the Intergeo conference in Berlin on 26-28 September 2017, members of Commission 5 have made their presentations in this session. One seminar "Digital Geodesy for Smart Cities-Reference Frames, Positioning, Surveying and BIM" will be organized by Commission 5,6, and 10 within the international symposium GeoPreVi 2018 in Bucharest, Romania on 25-26 October 2018.

We have also continued our effective collaboration with our international sister organisations to promote and fulfil the FIG objectives and the FIVE missions of our work plan.

A summary of the working group activities in 2017 is as follows.

## 2. Working Groups

### 2.1 WG 5.1 – Standards, Quality Assurance and Calibration

Chaired by David Martin

Standards play an important role in surveying. This is particularly true with modern instrumentation that produces measurements and results from black box solutions not fully understood by the average practicing surveyor. So even if surveyors are not directly implicated, they are implicitly very reliant upon standards underpinning the correct functioning of their instruments.

Working Group 5.1 actively participates in technical sessions, technical seminars and presentations for FIG Working Weeks and Congresses.

Importantly Working Group 5.1 is the contact for FIG liaison to the ISO Technical Commission (TC) 211 (<http://www.isotc211.org/>) and Technical Committee ISO/TC 172/SC 6.

ISO TC 211 is concerned with standardization in the field of digital geographic information. This commission aims to establish a structured set of standards for information concerning objects or phenomena that are directly or indirectly associated with a location relative to the Earth. These standards may specify, for geographic information, methods, tools and services for data management (including definition and description), acquiring, processing, analysing, accessing, presenting and transferring such data in digital/electronic form between different users, systems and locations. The work links to appropriate standards for information technology and data where possible, and provides a framework for the development of sector-specific applications using geographic data. At present, Nic Donnelly, from Land Information New Zealand, is the FIG liaison to TC211.

ISO/TC 172/SC 6 deals more closely with the hands on details related to using classical surveying instruments. These standards deal with field procedures for testing geodetic and surveying instruments such as theodolite, total stations levels and GNSS in real-time kinematic (RTK).

A principal aim of Working Group 5.1 remains the examination and promotion of guidelines and recommendations for standards and quality in survey measurements based on the ISO Guide to Uncertainty in Measurement (GUM) and its supplements.

### 2.2 WG 5.2 – 3D Reference Frames

Chaired by Nic Donnelly

The role of 3D reference frames as fundamental infrastructure for communities is increasingly recognised, most notably through the 2015 resolution of the United Nations General Assembly entitled *A global geodetic reference frame for sustainable development*. Robust, accurate and easily-accessible 3D reference frames are critical to support applications such as hazard monitoring and modelling, infrastructure development, land use planning, environmental analysis and cadastral definition. Increasingly, the 3D reference frame is used as a mechanism to conveniently access the vertical orthometric reference frame which is so critical to engineering applications.

Working Group 5.2 is focussed on the 3D reference frame as represented by either geocentric (X, Y, Z) or geographic (latitude, longitude, ellipsoidal height) coordinates. It complements and closely aligns with WG 5.3 – Vertical Reference Frames, which focusses on non-ellipsoidal height systems. Members of this working group are focussed on education and guidance on the practical aspects of implementing and using 3D reference frames. Areas of research and operational interest include deformation modelling, reference frame transformations, GNSS utilization, time-dependent coordinates and reference frame standardization.

As in previous years, working group members have focussed on organising and presenting at technical sessions and seminars. The highlight of 2017 was the Technical Seminar on Reference Frames in Practice held in Kobe on 29-30 July 2017, organised in conjunction with IAG and other partners. Work is well underway on preparations for the two-day reference frames seminar to be held immediately prior to the 2018 FIG Congress in Istanbul.

### **2.3 WG 5.3 – Vertical Reference Frames**

Chaired by Kevin M. Kelly and Dan Roman

Established at the 2014 FIG Congress in Kuala Lumpur, WG5.3 – Vertical Reference Frames (VRF) addresses issues involving heights and height which impact environmental phenomena such as sea level rise, climate change and other geodynamic processes. Practical geodetic issues related to WG5.3 include: relationships and links between land-based vertical datums and ocean tidal datums, gravimetric geoid based national vertical reference systems (or datums), regional and global height system unification, ongoing deterioration of classical vertical control networks, usefulness of existing leveling data, and of course, GNSS heighting. Our aim is to provide tools so that geomatics practitioners can effectively understand and use VRF's in their day to day work or implement VRF's in their national jurisdictions.

Our focus over this past year has been education, with two workshops addressing, among other things, vertical and 3D geometric-kinematic reference frames (in conjunction with WG5.2). A Technical Seminar on Reference Frames in Practice was held in Kobe on 29-30 July 2017 in conjunction with the International Association of Geodesy (IAG) Scientific Assembly. Key topics covered included geometric and vertical reference frame theory, crustal deformation theory, vertical reference frames and GIS, national reference frame case studies and capacity development of the FIG Asia Pacific Capacity Development Network. The seminar attracted 68 delegates from 19 different countries. Another Technical Seminar on Reference Frames in Practice will be held at the FIG Congress in Istanbul on 4-5 May 2018. The seminar aims at surveyors, spatial professionals, students and operational geodesists interested in learning more about practical aspects of reference frames. The two-day seminar will address reference frame fundamentals with emphasis on crustal deformation datum unification.

### **2.4 WG 5.4 – GNSS**

Chaired by Suelynn Choy

The GNSS working group continues to support international R&D activities in GNSS through participation in the ION Pacific PNT and GNSS+ Meetings, Multi-GNSS Asia Conference, International Symposium on GNSS, INTERGEO and etc. Focus areas are in multi-constellation multi-frequency GNSS precise positioning and efficient delivery of high precision GNSS positioning which includes satellite based augmentation services.

The WG 5.4 also continues to represent FIG at the UN International Committee on GNSS (UN ICG) and contribute towards the activities and recommendations of the UN ICG Working Group D. In addition, the WG is working with IAG contributing towards their effort in enhancing integer ambiguity resolution for multi-GNSS PPP and PPP-RTK.

In 2017, Suelynn Choy was elected as a steering committee member of Multi-GNSS Asia. The key objective of Multi-GNSS Asia is to encourage and promote utilisation and applications of satellite positioning, navigation and timing services in the Asia and Oceania region. This region is a unique place that will see the earliest and highest level of coverage from the new and modernised GNSS satellites. The WG is actively supporting Multi-GNSS Asia for the upcoming Multi-GNSS Asia Conference to be held in Melbourne, Australia, from 23-25 October 2018. WG 5.4 will participate in the upcoming RTCM SC-104 Meeting in Sydney, Australia, from 5-6 February 2018.

In January 2018, Suelynn Choy presented a lecture on GNSS Precise Point Positioning at a training programme on GNSS organised by the Asian Institute of Technology, Thailand; UN ICG; S4D/CSIS, and The University of Tokyo. The training course was designed for those who would like to learn about GNSS.

## **2.5 WG 5.5 – Multi-Sensor-Systems**

Chaired by Allison Kealy and Günther Retscher (IAG)

WG5.5 is a joint working group between FIG and IAG. In 2017 activity centered around multi-sensor systems for GNSS difficult environments. Two specific areas were indoor positioning and autonomous vehicles in urban environments.

A major activity undertaken by members of the joint IAG Working Group WG 4.1.1 and FIG WG 5.5 was field experiments at the Ohio State University In October 2017. These revolved around the concept of collaborative navigation, and partially indoor navigation. Collaborative positioning is an integrated positioning solution which employs multiple location sensors with different accuracy on different platforms for sharing of their absolute and relative localizations. Typical application scenarios are dismounted soldiers, swarms of UAV's, team of robots, emergency crews and first responders. The stakeholders of the solution (i.e., mobile sensors, users, fixed stations and external databases) are involved in an iterative algorithm to estimate or improve the accuracy of each node's position based on statistical models. For this purpose different sensor platforms have been fitted with similar type of sensors, such as geodetic and low-cost high-sensitivity GNSS receivers, tactical grade IMU's, MEMS-based IMU's, miscellaneous sensors, including magnetometers, barometric pressure and step sensors, as well as image sensors, such as digital cameras and Flash LiDAR, and ultra-wide band (UWB) receivers.

A novel approach for positioning with Wi-Fi was initiated and developed at TU Wien (Vienna University of Technology) under the lead of Guenther Retscher. This approach for localization and tracking of mobile smartphone users is termed Differential Wi-Fi (DWi-Fi) by analogy with DGPS. From reference stations deployed in the area of interest differential measurement corrections are derived and applied at the mobile user side. Hence, range or coordinate corrections can be estimated from a network of reference station observations as it is done in common CORS GNSS networks. A low-cost realization with Raspberry Pi units

has been realized for these reference stations. These units serve at the same time as Access Points (APs) broadcasting Wi-Fi signals as well as reference stations scanning the receivable Wi-Fi signals of the surrounding APs. As the RSS measurements are carried out continuously at the reference stations dynamically changing maps of RSS distributions, so-called radio maps, can be derived. The DWi-Fi concept was evaluated in several field campaigns conducted at TU Wien, RMIT University and The University of Melbourne as well as at the Ohio State University.

The working group also maintained a strong and active presence at the following international events through participation in coordinating workshops, scientific and organizing committees, delivering short courses and tutorial, publishing papers and presentations, session chairing, etc.

- ION ITM, California, USA, Jan 30-Feb 2, 2017
- ION Pacific PNT 2017, Honolulu, Hawaii, May 1-4, 2017
- FIG Working Week, Helsinki, Finland, May 29-June 2, 2017
- ION GNSS, Portland, Oregon, USA, Sep. 25-29, 2017
- Mobile Mapping Symposium, Cairo, Egypt, May 6-8, 2017
- IAG-IASPEI, Kobe, Japan, July 30-Aug. 4, 2017

Upcoming work will consist the continuation of the research in the field of ubiquitous localization of smartphone users as well as other sensor platforms in combined out/indoor environments. The evaluation and analyses of the collected measurement data at the conducted field campaigns is well under way and will be continued. Results will be presented at the FIG General Assembly in Istanbul, Turkey and upcoming ION PLANS and GNSS+ as well as IPIN conferences.

## **2.6 WG 5.6 – Cost Effective Positioning**

Chaired by Leonid A. Lipatnikov

For the WG 5.6 the most important accomplishment of the year 2017 was organizing the Cost Effective Positioning and Geo Data Seminar which took place in Novosibirsk, Russia on 20 April. The primary objective of the Seminar was to shape a vision for the future of cost-effective positioning technologies. The seminar was aimed at bringing developers of precise low-cost solutions, surveyors, and other potential users together. The agenda of the seminar covered both hardware and software solutions. Access to the Seminar was open to all participants of Interexpo Geo-Siberia. The total number of attendees at the Seminar was more than 60 including participants from Russia, Germany, and Belgium. Handouts and photos of the Seminar can be found at [http://www.fig.net/news/news\\_2017/04\\_comm5\\_novosibirsk.asp](http://www.fig.net/news/news_2017/04_comm5_novosibirsk.asp)

An online lecture “Precise Point Positioning: Principles, Applications, Prospects” was given by Leonid Lipatnikov on March 1, 2017 in the frame of webinar series organized by Alexander Ustinov. Especial attention was payed to cost-efficiency aspects of PPP, including free software, free online processing services, free data sources, and prospects of free real-time access to correction data via satellite based augmentation systems. The lecture attracted 86 attendees online, gained more than 1,100 watches over 11 months. Available in Russian language at <https://www.youtube.com/watch?v=hNUbis1H6j0>

The focus of the forthcoming year is publication on cost-effective positioning techniques.

### 3. Cooperation

#### 3.1 Cooperation with Other Commissions

This cooperation with other commissions primarily consisted of holding joint technical seminar, e.g. Cost Effective Positioning and Geo Data Seminar was organised together with *Commission 3*. The seminar "Digital Geodesy for Smart Cities-Reference Frames, Positioning, Surveying and BIM" will be organised by together with *Commission 6 and 10* in 2018.

#### 3.2 Cooperation with Sister Organisations

The Cost Effective Positioning and Geo Data Seminar was organised together with *Siberian State University of Geosystems and Technologies (SSUGT)*. Technical Seminar on Reference Frame in Practice in 2017 was organised together with *IAG, UN-GGIM-AP, ICG, Geospatial Information Authority of Japan (GSI) as well as Japan Federation of Surveyors (JFS)*. Digital Geodesy for Smart Cities-Reference Frames, Positioning, Surveying and BIM Seminar will be organised together with *Romanian Surveyors Union and Romanian Association of Private Surveyors*.

#### 3.3 Cooperation with UN

In December 2017, Suelynn Choy and FIG Vice President Mikael Lilje attended the 12th meeting of the UN ICG, in Kyoto, Japan, from 2-7 December 2017. The report can be found:

[http://fig.net/news/news\\_2017/12\\_icg\\_12.asp](http://fig.net/news/news_2017/12_icg_12.asp)

#### 3.4 Cooperation with ISO

Nic Donnelly, Chair of Working Group 5.2 is also the FIG special liaison to ISO/TC211. As part of this role, he represents FIG on the Control Body for the ISO Geodetic Registry. This registry is being developed to provide an authoritative source of 3D and vertical reference frame data, primarily to support the geospatial community. He is also a member of the project team for ISO19161 *Geographic information -- Geodetic references -- Part 1: The international terrestrial reference system (ITRS)* and the editing committee for ISO 19111 *Geographic information -- Spatial referencing by coordinates*. These development/revision of these standards will make it easier for the geospatial community to correctly and efficiently utilise geodetic reference frames.

### 4. Events

FIG/IAG/ UN-GGIM-AP/ICG/GSI/JFS Technical Seminar on Reference Frame in Practice was held on 29-30 July 2017 in Kobe, Japan. The proceeding and report can be found in

[http://www.fig.net/resources/proceedings/2017/2017\\_07\\_refframe\\_japan.asp](http://www.fig.net/resources/proceedings/2017/2017_07_refframe_japan.asp) and

[http://www.fig.net/organisation/networks/capacity\\_development/asia\\_pacific/events/2017\\_refframe\\_kobe/RFIP\\_Kobe\\_FIG\\_UNGGIM\\_Report.pdf](http://www.fig.net/organisation/networks/capacity_development/asia_pacific/events/2017_refframe_kobe/RFIP_Kobe_FIG_UNGGIM_Report.pdf)

Cost Effective Positioning and Geo Data Seminar was organised within the frame of the XIII International Exhibition and Scientific Congress "Interexpo GEO-Siberia 2017" in Novosibirsk, Russia on April 20, 2017.

The handouts and the report are available at

[http://www.fig.net/news/news\\_2017/04\\_comm5\\_novosibirsk.asp](http://www.fig.net/news/news_2017/04_comm5_novosibirsk.asp)

A special Session "Trends in GNSS" was organised by Commission 5 at the well-known international exhibition and congress "Intergeo 2017" in Berlin, Germany (26-28 September 2017). The members of Commission 5, Dan Roman, Suelynn Choy and Li Zhang have made presentations ("High Precision GNSS", "Physical Heights from GNSS" and "Low-Cost GNSS for geodetic applications") in this session, the session was well attended.

## 2018

In 2018 Commission 5 will endeavour to send representatives to the following conferences:

- FIG/IAG/UN-ICG/HKMO Technical Seminar on Vertical Reference Frames in Practice, 04-05 May in Istanbul, Turkey
- FIG Congress 2018, 06-11 May in Istanbul, Turkey
- ION GNSS+ 2018, 24-28 September 2018, Miami, Florida, US
- IPIN 2018, 24-27 September 2018, Nantes, France
- Digital Geodesy for Smart Cities-Reference Frames, Positioning, Surveying and BIM, 25-26 October 2018, Bucharest, Romania

## 5. Communication and publications

Commission 5 have issued numerous reports and periodic newsletters to our delegates. These information can also be found on websites

- <http://www.fig.net/organisation/comm/5/index.asp>

Suelynn Choy and Leonid Lipatnikov are planning to revise the publication "Cost Effective GNSS Positioning Techniques".

Additionally it is planned to revise the Reference Frames in Practice Manual as a Web-based-version in 2018.

**Volker Schwieger**  
**Chair**

**Report to the 41<sup>st</sup> General Assembly  
FIG Working Week 2017, Istanbul, Turkey**

**FIG Commission 8 – SPATIAL PLANNING AND DEVELOPMENT**

**Report of Activities 2017**

**1. General**

**Terms of Reference**

- Regional and local planning structure
- Land use planning and implementation control
- Human settlement issues in spatial development
- Natural resources utilization and stewardship
- Strategy for environmentally sustainable development
- Public – Private –Partnerships
- Rural development
- Disaster risks management and resilience
- Inter-relationship between and amongst Commissions

The mission of Commission 8 is to unpack linkages between planning, Sustainable Development, natural resources utilization for economic growth while advancing social equity and resilience.

**2. Working Groups**

The following working groups formed the operational basis for the administration of Commission 8 and its programs;

Working Group 8.1 – Disaster recovery, risk management and resilience planning

Working Group 8.2 – Stewardship for water, land and forest as primary resources for development

Working Group 8.3 – Human settlement policies and implementation

Working Group 8.4 –Resilient Urban Development

Working Group 8.5 – Rural development and land governance



### 3. Cooperation

1. Chartered Institute of Water & Environmental Management: **(CIWEM) – United Kingdom:**  
The commission has had a good relationship with CIWEM. A special report on the joint technical session is herein presented by the WG 8.2

### 4. Events

1. GeoPreVI – Bucharest, Romania

GeoPreVI 2017 is the most important surveying event held in Romania last year. More than 200 surveyors, land administration, spatial planning and development and land valuation specialists from around 10 countries were present starting with 14th of September in Bucharest.

The theme for GeoPreVI 2017 was inspired by generous idea of „Smart Solutions for a Secure and Valuable Property”.

It created the professional frame and environment for discussions, exchanging knowledge and experience among surveyors, land administration, spatial planning and development and land valuation professionals creating an opportunity to enhance the awareness regarding the profession in Romania, Europe and worldwide.

2. INTERGEO 2017, Berlin, Germany
3. African Regional Network (ARN) Challenges and opportunities in facing the SDG’S and training on fit for purpose in Kigali, Rwanda ([http://www.fig.net/news/news\\_2018/01\\_ARN\\_meeting.asp](http://www.fig.net/news/news_2018/01_ARN_meeting.asp))
4. 2017 *Shanghai Land & Future Conference*” is a high-level symposium on research of land planning, policy and management. It aimed to build an international high-end academic platform in land science realm across the world. The first session was held on 24-25th November 2017 in Shanghai. The duration was two days.  
([https://www.fig.net/news/news\\_2017/11\\_shanghai.asp](https://www.fig.net/news/news_2017/11_shanghai.asp))

### 5. Communication and publications

A report highlighting presentation in WG 8.2 will be published as a joint outcome of the collaboration between Commission 8 and CIWEM

### 6. Other highlights

- **Minutes of annual meeting of Commission 8**

Below is the summary of the outcome of the annual meeting held on the 31 May 2017, Messukeskus Helsinki, Finland. In attendance were the following, Kwame Tenadu (chair commission 8), Michael Klaus, Rosy Liao, Bruce Keith, Marije Louwsma, Yvonne Sowah, Mark Obbink, Kwasi Darko Asare.

## Publications

Our main aim is to work on a publication to mark the end of the 4 year term in Istanbul in 2018. Type of possible publication(s):

- Peer reviewed publication in a scientific journal
- a FIG publication that summarises our activities

Planning: preferably before the Congress in Istanbul, and otherwise before the Working Week in Vietnam

Papers available from the international symposium on land consolidation and land readjustment, held in Apeldoorn, November 2016 to be published in addition to other interesting papers presented in the technical sessions of this Working Weeks.

Hans Seidel Stiftung (Michael Klaus) has organised a workshop with Cambodia, Vietnam, Laos, last year and will organise one with 9 countries extending to Africa.

The presentation about precision farming in one of the technical sessions of commission 8 would be interesting for publication, and could be input for a scientific publication in collaboration with CIWEM. We could also work together with GLTN for example.

Possible themes for a publication:

- Village renewal. Spatial planning at different geographical scales (local – regional – national – international). Rosy will work out a format in concept.
- Urban – Rural connection
- Water management. Optimise water usage (drainage and management).
- Environment and sustainability issues (climate change, food security, technology, planning instruments).

Idea: send out a questionnaire by the end of August (Rosy makes a draft).

## 7. Report from Working Groups

### Working group 8.1 - Disaster recovery, risk management and resilience planning

No updates received.

### Working group 8.2 Stewardship for water, land and forest as primary resources for development

A report is submitted by the WG for communication and possible publication

### Working group 8.3 Human settlement policies and implementation

No report.

### Working group 8.4 Resilient Urban Development

No report

Working group 8.5 Rural Development and Land Governance

A conference on Land Use and Green Development in Rural and Urban development was held in Shanghai, China

Report on event in China published at the FIG website

[https://www.fig.net/news/news\\_2017/11\\_shanghai.asp](https://www.fig.net/news/news_2017/11_shanghai.asp)

**Report to the 41st General Assembly  
FIG Congress 2018, Istanbul, Turkey**

**FIG Commission 10 – CONSTRUCTION ECONOMICS AND  
MANAGEMENT**

**Report of Activities 2017**

**1. General**

Commission 10 intends to leverage on FIG's network of members organisations to promote the profession of QS/CE and PM/CM which are either non-existent or lacking in many countries especially the under-developed and developing countries. There are also developed countries that do not have the profession of QS/CE or PM/CM. Specific activities aimed at these countries include development of standards for construction and cost management and contribution to appropriate Continuing Professional Development programmes.

In 2017 we see the successful launch of the International Construction Measurement Standard (ICMS) which will see a signification harmonisation of the practice of construction cost reporting across the globe in the years to come. The interest among FIG members on Building Information Modelling (BIM) continues to grow and the Pre-Working Week Conference on BIM has drawn large crowd.

