

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



International Federation of Surveyors

General Assembly

AGENDA AND APPENDICES

02 and 06 May 2016

Horncastle Arena and Addington Raceway

Christchurch, New Zealand

INTERNATIONAL FEDERATION OF SURVEYORS**FIG 39th GENERAL ASSEMBLY****02 and 06 May 2016****Horncastle Arena (HA) and Addington Raceway (AR) - Christchurch, New Zealand****PROGRAMME**

Monday, 02 May 2016		
Horncastle Arena and Addington Raceway - Christchurch, New Zealand		
Monday	09:00-12:30	General Assembly, First Session
02 May	13:30-16:00	
	Plenary Hall, HA	
Tuesday, 03 May – Thursday, 05 May 2016		
FIG 2016 Working Week		
Horncastle Arena and Addington Raceway - Christchurch, New Zealand		
www.fig.net/fig2016		
Tuesday, 03 May – Thursday, 05 May 2016		
FIG 2016 Working Week Exhibition		
Horncastle Arena - Christchurch, New Zealand		
www.fig.net/fig2016		
Tuesday	14:00-15:30 and 16:00-	Director/Surveyor General Forum, Chaired by
3 May	17:30	Director General Peter Mersi, LINZ and Anders
	Silk room 2, AR	Sandin, Lantmäteriet.
Wednesday 4	12:45-14:00	FIG Task Force on Commission Structure – open to all FIG members to discuss the proposal paper presented at the General Assembly session 1.
May	Concourse Room, HA (Bring your lunch)	
Wednesday 4	14:00-15:30	Corporate Members Meeting
May	Silk Room 4	
Wednesday	17:30-18:30	Annual Meetings of FIG Commissions
04 May	AR	
Thursday 5	11:00-12:30	FIG Member Associations Forum
May	Terror of Love Lounge 2, AR	This session is reserved for Presidents or Heads of delegation (or their representatives) of member associations to discuss issue of their common interest. There will be a possibility to discuss the proposal on Commission Structure. By invitation only
Thursday 5	14:00-15:30	Academic Members Forum joint with FAO
May	Concourse Room, HA	
Tba	Board Room	Task Force on Scientific Journal meeting

Friday 06 May	08:30 – 10:30 Concourse Room, HA	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 06 May	11:00–12:30 13:30-15:00 Plenary Hall, HA	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 2017, MIL and MAKLI, Finland.

For full Working Week programme check: <http://www.fig.net/fig2016/program.htm>

FIG 39th GENERAL ASSEMBLY

List of Agenda Items

Monday, 02 May, 09:00-12:30 and 13:30-16:00

1. OPENING PROCEEDINGS	5
2. ROLL CALL	5
3. APPOINTMENT OF TELLERS.....	6
4. ADOPTION OF THE AGENDA	6
5. ADOPTION OF THE MINUTES OF THE 38 th GENERAL ASSEMBLY	6
6. MEMBERSHIP	6
6.1. Admittance of new Member Associations	6
6.1.1. Géographie, Topographie, Hydraulique, Energie et Construction (GEOTHECO) Uganda MA-10127	6
6.2. Other Member Association Issues.....	7
6.2.1. Reinstallment of Federación Argentina de Agrimensores (FADA) Argentina, MA-10002	7
6.2.2. Termination - College of Engineers and Surveyors of Puerto Rico (MA-10069) 7	7
6.2.3. Termination - The Irish Institution of Surveyors, (Ma-10042).....	7
6.3. Expulsion of member associations	8
6.4. Suspended status 2016	8
6.5. Other membership issues	9
6.5.1. Affiliate members.....	9
6.5.2. Corporate members	9
6.5.3. Academic members	9
6.5.4. Correspondents.....	10
7. PRESIDENT’S REPORT.....	10
8. COUNCIL RESPONSES FROM GENERAL ASSEMBLY 2015.....	10
9. REPORTS FROM FIG COMMISSIONS	11
10. REPORTS FROM FIG NETWORKS	11
11. REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS 2015- 2016	12
11.1. International Office of Cadastre and Land Records (Office International du Cadastre et du Régime Foncier) OICRF	12
11.2. International Institution for the History of Surveying and Measurement, Permanent Institution of FIG.....	12
12. REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2015-2016	12
13. REPORTS FROM THE FIG TASK FORCES (2015-2016)	13
13.1. Task Force on Real Property Markets.....	13
13.2. Task Force on Corporate Members.....	13
13.3. Task Force on Scientific Journal.....	13
13.4. Task Force on Commission Structure	14
14. CO-OPERATION WITH THE UNITED NATIONS AND THE WORLD BANK ...	14
15. LIAISON WITH INTERNATIONAL PROFESSIONAL ORGANISATIONS	15
16. FIG ACCOUNTS FOR 2015, AUDITOR’S REPORT AND BUDGETS 2016-2019 15	