**2. Working Groups**

**2.1 Working Group 10.1 – International Construction Measurement Standards**

Following the launch of draft standard for public consultation on 11 November 2016 at RICS Headquarters, London, more comments were received. Subsequently the second draft for public consultation was issued in Mid-March 2017 and consultation period closed on 31 May 2017. The draft ICMS was well received and several constructive comments were received when dateline for receiving comments for the final draft closed on 31 May 2017.

Consequently the SSC further finetuned the final draft with the comments received and publish the final draft to the Trustee in June 2017. The ICMS was published and launched at the annual congress of Pacific Association of Quantity Surveyors (PAQS) held in Vancouver, Canada from 24 to 26 July 2017.

With the publication of ICMS we hope that there will be consistency in reporting of construction cost across the entire world.

The Trustee of ICMS Coalition has reconstituted the Standard Setting Committee (SSC) and has mandated the SSC to review the current edition of ICMS incorporating comments from the market.

The SSC had just commenced its first meeting on 16 March 2018 and will over the next 12 months work towards the publication of the 2nd Edition of ICMS incorporating additional project categories for civil engineering works, life cycle costing and reformat the standard to ensure it is easy for data capture digitally.

## **2.2 Working Group 10.2 – Building Information Modelling**

Building Information Modelling (BIM) is changing the way how surveyors work, think, collaborate and make money. Using and sharing multidimensional digital representations of buildings are the driving forces for the digitalization of our work. This affects many tasks surveyors and GIS professionals perform, e. g. cost estimation, GIS analysis, engineering surveying, construction work, land management and facilities management.

Following great interest on the development and application of BIM at previous FIG Working Weeks, the Working Group organised a Pre-Working Week Workshop on BIM in Helsinki.

The workshop covered:

- Teaching theoretical background of the BIM method (concepts, workflows and standards).
- Best practice presentations from large projects and SME (from surveyor's point of view).
- Presentation of the latest software (surveying, integration and collaboration with BIM, CAD, GIS).

The Workshop attracted strong participation from professionals of engineering and surveying companies, land administration agencies, academics from different countries and also students and young professionals from the FIG Young Surveyors Network.

Following this, the Working Group also organised a Round-Table discussion among key executives of vendors and users of BIM and has resulted in several proposals for the development of BIM agenda in FIG.

Based on this success, the Working Group will again be organising a similar workshop before the FIG Congress in Istanbul.

The Commission has also proposed to publish "BIM for Surveyors", a compilation of selected essays and technical papers by professionals and experts in the field. The application for such publication has been sent to the Council and is awaiting approval from the Council.

## **2.3 Working Group 10.3 – Education and Research**

The profession of QS/CE is new or non-existent in some countries, both developed and developing countries. Commission 10 hopes to use its network and platform to influence policy makes to consider the use of QS/CE for developmental projects and as such the need to build competencies and human capital in this specialised field.

Commission 10 has developed the core competency standard for the QS/CE profession. The application for the publication of the QS/CE Core Competency Standard has been forwarded to the Council and is awaiting approval from the Council.

## **3. Cooperation**

Within FIG, Commission 10 enjoys good co-operation from other commissions particularly Commission 1 on Professional Practice, Commission 2 on Professional Education, Commission 6 on Engineering Surveys and Commission 8 on Spatial Planning & Development.

Externally Commission 10 has excellent collaboration with other professional organisations involved in QS/CE, PM/CM, such as RICS, ICEC, PAQS, CEEC, AAQS, PMI and other similar organisations.

## **4. Events**

1. Pre-Congress Workshop entitled “BIM for Surveyors” to be held on 06 May 2018 in Istanbul.

## 5. Other highlights

See photographs attached below:

	
<p>Launch of ICMS in Vancouver (July 2018)</p>	<p>Launch of ICMS in Vancouver (July 2018)</p>
	
<p>Participants of BIM Workshop in Helsinki (May 2017)</p>	<p>Participants of BIM Workshop in Helsinki (May 2017)</p>

# **XX on FIG Governance**

## **Terms of Reference**

(To be approved by the General Assembly, May 2018)

### **1. BACKGROUND**

As the premier international organization representing the interests of its members worldwide, it is essential FIG continually reviews its role and function to remain relevant, and provide membership services and professional surveying advice to not only to its members but also its global partners. Using FIG's extensive network, its various international forums for discussion, and unique capability to assist the development of professional practice and standards, FIG needs to consider how its existing "governance framework" will meet the survey professions challenges and expectations for the future.

FIG went through major structural changes in its governance and administration about twenty years ago (1998). Since then minor reviews has been made as well as minor changes. However, significant changes have been seen within the profession. The geospatial industry and land professions are dealing with major global challenges such as rapid urbanisation and the effects of climate change. FIG is becoming a major collaborator and partner with multinational organisations such as the United Nations, World Bank, the scientific and academic community and operational professional surveyors. With this comes an added expectation that FIG surveyors will provide technical solutions and provide professional advice to address sustainable development (UN SDGs) and humanitarian needs. This responsibility is not only a FIG Council responsibility, but also extends to and needs the full support of the entire FIG structure. The roles and functions of commissions, networks and our member engagement need to be better aligned and fit for the future.

The Member Associations have now asked for a review to see if the current administration, including how FIG is organised, internal rules and governance, is still valid or if changes are necessary to ensure an even stronger FIG that is fit for the future. The structure of FIG, including the FIG Commissions, has been robust and resilient and has remained, generally, the same for since 1998. This structure has enabled FIG to achieve significant global outcomes and to support our international membership, however it has been recognised by the General Assembly that new and emerging processes, technologies and initiatives are not very easily connected into the current structure.

For example –

- How should we map in BIM, Smart Cities or Blockchain technology into our existing commission structure?
- How do we ensure that rapidly evolving new surveying and mapping technologies are managed and understood within our current organisation?
- How can we ensure that we are able to meet the needs of important global initiatives such as the UN SDGs and New Urban Agenda and how can we support our Member Associations and survey related National institutions in understanding these initiatives?



- How can we ensure that FIG can effectively play an important international role in a dynamic and rapidly changing environment?
- How can FIG increase its profile and role now that the UN is playing an even more important global role in the field of global geospatial information management (UN GGIM)?
- How can we ensure that FIG has a strong and consistent succession plan for chairs, vice presidents and president (officers) over time? Is a four year appointment period too long and does it put members off standing for office?

Considering the above questions, the General Assembly at the Helsinki FIG 2017 Work Week asked volunteers among the Member Associations to draft Terms of Reference for a future work group to evaluate the governance framework of FIG. Consequently, this document proposes and provides these Terms of Reference.

## **2. OUTCOME**

The outcome for this group is to ensure the governance framework (which includes the administration and organisational structure of FIG) is effective, efficient and dynamic so as to meet the future needs and expectations of members. This TOR identifies the following key outcomes from the review:

1. Documented analysis of the FIG governance framework, being the administration and organisational structure of FIG, in terms of how it meets the current and future needs and expectations of member associations
2. Recommendations and proposed changes to the FIG governance framework
3. Recommendation regarding the ongoing need for a group to review FIG governance and responsiveness to member association requirements, and the form and structure such a review group should take.

## **3. OBJECTIVES THE TASK FORCE**

The main objectives of the group will be to -

- a) Evaluate the present governance framework of FIG; and if required,
- b) Based on the findings, propose changes and, if necessary, an alternative internal structure of FIG to meet the future “needs and expectations” of its membership.

The group will also present periodic reports on their findings concerning current FIG governance, this may also include or suggest incremental changes and improvements for FIG General Assembly and Council to consider.

The group must undertake this via a unified, collaborative, transparent and consultative approach with all FIG members. The Task Force should identify, consult and discuss with our internal and external stakeholders what we are doing well, what we can do better, challenges or trends affecting and influencing the future, and how to resolve such matters.

#### **4. PATHWAY and IMPLEMENTATION (to be completed...)**

It is proposed that a work plan shall be created by the group, it is recommended that –

- A “SWOT” analysis of the FIG governance framework be performed and involves FIG members and the FIG Office.
- Key FIG materials be reviewed, including reports and recommendations from previous Task Forces, and information from various Member Association meetings and forums facilitated by FIG.
- The current structure and function of FIG be evaluated, via a participatory process including the Council, ACCO, Commissions, Networks, Task Forces and the FIG Office.
- Consultation (online) with FIG membership.
- Development and preparation of a report on the task force findings, which may include recommendations to Council and General Assembly.
- *The group should complete its work in 2 years and the final report be ready for consideration and endorsement by the General Assembly at the FIG 2020 Working Week in Amsterdam.*

The group should present interim/periodic reports on findings concerning the current FIG governance, which may include: preliminary analyses and recommendations, reports from meetings held and a first draft of proposed changes and improvements for General Assembly and Council to consider.

Whilst a core group will have the responsibility for implementing this TOR, the group must undertake this via a unified, collaborative and consultative approach with all FIG members. In other words, the Task Force should identify, consult and discuss with our internal and external stakeholders what we are doing well, what we can do better, challenges or trends affecting influencing the future, and how to resolve such matters

#### **5. PROPOSED WORK PLAN**

With respect to the work plan, it is expected and highly recommended that the group –

- Forms and begins work as soon as possible.
- Consider the above-mentioned pathways and implementation initiatives as ‘milestones’ within the work plan.
- The work programme will be done through email, and where feasible “face to face” meetings will be organised to coincide with FIG related events.

#### **6. COMPOSITION OF TASK FORCE**

To be decided but a diverse group of individuals that represent all FIG membership categories is preferred.

## **7. CHAIR OF THE GROUP**

To be decided by the Task Force

## Cooperation agreement between FIABCI and FIG

Today, December 10, 2017, at Royal Olympic Hotel Conference Room, in Athens, Greece, the two following organizations International Real Estate Federation "FIABCI" ([www.fiabci.org](http://www.fiabci.org)) and the International Federation of Surveyors "FIG" ([www.fig.net](http://www.fig.net))

A. Recognize that:

- The existing cooperation agreement between the two organizations signed since many years allows the two organizations to cooperate for common tasks.
- The activities of both organizations on real estate in international bodies, such as the United Nations, since many years were held on common targets.

B. Consider the opportunity to strengthen their cooperation to face the global challenges of a rapidly changing world such as the rapid population growth and urbanization trend and the climate change, and to investigate the possibility to arrive in future to a more structured cooperation.

In particular, today FIABCI and FIG decide to consider to organize and/or cooperate on specific initiatives, at National and International level, of common interest, as to involve people participation in creating sustainable and more affordable cities and to help strengthening the weakest and emerging real estate markets in formalizing informal settlements.



Farook Mahmood

FIABCI World President 2017- 2018



Chryssy Potsiou

FIG President 2015- 2018

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Farook Mahmood

FIABCI World President 2017- 2018



Chryssy Potsiou

FIG President 2015- 2018

## **The International Federation of Surveyors - FIG**

Kalvebod Brygge 31-33

DK-1780 Copenhagen V

(Registration No. 21 33 60 76)

## **Financial Statements for 2017**

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## Statement of the Management and the Council

Today the management have discussed and approved the Financial Statements for 1 January - 31 December 2017.

The Financial Statements have been presented in accordance with the generally accepted accounting principles of associations.

In our opinion the Federation and Foundation's financial statements give a true and fair view of the Federation and Foundation's financial position at 31 December 2017.

We recommend the Financial Statements to be approved at the annual general assembly.

Copenhagen, 6 February 2018

### FIG Director

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Louise Friis-Hansen

### Council

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Chryssy A Potsiou  
President

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Rudolf Staiger  
Vice President

---

Diane Dumashie  
Vice President

---

Mikael Lilje  
Vice President

---

Orhan Ercan  
Vice President

The annual financial report is submitted for approval at the general assembly on / 2018

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Chryssy A Potsiou



## **Independent Auditor's Report**

### **To the members of The International Federation of Surveyors - FIG**

#### **Opinion**

We have audited the financial statements of The International Federation of Surveyors and FIG Foundation for the financial year 1 January 2017 to 31 December 2017, which comprise income statement and balance sheet including summary of significant accounting policies. The financial statements are prepared in accordance with generally accepted accounting principles of associations.

In our opinion, the financial statements give a true and fair view of the financial position of the association at 31 December 2017, and of the results of the association operations for the financial year 1 January 2017 to 31 December 2017 in accordance with generally accepted accounting principles of associations.

#### **Basis for opinion**

We conducted our audit in accordance with International Standards on Auditing and the additional requirements applicable in Denmark. Our responsibilities under those standards and requirements are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report. We are independent of the company in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) and the additional requirements applicable in Denmark, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### **Statement on management and council's review**

Management and the council is responsible for management and council's review.

Our opinion on the financial statements does not cover management's review, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read management's review and, in doing so, consider whether management and council's review is materially inconsistent with the financial statements or our knowledge obtained during the audit, or otherwise appears to be materially misstated.

Moreover, it is our responsibility to consider whether management and council's review provides the information required under the accounting principles of associations.

Based on the work we have performed, we conclude that management and council's review is in accordance with the financial statements and has been prepared in accordance with the requirements of the accounting principles of associations. We did not identify any material misstatement of management and council's review.

## **Independent Auditor's Report - Continued**

### **Management's and council's responsibilities for the financial statements**

Management and the council is responsible for the preparation of financial statements that give a true and fair view in accordance the generally accepted accounting principles of associations, and for such internal control as management determines is necessary to enable the preparation of financial statements and that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management and council is responsible for assessing the association's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting in preparing the financial statements unless management and council either intends to liquidate the association or to cease operations, or has no realistic alternative but to do so.

### **Auditor's responsibilities for the audit of the financial statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing and the additional requirements applicable in Denmark will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit conducted in accordance with International Standards on Auditing and the additional requirements applicable in Denmark, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.

## **Independent Auditor's Report - Continued**

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting in preparing the financial statements and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and contents of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that gives a true and fair view.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Roskilde, 6 February 2018

### **Beierholm Statsautoriseret Revisionspartnerselskab**

CVR no. 32895468

Carsten Johnsen

State Authorized Public Accountant

MNE no. 29490

## **Federation Information**

### **Federation**

The International Federation of Surveyors - FIG  
Kalvebod Brygge 31-33  
DK-1780 Copenhagen V

Telephone: +45 38 86 10 81

Internet: [www.fig.net](http://www.fig.net)

E-mail: [fig@fig.net](mailto:fig@fig.net)

Registration No. 21 33 60 76

Registered in: Copenhagen

Financial year: 1 January to 31 December

### **Council**

Chryssy A Potsiou

Rudolf Staiger

Diane Dumashie

Mikael Lilje

Orhan Ercan

### **FIG Director**

Louise Friis-Hansen

### **Auditor**

Beierholm

State Authorized Public Accountant

Ringstedvej 71

DK-4000 Roskilde

Denmark

## **Accounting policies**

This Annual Financial Statements has been prepared in accordance with generally accepted accounting principles of associations.

The accounting policies applied for the Financial Statements are consistent with those applied last year.

### **Recognition and measurement overview**

Income is recognised in the income statement when earned, where as costs are recognised by the amounts attributable to this financial year. Value adjustments of financial assets and liabilities are recognised in the income statements as financial income or financial expenses. Also depreciations are recognised in the income statement.

Assets are recognised in the balance sheet when it is probable as a result of a prior event that future economic benefits will flow to the Federation, and the value of the asset can be measured reliably.

Liabilities are recognised in the balance sheet when it is probable that future economic benefits will flow out of the Federation, and the value of the liability can be measured reliably.

On initial recognition, assets and liabilities are measured at cost. Measurement subsequent to initial recognition is effected as described below for each financial statement item.

Anticipated risks and losses that arise before the time of presentation of the Financial Statements and that confirm or invalidate affairs and conditions existing at the balance sheet date are considered at recognition and measurement.

## **Income Statement**

### **Income and expenses**

Items of income or expenses are stated within the period to which they relate irrespective of the payment date.

## **Balance Sheet**

### **Deposits**

Deposits are measured at nominal value.

## **Accounting policies**

### **Receivables**

Receivables are measured at amortised cost, usually equalling nominal value less provisions for bad debts.

Prepayments comprise costs incurred relation to the subsequent financial year.

### **Stocks**

Stocks are measured at cost price.

### **Investments funds**

Investment funds are measured at quoted market price.

### **Reserves**

Reserves are measured at amortized cost, which corresponds to nominal value. Reserves includes provision to future events and IT investements.

### **Current liabilities**

Current liabilities are measured at amortized cost, which corresponds to nominal value.

### **Foreign currency translation**

On initial recognition, foreign currency transactions are translated applying the exchange rate at the transaction date. Exchange differences that arise between the rate at the transaction date and the one in effect at the payment date or the rate at the balance sheet date are recognised in the income statement as financial income or financial expenses.

Receivables, payables and other monetary items denominated in foreign currencies that have not been settled at exchange rate on the balance sheet date and the transaction date is recognised in the income statement as financial income or financial expenses.

## Income Statement for 1 January - 31 December 2017 for The International Federation of Surveyors - FIG

	<u>2017</u>	<u>2016</u>
	<i>EURO</i>	<i>EURO</i>
<b>Regular Income</b>		
Member associations.....	271.114	260.794
Affiliate members.....	29.260	33.441
Corporate members.....	80.025	79.450
Academic members.....	12.312	12.237
Less bad debts.....	(50.034)	(32.072)
Less change in provision for doubtful debts.....	20.000	(5.067)
	<b>362.677</b>	<b>348.783</b>
Financial income.....	4.366	6.277
Less banking costs.....	(766)	(523)
Currency differences.....	(12.155)	4.126
Advertising income.....	849	0
Events, fees charged for services.....	56.000	50.000
	<b>410.971</b>	<b>408.663</b>
<b>Total Regular Income</b>		
<b>Regular Expenditure</b>		
<i>Administration</i>		
Office costs.....	(115.324)	(134.608)
Outsourced office costs.....	(38.424)	(45.381)
	<b>(153.748)</b>	<b>(179.989)</b>
Marketing and publications.....	(12.821)	(13.880)
Council and executive management.....	(147.089)	(151.524)
<i>Commission support</i>		
Regular grants.....	(30.000)	(30.000)
Regular grants, Young Surveyors Network.....	(3.000)	(3.000)
	<b>(33.000)</b>	<b>(33.000)</b>
<b>Total Regular Expenditure</b>	<b>(346.658)</b>	<b>(378.393)</b>
<b>Regular income/Regular Expenditure</b>	<b>64.313</b>	<b>30.270</b>

## Income Statement for 1 January - 31 December 2017 for The International Federation of Surveyors - FIG

	2017	2016
	<i>EURO</i>	<i>EURO</i>
<b>Result brought forward</b>	64.313	30.270
<b>Projects, events - funds recived by FIG</b>		
Congress/Working Week.....	10.000	11.031
Other projects.....	7.008	12.994
	<b>17.008</b>	<b>24.025</b>
<b>Development spend</b>		
IT and web development.....	(5.880)	(11.815)
Task Force support.....	(3.517)	(5.007)
Specific grants for Commissions.....	(7.381)	0
	<b>(16.778)</b>	<b>(16.822)</b>
<b>Final Result (Deficit)</b>	<b>64.543</b>	<b>37.473</b>
<b>The Final Result is recommended distributed as follows</b>		
Transferred to Event reserve.....	25.000	0
Transferred to IT reserve.....	0	20.000
Transferred to Equity.....	39.543	17.473
	<b>64.543</b>	<b>37.473</b>



## Balance Sheet at 31 December 2017 for The International Federation of Surveyors - FIG

	<u>2017</u>	<u>2016</u>
	<i>EURO</i>	<i>EURO</i>
<b><u>Assets</u></b>		
<b>Current assets:</b>		
Receivables:		
Receivables from members.....	10.506	55.465
Other receivables.....	2.741	14.199
Receivable VAT.....	2.721	4.049
Prepaid expenses.....	2.722	2.688
Projects in progress.....	0	20.693
Deposit.....	3.826	0
Investments funds.....	215.659	212.540
Cash at hand and bankaccounts.....	779.298	644.005
<b>Total current assets</b>	<b>1.017.473</b>	<b>953.639</b>
<b>Total assets</b>	<b>1.017.473</b>	<b>953.639</b>
<b><u>Equity and liabilities</u></b>		
<b>Equity:</b>		
Equity at the beginning of the year.....	462.120	444.647
Retained earnings.....	39.543	17.473
<b>Total equity</b>	<b>501.663</b>	<b>462.120</b>
<b>Reserves:</b>		
Event reserve.....	50.000	25.000
IT reserve.....	50.000	50.000
<b>Total reserve</b>	<b>100.000</b>	<b>75.000</b>
<b>Liabilities:</b>		
Deferred income.....	4.560	16.747
Projects in progress.....	18.466	0
Account payable, The FIG Foundation.....	257.608	235.892
Other debt.....	135.176	163.880
<b>Total liabilities</b>	<b>415.810</b>	<b>416.519</b>
<b>Total equity, reserves and liabilities</b>	<b>1.017.473</b>	<b>953.639</b>

## Income Statement for 1 January - 31 December 2017 for the FIG Founda

	<u>2017</u>	<u>2016</u>
	<i>EURO</i>	<i>EURO</i>
<b>Donations</b>		
Personal donations.....	1.374	97
Other donations.....	10.642	10.000
FIG Conferences.....	24.320	10.173
Financial income.....	<u>641</u>	<u>2.191</u>
<b>Total Income</b>	<b>36.977</b>	<b>22.461</b>
<b>Expenses</b>		
Grants.....	<u>(15.190)</u>	<u>(19.811)</u>
<b>Total Expenses</b>	<b>(15.190)</b>	<b>(19.811)</b>
<b>Final Result (Deficit)</b>	<b><u>21.787</u></b>	<b><u>2.650</u></b>

## Balance Sheet at 31 December 2017 for The FIG Foundation

	<u>2017</u>	<u>2016</u>
<b><u>Assets</u></b>	<i>EURO</i>	<i>EURO</i>
<b>Current assets:</b>		
Receivables:		
Account receivable, FIG.....	257.608	235.892
Other receivables.....	1.155	1.155
Cash at hand and bankaccounts.....	<u>3.181</u>	<u>3.110</u>
<b>Total current assets</b>	<b><u>261.944</u></b>	<b><u>240.157</u></b>
<b>Total assets</b>	<b><u><u>261.944</u></u></b>	<b><u><u>240.157</u></u></b>
<b><u>Equity and liabilities</u></b>		
<b>Equity:</b>		
Equity at the beginning of the year.....	239.158	236.508
Retained earnings.....	<u>21.787</u>	<u>2.650</u>
<b>Total equity</b>	<b><u>260.945</u></b>	<b><u>239.158</u></b>
<b>Liabilities:</b>		
Other debt.....	<u>999</u>	<u>999</u>
<b>Total liabilities</b>	<b><u>999</u></b>	<b><u>999</u></b>
<b>Total equity, reserves and liabilities</b>	<b><u><u>261.944</u></u></b>	<b><u><u>240.157</u></u></b>

FIG FINANCIAL PROGRESS AT	31.12.17		Version of	31.12.17	
	2016	2017	2017		
	Result	Budget	Result	Variance	Notes
		€	€	€	
<b>REGULAR INCOME</b>					
<b>Subscriptions</b>					
Member associations	260.794	260.000	271.114	11.114	
Affiliate members	33.441	30.000	29.260	-740	
Corporate members	79.450	85.000	80.025	-4.975	
Academic members	12.237	12.000	12.312	312	
Less bad debts	32.072	15.000	50.034	35.034	
Less change in provision for doubtful debts	5.067	-	20.000	20.000	
	<u>348.783</u>	<u>372.000</u>	<u>362.677</u>	<u>-9.323</u>	
<b>Financial income / expenses</b>					
Financial income	6.277	3.000	4.366	1.366	
Less banking costs	523	250	766	516	
Currency diff.	4.126	-	-12.155	-12.155	
Advertising income			849	849	
				-	
Events - fees charged for services	50.000	45.000	56.000	11.000	
				-	
<b>TOTAL REGULAR INCOME</b>	<u>408.663</u>	<u>419.750</u>	<u>410.971</u>	<u>-8.779</u>	
<b>REGULAR EXPENDITURE</b>					
<b>Administration</b>					
Office costs					
	<u>134.608</u>	<u>156.500</u>	<u>115.324</u>	<u>-41.176</u>	
Outsourced office costs					
	<u>45.381</u>	<u>47.000</u>	<u>38.424</u>	<u>-8.576</u>	
Total administration	<u>179.989</u>	<u>203.500</u>	<u>153.748</u>	<u>-49.752</u>	
<b>Marketing and publications</b>					
	<u>13.880</u>	<u>15.000</u>	<u>12.821</u>	<u>-2.179</u>	
<b>Council and executive management</b>					
	<u>151.524</u>	<u>158.000</u>	<u>147.089</u>	<u>-10.911</u>	
<b>Commission support</b>					
Regular grants	30.000	30.000	30.000	-	
Regular grants - Young Surveyors Network	3.000	3.000	3.000	-	
	<u>33.000</u>	<u>33.000</u>	<u>33.000</u>	<u>-</u>	
				-	
Total regular expenditure	<u>378.393</u>	<u>409.500</u>	<u>346.658</u>	<u>-62.842</u>	
Surplus/deficit of regular income over regular expenditure	30.270	10.250	64.313 xx	54.063	
[Key measure 1 - this to be positive]					
<b>PROJECTS AND DEVELOPMENT</b>					
<b>Events - funds received by FIG</b>					
Congress/Working Week	11.031	10.000	10.000	-	
Regional Conference	-	-	-	-	
Other events	12.994	5.000	7.008	2.008	
	<u>24.025</u>	<u>15.000</u>	<u>17.008</u>	<u>2.008</u>	
<b>Development income</b>					
<b>Development spend</b>					
Task Force support	5.007	5.000	3.517	1.483	
IT and web - developmental activity	11.815	10.000	5.880	4.120	
Support for poor Member Associations		2.000		2.000	
Specific grants for Commissions		5.000	7.381	-2.381	
	<u>16.822</u>	<u>22.000</u>	<u>16.778</u>	<u>5.222</u>	
<b>Other projects</b>					
<b>Net result</b>					
<b>RESULT</b>					
Overall surplus/deficit in the year - normal activities	<u>37.473</u>	<u>3.250</u>	<u>64.543</u>	<u>61.293</u>	
[Key measure 2 - this to be positive in total over the term of the 4 year budget period]					
<b>Reserves at start of year</b>					
Events Reserve	25.000				
IT Reserve	50.000				
General Reserve	462.121				
General Reserve as % of annual expenditure	122%				
<b>Reserves at end of year - estimate</b>					
Events Reserve			601.664		
Events Reserve			50.000	Increased with 25,000	
IT Reserve			50.000		
General Reserve			501.664		
Overall Reserve as % of annual expenditure			174%		
General Reserve as % of annual expenditure			145%		



	Final 2016 result	Notes	GA 2017 Budget 2017	Final 2017 Result	Notes	GA 2015 Budget 2018	GA 2016 Budget 2018	GA 2017 Budget 2018	GA 2018 Budget 2018	GA 2016 Budget 2019	GA 2017 Budget 2019	GA 2018 Budget 2019	GA 2017 Budget 2020	GA 2018 Budget 2020	GA 2018 Budget 2021
<b>PROJECTS AND DEVELOPMENT</b>															
<b>Events - funds received by FIG</b>															
Congress/Working Week - share	11.031	e	10.000	10.000	e	-	-	15.000	15.000	-	10.000	10.000	10.000	10.000	10.000
Regional conference	-		-	-		-	-	-	-	-	-	-	-	-	-
Other events	12.994	j	5.000	7.008	j	-	-	5.000	5.000	-	-	-	-	-	-
Commission events						-	-	-	-	-	-	-	-	-	-
	<u>24.025</u>		<u>15.000</u>	<u>17.008</u>		<u>-</u>	<u>-</u>	<u>20.000</u>	<u>20.000</u>	<u>-</u>	<u>10.000</u>	<u>10.000</u>	<u>10.000</u>	<u>10.000</u>	<u>10.000</u>
<b>Developmental income</b>															
<b>Developmental spend</b>															
Task Force support	5.007	k	5.000	3.517	k	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000
IT and web - developmental activity	11.815	g	10.000	5.880	g	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Support for poor Member Associations			2.000			2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000
Specific grants for Commissions			5.000	7.381		5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000
	<u>16.822</u>		<u>22.000</u>	<u>16.778</u>		<u>22.000</u>	<u>22.000</u>	<u>22.000</u>	<u>22.000</u>	<u>22.000</u>	<u>22.000</u>	<u>22.000</u>	<u>22.000</u>	<u>22.000</u>	<u>22.000</u>
<b>RESULT</b>															
Overall surplus/deficit in the year - normal	<u>37.473</u>		<u>3.250</u>	<u>64.543</u>		<u>-10.500</u>	<u>8.250</u>	<u>-8.750</u>	<u>-12.250</u>	<u>-2.250</u>	<u>6.750</u>	<u>3.750</u>	<u>3.750</u>	<u>750</u>	<u>750</u>
<i>[Key measure 2 - this to be positive in total over the term of the 4 year budget period]</i>															
<b>Exceptional items</b>															
<b>Total reserves at year end</b>															
General reserve	537.121		540.371	601.664					589.414			593.164	593.914	594.664	594.664
Events reserve	462.121		485.371	501.664				489.414			493.164	493.914	494.664	494.664	494.664
IT Development Reserve	25.000		25.000	50.000	p			50.000			50.000	50.000	50.000	50.000	50.000
	50.000		30.000	50.000	n			50.000			50.000	50.000	50.000	50.000	50.000
Total reserves as a % of regular	134%		129%	150%				147%			143%	143%	143%	137%	137%
General reserve as a % of regular	115%	l	116%	125%	l			122%			119%	119%	119%	154%	154%
General reserve as a % of regular	122%		119%	145%				107%			116%	115%	115%	115%	115%

*[Key measure 3 - this to be within the range 90-100%]*

**Notes:**

- a Decrease in number of members in particular, member associations; application of new subscription framework for academic members; level of subscription held at 2014 level
- b Estimate based on anticipated expulsions; global financial situation requires to keep expulsions higher
- c Interest rates forecast to remain lower
- d Provided for 'old' banking fees not paid that are written off
- e As agreed based on revised model for events organization
- f Based on estimated level of engagements and activities for the year
- g Major platform change plus subsequent enhancements to the system
- j Provision of returns for administrative backstopping for collaborative activities
- k A provision to support task force activities
- l Currently required to be in 90-100% range
- Note that the formula allows for the cycle of expenditure over a 4-year period as the reserve is divided by the annual average expenditure over 4 years (2011-14 for those years; 2013-16 for 2015 and 2016)
- m Reserve introduced in 2012
- n IT reserved introduced in 2013, increased in 2014 and decreased in 2015
- p Events reserve increased in 2018 with 25,000
- xx Savings in office salary costs

## 2018 GENERAL ASSEMBLY

### FINANCIAL ISSUES (INCLUDING 2017 ACCOUNTS, 2018-21 BUDGETS AND 2019 AND 2020 SUBSCRIPTIONS)

#### 1. Introduction

This paper provides the General Assembly with an update on FIG's financial progress in 2017, the Council's amended proposed budgets for 2018-20 and an indicative budget for 2021, and other financial matters.

The General Assembly is asked to:

- Adopt the audited 2017 Accounts at Annex A, noting that the audited accounts are in the form of the template approved at the 2009 General Assembly (and provided again at Annex B)
- Agree to increase events reserve from €25,000 to €50,000 using part of the surplus from 2017.
- Endorse the budgets for 2018-21, at Annex C to the General Assembly agenda.
- Approve member association subscription levels for 2020, set out in section 5 of this paper.

#### 2. A commentary on FIG income and expenditure for 2017

FIG Finances follow three key measures:

- Key measure 1: there must be a surplus of regular income over regular expenditure each year;
- Key measure 2: there must be an overall surplus over the 4-year Council period;
- Key measure 3: the general reserve must remain within the level of 90-100% of regular expenditure.

2017 was the third year for the current Council. Council and FIG Office have continued to act prudent and with cost containment measures. There was a budgeted surplus of €3,250, however the final result shows a surplus of € 64,543 which is caused by several factors and will be explained in this paper.

Key measures 1 and 2 were held – however key measure 3 has for the later years been above the desired level. There was a surplus of regular income over regular expenditure of €64,313 (Key measure 1). This is a high surplus which is a result of:

- Income from the Working Week and other events higher than expected
- Large savings in administrative costs
- Currency difference adjustment
- Some planned publications for 2017 will instead be finalised in 2018
- Decreased provision for doubtful debt

As always, expenditure was monitored closely. Key measure 2 is 125% seen over the period 2016, 2017 (actual results) 2018 and 2019 (budgets). Key measure 3 was 145%. General reserve

as % of annual total expenditure was also 145%. This is high and will most likely be aligned over a 4-year term, especially with an upcoming Congress year. Savings will be less in the coming years.

The finances are solid, and it is a good sign that it is possible to increase the reserves, and be prepared for possible less healthy years.

### **Income**

Income from membership subscriptions was almost €10,000 lower than budget however almost €15,000 higher than the 2016 result. Membership fees from Member Associations were €10,000 higher than in 2016. Membership fees from Affiliate members and Academic members were as budgeted whereas the membership fee from Corporate members were at the same level as 2016, although there was a budgeted expectation of an increase of €5,000. Write offs were again in 2017 high, in total €50,000 which was even higher than 2016 (32,000). This means that we have had several expulsions and members who have not paid their membership fee in full. The positive aspect is that there are less members in arrears, and with smaller amounts which also meant that the provision for doubtful debt had to be written down with €20,000. This is one of the reasons for the high final result, because it has added 20,000 to the final result.

Financial income was in 2017 higher than expected in spite of the prevailing low interest rate regime, which is expected to persist. Interest earned was in line with last year, but at the end of 2017 a capital gain on investments was noted. Today some of the FIG accounts give 0 % interest, and we have had to accept negative interest rates in 2017 on EUR accounts. This will remain for 2018 and will most likely also be applicable for the DKK and USD accounts.

In total the regular income for 2017 was almost €10,000 lower than budgeted, however a slight increase of €2,000 compared to 2016.

### **Arrears**

Arrears at the end of 2017 have decreased significantly. The arrears are down to €51,000. This is still remarkably high but compared to previous years it is a decrease of more than €50,000 from 2016, and a decrease of 100,000 compared to 2014, and is a very positive development. Hopefully this is a positive trend, and that it will remain to decrease in the coming years. Arrears solely for 2017 was €36,000 which again is half of what the arrears were one year ago (€62,000). This also means that the older arrears (before 2017) have successfully been decreased significantly compared to previous years. Arrears from earlier than 2017 is now down to €15,000 compared to almost 50,000 last year. It is positive that the older arrears have decreased significantly, which will also result in less expulsions.

Council still requests all members to pay their membership subscription promptly. The current size of the arrears still mean that a significant portion of FIG's reserve holdings is being used to fund FIG cash flow.

### **Expenditure**

Total regular expenditure was €346,658 which is €62,842 below budget, and €31,735 below the 2016 result (€378,393). This is quite low and is exceptional for 2017 due to a savings in administration costs, especially office costs. This is another reason for the high overall result.



Hereto there have been a carefully monitored and conservative handling of expenditure in general. The costs cannot continue to be kept as low as in 2017.

The grants to Commission chairs were paid in line with the levels agreed by the General Assembly. All requests from Task Force and Network chairs for support and from Commission chairs for specific support were carefully reviewed prior to any decision. There were no applications for support for poor Member Associations.

Council and executive management costs were €10,000 below budget. Again this year this has been obtained through continuing care and control of travel and meeting costs. Some of the travels were partially covered by external sources. It is important also to note that, in many instances, travel by Council members were partially covered by Council members' employers, member associations or by the event hosts. FIG is very grateful for this support, which allows Council members to maintain close contact with its membership and partners during the year.

### **Final result**

The result of regular income over regular expenditure (key measure 1) showed a positive result of €64,313 which is €54,063 over budget.

The final result 2017 which also includes projects and development costs and income shows a surplus of €64,543 which is €47,723 over budget. Developmental expenditure was lower than expected and further to this there was a not expected extra income on conferences and other projects. In regard to FIG Working Week FIG office had less costs than expected which meant that a part of the income could be allocated to events in addition to the regular income. On other projects and events that FIG Office has been involved in, there has been a smaller income on services provided.

FIG Office continued the IT developmental work that was commenced in 2013. The development could in 2017 be kept within budget. Last year the General Assembly agreed to increase the IT reserve which means that future larger investments can be covered with the budget and if needed part of the reserve.

FIG Council proposes to increase the events reserve from € 25,000 to € 50,000. The instability around the world makes it difficult to find conference destinations that are without risks; this can be natural disasters, instability, and other occurrences that are impossible to predict 4 years ahead when a Working Week or Congress destination is elected. It is to be noted that a larger part of the regular income is coming from the conference activities, and key measure 1 and the final result are therefore more vulnerable. With the increased reserve the risk for the annual result is reduced. With this change the final surplus is **€ 39,543**.

At the end of year, FIG's total reserve stood at € 601,664 and the general reserve (total reserved deducted IT and Events reserves) amounts to € 501,664 which is 145% of regular annual expenditure.

### **3. Budgets 2018-21**

Annex C to this paper presents proposed revised budgets for 2018, 2019 and 2020 and a proposed budget for 2021. This is to adhere to the requirement for a 4-years ahead budget (decision at the 2009 General Assembly).

## **Key considerations in constructing the budget**

Council's overriding consideration when preparing the budget was to be as realistic as it has to be, particularly with its forecast since it is a 4-year forward budgeting process. In this regard Council is very mindful of the two, ongoing risks to the budget:

- Council has (as described below) reviewed risks from events, and developed models to address these risks, however still there will be a risk to include a conference income in the regular income
- There is a potential risks around the level of income from subscriptions in the on-going economic situation. The levels of arrears has decreased which is a positive development, but the remaining amount shows that it remains a significant area of concern.

## **Budgets**

Council seeks to ensure a sustainable, effective and efficient Federation. Budgets have therefore been revised to reflect the current realities. When income is forecasted to decline, this has to be balanced by corresponding efforts to reduce operating and developmental costs.

The key changes to the budgets approved at the 2017 General Assembly are:

- Subscriptions are held close to the 2017 final result in light of resignations and 2017 invoiced figures although membership development is an important focus of the FIG office especially;
- An expected increase in the number and income of Corporate Members is included in the budget as an outcome of the Task Force for Corporate member
- In the light of the development the General Assembly has accepted an increase in subscription rate from 2019 for Member Associations
- Council has agreed on an increase in subscription fee for Affiliate Members for 2019 and onwards
- Financial income has been decreased since FIG will now have to pay negative interest rate not only on the EUR accounts but also DDK and USD accounts
- Administrative costs have been further reduced wherever possible but cannot be held as low as the 2017 result;
- Since 2018 is a congress year expected expenses for travel and costs for publications is higher
- Council and executive management costs are reviewed in the light of activities anticipated for the year;

As in previous years, every effort has been made to base the budget on information available as well as to forecast income and expenditures realistically. This is particularly important given the overall economic situation.

Council remains cognizance of the three key financial measures when preparing the budget:

- Key measure 1: there must be a surplus of regular income over regular expenditure each year;
- Key measure 2: there must be an overall surplus over the 4-year Council period;
- Key measure 3: the general reserve must remain within the level of 90-100% of regular expenditure.

An increase in membership fees from 2019 will make it possible to meet key measure 3.

## **Staffing**

Current staffing of the FIG Office is:

- Director (Louise Friis-Hansen) responsible for general management, developmental/strategic tasks, oversight of administration, finances, events, membership matters (particularly in relation to corporate members), council/commission matters, IT, communication and Foundation secretariat duties
- FIG Events and Support Manager (Claudia Stormoen) (full time)
- Finances and Administration (Maria Bargholz, part time – 20 hours/week) responsible for financial administration as well as general FIG and events administration.
- Assisting FIG Events and Support Manager (Martine Eelderink, the Netherlands), has been in the office 1 October 2017 – 31 May 2018 replacing Claudia Stormoen during her maternity leave.

Claudia Stormoen went on maternity leave in August 2017 and returned on a full-time basis in April 2018. In the meantime Martine Eelderink has been in the office to assist. It has been a possibility for Martine to work with FIG events planning as a preparation for FIG Working Week 2020 in Amsterdam, the Netherlands.

In 2015 past Vice President Pengfei Cheng announced that the Chinese Society for Surveying, Mapping and Geoinformation (CSSMG) has offered to assist the office with an intern. CSSMG is a member association of FIG and has been actively supporting and participating in the activities of FIG including the support of past FIG Vice President Cheng Pengfei (2013-2016). CSSMG has a trainee exchange programme. As part of this programme, a Memorandum of Understanding has been signed between CSSMG (on behalf of NASG) and FIG for an Internship/Trainee Programme at FIG Office in Copenhagen. An NASG staff person will be appointed as trainee for the FIG Office in Copenhagen for ½ year. This Memorandum of Understanding is valid for three years. The first trainee, Tian Tian, was in the office from February-August 2016. The second trainee, Wu Qiong was in the FIG office in the period January-July 2017. The third trainee should have been in the office January-July 2018, but due to the changed situation in office and Claudia Stormoen being on maternity leave it was decided to postpone the third trainee until autumn 2018/spring 2019 leading up to the FIG Working Week 2019 in Hanoi, Vietnam.

## **Organisation of events**

The Council and FIG Office work closely together with a Local Organising Committee to organise the yearly FIG event ensuring that FIG's annual event remains not only the flagship event of FIG but a global forum for FIG's membership, partners and stakeholders. Over the past years, FIG has developed the following operating models for its annual events:

- FIG will handle the overall programme, the technical programme, keynote speakers, international registrations, (local registration if in EUR or USD), the website, and international exhibitors; and
- The local organisers will handle the contact with the venue; hotels; the local exhibition; local registrations (if other currency from EUR and USD); social events; technical tours; and social tours.

FIG will be reimbursed a fixed sum for its handling, coordination and organization workload for each event. We believe that the models and arrangements provide a sound basis for future conferences, and provide an appropriate balance between FIG and local input and expertise.

FIG Office spends a considerable amount of time on the organisation and preparations of FIG events. FIG Office and Council have evaluated that it is a rewarding investment and gives a possibility to get closer to the individual persons that are related to FIG members.

Due to the larger uncertainty around the world it has been suggested to increase the events reserve with €25,000 to €50,000.

### **IT Development**

Since 2015 several major IT projects have been carried through:

- The new web site was launched in May 2015 based on a modern technology. Continuous improvements are undertaken
- FIG Membership database phase I. A database for all members was established in 2016, incl. Commission officials and national delegates to commissions. Until then FIG has not had an actual database, and information has been stored in several different places.
- Possibility for members for on-line update of membership information. Earlier this was done manually.
- Peer review database and handling system that can handle most processes electronically
- Improvements and integration of abstract and registration databases for handling of FIG Conferences
- Automatisations of many of the processes in connection to FIG conferences that have previously been done manually
- Improvement of online payment system
- Conference management related features and FIG Conference Web App continued to be enhanced
- FIG Membership database phase II: a database for individuals who have a connection with FIG either through the newsletter, participant at FIG Conferences or in any other way related to FIG. The database will be connected with the registration and abstract database as well as the membership database.
- Introduction of a new mass mailing system.

In the budget 10,000 has been dedicated to IT development. In 2017 it was decided to transfer €20,000 of the surplus to the IT reserve to a total of €50,000 to be prepared if larger IT investments are needed.

### **4. FIG Reserves**

As is shown in Annex C, the FIG general reserve at the end of 2017 was 145% of regular annual expenditure. This is above the 90-100% agreed by the 2009 General Assembly. The main reason for this large percentage is the exceptionally low expenditure for 2017. As a 4-year average the general reserve is 125% (the reserve percentage is calculated using an average of four years' regular annual expenditure, as agreed at the 2012 General Assembly).

Council proposes to increase the €25,000 events reserve with another €25,000, for the reasons described in this paper. In essence, this recognises the risk of organising events, particularly in the current economic climate. Council suggests that the reserve will be increased to €50,000.

Council suggests to maintain the IT reserve at the €50,000 level.

The reserves are held in low risk investments and on bank accounts, in line with the policy agreed by the General Assembly. Any transfer of the reserves requires approval by two persons, one of whom being the Council member responsible for finance and administration.

## 5. Subscriptions 2020

The 2017 General Assembly approved membership fees as follows:

Year	Per capita fee	Minimum fee	Maximum fee
2019	€4.80 per member up to a maximum of 5,500 members Member associations from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay €2.40 member up to a maximum of 5,500 members.	25 members or €50 (whichever is greater)	5,500 members (€26,400)

In the light of the budget and the current development the General Assembly decided in 2017 to increase the membership fee for 2019 and onwards. Council is conscious of the economic condition that members are operating under and in particular member's challenges with their national membership and budgets. Council wishes to respect this as well and both Council and FIG Office will continue to be prudent in its financial management. The last time fees for member associations were increased was 2012. Council proposes to keep the 2019 rates in 2020.

Council has agreed to increase the membership fees for Affiliate Members to € 790 EUR (from 760) which is a 6% increase.

Council has initiated a Task Force to work on how to attract corporate members and the hope is to increase the fees received by corporate members to limit the deficit or turn it into a positive result.

Year	Per capita fee	Minimum fee	Maximum fee
2020	€4.80 per member up to a maximum of 5,500 members Member associations from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay €2.40 member up to a maximum of 5,500 members.	25 members or €50 (whichever is greater)	5,500 members (€26,400)

## 6. Conclusion

Council continues to monitor and manage its finances prudently and believes that the budget proposed is realistic. It is positive to show a solid result, and part of the good result stems from

the decreased number of members in arrears which has given the opportunity to write down the provisionally doubtful debt. Another reason was a large savings in administration costs which however cannot be maintained at this low level, and a good event result from several events. Council will allow appropriate decisions to be made on levels of operational and developmental expenditure, to ensure the continuing sustainability, efficiency and effectiveness of FIG. Council thanks all members who have paid the annual membership fees promptly.

Rudolf Staiger  
Vice President



## Nomination Template for Commission Chair 2019-2022

<b>Commission no.</b>	One
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Nominee	
Name	Winnie SHIU
Country	China
Contact Address	Flat F, 5/F, Block 6, Pokfulam Gardens, 180 Pokfulam Road, Pokfulam, Hong Kong
E-mail address	mswinnieshiu@gmail.com
Age	56
Degrees and educational background	MSc in Public Administration and Development Bsc (Hons) in Surveying and Mapping Sciences Fellow, Hong Kong Institute of Surveyors Fellow, Royal Institute of Chartered Surveyors Authorized Land Surveyor Registered Professional Surveyor (Land Surveying) Member of HK Institute of Building Information Modelling
Employment history - current position - previous	<u>Current Position:</u> Chief Land Surveyor, HKSAR Government <u>Previous Positions:</u> Land Surveyor and Senior Land Surveyor in HKSAR Government Senior Digital Cartographer with Mason Land Surveys in UK Land Surveyor with JA Story and Partners in UK
Positions of trust - current - previous	<u>Current:</u> 2009 - Present Member of Hong Kong Institute of Surveyors (HKIS) Disciplinary Panel 2013 - Present Permanent Executive Member of Chinese Society for Surveying, Mapping and Geo-information 2014 - Present Assessor of Assessment of Professional Competence of HKIS and RICS 2017 - Present



## Nomination Template for Commission Chair 2019-2022

	<p>President of Hong Kong Geographic Information System Association</p> <p><u>Previous:</u> 1992-1994 Hon Secretary of Land Surveying Division of HKIS 1997-1999 Hon Secretary and Hon Editor of General Council of HKIS 1999-2013 Hon Secretary of 7<sup>th</sup> South East Asian Surveyors Congress 2010-2011 Chair of UK University of East London Alumni (HK) 2015-2017 Council Member of Hong Kong Geographic Information System Association 2016-2017 Chair of Asia GIS Conference 2017 Organising Committee</p>
<p>Positions in FIG</p> <ul style="list-style-type: none"> <li>- current</li> <li>- previous</li> </ul>	<p><u>Current:</u> Vice Chair (Administration &amp; Communication), Commission 1 Co-chair – Working Group 1.2 Women in Surveying Member of FIG Task Force on Commission Structure</p> <p><u>Previous:</u> Personal Assistant to FIGVP 2002-2006 Congress Director of FIGWW 2007 in Hong Kong Co-chair – Working Group 1.1 Changing Nature of Work and the Role of a Surveyor</p>
Other activities in FIG	<p>Experience sharing of being a woman in the surveying industry in FIGWW 2016 in New Zealand Chairs, Rapporteurs and Speakers in various FIGWW and Congress</p>
Field of surveying discipline	Land and Engineering Surveys, Photogrammetry, Aerial Survey, Cadastral Survey, Hydrographic Survey, GIS, BIM
<b>Nominees Statement:</b>	
Why I want to be a Commission Chair and what I would like to achieve	Having involved in various activities of FIG since 2002 with the current position as Vice Chair of Commission 1, my next move as the Commission Chair will ensure a smooth transition between the stages of implementation and review of the work plan. My work plan will be based on the terms of reference of the Commission and to achieve





## Nomination Template for Commission Chair 2019-2022

	its mission including making use of advanced technology and innovative tools to create a community of practice to share knowledge about professional standards and practice, build links to regional and world structures for surveying professionals that focus on issues around the professional standards and practice, develop individuals as professional surveyors and provide opportunities for them to continue to develop as part of the surveying community.
What I can offer to FIG in support of the aims and objectives of the Commission	I believe that I have proven record of leadership within the surveying profession in Hong Kong and in my international arena through my involvement of various activities in FIG and China.
My key skills	Public administration, Team Work, Leadership, Commitment, Interpersonal Skills, Professional Knowledge and Communication are my strong skills that can be contributed to FIG
Any other general comments	

### Nominator

Name of member Association	Chinese Society for Surveying, Mapping and Geo-information
Name and title of contact person	Dr. WANG Qian Deputy Secretary General
Contact address	28 Lianhuachixi Road, Haidian District, 100830, China
Email address	wangqian@sbsm.gov.cn

### Nominator's statement

Why the association wants to nominate Nominee	Ms SHIU possesses abundant professional surveying knowledge and enormous practical experience in various aspects of surveying work; she has demonstrated superb vision and ideas to elevate the surveying profession through practical approaches, and she endeavours to share her achievements in conferences in local, in the mainland and others countries. It is anticipated that she will make substantial contribution surveying globally when given the opportunity to lead the Commission 1.
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## Nomination Template for Commission Chair 2019-2022

Support the Association can offer the Nominee (financial and other)	The Association will give her the needed support to enable her to discharge her duties successfully and to achieve all her goals for the benefits of the surveying community across the world.
Any other comments	Ms SHIU is a most righteous and dedicated person with outstanding caliber who can be entrusted with the most challenging assignments.
<b>Signed</b> I hereby certify the above is true and correct	
Date	Oct. 18, 2017
Nominee	<i>Handwritten signature</i>
Nominator	<i>Wangbin</i> <i>王斌</i>



# 中国测绘地理信息学会

Chinese Society for Surveying Mapping and Geoinformation

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18 Oct 2017

Dr. Chryssy Potsiou  
President, International Federation of Surveyors  
Kalvebod Brygge 31-33  
DK-1780 Copenhagen V  
Denmark

Dear Ms Potsiou,

**Nomination for Winnie SHIU for the  
Election of FIG Commission 1 Chair 2019-2022**

We would like to nominate Ms. Winnie SHIU for the election of Chair of FIG Commission 1 (2019-2022).

Winnie has been an Executive Council Member with the Chinese Society for Surveying and Mapping since 2013 and made substantive contribution to the Society. She has been serving the FIG in different capacities since 2002, in particular, organized a very successful FIG Working Week in Hong Kong in 2007. Her current position as the Vice Chair of Commission 1 will ensure a smooth transition between the stages of implementation and review of the work plan.

Winnie possesses an abundant professional surveying knowledge and enormous practical experience in various aspects of surveying work, demonstrated superb vision and ideas to elevate the surveying profession through practical approaches, and endeavours to share her achievements in conferences in local and overseas.

We trust that Winnie will make substantial contribution to surveying globally and promoting the professional standards and practice of the surveying arena when given the opportunity to lead the Commission 1.



# 中国测绘地理信息学会

Chinese Society for Surveying Mapping and Geoinformation

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Enclosed is the completed nomination form for your necessary action please.

See you in the FIG Congress 2018 in Istanbul.

Yours sincerely,

Dr. WANG Qian  
Deputy Secretary General  
Chinese Society for Surveying Mapping  
and Geoinformation (CSSMG)



# Nomination Template for Commission Chair 2019-2022



## Nomination Template for Commission Chair 2019-2022

<b>Commission no. 2 Professional Education</b>
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<b>Nominee</b>	
Name	Assoc Prof David Mitchell
Country	Australia
Contact Address	Geospatial Science, School of Science, RMIT University, GPO Box 2476V, Melbourne, Australia 3001
E-mail address	David.mitchell@rmit.edu.au
Age	56
Degrees and educational background	2005 Doctor of Philosophy, Land administration, RMIT University 2000 Graduate Certificate, Urban development, RMIT University 1996 Graduate Diploma, Land Data Management, RMIT University 1986 Bachelor of Applied Science, Surveying, RMIT University
Employment history - current position - previous	Current position: Assoc Prof at RMIT University since 1997. Previous: 12 years in private practice.
Positions of trust - current - previous	Current: Co-Chair of the GLTN Research and Training cluster (since 2016).
Positions in FIG - current - previous	Previous: <ul style="list-style-type: none"> <li>- Co-chair of Commission 7 Working Group on land administration, natural disasters and climate change (2011-2014).</li> <li>- Member of the FIG climate change Taskforce (2009-2014).</li> </ul>
Other activities in FIG	<ul style="list-style-type: none"> <li>- Helped organize the SIDS workshop at the 2010 Sydney Congress and the 2013 FIG Pacific Small Island Developing States Symposium.</li> <li>- Organised FIG SIDS workshop at the 2016 Christchurch Working Week</li> </ul>



## Nomination Template for Commission Chair 2019-2022

Field of surveying discipline	Cadastral surveying, land development and land administration.
<b>Nominees Statement:</b>	
Why I want to be a Commission Chair and what I would like to achieve	Predominantly I would like to contribute to the next FIG term and I think that my academic role at RMIT University and strong interest in teaching and Professional Education lends itself to the role of Commission 2 chair. I also see opportunities to further invigorate (i) participation in Commission activities, (ii) papers submitted to events, and (iii) engagement with FIG multilateral partners and members in the Global South.
What I can offer to FIG in support of the aims and objectives of the Commission	I will draw on my 20 years expertise and experience in Surveying teaching and education, as well as my extensive FIG and international networks to connect with FIG members and seek engagement.
My key skills	An ability to communicate effectively, respectful engagement with others, and an understanding of the key professional education issues and trends.
Any other general comments	
<b>Nominator</b>	
Name of member Association	Surveying and Spatial Sciences Institute
Name and title of contact person	Gabriel van Wyk President Surveying & Spatial Sciences Institute (SSSI)
Contact address	64 Sylvan Road, Toowong Qld 4066 Australia
Email address	<a href="mailto:president@ssi.org.au">president@ssi.org.au</a>
<b>Nominator's statement</b>	
Why the association wants to nominate Nominee	David is a long-time member and supporter of SSSI. He has been active in our industry, providing leadership in the academic space while contributing to the profession in general.
Support the Association can offer the Nominee (financial and other)	SSSI will assist David generally within his role in FIG. Any liaison with the Survey and Spatial Industry of Australia will be provided whenever needed. We will also work with David in terms of any research or activities relevant



## Nomination Template for Commission Chair 2019-2022

	to the profession's Body of Knowledge. The Institute will also work with David to add financial support for his FIG activities to our budget.
Any other comments	SSSI want to use our representatives at FIG as conduits to increase capacity building and collaboration efforts and to enable and enthuse our industry. Resolving Equality and diversification issues are also high on our agenda.
<b>Signed</b> I hereby certify the above is true and correct	
Date	23/4/18
Nominee	
Nominator	Gabriel van Wyk, Surveying and Spatial Sciences Institute






Nomination Template for  
**Commission Chair**  
2019-2022

**Commission no. 3 Spatial Information Management**

**Nominee**

Name	 Prof. Dr.-Ing. Hartmut Müller
Country	Germany
Contact Address	Mainz University of Applied Sciences, Lucy-Hillebrand-Str. 2, D-55128 Mainz
E-mail address	hartmut.mueller@hs-mainz.de
Age	64
Degrees and educational background	1977 Diploma Engineer Geodesy (MSc) 1983 Doctor of Engineering (PhD)
Employment history - current position	2001 to date Professor for Geoinformatics, Director of Institute for Spatial Surveying and Information Technology, Mainz University of Applied Sciences
- previous	1991 to 2001 Professor for Surveying Technology, Mainz University of Applied Sciences, 1989 to 1991 Project Manager IT, Köln, Germany 1985 to 1989 Product Manager Systems, Heerbrugg, Switzerland 1982 to 1985, Post-doc Researcher, Karlsruhe University, Germany 1977 to 1982 Research Associate, Karlsruhe University, Germany
Positions of trust - current	



## Nomination Template for Commission Chair 2019-2022

- previous	<p>2005 to date Advisory Member of Steering Committee GDI-RP, Geospatial Data Infrastructure Rhineland-Palatinate, Germany</p> <p>2003 to date Scientific Advisor of State Municipal Associations, Rhineland-Palatinate, Germany</p> <p>2011 to date Guest Member of DVW Society of Geodesy, Geoinformation and Landmanagement Working Group Geoinformation and Geodata Management</p> <p>2003 to 2010 Chair of DVW Working Group Geoinformation and Geodata Management</p>
Positions in FIG - current	<p>2003 to date National Delegate Germany com 3</p> <p>2011 to date Vice Chair com3</p> <p>2011 to date Chair of Working Group 3.1 Spatial Information Management</p>
- previous	<p>2007 to 2010 Co-Chair of Working Group 3.1 Spatial Information Management</p>
Other activities in FIG	<ul style="list-style-type: none"> <li>- During the last 15 years I have participated in most of FIG congresses and annual working weeks, as well as in many other FIG workshops, in particular those of com3, contributing as author, presenter, session chair</li> <li>- Chair of Local Organization Committee, FIG com3 Workshop 2009, Mainz, Germany</li> <li>- Member of Com3 Scientific Peer Review Committee, 2011 to date</li> <li>- Co-author of FIG Publication No. 38 – The contribution of the Surveying Profession to Disaster Risk Management, A publication of FIG Working Group 8.4, ISBN 978-87-90907-58-7, 2006</li> <li>- Co-author of FIG Publication No. 48 – Rapid Urbanization and Mega Cities: The Need for Spatial Information Management, Research study by FIG Commission 3, ISBN 978-87-90907-83-9, 2010</li> <li>- Co-author of the FIG Article of the Month – SDI Development in the World’s Currently Existing Mega Cities, April 2009</li> <li>- Author of the FIG Article of the Month – Bridging the Gap between the Surveyors and the Geo-Spatial Society, October 2016</li> </ul>





## Nomination Template for Commission Chair 2019-2022

Field of surveying discipline	Geoinformation Systems, Spatial Information Management, Geospatial Data Infrastructures, Interdisciplinary Applications
<b>Nominees Statement:</b>	
Why I want to be a Commission Chair and what I would like to achieve	I have a good understanding of com3 having worked in com3 during a long period of time, with 4 different com3 chairs. I would like to encourage delegates from all countries to participate and contribute to the geospatial information management community; to uphold com3's tradition of organizing annual workshops focused on specific predefined topics; to motivate professionals from government, industry and academia to participate and contribute their know-how from the world's regions for the benefit of our profession and our society; and to further strengthen the cooperation with other FIG commissions and also the Young Surveyors Network on mutual aspects of Spatial Information Management .
What I can offer to FIG in support of the aims and objectives of the Commission	I believe I have a proven record of leadership both within academia and professional practice, in national and international context. I am part of an extensive national and international professional network, inside and outside FIG. I have an international reputation as an author, educator, researcher and conference presenter, both within FIG and externally. I am ready to invest a significant amount of time and effort towards the success of com3
My key skills	Proven project management experience; leadership through listening, consensus, and motivation; ability and willingness to work on a team
Any other general comments	For me the work of com3 and its team was and still is a constant source of inspiration and enthusiasm. It would be a great pleasure for me to guide com3 in the forthcoming period
<b>Nominator</b>	
Name of member Association	DVW – Gesellschaft für Geodäsie, Geoinformation und Landmanagement e.V.
Name and title of contact person	Prof. Dr.-Ing. Hansjörg Kutterer
Contact address	DVW Office



## Nomination Template for Commission Chair 2019-2022

	C/O Dipl.-Ing. Christiane Salbach Feierabendstr. 12 D-79235 Vogtsburg GERMANY
Email address	<a href="mailto:hansjoerg.kutterer@dvw.de">hansjoerg.kutterer@dvw.de</a>
<b>Nominator's statement</b>	
Why the association wants to nominate Nominee	Hartmut Müller is nationally and internationally well reputed as a highly qualified expert in the field of Spatial Information Management; he has gained a long term FIG experience, in particular in com3. DVW appreciates very much Hartmut's capability of promoting communication between FIG com3 and the experts standing behind the national working group 'Geo Information and Geo Data Management'.
Support the Association can offer the Nominee (financial and other)	DVW will offer any necessary personal, financial and institutional support to the nominee.
Any other comments	
<b>Signed</b> I hereby certify the above is true and correct	
Date	1 <sup>st</sup> of December 2017
Nominee	
Nominator	



# Nomination Template for Commission Chair 2019-2022

<b>Commission no.</b> <b>Five (5): Positioning and Measurement</b>
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<b>Nominee</b>	
Name	Daniel R. Roman
Country	U.S.A.
Contact Address	1315 East-West Highway, SSMC3, N/NGS Silver Spring, Maryland 20910
E-mail address	<a href="mailto:Dan.Roman@noaa.gov">Dan.Roman@noaa.gov</a>
Age	53
Degrees and educational background	1985 - B.S. Geology from the University of Southern California 1993 - M.S. in Geodetic Science and Surveying from the Ohio State University 1999 - Ph.D. in Geological Sciences (Geophysics) from the Ohio State University (1999)
Employment history - current position - previous	Current - Chief Geodesist, U.S. National Geodetic Survey Previous - Chief, Spatial Reference Systems Division, NGS - Team Lead, Geoid Modeling, GRD, NGS
Positions of trust - current - previous	Current – US Representative to IAG SubCommission (SC) 1.3c – North American Reference Frame – US Representative to IAG SC 2.4c – Central and North American Gravity and Geoid – Associate Member of IGS – Delegate to UN Global Geospatial Information Management (UN-GGIM) – Delegate to UN-GGIM-Americas regional – Representative to UN Subcommittee on Geodesy (UN SCOG) for the Americas – US Representative to ISO TC 211 – US Representative to SIRGAS
Positions in FIG - current - previous	Current – WG co-Chair for Vertical Reference (5.3) – 2015 to present Previous – member of Reference Frames WG (5.2) -2011 to 2014



## Nomination Template for Commission Chair 2019-2022

Other activities in FIG	<ul style="list-style-type: none"> <li>* Served as session chair and rapporteur for numerous FIG working weeks (2011 onward).</li> <li>* Acted as lecturer during FIG Sponsored and hosted Reference Frame In Practice (RFIP) seminars. These seminars are held before the start of a FIG working week or conference with an eye to educating the local surveyors.</li> <li>* Authored section on geoid models and vertical datums for FIG publication for RFIP. This document serves as a primer for surveyors and other professionals seeking further information on aspects of geodesy and surveying.</li> </ul>
Field of surveying discipline	Physical and Geometric Geodesy; Datums and Reference Frames; geodetic infrastructure planning and maintenance
<b>Nominees Statement:</b>	
Why I want to be a Commission Chair and what I would like to achieve	I am heavily involved in the development of many aspects of the new global terrestrial reference frame and vertical datums. However, any reference frame or datum is inconsequential if it isn't actually used. As we move forward into a globalized era, I want to ensure that these are adopted and implemented by FIG members. It will fall to FIG members to conduct their work in this new global reference frame following appropriate techniques. As Chair for Commission 5, I would be in the best position to synergize these efforts so that surveyors around the world can evolve with these new efforts.
What I can offer to FIG in support of the aims and objectives of the Commission	I am active in IAG working groups developing global reference models for the terrestrial reference fame and vertical datum focused explicitly on refining the best means for Positioning and Measurement - the core of Commission 5's work. I also work in UN groups focused on providing the governance to implement these models globally, regionally and nationally. I am working with the ISO body tasked with developing the requisite standards and guidelines for use of these models. What I can offer to FIG and Commission 5, in particular, is the ability to influence the activities of those developing the models and providing the governance and standards. This will better ensure that FIG members can complete their work in the not too distant future as their industry undergoes a period of significant change.
My key skills	I have evolved over time from being merely a technically



## Nomination Template for Commission Chair 2019-2022

	<p>oriented researcher to a position of leadership and communication. I have worked in various capacities in the international environment for decades. I have experience in meeting deadlines, coordinating the efforts of others, and developing &amp; implementing plans. I now serve as Chief Geodesist at the NGS. My Supervisor supports my desire to seek the position of Commission 5 Chair. She recognizes that our customers in the surveying community must eventually implement the technical work and governmental oversight that we develop. In particular, we must ensure that it is implemented in a consistent manner around the world and not just in the U.S.A. as a matter of global leadership. I believe that my skills and experiences highlighted above provide me both the technical skills to assess the work and the leadership skills to put it into practice.</p>
Any other general comments	<p>I serve as a delegate on a number of international NGO's as well as several InterGovernmental Organizations (IGO's). The USA is committed to the release of a modern reference frame and vertical datum in 2022. As we proceed through the steps necessary to achieve this, we at the NGS will be refining our understanding of how these must be implemented in various industries and professional associations. As Chief Geodesist at NGS, I oversee these efforts – keeping my Director informed of progress and challenges. Our experiences in this effort will provide key insights into the global effort at implementing updates to positioning techniques, training, and policies for all in the surveying community. I would like to share the hard won (or soon to be won) wisdom in these efforts with others members of FIG to facilitate this new paradigm. Finally, this position would also serve to focus on capacity building and training to ensure more coordinated regional and global frames.</p>
<b>Nominator</b>	
Name of member Association	National Society of Professional Surveyors
Name and title of contact person	Curtis W. Sumner, LS Executive Director
Contact address	5119 Pegasus Court, Suite Q



## Nomination Template for Commission Chair 2019-2022

	Frederick, MD 21704
Email address	<a href="mailto:Curtis.sumner@nspis.us.com">Curtis.sumner@nspis.us.com</a>
<b>Nominator's statement</b>	
Why the association wants to nominate Nominee	The work of Commission Five (5) is very important to NSPS and the surveying community. We believe that Dan's experiences through his role (currently that of Chief Geodesist) within NGS, as well as within FIG, make him the perfect candidate to lead the efforts of the Commission.
Support the Association can offer the Nominee (financial and other)	While Dan's employer has pledged to cover his travel expenses related to the position, NSPS stands ready to support him as needed. It's trust in his abilities allows NSPS to be supportive of Dan's leadership skills and decision making.
Any other comments	
<b>Signed</b> I hereby certify the above is true and correct	
Date	December 15, 2017
Nominee	Daniel R. Roman
Nominator	Curtis W. Sumner, LS





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
National Geodetic Survey  
Silver Spring, Maryland 20910-3282

DEC 15 2017

To whom it may concern:

Dr. Daniel Roman is the Chief Geodesist of the U.S. National Geodetic Survey (NGS). Dr. Roman has expressed a strong desire to serve as the Chairman for FIG Commission 5 - Positioning and Measurement. NGS's mission is to manage the U.S. National Spatial Reference System and its underlying geodetic infrastructure and provide access to the NSRS by professional surveyors. Dr. Roman's efforts in the FIG Commission 5 would be greatly beneficial to NGS efforts to manage national, regional, and international efforts at developing standards & guidelines, education & training and capacity building.

I support Dr. Roman's bid to become the next FIG Commission 5 Chair and will commit his time and resources to ensure he has a successful tenure over the next four years from 2018-2022. I believe that he has demonstrated potential to serve in this capacity and has much to offer to the FIG members.

Sincerely,

Juliana P. Blackwell  
Director





ORDEM  
DOS ENGENHEIROS  
BASTONÁRIO

DEAR MADAM PRESIDENT  
PROF. CHRYSY POTSIOU  
INTERNATIONAL FEDERATION OF SURVEYORS, FIG  
KALVEBOD BRYGGE 31-33  
DK-1780 COPENHAGEN  
DENMARK

N.º 654 - SG

P.º 1.3/CMA/ta

2017-12-13

**Subject:** Candidate to the position for Chair of Commission 6 | 2019-2022

Dear Prof. Chrysey Potsiou,

The Portuguese Association of Engineers, *Ordem dos Engenheiros*, nominates Engineer Maria João Henriques as candidate for Chair of Commission 6 – Engineering Surveys, to be elected at the 41<sup>st</sup> General Assembly that will take place next May in Istanbul, Turkey.

Engineer Maria João Henriques meets the criteria and qualifications required by this post. Please find attached the Nomination Template for Commission 6 Chair for the period of 2019/2022.

We confirm that *Ordem dos Engenheiros* will support all the expenses incurred by Engineer Maria João Henriques related to her function as Chair of Commission 6.

Yours sincerely,

  
Carlos Mineiro Aires  
Bastónario

Attached: Nomination Template



Nomination Template for  
**Commission Chair**  
2019-2022

**Commission no. 6 - Engineering Surveys**

Nominee	
Name	Maria João Henriques
Country	Portugal
Contact Address	Av. António Augusto de Aguiar 3D 1069-030 – Lisboa Portugal
E-mail address	fig.ceg@oep.pt
Age	57
Degrees and educational background	Geographical Engineer from the Faculty of Sciences of the University of Lisbon since 1983
Employment history - current position - previous	<ul style="list-style-type: none"><li>• Senior Research Officer at the Applied Geodesy Unit of the National Laboratory for Civil Engineering (LNEC) since October 2003. Start at LNEC in February 1983 as a Research fellow.</li><li>• Teaching assistant in the Faculty of Sciences of the University of Lisbon from October 1984 to July 1986</li></ul>
Positions of trust - current - previous	Vice-President of the College of Geographical Engineering of the Portuguese Engineers Association (CEG/OE) since 2013
Positions in FIG - current - previous	<ul style="list-style-type: none"><li>• Delegate of CEG/OE in Commission n.º 6 since 2002.</li><li>• Delegate of CEG/OE in FIG General Assembly between 2002 and 2015.</li></ul>
Other activities in FIG	Organizer of several FIG events held in Portugal: <ul style="list-style-type: none"><li>• 2008: Joint symposia: 13th FIG Symposium on Deformation Measurement and Analysis &amp; 4th IAG Symposium on Geodesy for Geotechnical and Structural Engineering</li><li>• 2013: 1<sup>st</sup> FIG Young Surveyors European Meeting</li><li>• 2016: Commission 7 Annual Meeting &amp; Geoconference</li></ul>





## Nomination Template for Commission Chair 2019-2022

	<p>"Cadastre 4.0 - Transparency-Participation-Collaboration"</p> <ul style="list-style-type: none"> <li>• 2017: INGEO2017 - 7th International Conference on Engineering Surveying</li> <li>• 2017: FIG Commission 3 Annual Meeting and Workshop "Volunteered Geographic Information: Emerging Applications in Public Science and Citizen Participation"</li> </ul>
Field of surveying discipline	Monitoring of structures by geodetic methods. Use of UAV (drones) to support civil engineering studies.
<b>Nominees Statement:</b>	
Why I want to be a Commission Chair and what I would like to achieve	<p>Working in a Laboratory for Civil Engineering, with civil engineers of several domains of expertise, I have a deep knowledge of the demands of these experts and the answers that we, surveyors, can give to them.</p> <p>I also believe that events, like conferences, workshops or meetings, are the best forum to establish new links, to start new projects.</p> <p>Also important, and to improve, the link between professional and scientific associations.</p>
What I can offer to FIG in support of the aims and objectives of the Commission	<p>The link with other associations of several domains, including in civil and geotechnical engineering.</p> <p>Contact with Portuguese speaking countries</p>
My key skills	<p>Project management</p> <p>Organizer of national and international scientific events</p>
Any other general comments	
<b>Nominator</b>	
Name of member Association	Portuguese Engineers Association - College of Geographical Engineering
Name and title of contact person	Eng. Carlos Mineiro Aires Portuguese Engineers Association President
Contact address	Av. António Augusto de Aguiar 3D 1069-030 – Lisboa Portugal
Email address	<a href="mailto:mineiro.aires@oep.pt">mineiro.aires@oep.pt</a> ; <a href="mailto:bastonario@oep.pt">bastonario@oep.pt</a>
<b>Nominator's statement</b>	
Why the association wants to	Maria João Henriques is a well qualified expert in the field



## Nomination Template for Commission Chair 2019-2022

nominate Nominee	of Engineering Surveying applied to monitoring and safety evaluation of civil engineering structures, the main domain of Commission 6. Moreover, she has been active in several FIG events and was organizer of several meetings (either national and international) many of them as president of the organizing committee.
Support the Association can offer the Nominee (financial and other)	The Portuguese Engineers Association will offer the necessary financial and institutional support to the nominee
Any other comments	
<b>Signed</b> I hereby certify the above is true and correct	
Date	2017.12.12
Nominee	
Nominator	



Nomination Template for  
Commission Chair  
2019-2022

<b>Commission no.</b> Seven (7)	
<b>Nominee</b>	
Name	Daniel Paez
Country	Colombia
Contact Address	Calle 108 no 3-30 apt 402
E-mail address	<a href="mailto:dpaez@uniandes.edu.co">dpaez@uniandes.edu.co</a>
Age	42
Degrees and educational background	<ul style="list-style-type: none"><li>• PhD in Geomatics with professor Ian Williamson at the University of Melbourne</li><li>• Graduate Certificate in Geographic Information Systems from The University of Melbourne</li><li>• Civil Engineer from Los Andes University</li></ul>
Employment history - current position - previous	<ul style="list-style-type: none"><li>• Current:<ul style="list-style-type: none"><li>○ Land Specialist with Land Equity International, an international consulting firm</li><li>○ Los Andes University – Geomatics and land administration lecturer</li></ul></li><li>• Past:<ul style="list-style-type: none"><li>○ National Director at Ministry of Transport – Colombia</li><li>○ Manager at Department of Transport Victoria – Australia</li><li>○ Coordinator at Moreland City Council – Australia</li><li>○ Researcher at The University of Melbourne – Australia</li><li>○ Planner at National Railway company - Colombia</li></ul></li></ul>
Positions of trust - current - previous	<ul style="list-style-type: none"><li>• Current:<ul style="list-style-type: none"><li>○ World Secretary of the United Nations GGIM Academic Network – New York, USA</li><li>○ Vice-chair and Working group 7.2 Chair at FIG commission 7</li></ul></li></ul>



## Nomination Template for Commission Chair 2019-2022

	<ul style="list-style-type: none"><li>○ Founding member of Americas Academic Network for UNGGIM</li><li>○ Honorary member of the Colombian Surveyor society</li><li>○ Member of AFN20 Committee of the USA Transport Research Board - USA</li><li>● Past:<ul style="list-style-type: none"><li>○ Member of the Geomatics committee – Colombian Society of Engineers</li><li>○ Councilor of the Postgraduate faculty – the University of Melbourne</li><li>○ Member of the Ethic committee – University of Melbourne</li></ul></li></ul>
Positions in FIG - current - previous	<ul style="list-style-type: none"><li>● Current:<ul style="list-style-type: none"><li>○ Vice-chair commission 7</li><li>○ Working group 7.2 Chair commission 7</li><li>○ Peer reviewer, moderator and session chair at multiple events including working weeks and congresses</li></ul></li><li>● Past:<ul style="list-style-type: none"><li>○ Member of Commission 7</li><li>○ Member of Young surveyors</li></ul></li></ul>
Other activities in FIG	Organized in December 2017 the Commission 7 and commission 9 annual meeting in Cartagena – Colombia with over 90 participants
Field of surveying discipline	Cadaster and Land administration, land planning, integration transport with land use planning
<b>Nominees Statement:</b>	
Why I want to be a Commission Chair and what I would like to achieve	<ul style="list-style-type: none"><li>● Support national associations and their members to redefine and manage changes to the role of surveyors under new trends of cadastre and land administration systems</li><li>● Enhance opportunities for an active and healthy participation of the private sector in cadaster and land administration systems worldwide</li><li>● Continue to grow the influence of FIG on key land administration issues such as Fit-for-purpose, Cadaster 4.0, pro-poor policies and private-public partnerships</li></ul>



**Nomination Template for  
Commission Chair  
2019-2022**

	<ul style="list-style-type: none"><li>• Strength linkage to the World Bank, UNGGIM, FAO and other international organizations</li></ul>
What I can offer to FIG in support of the aims and objectives of the Commission	<ul style="list-style-type: none"><li>• Significant understanding of FIG from practical experiences attending all congresses and working groups since 2012 as well as being an active member of commission 7</li><li>• Active participation both in the private and academic network with surveying experiences in both in developing and developed countries</li><li>• Active participation as a consultant in cadaster and land administration in multiple countries (currently active in Australia, Indonesia, Colombia and Honduras)</li></ul>
My key skills	<ul style="list-style-type: none"><li>• Highly developed technical skills in Geospatial analysis, cadaster system design and urban planning</li><li>• Communication and facilitation skills with a focus on achieving win-win outcomes</li><li>• Managerial and Organization skills applicable to event management as well as project development</li></ul>
Any other general comments	If I am elected as chair of commission 7, I will devote my efforts to the consolidation of FIG in the Latin-America as well as creating strong linkage between practitioners from developed and developing countries

**Nominator**

Name of member Association	Sociedad Colombiana de Topografos (Colombian Surveyors Association)
Name and title of contact person	Ing. Wilson Perez Duarte - President
Contact address	Calle 36 Sur # 24-45 P-2 Bogota, Colombis (+57) 3003531445
Email address	s.c.topografos@gmail.com

**Nominator's statement**

Daniel Paez has been instrumental in the development of the Surveying profession in Colombia. Under his leadership and coordination, we were admitted to the FIG in 2014. During his work at Los Andes University, he has brought to the attention of government



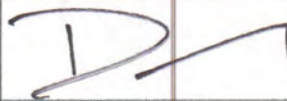



## Nomination Template for Commission Chair 2019-2022

officials and the private sector the importance of Surveying as a key component of all cadaster or infrastructure project. He has demonstrated extraordinary leadership at his position at Los Andes University. His role as Land Specialist in Land Equity International allows him to be close to the private sector and understand what is needed to be improved in our profession, so we are more competitive and relevant under the new trends our profession is facing.

I personally have developed a strong relationship with Daniel, and I admire his capacity to be active in both the international context and in Colombia while maintaining an excellent relationship with all stakeholders. He is naturally a facilitator and an excellent manager, both skills very useful if elected as chair of commission 7.

Therefore, hereby as president of the Colombian Society of Surveyors, I offer Daniel my unconditional support to become chair of Commission 7.

Why the association wants to nominate Nominee	Daniel's activities in Commission 7 have allowed us as Association to be active in the changes proposed to the land administration system in Colombia as well as understanding the latest trends in land administration and cadaster. Daniel Paez is a very dynamic individual with outstanding communication and leadership skills. He organized an outstanding commission 7 and 9 annual meeting in Colombia in 2017, proving that the surveying profession in Colombia is ready to play a leading role in the region and, hopefully with his election as a chair, in the world.
Support the Association can offer the Nominee (financial and other)	We will provide support to Daniel to participate in national events of our association, and we have offered him administrative support to conduct the role as chair if elected
Any other comments	Support for Daniel's nomination has been by consensus
<b>Signed</b> I hereby certify the above is true and correct	
Date	7 December 2017
Nominee	
Nominator	



**Nomination Template for  
Commission Chair  
2019-2022**

**Commission no. 8**

<b>Nominee</b>	
Name	Marije Louwsma
Country	Netherlands
Contact Address	PO Box 9046 7300 GH Apeldoorn The Netherlands
E-mail address	marije.louwsma@kadaster.nl
Age	38
Degrees and educational background	PhD candidate (present) at Wageningen University MSc in environmental planning and design, specialization spatial planning (2002) at Wageningen University MSc in Geographical information management and applications (2010) at Utrecht University
Employment history - current position - previous	Current: Senior Project Leader at Cadastre, Land Registry and Mapping Agency  Previous: (Assistant) Project leader regional planning at Cadastre, Land Registry and Mapping Agency  Tourism officer / Project leader at Municipality of Sluis  Junior Lecturer at the land use planning group, Wageningen University
Positions of trust - current - previous	Current: Guest lecture at ITC, Enschede External examiner of MSc students (ad hoc) Ambassador of Young Cadastre  Previous: Board member of Young Cadastre (2011 – 2013) Young Cadastre is the association for young



## Nomination Template for Commission Chair 2019-2022

	<p>professionals at Cadastre, Land Registry and Mapping Agency.</p> <p>Member of the Program Committee (2008 – 2010) for the MSc program Geographical Information Management and Applications</p>
<p>Positions in FIG</p> <ul style="list-style-type: none"> <li>- current</li> <li>- previous</li> </ul>	<p>Current:</p> <p>Active in commission 8 (e.g. working group 8.3, chairing sessions, commission meetings).</p> <p>Previous:</p> <p>Chair of program committee for the symposium ‘land consolidation and land readjustment’ organized in cooperation with FIG commissions 7 and 8, FAO and Cadastre, Land Registry and Mapping Agency.</p>
Other activities in FIG	<p>Active participation at FIG working weeks and congress in Helsinki (2017), Christchurch (2016), Sofia (2015), and Kuala Lumpur (2014).</p> <p>Active participation in Young Surveyors meeting in Kuala Lumpur (2014).</p>
Field of surveying discipline	Spatial planning, land management, land policy instruments (land consolidation, land banking etc.) and geo-information
<b>Nominees Statement:</b>	
Why I want to be a Commission Chair and what I would like to achieve	<p>FIG is a well-known and leading organization in the broad field of surveying. A valuable asset of the organization is that it involves scientists and practitioners. This enables the exchange of grounded and scientific knowledge which puts forward the development of the profession as a whole.</p> <p>As commission chair ‘spatial planning and development’ I would be committed to enhance the exchange of knowledge among the various professional and research communities that aim to govern the spatial development of rural, urban and peri-urban areas in a sustainable way (social, economic and environmental).</p> <p>Networking and capacity building are key pillars to amplify the knowledge and experience that the spatial planning community around the world holds. Working together will broaden and strengthen the advancement of spatial</p>



## Nomination Template for Commission Chair 2019-2022

	<p>development at scientific, strategic and operational level.</p> <p>An active commission is needed to facilitate the needs of society in general, and institutions and citizens in particular. Citizens should be able to profit from our efforts, acknowledging their land rights and interests in spatial planning processes and enabling a sustainable development and the empowerment of communities.</p>
What I can offer to FIG in support of the aims and objectives of the Commission	<p>Developments in the field follow each other up rapidly. FIG provides a platform where scientists and practitioners discuss these developments and how to respond to them. Being strongly rooted in current practice and in research, I can contribute to the debate in science and practice and understand the need for exchange of knowledge from both perspectives.</p> <p>My experience in developing and implementing innovative processes and new geo-information applications can be helpful in analyzing developments, and exploring new and fit-for-purpose solutions that contribute to the societal value of geo-information, land tenure systems, and land management approaches.</p> <p>Apart from hands-on experience, my interest in this topic is reflected in the topic of my PhD research that focuses on the impact of e-government on government-citizen interaction in spatial planning.</p>
My key skills	<ul style="list-style-type: none"><li>▪ Interdisciplinary background</li><li>▪ Bridging science and profession</li><li>▪ Involving young professionals into our profession</li><li>▪ Jointly develop new approaches and innovations</li><li>▪ Enthusiastic and engaged in various networks</li></ul>
Any other general comments	<p>Professional publications:</p> <p>Hospers, A., Lammeren, R. van, Kuiper, P.P., and Louwsma, M. 2015. Verrijkt netwerkmodel berekent huisveldritten – agrarisch verkeer: hoeveel, wanneer en waar? (A spatial network model to calculate the intensity of agricultural traffic on public roads). Verkeerskunde, 5/2015, Netherlands.</p> <p>Louwsma, M., and Kuiper, P.P., 2013. Ruimtelijke effecten van herverkaveling op landbouwverkeer (How land consolidation spatially affects agricultural traffic).</p>

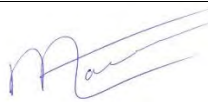


## Nomination Template for Commission Chair 2019-2022

	<p>Verkeerskunde, 5/2013, Netherlands.</p> <p>Louwsma, M., 2010. Exchange of geo-information in land consolidation projects via a web service – a feasibility study from a user’s perspective. MSc thesis, Utrecht University, Utrecht, The Netherlands.</p> <p>Conference papers:</p> <p>Louwsma et al., 2017. Land Consolidation and Land Readjustment for Sustainable Development – the Issues to be Addressed, FIG Working Week, 29 May – 2 June 2017, Helsinki, Finland.</p> <p>Beunen, R. and Louwsma, M., 2016. Participatory approaches to land re-allotment: on the interplay between institutional frameworks and trust. Symposium on Land Consolidation and Land Readjustment, 9-11 November 2016, Apeldoorn, The Netherlands.</p> <p>Louwsma, M., and Lemmen, C., 2015. Relevance of leased land in land consolidation. FIG Working Week, 17-21 May 2015, Sofia, Bulgaria.</p> <p>Louwsma, M., 2014. Using Planning Support Systems (PSS) to facilitate the implementation of spatial plans. AESOP conference, 9-12 July 2014, Utrecht, The Netherlands.</p> <p>Louwsma, M. Beek, M. van, Hoeve, B., 2014. A new approach: participatory land consolidation. XXV FIG congress, 16-21 June 2014, Kuala Lumpur, Malaysia.</p> <p>Louwsma, M.A., 2012. E-government services to support spatial planning through an effective exchange of geo-information between involved parties. GSDI 13 World Conference, 14–17 May 2012, Quebec City, Canada.</p> <p>Keynotes:</p> <p>WPLA/CLARKEN Workshop, 21 April 2017, Lausanne, Switzerland</p> <p>Symposium “Land consolidation and land readjustment for sustainable development”, 9-11 November 2016, Apeldoorn, Netherlands</p> <p>Symposium "Land Consolidation and Land Development - Perspectives and Challenges for the Future" , 20-21 September 2015, Qingzhou, China</p>
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## Nomination Template for Commission Chair 2019-2022

<b>Nominator</b>	
Name of member Association	Geo-information Netherlands (GIN)
Name and title of contact person	Peter Hoogwerf, President of GIN
Contact address	Postbus 1058 3860 BB NIJKERK The Netherlands
Email address	p.hoogwerf@geo-info.nl
<b>Nominator's statement</b>	
Why the association wants to nominate Nominee	Working for the Dutch Cadastre, Land Registry and Mapping Agency, Marije gained thorough knowledge of the role of land administration and land rights in spatial planning processes. She has been involved in the development of new approaches towards public participation and new GIS applications in spatial planning processes, in particular in land consolidation and re-allotment. GIN believes that her expertise and enthusiasm for international cooperation, innovation and capacity building will contribute to the commission 8 work and FIG in general.
Support the Association can offer the Nominee (financial and other)	GIN and Dutch Cadastre, Land Registry and Mapping Agency will offer the support needed to carry out the tasks as chair of commission 8.
Any other comments	-
<b>Signed</b> I hereby certify the above is true and correct	
Date	15 December 2017
Nominee	
Nominator	

International Federation of Surveyors, FIG  
Louise Friis-Hansen  
Kalvebod Brygge 31-33  
DK-1780 Copenhagen V  
DENMARK

Apeldoorn, 14 December, 2017

Subject: Nomination Chair FIG Commission 8

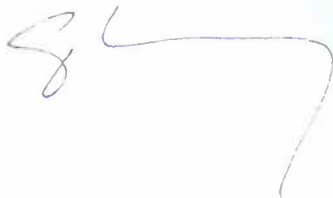
Dear Louise,

Geo-Information Netherlands, the Dutch member of the FIG, is pleased to support the nomination of MSc Marije Louwsma, as chair of FIG Commission 8 for the period 2019 – 2022.

Geo-Information Netherlands hereby nominates MSc Marije Louwsma, Wageningen University, as chair for this commission. She will be available over the duration of the term of office to carry out the needed work for the commission and has the support from her employer, the Dutch Cadastre, Land Registry and Mapping Agency as well.

With her background in land administration, geo-information and spatial planning, we believe that her expertise and enthusiasm for international cooperation, innovation and capacity building will contribute to the commission 8 work and FIG in general.

Best regards,



Peter Hoogwerf MBA, LL.M  
President Geo-Information Netherlands

Ms. Louise Friis-Hansen  
FIG Manager  
International Federation of Surveyors  
Kalvebod Brygge 31-33  
DK-1780 Copenhagen V  
Tel. + 45 3886 1081  
Direct: + 45 9391 0810  
[louise.friis-hansen@fig.net](mailto:louise.friis-hansen@fig.net)  
[www.fig.net](http://www.fig.net)

Dear Louise

***Re: RICS letter of nomination for Ben Elder FRICS as FIG Commission 9 chair***

We would like to take this opportunity to re-confirm the RICS nomination of Ben Elder FRICS for the position of FIG Commission 9 chair.

Yours Sincerely

A handwritten signature in black ink, appearing to read "James Kavanagh". The signature is fluid and cursive, with a large, sweeping flourish at the end.

On behalf of the RICS President John Hughes  
pp. James Kavanagh MRICS  
Director Land Group  
RICS  
Tel: 0044 (0) 207 695 1598  
Email: [jkavanagh@rics.org](mailto:jkavanagh@rics.org)  
Web: <http://www.rics.org/land>





# Nomination Template for Commission Chair 2019-2022



## Nomination Template for Commission Chair 2019-2022

<b>Commission no. 9</b>
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<b>Nominee</b>	
Name	Ben Elder
Country	UK
Contact Address	RICS, 12 Great George Street, London SW1P 3AD
E-mail address	belder@rics.org
Age	62
Degrees and educational background	BSc, MSc
Employment history - current position - previous	RICS – Director of Valuation (since 2012) IVSC – chair of valuation board Head of Valuation – college of estate management Over 40 years’ experience in the valuation and ratings profession.
Positions of trust - current - previous	academia
Positions in FIG - current - previous	None, but actively involved in comm 9 since 2014
Other activities in FIG	
Field of surveying discipline	Valuation, Economics
<b>Nominees Statement:</b>	
Why I want to be a Commission Chair and what I would like to achieve	I would like to drive forward the previous work of comm 9 (Steven Nystrom) and bring comm 9 activities to the core of FIG. Comm 9 has a lot to bring to the FIG family as valuation is a core skillset for the future of the global profession and its understanding is central to myriad land issues.



## Nomination Template for Commission Chair 2019-2022

What I can offer to FIG in support of the aims and objectives of the Commission	I believe that Comm 9 can work much closer with Comm 7 and Comm 8 and also bring valuation (and its economic relationship) into play when FIG liaises with the UN and World Bank. The recent and ongoing output on unregistered land (GLTN) is a great platform to develop. I would also bring in my colleague James Kavanagh as vice chair to develop the relationship with Comm 7 and 8.
My key skills	Valuation, public speaking, teaching
Any other general comments	
<b>Nominator</b>	
Name of member Association	RICS
Name and title of contact person	James kavanagh Director – Land & Resources
Contact address	12 Great George Street, London SW1P 3AD
Email address	jkavanagh@rics.org
<b>Nominator's statement</b>	
Why the association wants to nominate Nominee	Valuation is a key sector for RICS and Ben is a world recognised expert in this sector. We believe FIG will greatly benefit from a deeper understanding of valuation principles and global liaison.
Support the Association can offer the Nominee (financial and other)	RICS will fully support Ben's involvement in Comm 9.
Any other comments	
<b>Signed</b> I hereby certify the above is true and correct	
Date	14/12/2017
Nominee	Ben Elder
Nominator	John Hughes RICS President (pp James Kavanagh)



Nomination Template for  
**Commission Chair**  
2019-2022

Commission no.	10
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Nominee	
Name	ALAN G. MUSE
Country	U.K.
Contact Address	RICS, 12 GREAT GEORGE STREET, LONDON SW1P 3AD.
E-mail address	AMUSE@RICS.ORG
Age	58
Degrees and educational background	B.Sc (HONS) M.Sc F.R.I.C.S.
Employment history - current position - previous	RICS HPR/McBAIN COOPER / RLB
Positions of trust - current - previous	CITY OF LONDON LIVERYMAN / VICE-CHAIR OF ICMS STANDING SETTING COMMITTEE
Positions in FIG - current - previous	
Other activities in FIG	
Field of surveying discipline	QUANTITY SURVEYING AND PROJECT MANAGEMENT.
<b>Nominees Statement:</b>	
Why I want to be a Commission Chair and what I would like to achieve	TO FURTHER DEVELOP AND HARMONISE THE PROFESSION GLOBALLY THROUGH INTERNATIONAL STANDARDS AND FULLY EMBRACING NEW TECHNOLOGIES.
What I can offer to FIG in support of the aims and objectives of the Commission	KNOWLEDGE AND EXPERIENCE OF GLOBAL BEST PRACTICE IN PM/QS, COUPLED WITH A COLLABORATIVE, COMMUNICATIVE WORK ETHOS.
My key skills	PROJECT AND COST MANAGEMENT ON THE INTERNATIONAL STAGE. BIM.
Any other general comments	



Nomination Template for  
Commission Chair  
2019-2022

<b>Nominator</b>	
Name of member Association	RICS
Name and title of contact person	MR K. CREIGHTON
Contact address	12 GREAT GEORGE STREET, LONDON SW1P 3AD
Email address	KCREIGHTON@RICS.ORG
<b>Nominator's statement</b>	
Why the association wants to nominate Nominee	we think Alan will add great value to our mutual aims in INTL Standards
Support the Association can offer the Nominee (financial and other)	We support Alan in doing this role and reasonable expenses.
Any other comments	We believe this will be a successful win/win.
<b>Signed</b> I hereby certify the above is true and correct	
Date	1st OCTOBER 2017
Nominee	
Nominator	



Nomination Template  
**Vice President**  
2019-2022

<b>Nominee:</b>	
Name:	Diane Dumashie
Member Association:	RICS
Country:	UK
Contact address:	Keta Lodge, Wareham UK, BH20 5DG
Email address:	ddd@dumashie.co.uk
Educational background & Qualifications:	<ul style="list-style-type: none"><li>• PhD University Cardiff</li><li>• BSC University of Central England</li></ul> Professional qualifications: <ul style="list-style-type: none"><li>• Fellow Member of the Royal Institution of Chartered Surveyors (FRICS)</li><li>• CEDR Accredited Mediator</li><li>• Associate Project Managers (APM)</li></ul>
Field of surveying discipline	Property, Economic Development and Planning, Land governance and management, Institutional development
History of Employment: - Current position	<ul style="list-style-type: none"><li>• Director Dumashie LTD- International Consultancy in Land, Property and Economic development (1999- to date)</li></ul>
- Previous position(s)	<ul style="list-style-type: none"><li>• Planning and Economic Development Consultancy (1996-1999)</li><li>• Corporate Property Director/ Senior Surveyor Manager (1990 -1995)</li><li>• Various technical, business and managerial roles, in corporate and private sector (1984-1995)</li></ul>



## Nomination Template Vice President 2019-2022

<b>Nominee:</b>	
Position of Trust: - Current position(s)  - Previous position(s)	<ul style="list-style-type: none"> <li>• UN Habitat Advisory Board on Gender issues</li> <li>• Board member, RICS Governing Council</li> </ul>
	<ul style="list-style-type: none"> <li>• Editorial Advisory Board, Emerald Journal</li> <li>• External Examiner, Portsmouth University</li> </ul>
FIG Positions/Responsibilities: - Current position(s)/ responsibilities  - Previous position(s)/ responsibilities	<ul style="list-style-type: none"> <li>• Vice President FIG (2015-2018)</li> <li>• Chair FIG Global Regional Networks</li> <li>• Chair ACCO</li> <li>• Chair Africa Regional Network</li> </ul>
	<ul style="list-style-type: none"> <li>• Chair, Africa Task force (2009-2014)</li> <li>• Convener &amp; FIG lead for SIDS workshop 2010</li> <li>• Chair, Commission 8 (2007-2010)</li> <li>• Chair, Commission 8 (2004 -2006)</li> <li>• Vice chair, commission 8 (1998-2009)</li> <li>• Member, Task Force on Governance (2004-2006)</li> </ul>
Other activities in FIG	<ul style="list-style-type: none"> <li>• Encouraging members, and agreeing new member engagement within FIG</li> <li>• Leading and facilitating professional capacity development</li> <li>• Responsible for ACCO and FIG Commissions- Helping the commission chairs to develop their plans, support (with the support of the Office) that they understand and implement their tasks for the WWs and Congress, and that they deliver high quality technical programs and liaise as required between commission chairs. Chair and coordinate of the FIG Regional Capacity Development Network and report to GA.</li> <li>• Cooperate liaison ensuing close working (in Networks) and supporting Task Force on Corporate members.</li> <li>• Lead responsibility, engagement and partnership working/ deliberations with international sister associations, specifically, FAO, UNHABITAT/GLTN, AU, the World Bank, and sister organization including Habitat for Humanity, grassroots/ civil society (e.g Huairou Commission, Slum Dwellers International)</li> <li>• Input into various Task Force's e.g. Institutional and Organizational Development</li> <li>• Head of RICS delegation to FIG (2006 - 2014)</li> <li>• Participated in FIG since WW Prague</li> </ul>



# Nomination Template

## Vice President

### 2019-2022

<b>Nominee's statement</b>	
<p>My motivation to be FIG Vice President:</p>	<ul style="list-style-type: none"> <li>• To continue, and to build on the contribution I have already made in the FIG Council including encouraging new members, providing a steady hand in decision making and steering key stakeholder relationships</li> <li>• As a practicing surveyor I am in touch with my fellow practitioners daily realities of working in the current economic climate with ethical and robust technical competencies</li> <li>• As a practicing knowledge transfer facilitator I am at the cutting edge of new ways of thinking and implementing approaches to futures strategies, and</li> <li>• As a practicing communicator I am in touch with all levels of business activity within donor agencies, member associations and grassroots stakeholders, building bridges and dialogue</li> </ul> <p>Combining these practices enables me to positively and credibly to continue to contribute to FIG Council in key strategic fields.</p>
<p>What I can offer in support of FIG's aims and objectives:</p>	<p>I have been widely acknowledged as a creative and strategic business thinker with a proven ability to lead and manage change, to energise and resolve complex issues and deliver successful outcomes for all stakeholders.</p> <p>As an experienced Board member, I believe that the combination of my business expertise combined with my active involvement in a range of communication platforms will continue to greatly benefit FIG members. The reasons are:</p> <p><b>Board / Strategic Experience</b></p> <ul style="list-style-type: none"> <li>• Bringing positive and constructive critique to decisions making within Boards, including FIG, and ensuring action solutions and delivery within fields of responsibility</li> <li>• AA proven track record of success in leading ACCO, managing Commissions, Task Force and networks in FIG</li> <li>• Driving change and delivering strategic objectives and projects on time and within budget.</li> <li>• Actively identifying and bringing into FIG new member associations and networks</li> <li>• Chairing working groups of senior individuals and occupying Board positions in commercial and voluntary environments.</li> <li>• Familiarisation with and working on a global Professional platform with Country government aid agency departments and International donor agency (UN, World Bank, FAO) in both professional and policy development</li> <li>• In-depth understanding of member governance, standards of public life and the need for careful stewardship of members money</li> <li>• Building mutually successful, long – standing relationships with key stake holding Partners through strategic alliances</li> </ul>





# Nomination Template

## Vice President

### 2019-2022

	<p>and joint ventures through active involvement in networks including, CASLE, AFRES, EALAN and a range of Member associations.</p> <ul style="list-style-type: none"><li>• Built an in-depth understanding of the geopolitical environment and over the past decade am doing business, monitoring world initiatives and becoming familiar with the issues and interventions of major players.</li></ul> <p><b>Business Experience</b></p> <ul style="list-style-type: none"><li>• Board level decision making and business development experience, in both Corporate and SME's organisations across a range of industries including, professional services (Land, Lawyers, Engineers), commerce (hotel &amp; leisure, fast food &amp; retail), Housing, Health Care and industrial (Ports)</li><li>• Experienced in entrepreneurial activity including areas in sub franchising, development strategies, leading acquisitions and development programmes, company take-overs, feasibility market analysis, provision and coordination of strategic property advice.</li><li>• Providing assistance to SME's to develop strategic business thinking, business plans, research, report drafting, market analysis and grant applications.</li><li>• Established track record in assimilating partnership needs in a variety of contexts to progress projects through adoption and implementation processes</li></ul> <p><b>Interpersonal:</b></p> <ul style="list-style-type: none"><li>• The passion, enthusiasm, drive and commitment to lead, motivate and inspire others allied with strong interpersonal, communication and negotiation skills and ability to work cooperatively, collaboratively and effectively.</li><li>• Considered leadership approach to coordinate, design and facilitate activities to progress the Boards objectives and inform decision makers.</li><li>• As a proven communicator I have the ability to transfer knowledge and skills in a multi-cultural environment, evidenced by a range of international project work and networking platforms.</li></ul> <p>My professional, policy and investigative research experience in land economics, governance, and natural resources, allied with extensive networks in international professional working groups, will greatly benefit the FIC council Board and contribute significantly to the success for FIG members across the globe.</p>
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## Nomination Template Vice President 2019-2022

My key skills for the Vice Presidency and FIG Council:	As outlined above, my Board level competencies combines: Thinking skills: <ul style="list-style-type: none"><li>• Strategic thinking</li><li>• Creative thinking</li><li>• Analysis and planning</li></ul> And, Delivery skills: <ul style="list-style-type: none"><li>• Leadership</li><li>• Networking and influencing</li><li>• Communications</li><li>• Focus on results</li></ul>
Any other supporting information:	I have the commitment of my employers to support me as Vice President of FIG






**Nomination Template**  
**Vice President**  
**2019-2022**

<b>Nominator</b>	
Name of Member Association:	RICS
Name of Proposer:	J Kavanagh on behalf of John Hughes, RICS President
Position in Association	Director Lands Professional Group
Contact address:	12 Great George Street, London, SW1P 3AD
Email address	<a href="mailto:jkavanagh@rics.org">jkavanagh@rics.org</a>
<b>Proposer's Statement</b>	
Why the Association wants to propose the Nominee	RICS is fully committed to FIG and believes that Diane can really built on her work of a successful first 4 years as FIG Vice president. Diane will also provide an element of continuity for the new incoming FIG presidential team (2018-22). Diane is also a member of several important RICS boards such as RICS Governing Council and the Global Land Board, this provides an excellent platform for feedback, RICS collaboration and dissemination of FIG initiatives.
What support (financial, administrative and others) can the Association provide to the Nominee if elected Vice President	RICS will be able to offer assistance to Diane on a number of levels. RICS has an extensive network of international offices which might be able to provide local contacts for her work as Vice President of FIG. Closer to home, RICS will offer back office support to Diane's administrative logistics
Any other supporting information:	RICS is committed to its continued involvement with FIG and supports a number of delegates and commission chairs.
Name of Seconder:	Ken Creighton
Position in Association	Director, International Standards
Contact address:	12 Great George Street, London, SW1P 3AD
Email address	<a href="mailto:kcreighton@rics.org">kcreighton@rics.org</a>

**Signed**



Nomination Template  
**Vice President**  
2019-2022

I hereby certify the above is true and correct*	
Nominee	
Proposer:	
Secunder:	 pp. jk
Date:	14/12/17

\* Nominee is requested to initial every page of the nomination template

Clarifying Notes:	<ul style="list-style-type: none"><li>• The Nominator (Proposer and Secunder) must be principal officers of the FIG Member Association (by principal officers, it is construed as President or Chairperson, Deputy or Vice President/Chairperson, Secretary General or Chief Executive Officer or equivalent position)</li><li>• The Nomination Template must be accompanied by a letter of support from either the President or the Principal Officer of the nominating FIG Member Association</li><li>• Nominating FIG Member Association should ascertain the availability of the nominee over the duration of the term of office</li><li>• Nominee should preferably have prior or current responsibilities within and working knowledge of FIG, its activities, aims and objectives</li><li>• Nominee and Nominator are requested to pay attention to the Nominee's Statement and the Proposer's Statement</li></ul>
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14 December 2017

Ms. Louise Friis-Hansen  
FIG Manager  
International Federation of Surveyors  
Kalvebod Brygge 31-33  
DK-1780 Copenhagen V  
Tel. + 45 3886 1081  
Direct: + 45 9391 0810  
[louise.friis-hansen@fig.net](mailto:louise.friis-hansen@fig.net)  
[www.fig.net](http://www.fig.net)

Dear Louise

***Re: RICS letter of nomination for Diane Dumashie FRICS as FIG vice president***

We would like to take this opportunity to re-confirm the RICS nomination of Diane Dumashie FRICS for the position of FIG vice president.

Yours Sincerely

A handwritten signature in black ink, appearing to read "James Kavanagh". The signature is fluid and cursive, with a large, sweeping flourish at the end.

On behalf of the RICS President John Hughes  
pp. James Kavanagh MRICS  
Director Land Group  
RICS  
Tel: 0044 (0) 207 695 1598  
Email: [jkavanagh@rics.org](mailto:jkavanagh@rics.org)  
Web: <http://www.rics.org/land>



**Nomination Template**  
**Vice President**  
**2019-2022**

<b>Nominee:</b>	
Name:	Alojz Kopáčik, prof., hab., PhD.
Member Association:	Chamber of Surveyors and Cartographers
Country:	Slovakia
Contact address:	Department of Surveying Faculty of Civil Engineering, STU in Bratislava Radlinského 11 810 05 Bratislava, Slovakia
Email address:	alozj.kopacik@stuba.sk
Age:	59
Educational background & Qualifications:	Diploma in Surveying, 1982 PhD. in Geodesy and Cartography, 1987 Habilitation in Geodesy and Cartography, 1997 Professorship, Department of Surveying, STU Bratislava, 2004 License, Chamber of Surveyors and Cartographers, 1996 German Geodetic Commission, Bavarian Academy of Sciences, member, since 2005 Chair of Exam Boards STU Bratislava, CVUT Prague, VUT Brno, Uni Žilina, Chamber of Surveyors and Cartographers Member of Editorial Board of Slovak Journal of Civil Engineering (Slovakia), Geodetskij list (Croatia), Geodezijni zurnal (Serbia)
Field of surveying discipline	Engineering surveying, Mine Surveying, Tunneling, Deformation Measurement and Analysis, Inertial Sensors, Automated Measuring Systems, TLS, GBSAR



**Nomination Template**  
**Vice President**  
**2019-2022**

<b>Nominee:</b>	
<b>Position of Trust:</b> - Current position(s)  - Previous position(s)	Head of the Department of Surveying STU in Bratislava, since 2015  Dean, Faculty of Civil Engineering STU in Bratislava, 2007-2015  Vice Dean, Faculty of Civil Engineering STU in Bratislava, 2000-2007  Senior Lecture and Ass. Professor at the Department of Surveying STU in Bratislava, 1992-2004  Research Staff, Department of Engineering Surveying TU Vienna, 1990-1991
<b>FIG Positions/Responsibilities:</b> - Current position(s)/ responsibilities  - Previous position(s)/ responsibilities	JWG for BIM, member, since 2015  FIG Standards Network, Com 6 representative, since 2006  WG6.1 Deformation Measurement, member, since 2003  Com 2 and Com 6 national delegate, since 2002  Com 10 national delegate, since 2016  Com 6, Chair, 2006-2010  Com 6, Chair Elect, 2004-2006  FIG representative for ISMS, 2006-2010  WG6.2 Engineering Surveys for Industry and Research, member, 2001-2005  Joint IAG SC4, FIG Com 6 WG Building Structures as Kinematic Systems, member, 1997-2001  FIG Com 6 E6 WG Laser Techniques and Applications in Engineering Surveys, member, 1992-1998
<b>Other activities in FIG</b>	Com 6 activities – SC Chair of the series of 7 INGEO International Conferences on Engineering Surveying – 1998, 2002, 2004 and 2008 Bratislava (Slovakia), 2011 Brijuni (Croatia), 2014 Prague (Czech Republic), 2017 Lisabon (Portugal)  Task Force for FIG Journal, member, 2014-2016



**Nomination Template**  
**Vice President**  
**2019-2022**

<b>Nominee's statement</b>	
<b>My motivation to be FIG Vice President:</b>	<p>FIG is the leading organization representing our profession worldwide. It is a great honor for me to be a member of this family and to have the possibility to participate actively on this great "project".</p> <p>I have many opportunities to gain profit from FIG membership in the past and I think it is the right time to use it on behalf FIG. Thanks to my experience gained in FIG and other positions (at university, chamber, standardization or editorial boards, practice), I am able to take part on management of wide spectrum of FIG activities.</p> <p>My personal skills in the field of management of different institutions and large events, simultaneously with great support of the Chamber of Surveyors and Cartographers in Slovakia create a good base for active and valuable participation at all tasks expected from the member of the FIG Council.</p>
<b>What I can offer in support of FIG's aims and objectives:</b>	<p>Management skills in academic sector – management of educational projects, communication with FIG Young Surveyors Network, support for cooperation between FIG Com 2 and other FIG commissions focused on professional education, LLP development, etc.</p> <p>Wide spectrum of professional personal relations with colleagues which are active in other professional organizations – ISPRS, ISMS, IAG, CLGE, etc. is a good base for close cooperation, developing common projects and joint events.</p>
<b>My key skills for the Vice Presidency and FIG Council:</b>	<p>Dean of the Faculty of Civil Engineering STU in Bratislava for 8 years – 3000 students, 400 staff members, with budget of 15 million €/year</p> <p>Chair of FIG Com6, member of ACCO in the period 2006-2010.</p> <p>Organization of large events – 7 INGEO international conferences (in cooperation with FIG), 10 Slovak Geodetic Days (more than 500 participants), seminars and education courses for practice.</p> <p>Participation of many international education projects (summer schools, curricula development, INTERREG, ERASMUS+, ...).</p>
<b>Any other supporting information:</b>	<p>Member of Bavarian Academy of Sciences German Geodetic Commission since 2005.</p> <p>Member of editorial board of many journals.</p>




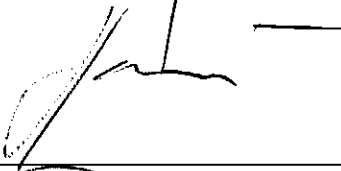



Nomination Template  
**Vice President**  
2019-2022

<b>Nominator</b>	
Name of Member Association:	Chamber of Surveyors and Cartographers
Name of Proposer:	Ján Hardoš
Position in Association	president
Contact address:	Na paši 4 821 02 Bratislava, Slovakia
Email address	<a href="mailto:komorag@mail.t-com.sk">komorag@mail.t-com.sk</a>
<b>Proposer's Statement</b>	
Why the Association wants to propose the Nominee	Professor Kopáčik has wide experience in the management of activities of professional organizations. He is active member of the Chamber for a long time, since 2008 in the position of the Chair of Exam Board. He is chairing the standardization in Slovakia as the Chair of TC89 Geodesy and Cartography. Very positive and important is his work in the field of geodetic legislation in Slovakia. We are absolutely convinced, that he is the right person to represent Slovakia and the Chamber on international level and his wide experience will be valuable for FIG and the Council, too.
What support (financial, administrative and others) can the Association provide to the Nominee if elected Vice President	Chamber of Surveyors and Cartographers is ready to give professor Kopáčik in the FIG Vice President position all kind of administrative support and if necessary or expected, there is a budget of 1000 €/year prepared.
Any other supporting information:	...
Name of Secunder:	Peter Repán
Position in Association	Vice President
Contact address:	Na paši 4 821 02 Bratislava, Slovakia
Email address	<a href="mailto:komorag@mail.t-com.sk">komorag@mail.t-com.sk</a>



Nomination Template  
**Vice President**  
2019-2022

<b>Signed</b> I hereby certify the above is true and correct*	
Nominee	
Proposer:	
Seconder:	
Date:	

\* Nominee is requested to initial every page of the nomination template

Clarifying Notes:	<ul style="list-style-type: none"><li>• The Nominator (Proposer and Seconder) must be principal officers of the FIG Member Association (by principal officers, it is construed as President or Chairperson, Deputy or Vice President/Chairperson, Secretary General or Chief Executive Officer or equivalent position)</li><li>• The Nomination Template must be accompanied by a letter of support from either the President or the Principal Officer of the nominating FIG Member Association</li><li>• Nominating FIG Member Association should ascertain the availability of the nominee over the duration of the term of office</li><li>• Nominee should preferably have prior or current responsibilities within and working knowledge of FIG, its activities, aims and objectives</li><li>• Nominee and Nominator are requested to pay attention to the Nominee's Statement and the Proposer's Statement</li></ul>
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**Mrs. Louise Friis-Hansen**  
Director

**International Federation of Surveyors, FIG**  
Kalvebod Brygge 31-33  
DK-1780 Copenhagen V  
DENMARK

č.j. 189/17-111

Bratislava, 30. 11. 2017

**Nomination to FIG Vice President**

According FIG Internal Rules and the Call for Nomination presented by the FIG Council and sent to member associations at September 14, 2017 the Chamber of Surveyors and Cartographers in Slovakia nominate prof. Alojz Kopáčik, PhD. for the position of FIG Vice President for term 2019-2022.

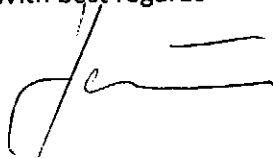
I would like to express on behalf the Chamber of Surveyors and Cartographers in Slovakia that professor Kopáčik has wide experiences in the management of activities of professional organizations. He is active member of the Chamber for a long time, since 2008 in the position of the Chair of the Board of Examiners.

Alojz Kopáčik has wide experience in academic sector, management of international educational and research projects as well as experiences in cooperation with industry and practice. His wide spectrum of professional personal relations with colleagues which are active in other professional organizations (ISPRS, ISMS, IAG, CLGE, etc.) is a good base for close cooperation, developing common projects and joint events. He is chairing the standardization in Slovakia as the Chair of TC89 Geodesy and Cartography since 1999. Very positive and important is his work in the field of geodetic legislation in Slovakia.

We are absolutely convinced, that he is the right person to represent Slovakia and the Chamber on international level and his wide experience will be valuable for FIG and the Council, too.

To this nomination letter are attached the nomination template with the required information, motivation and skills of the nominee and with expression to give all kind of administrative support to our candidate which is necessary for his work in this position. In the event, that extra election for Vice President for two years term office will be required, professor Kopáčik will be available for this shorter period (2019-2020) in Council, too.

With best regards



Jan Hardoš  
president



# 国家测绘产品质量检验测试中心

National Quality Inspection and Testing Center for Surveying and Mapping Products

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18 October 2017

## Candidate's consent to nomination Election of a Vice President of FIG

Dear FIG members,

As the president of Chinese Academy of Surveying and Mapping, I feel very privileged to be nominated for election of a vice president of FIG for the period 2019-2022. If elected, I will dedicate to the development of the federation as well as the progress of our beloved profession.

I am a leading scientist in surveying and mapping and geoinformation in China, having collaborative published over 330 articles in reputation journals and 7 books, won 5 prestigious National Award of Science and Technology Progress of China and one Geospatial World Excellence Awards. I have rich experiences in international academic exchanges, including my past efforts in organizing 15 international conferences/workshops and making 60+ international invited presentations in surveying, mapping and geoinformation.

In my many past experiences in the international and domestic academic and professional communities, such as International Society for Photogrammetry and Remote Sensing, Chinese Society for Surveying, Mapping and Geoinformation, China Association for Geographic Information Society and Chinese Society for Land Science, I have been devoting myself to the missions and goals of each community. As the Chair of ISPRS WG VII/6, I was awarded the prize of President's Honorary Citation for my meritorious contributions to the operation of the ISPRS Commission VII at the XXI Congress of ISPRS in 2008. I believe these significant experiences in scientific management should be useful to the works of the FIG in the future.

I look forward to serving the FIG. Thank you very much for your kind considerations.

Best regards,



Jixian ZHANG

General Director

National Quality Inspection and Testing Center  
for Surveying and Mapping Products

Address: 28 Lianhuachixi Road, Beijing 100830, China

Tel:86-10-63881816

Email: zhangjx@sbsm.gov.cn



# 中国测绘地理信息学会

Chinese Society for Surveying Mapping and Geoinformation

To:  
FIG Council and FIG Director

No.28, Lianhuachixi Road  
Haidian, Beijing, 100830  
CHINA  
Tel. +86 10 63882301  
Email. liws@sbsm.gov.cn

18 October 2017

## Supporting Prof. Jixian ZHANG to Compete for the Vice President of FIG

Dear FIG Council and FIG Director,

It is truly my pleasure to write this letter to provide my strongest support of the nomination of Prof. Jixian Zhang from National Quality Inspection and Testing Center for Surveying and Mapping Products (QICS) for Vice President of FIG. I have been in acquaintance with Prof. Jixian Zhang since he joined Chinese Academy of Surveying and Mapping (CASM), the top and biggest comprehensive scientific research institution on surveying and mapping in China as a professor in 1997 and he was subsequently promoted to the rank of the general director of CASM in 2006. I am deeply impressed with his leading ability, pioneer research, and fine personal attributes.

Prof. Jixian Zhang is a chief leading scientist in surveying mapping and geoinformation in China, elected initially to "National program for special support of eminent professionals", titled with "National Excellent Scientist", "National Outstanding Professional and Technical Personnel", "Scientific Leading Talent of National Administration of Surveying Mapping and Geoinformation", and presided 50+ national scientific projects. He has won 5 prestigious National Award and 8 Provincial Award of Science and Technology progress of China, one Geospatial World Excellence Awards, and 20 items of patent for invention, having collaborative published over 330 articles in reputation journals and 7 books. He also devote himself in international cooperation and academic exchanges, for instance, he has organizing 15 international conference/workshop and making 60+ international invited presentations, especially as a keynote speaker in general meeting in FIG 2016 Working Week in Christchurch. He is extremely enthusiastic in furthering and promoting the geomatics profession in the community both locally and overseas, for example, he is the Chair of ISPRS WG VII/6, Vice President of Chinese society for Surveying, Mapping and Geoinformation, Chinese Society for Land Science.

Besides his achievement in the geomatics profession, he has shown enormous management and leadership abilities. He is a born leader equipped with integrity, commitment, dedication, decisiveness, accountability, foresight and aspiration. He always motivates and cares for his staff and has successfully established an excellent team spirit with his colleagues. Coupled with his righteousness and fairness, he has earned the trust and respect from his staff. He is resourceful in coping with work pressure and managing crisis while

地址：北京市海淀区莲花池西路28号国家测绘地理信息局内

邮编：100830 电话：63881401 传真：63881410 网址：[www.csgpc.org](http://www.csgpc.org)



# 中国测绘地理信息学会

Chinese Society for Surveying Mapping and Geoinformation

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maintaining his composure and performance. Through his obliging and modest character and excellent communication and linguistic skills, he communicated efficiently with his counterparts. He can resolve contentious issues in a tactful manner thereby reaching an amicable solution between parties concerned.

Consequently Prof. Jixian Zhang is overwhelmed with passion in all the work he assumed and always comes up with outstanding results. He is full of initiatives and innovation, has tremendous confidence in all his undertaking and makes critical and acute judgment. He is reliable and can be entrusted with any challenging assignment.

I make the highest recommendation to the nomination of Prof. Jixian Zhang for the Vice President of FIG. CSSMG will give its full support for Prof. Jixian ZHANG to play an actively leading role in FIG. I have every confidence that he will make great contribution to the FIG work and surveyor profession worldwide.

Kind Regards.

Weisen Li

President

Chinese Society for Surveying, Mapping  
and Geoinformation(CSSMG)



**Nomination Template**  
**Vice President**  
**2019-2022**

<b>Nominee:</b>	
Name:	Jixian ZHANG
Member Association:	Chinese Society for Surveying, Mapping and Geoinformation (CSSMG)
Country:	China
Contact address:	No.28 Lianhuachixi Road, Haidian District, Beijing, 100830, China
Email address:	zhangjx@sbsm.gov.cn
Age:	52
Educational background & Qualifications:	<p>Post Doctor, Huazhong University of Science and Technology, Image Analysis and Understanding, 1995-1997.</p> <p>PhD, Wuhan Technical University of Surveying and Mapping, Photogrammetry and Remote Sensing, 1991-1994.</p> <p>MSc, Wuhan Technical University of Surveying and Mapping, Geographic Information System, 1988-1991.</p> <p>BSc, Wuhan Technical University of Surveying and Mapping, Photogrammetry and Remote Sensing, 1984-1988.</p>
Field of surveying discipline	Digital Photogrammetry, Remote Sensing, Geographic Information System, Image information Processing, Point Cloud Processing.
History of Employment:	<p>General Director, Professor, National Quality Inspection and Testing Center for Surveying and Mapping Products (QICS). Since 2016.</p> <p>President, Professor, Chinese Academy of Surveying and Mapping, 2006-2016.</p> <p>Director, Professor, National Center for International Research on Surveying, Mapping and Geoinformation, 2012-2016.</p> <p>Vice President, Professor, Chinese Academy of Surveying and Mapping, 2002-2006.</p> <p>Director, Professor, Photogrammetry and Remote Sensing Institute, Chinese Academy of Surveying and Mapping, Since 1997-2002.</p> <p>Person in Charge, Statistical Analysis Working Group, First China Nationwide General Survey of Geographic Conditions, 2013-2016.</p> <p>General Engineer and Head of Project Department, National "Western China Mapping Project", 2006-2011.</p>
- Current position	
- Previous position(s)	



**Nomination Template**  
**Vice President**  
**2019-2022**

<b>Nominee:</b>	
Position of Trust: - Current position(s)	<p><b>International and Domestic Academic Organizations</b></p> <p>Vice President, Chinese Society for Surveying, Mapping and Geoinformation, since 2005.</p> <p>Chair, International Society for Photogrammetry and Remote Sensing WG VII/6: Remote Sensing Data Fusion, since 2004.</p> <p>Committee Member, Chinese National Committee of International Society for Digital Earth, since 2012.</p> <p>Expert Panel Member, National Remote Sensing Center of China, since 1998.</p> <p>Member, National Consultive Committee for Land and Resource informatization, Ministry of Land Resources, 2016-2020.</p> <p>Ground System Specialist, High Resolution Earth Observing System of National Mega Project in China since 2011.</p> <p>Committee Member, State Key Lab for Information Engineering in Surveying Mapping and Remote Sensing since 2006.</p> <p><b>Institutes and Universities</b></p> <p>Professor, Chinese Academy of Surveying and Mapping, China.</p> <p>Doctoral Tutor and Adjunct Professor, Wuhan University, China.</p> <p>Doctoral Tutor and Adjunct Professor, Central South University, China.</p> <p>Doctoral Tutor and Adjunct Professor, China University of Mining and Technology, China.</p> <p>Doctoral Tutor and Adjunct Professor, China University of Geosciences, China.</p> <p>Doctoral Tutor and Adjunct Professor, Huazhong University of Science and Technology, China.</p> <p>Doctoral Tutor and Adjunct Professor, Shandong University of Science and Technology, China.</p> <p><b>International and Domestic Academic Journals</b></p> <p>Editor-in-Chief, International Journal of Image and Data Fusion.</p> <p>Editorial Board Member, International Journal of Geoinformatics.</p> <p>Editorial Board Member, International Journal of Applied Earth Observation and Geoinformation.</p>





## Nomination Template Vice President 2019-2022

<p>- Previous position(s)</p>	<p>Deputy Editor-in-Chief, Bulletin of Surveying and Mapping.</p> <p>Deputy Editor-in-Chief, Journal of Acta Geodaetica et Cartographica Sinica.</p> <p>Deputy Editor-in-Chief, Journal of Remote Sensing.</p> <p>Vice President, China Association for Geographic Information Society, 2009-2017.</p> <p>Vice President, Beijing Society for Surveying and Mapping, 2005-2015.</p> <p>Executive Council Member, Chinese Society for Land Science, 2008-2017.</p> <p>Council Member, Innovation Method Society of China, 2010-2016.</p> <p>Member, National Remote Sensing Standardization Technical Committee (SAC/TC327).</p> <p>Member, National Geographic Information Standardization Technical Committee (SAC/TC230).</p> <p>Representative, Association for Science and Technology of the 7<sup>th</sup> National People's Congress of China.</p> <p>Consultant, TA No. 3657-PRC: PRC-GEF Partnership on Land Degradation in Dryland Ecosystems.</p> <p>Doctoral Tutor and Honorary Professor, University of Nottingham, UK, 2012-2015.</p> <p>Editor-in-Chief, Remote Sensing Information, 2004-2016.</p> <p>Editor-in-Chief, Science of Surveying and Mapping, 2008-2016.</p>
<p>FIG Positions/Responsibilities:</p> <p>- Current position(s)/ responsibilities</p> <p>- Previous position(s)/ responsibilities</p>	<p>None.</p> <p>None.</p>
<p>Other activities in FIG</p>	<p>As a national delegate of China, attended the FIG Working Week in Israel in 2009.</p> <p>As a keynote speaker, delivered a presentation in plenary session in 2016 FIG Working Week in New Zealand.</p> <p>As a national delegate of China, attended the FIG Working Week in Finland in 2016.</p>



Nomination Template  
**Vice President**  
2019-2022

Nominee's statement	
My motivation to be FIG Vice President:	<p>Further and prompt geomatics profession depending my long-year professional and administrative management background.</p> <p>Strengthen communication and cooperation among surveyors worldwide. Make FIG umbrella more attractive to surveyors esp. for the young surveyors in the world.</p> <p>China could make more contribution to FIG and the Surveyors with rapid progress in recent years. Meanwhile, I would like offer all my knowledge, full passion and adequate ability to serve FIG.</p> <p>Strongly recommended by National Administration of Surveying, Mapping and Geoinformation.</p> <p>Familiar with FIG management mode and operation rules.</p>
What I can offer in support of FIG's aims and objectives:	<p>I can make contributions to: the sharing of advanced technologies with other countries; and the help of knowledge transfer to and capacity building of developing countries in related professional fields.</p> <p>Attract more researchers and volunteers to take part in FIG activities.</p> <p>Share advanced techniques and management ideas to FIG and also bring advanced techniques and management ideas to China.</p>
My key skills for the Vice Presidency and FIG Council:	<p>Research and teaching in photogrammetry and remote sensing, land surveying, cadastral surveying and mapping, and management of academic programs and organizations.</p> <p>Communication and cooperation with UN-GGIM and international sister organizations.</p> <p>Experiences in managing international journals.</p> <p>Experiences in managing research projects.</p>
Any other supporting information:	<p>I will abide by all rules and regulations of FIG and work actively and fairly to promote FIG's further development.</p>






## Nomination Template Vice President 2019-2022

<b>Nominator</b>	
Name of Member Association:	Chinese Society of Surveying, Mapping and Geoinformation (CSSMG)
Name of Proposer:	Weisen LI
Position in Association	President
Contact address:	No.28 Lianhuachixi Road, Haidian District, Beijing, 100830, China
Email address	liws@sbsm.gov.cn
<b>Proposer's Statement</b>	
Why the Association wants to propose the Nominee	Prof. Jixian ZHANG has built up his reputation in China through many years' research work in the fields of photogrammetry, remote sensing and GIS, and made remarkable contributions to the development of the surveying profession in China. He has many experiences in the international and domestic academic and professional communities and also been interested in international professional activities. As General Engineer of the National "Western China Mapping Project", he made great contribution to the project which received Geospatial World Excellence Awards in 2014. Also, in view of his special, personal and meritorious contributions in ISPRS, he got recognition from ISPRS in 2008.
What support (financial, administrative and others) can the Association provide to the Nominee if elected Vice President	CSSMG will give its full support for Prof. Jixian ZHANG to play an actively leading role in FIG.
Any other supporting information:	None
Name of Seconder:	Qian WANG
Position in Association	Deputy Secretary -General
Contact address:	No.28 Lianhuachixi Road, Haidian District, Beijing, 100830, China
Email address	wangqian@sbsm.gov.cn



Nomination Template  
Vice President  
2019-2022

<b>Signed</b> I hereby certify the above is true and correct*	
Nominee	 Jixian ZHANG Vice President of CSSMG General Director of QICS
Proposer:	 Weisen LI President of CSSMG
Seconder:	 Qian WANG Deputy Secretary -General of CSSMG
Date:	

\* Nominee is requested to initial every page of the nomination template

Clarifying Notes:	<ul style="list-style-type: none"><li>• The Nominator (Proposer and Seconder) must be principal officers of the FIG Member Association (by principal officers, it is construed as President or Chairperson, Deputy or Vice President/Chairperson, Secretary General or Chief Executive Officer or equivalent position)</li><li>• The Nomination Template must be accompanied by a letter of support from either the President or the Principal Officer of the nominating FIG Member Association</li><li>• Nominating FIG Member Association should ascertain the availability of the nominee over the duration of the term of office</li><li>• Nominee should preferably have prior or current responsibilities within and working knowledge of FIG, its activities, aims and objectives</li><li>• Nominee and Nominator are requested to pay attention to the Nominee's Statement and the Proposer's Statement</li></ul>
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## Nomination Template

# President

2019-2022

Nominee	
Name:	Brian John COUTTS
Member association:	New Zealand Institute of Surveyors (NZIS)
Country:	New Zealand (NZ)
Contact address:	1 Warwick Street Balaclava Dunedin New Zealand
Email address:	brian.coutts@otago.ac.nz
Age:	70
Degrees and educational background:	PhD (Surveying) (University of Otago, NZ) MSc (Resource Management) (Lincoln University, NZ) BSc (Geography) (University of Canterbury, NZ) Diploma in Land Surveying (University of Otago, NZ) Diploma in Management (NZ Inst Mgmt) Fellow, NZIS Fellow (eminent professional) RICS Fellow, Royal Geographical Society Member, NZ Planning Institute.
Employment history:	
- current position	Retired (31:12:17) <b>Honorary Senior Lecturer</b> , School of Surveying, University of Otago, New Zealand.
- previous position(s)	1992/2017 - <b>Senior Lecturer</b> , School of Surveying, University of Otago, New Zealand. 2006/2009 - <b>Director</b> , Environmental Science post graduate programme, (secondment), University of Otago 1993/2000 – <b>Director</b> , Resolutions Mediation Services Ltd 1990/92 - <b>Director</b> , Constantine Coutts Ltd, Planning and Surveying Consultants. 1987/90 - <b>Asst Regional Manager</b> , NZ Dept of Conservation. 1982/87 - <b>Senior Planner</b> , NZ Dept of Lands and Survey. 1970/80 - <b>Surveyor</b> , NZ Dept of Lands and Survey.



## Nomination Template

# President

2019-2022

<p>Positions of trust:</p> <ul style="list-style-type: none"> <li>- current</li> </ul>	<p><b>Justice of the Peace</b>            Member, <b>Constitution Board</b>, RICS            Member, <b>Editorial Board</b>, Survey Review</p> <p><b>Trustee</b>, Otago Masonic Charitable Trust.  <b>President</b>, Otago Centre, Royal New Zealand Pipe Band Assn.  <b>Drum Major</b>, Pipes and Drums of Christchurch City.</p>
<ul style="list-style-type: none"> <li>- previous</li> </ul>	<p><b>Deputy Dean</b>, School of Surveying, University of Otago, NZ (2007-12).  <b>President</b>, Commonwealth Association of Surveying and Land Economy (<b>CASLE</b>) (2004-2007)  <b>Management Board</b>, CASLE (1998-2007)  <b>Chair</b>, Cadastral Surveyors <b>Licensing Board</b> of NZ (2002-10)            Member, Council of <b>Reciprocating Surveyors Boards</b> of Australia and New Zealand (2002-10)  <b>President</b>, NZIS (1999-2001)            Member, <b>RICS Geomatics Faculty Board</b> (2008-2010)  <b>Councillor</b> NZIS (1991-2003)  <b>Conference Treasurer</b>, NZ Planning Institute Conference, Dunedin, 1991  <b>Conference Secretary</b>, NZIS Annual Conference, Greymouth 1984.  <b>Secretary</b>, Canterbury Branch, NZIS (1978/80)            Member, Canterbury <b>Branch Executive</b>, NZIS (1975/80)</p> <p>Management Board, Royal NZ Pipe Bands Assn (RNZPBA).            President, Otago Centre, RNZPBA (1995-99).            District Grand Master, Wickliffe District, Freemasons NZ (2006-08).            Provincial Grand Master, Royal Order of Scotland (NZ South) (2016 – present)            President, Champions of Otago Pipe Band (2005-10).            President, Pipe Bands Foundation of NZ (1996-2003).            Director, Pipe Bands Foundation of NZ (1991-2003).            Drum Major, Champions of Otago Pipe Band (1989- 2003).            Founding Editor, NZ Pipeband magazine of the RNZPBA (1983-91).            Editor, New Zealand Surveyor.            Editor, Trans Tasman Surveyor.            Editor, Survey Quarterly.</p>
<p>Positions in FIG</p> <ul style="list-style-type: none"> <li>- current</li> </ul>	<p><b>Chair</b>, Commission 1, FIG (2015-2019).  <b>Co-Chair ACCO</b> (2015/16)</p>



## Nomination Template

# President

2019-2022

	<p>Member <b>ACCO</b> (2013-2019)  <b>Representative</b>, School of Surveying, University of Otago, Dunedin, New Zealand (Academic Member)  <b>Vice Chair</b> and <b>Working Group Chair</b>, Commission 1 (2011 - 2014).</p>
- previous	<p>Member, <b>Task Force on Commissions</b> 2014/17.  <b>ACCO Representative to Council</b> 2015/16  <b>Chair</b>, Working Group on <b>Voting Rights</b> 2011/12  <b>Vice Chair</b>, Commission 1 2010/14  <b>Instigator</b> and <b>campaign leader</b> for the FIG WW in Christchurch (2010 – 2014).</p>
Other activities in FIG	<p>National delegate <b>Commission 1</b> 2005 – present  National delegate <b>Commission 8</b> 1994 – 2005  NZ Head of Delegation 1998, 2003, 2007-11</p>
Field of surveying discipline	<p>Protected areas and statutory land use planning  Professional practice and standards  Cadastral Surveying  Mediation  Issues in Environmental Science</p>
<b>Nominees statement</b>	
Why I want to be the President of FIG	<p>There are 3 levels of operation of FIG; <b>governance</b> (the Council), <b>management</b> (the Commissions) and <b>administration</b> (the Office). Recent investigations have suggested that the management level (the Commissions) operates optimally. However, the other two levels can and should be improved.</p> <p>I would like the opportunity to cooperatively develop and lead improvements <b>to refresh the governance and administration</b> of FIG.</p> <p><b>I believe this is the particular role of the President.</b></p>
What I can offer to FIG in support of its aims and objectives	<p>There are 2 important issues facing FIG. The first is <b>strategic leadership</b> and governance in a time of rapid technological and organizational transformations of the activities and roles of members of FIG Member Associations. This must come from the FIG Council. As a professional planner and mediator I would like to improve the efforts already made in positioning FIG for the future as a significant contributor to our sustainable world in the area of land management information.</p>



## Nomination Template

# President

2019-2022

	<p>The second is related to the first in that in order to achieve our goals we need to find <b>greater resources</b> to support the <b>FIG office</b>. This requires improving the income of FIG, which has been an ongoing concern for the Council and the Member Associations for some time.</p> <p>That is, <b>I stand for sound governance and adequately resourced administration</b>. The latter, in particular, is a major challenge and must be not only addressed but pursued with determination.</p> <p>While there may be concern about increased travel costs for a President so far from Europe. This reinforces the Euro-centric bias of FIG. It would be my intention, while appearing as required at important functions wherever and whenever they occur, to utilize the expertise of the Vice Presidents, raising their status, and if necessary and appropriate, Commission Chairs.</p> <p>However, my more immediate concern would be to be available to the <b>Asia-Pacific region</b>, and specifically <b>Oceania</b> where the greatest consequences of global environmental impacts will be felt most.</p> <p>I did this successfully during my terms as Vice President (Pacific) and President of CASLE itself between 1998 and 2007. This was during troubled times in Fiji, the recognised centre of Pacific activities.</p>
My key skills	<p>Decades of successful <b>not-for-profit governance</b>; <b>Cooperative</b> management style; Highly experienced in working with a <b>diversity</b> of nationality, gender and occupational groups; <b>Mediation</b> practice experience; <b>Critical analysis</b> and <b>problem solving</b>; High level of <b>integrity</b>, <b>listening</b> ability, and <b>communication</b>. <b>Pragmatism</b>.</p>
Any other supporting information and comments:	<p>In particular, I represent a <b>small non-European country</b>, one that generally “fights above its weight” in international sporting, cultural, political and intellectual affairs. New Zealanders are world-recognised achievers. To date New Zealand has not held the supreme office in FIG.</p> <p>I combine that kiwi spirit with traditional Scottish values.</p>





## Nomination Template

# President

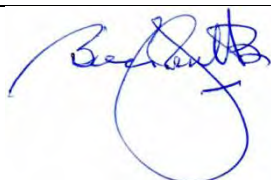
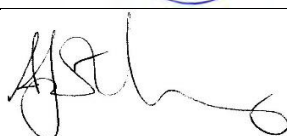
2019-2022

<b>Nominator</b>	
Name of member association	New Zealand Institute of Surveyors - NZIS
Name of Proposer/Contact:	Andrew Stirling
Position in Association	Chairman of the Board
Contact address	PO Box 5304, Lambton Quay Wellington, New Zealand
Email address	andrewstirling@surveyors.org.nz
<b>Nominator's statement</b>	
Why the association wants to nominate Nominee	<p><b>Vision for Change.</b> NZIS supports the candidates view of the strategic leadership and change required to position FIG for optimum performance. Brian is superbly qualified to lead FIG to enhance its relevance and achieve its goals.</p> <p><b>Governance Experience.</b> Brian has an extensive and diverse governance CV. He has provided excellent leadership to many organisations within the surveying sector in NZ and internationally.</p> <p><b>Commitment.</b> Brian has demonstrated his commitment to FIG in a range of roles for over 20yrs while balancing other demands on his time. He knows a great deal about FIG and the context it operates in.</p> <p><b>Collaborative style – outcomes focus.</b> Brian is collaborative in style and focused on achieving successful outcomes.</p> <p><b>Diversity.</b> NZIS supports diversity of Presidential candidates. Brian brings a strong world view and a focus on the rapidly changing Asia Pacific Region, including the Pacific Islands. Brian will relate well to all member organisations.</p>
What support (financial, administrative and others) can the Association provide to the Nominee if elected President	Up to NZ\$5000 per year towards airfares and accommodation.
Any other supporting information:	Nil
Name of Seconder:	Rebecca Strang



**Nomination Template**  
**President**  
**2019-2022**

Position in Association	President of NZIS
Contact address:	PO Box 5304, Lambton Quay Wellington, New Zealand
Email address	rebecca.strang@surveyors.org.nz

<b>Signed</b> I hereby certify the above is true and correct*	
Date	11/12/2017
Nominee	
Nominator	

\* Nominee is requested to initial every page of the nomination template

Clarifying Notes:	<ul style="list-style-type: none"><li>• The Nominator (Proposer and Seconder) must be principal officers of the FIG Member Association (by principal officers, it is construed as President or Chairperson, Deputy or Vice President/Chairperson, Secretary General or Chief Executive Officer or equivalent position)</li><li>• The Nomination Template must be accompanied by a letter of support from either the President or the Principal Officer of the nominating FIG Member Association</li><li>• Nominating FIG Member Association should ascertain the availability of the nominee over the duration of the term of office</li><li>• Nominee should preferably have prior or current responsibilities within and working knowledge of FIG, its activities, aims and objectives</li><li>• Nominee and Nominator are requested to pay attention to the Nominee's Statement and the Proposer's Statement</li></ul>
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11 December 2017

Dear FIG Member Organisations,

**Candidacy of Brian John Coutts for the office of President of FIG**

I refer to the upcoming election of officers that will occur at the FIG General Assembly on the 6<sup>th</sup> and 11th May 2018 in Istanbul, Turkey.

We seek your support for the above candidate as we believe that he is best placed to take the organisation forward.

There are many challenges facing FIG today and Brian Coutts has done the groundwork and been involved at grassroots, technical and governance levels for over 20 years, long enough to have developed a deep understanding of what FIG does. Long enough also to understand that changes to governance and administration of FIG are required to refresh the organisation to meet the challenges of the future.

This candidate is offering to cooperatively develop and lead change aimed at making FIG more effective in its role going forward.

New Zealand surveyors are renowned for their practical and objective approach to problem-solving. Brian Coutts has worked in the areas of cadastral surveying, protected areas and statutory land use planning and environmental science, and has skills in mediation and professional practice and standards. He has spent 25 years on the staff of the University of Otago National School of Surveying, one of the world's premier institutions for surveyor education.

Brian has worked across government, private practice and academic sectors during his career.

He has spent over 30yrs as an advocate and leader for surveyors within NZ and internationally. Some of the positions held within professional bodies include:

- NZIS - President, Councillor, Fellow, Editor, Secretary
- Cadastral Surveyors Licensing Board of New Zealand - Chairman

- Commonwealth Association of Surveying and Land Economy (CASLE) - President
- Royal Institution of Chartered Surveyors (RICS) – Constitution Board member and Geomatics Faculty Board member
- FIG - Chair Commission 1, Chair Working Group on Voting Rights, Task Force on Commissions, Co-Chair ACCO, NZ delegate Commissions 1 and 8

Brian would provide an opportunity to raise the FIG profile in the Asia Pacific region.

NZIS is a strong supporter of and contributor to FIG. We believe in the value of FIG as the global voice for the profession and we want FIG to operate optimally and to represent everyone.

It is time a New Zealander held this role and Brian Coutts is the right person to be the next President of FIG.

Warm regards



Andrew Stirling, NZIS Board Chair



Rebecca Strang, NZIS President

DVW e.V.  
Prof. Hansjörg Kutterer • c/o BKG • Richard-Strauss-Allee 11 • 60598 Frankfurt am Main

Ms. Louise Friis-Hansen  
FIG Manager  
FIG - International Federation of Surveyors  
Kalvebod Brygge 31-33  
DK-1780 Copenhagen V

**Kontakt**

Prof. Dr.-Ing. Hansjörg Kutterer  
DVW-Präsident  
c/o Bundesamt für  
Kartographie und Geodäsie  
Richard-Strauss-Allee 11  
60598 Frankfurt am Main  
Tel. +49 (0)69 6333-225  
Fax +49 (0)69 6333-235  
hansjoerg.kutterer@dvw.de

2017-10-16

**Nomination template of DVW for Prof. Dr. Rudolf Staiger as FIG President 2019-2022**

Distinguished FIG Manager Louise Friis-Hansen, dear Louise,

attached please find our official nomination template for Prof. Dr. Rudolf Staiger as FIG President 2019-2022.

I hereby declare the official support of DVW for this candidateship and in case of his election during the next period.

I would appreciate a short confirmation of my announcement.

Yours Sincerely



Prof. Dr. Hansjörg Kutterer  
Präsident


GESCHÄFTSSTELLE  
Dipl.-Ing. Christiane Salbach  
Feierabendstraße 12  
79235 Vogtsburg  
Tel. +49 (0)7662 949-287  
Fax +49 (0)7662 949-288  
christiane.salbach@dvw.de  
www.dvw.de

PRÄSIDIUM  
Prof. Dr.-Ing. Hansjörg Kutterer  
Dipl.-Ing. Christof Rek  
Dr.-Ing. Jens Riecken  
Dipl.-Ing. Thomas Paul  
Dipl.-Ing. Susanne Kleemann  
Prof. Dr.-Ing. Jürgen Müller  
Dipl.-Ing. Eberhard Ziem

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Nomination Template  
**President**  
2019-2022

Nominee	
Name:	 Prof. Dr.-Ing. Rudolf STAIGER
Member association:	DVW – Gesellschaft für Geodäsie, Geoinformation und Landmanagement e.V (DVW – Society for Geodesy, Geoinformation and Landmanagement)
Country:	Germany
Contact address:	University of Applied Sciences Bochum Department of Geodesy Lennershofstrasse 140 44 801 Bochum D-Germany
Email address:	rudolf.staiger@hs-bochum.de
Age:	61
Degrees and educational background:	<p><u>Degrees:</u> Prof. Dr.-Ing., Diplom-Ingenieur (TU) (geodesy, University of Karlsruhe, Germany), Bachelor of Business Administration (BBA, OEKREAL, Zuerich, Switzerland)</p> <p><u>Educational background</u> 1976-1982: studies of geodesy (University Karlsruhe and École Nationale des Sciences Géographiques, IGN, Paris, France) 1983-1987 : Scientific Assistant, Geodetic Institute, University Karlsruhe</p>



**Nomination Template**  
**President**  
**2019-2022**

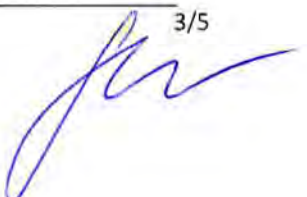
Employment history: - current position	Since 2005: Professor for Surveying Engineering University of Applied Sciences Bochum Germany
- previous position(s)	1983-1987: Scientific Assistant, Geodetic Institute, University Karlsruhe 1988-1994: Systems Engineer, Product Manager and Department Manager for Industrial Metrology KERN, Aarau, CH (later LEICA- GEOSYSTEMS) 1994-2005: Professor for Surveying Engineering, University of Essen, Germany
Positions of trust: - current	
- previous	2009-2016: Vice-President of the University of Applied Sciences Bochum for Research & Transfer 2007- 2010: Member of ISO-Committee TC 172 Sc 6 Geodetic Instruments Since 2003: Member of the DIN-Kommission 17123- "Geodätische Instrumente" 2002-2010: Chair of the Commission 3 of DVW (National equivalent to FIG-Commission 5)
Positions in FIG - current	Since 2015 Vice President (re-elected for 2 <sup>nd</sup> term)
- previous	2011-2014 Vice President (1 <sup>st</sup> 4-years-term) 2007-2010: Chair of Commission 5 2003-2006: Chair of the working group 5.1
Other activities in FIG	2009-2010: Chief Editor for Peer Review System Sydney 2010-Congress 2002-2011: National Delegate for Commission 5
Field of surveying discipline	Surveying Instruments, Calibration, Geodetic Metrology, Close Range Coordinate Measurements Laser Tracking, Terrestrial Laser Scanning
<b>Nominees statement</b>	



**Nomination Template**  
**President**  
**2019-2022**

Why I want to be the President of FIG	FIG is the only organization that is representing Surveying and Geodesy as a profession worldwide. In the times of "globalization", this role of representing our profession is extremely important. Therefore, FIG needs a proactive and experienced leadership in order to fulfill the mentioned task.
What I can offer to FIG in support of its aims and objectives	<p>I' am active in FIG since almost 18 years. As Chair of one of the Technical Commissions, as Chief Editor of the Peer Review for Sydney 2010 and as Vice-President I know our organization very well and from different perspectives.</p> <p>Additionally I offer strong experience</p> <ul style="list-style-type: none"><li>- in academic teaching &amp; research (more than 20 years)</li><li>- in industrial work (6 years with a leading manufacturer of surveying equipment)</li><li>- in organizing events like Seminars (f. e. Terrestrial Laser Scanning)</li><li>- in bringing young people into our profession</li><li>- with my very successful Commission-work in FIG</li><li>- with my very successful work as Vice President of FIG</li><li>- with my broad knowledge of our profession</li></ul>
My key skills	<p>Languages: German (native language) French (Fluent) English (very good)</p> <p>Experience of work in NGOs (like DVW, ISO, etc.)</p> <p>Experience of Leadership from public and private employment.</p> <p>Ability to listen and to find compromises</p>
Any other supporting information and comments:	

<b>Nominator</b>	
Name of member association	DVW – Gesellschaft für Geodäsie, Geoinformation und Landmanagement e.V.

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**Nomination Template**  
**President**  
**2019-2022**



Name of Proposer/Contact:	Prof. Dr.-Ing. Hansjörg Kutterer
Position in Association	President of DVW
Contact address	DVW Office C/O Dipl.-Ing. Christiane Salbach Feierabendstr. 12 D-79235 Vogtsburg GERMANY
Email address	<a href="mailto:hansjoerg.kutterer@dvw.de">hansjoerg.kutterer@dvw.de</a>
<b>Nominator's statement</b>	
Why the association wants to nominate Nominee	<p>Rudolf Staiger is nationally and internationally well reputed as a highly qualified expert not only in the field of surveying instruments.</p> <p>Moreover, Staiger has gained a strong FIG experience and knowledge not only as a Vice-President in the periods 2010-2014 + 2015-2018 but also as the Chair of Commission 5 (2007-2010), which was running in parallel to his chairmanship of the DVW Study Group "Measurement Methods and Systems" on both a scientific and practical level.</p> <p>His management skills are fundamental for the internal and external perception of FIG.</p> <p>DVW appreciates very much Staiger's capability of promoting communication between the FIG membership institutions and the experts standing behind the national associations.</p> <p>As a promotion strategy for our profession Staiger accentuates the close connection between global challenges and the expertise of the surveying branch.</p>
What support (financial, administrative and others) can the Association provide to the Nominee if elected President	DVW will offer any necessary personal, financial and institutional support to the nominee as we have done in the past.
Any other supporting information:	./.
Name of Seconder:	Dr.-Ing. Jens Riecken
Position in Association	Vice President of DVW

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## Nomination Template President 2019-2022

Contact address:	DVW Office as noted above
Email address	<a href="mailto:jens.riecken@dvw.de">jens.riecken@dvw.de</a>

<b>Signed</b> I hereby certify the above is true and correct*	
Date	16 <sup>th</sup> of October 2017
Nominee	
Nominator	

\* Nominee is requested to initial every page of the nomination template

Clarifying Notes:	<ul style="list-style-type: none"><li>• The Nominator (Proposer and Seconder) must be principal officers of the FIG Member Association (by principal officers, it is construed as President or Chairperson, Deputy or Vice President/Chairperson, Secretary General or Chief Executive Officer or equivalent position)</li><li>• The Nomination Template must be accompanied by a letter of support from either the President or the Principal Officer of the nominating FIG Member Association</li><li>• Nominating FIG Member Association should ascertain the availability of the nominee over the duration of the term of office</li><li>• Nominee should preferably have prior or current responsibilities within and working knowledge of FIG, its activities, aims and objectives</li><li>• Nominee and Nominator are requested to pay attention to the Nominee's Statement and the Proposer's Statement</li></ul>
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