17.	SUBSCRIPTION RATES FOR 2017 AND 2018	16
18.	ELECTION OF TWO VICE PRESIDENTS FOR 2017-2020 – PRESENTATION OF CANDIDATES.....	17
19.	POSTPONEMENT OF ELECTION OF COMMISSION CHAIRS ELECT FOR 2017-2018.....	18
20.	DECISION ON THE VENUE FOR FIG WORKING WEEK 2020 – PRESENTATION OF CANDIDATES.....	18
	Friday, 06 May, 08:30-10:30.....	20
21.	FIG PRESIDENT’S MEETING	20
	Friday, 06 May, 11:00–12:30 and 13:30-15:00.....	20
22.	ROLL CALL.....	20
23.	MEMBERSHIP.....	21
24.	ELECTION OF TWO FIG VICE PRESIDENTS FOR 2017-2020	21
25.	REPORTS FROM COMMISSIONS, NETWORKS, PERMANENT INSTITUTIONS, FIG FOUNDATION AND OTHER WORKING WEEK ACTIVITIES (IF ANY).....	22
26.	FIG TASK FORCES.....	22
	26.1. Real Property Markets.....	22
	26.2. FIG Corporate Members	22
	26.3. Scientific Journal.....	22
	26.4. Commission Structure	22
27.	REPORTS FROM ASSOCIATION, AFFILIATE, ACADEMIC AND CORPORATE MEMBERS FORUM (IF ANY)	23
28.	DECISION ON THE VENUE FOR 2020 FIG WORKING WEEK.....	23
29.	OTHER ISSUES	23
30.	REPORT ON THE FIG WORKING WEEK 2019 IN HANOI, VIETNAM	23
31.	REPORT ON THE FIG CONGRESS 2018 IN ISTANBUL, TURKEY	24
32.	REPORT ON THE FIG WORKING WEEK 2017 IN HELSINKI, FINLAND	24
33.	PRESENTATION OF CERTIFICATES OF APPRECIATION AND CLOSING CEREMONY.....	24

FIG 39th GENERAL ASSEMBLY

AGENDA

for the meetings to be held on Monday 02 May 2016 and on Friday 06 May 2016 in Hall 3 at the Horncastle Arena, Christchurch, New Zealand

MONDAY, 02 MAY

Monday, 02 May, 09:00-12:30 and 13:30-16:00
Conference Hall – Horncastle Arena
General Assembly, First Session

1. OPENING PROCEEDINGS

President Chryssy Potsiou to open the 39th General Assembly.

2. ROLL CALL

Vice President Rudolf Staiger to take the 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 **04 April 2016** 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/1cadnqGyWVECt806NSfextw42J-hK2uQ6NKvZDVkBmmU/viewform?usp=send_form

Since only member associations that have paid all their membership fees to the end of 2015 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 **12 April 2016**.

Appendix to items 2 & 22: Roll Call including information on member associations that are not allowed to vote at the General Assembly because of unpaid membership fees for 2015 and earlier.

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 association hosting the current (NZIS) and the host of the proceeding following General Assembly (MIL/MAKLI, Finland).

Motion: That the General Assembly appoints a representative from NZIS and MIL/MAKLI as tellers for this General Assembly.

Decision:

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 to all members.

Motion: That the agenda be adopted.

Decision:

5. ADOPTION OF THE MINUTES OF THE 38th GENERAL ASSEMBLY

Minutes have been circulated previously.

Appendix to item 5: Minutes of the General Assembly in Sofia, Bulgaria, May 2015, without appendices.

Motion: That the minutes be adopted as recorded.

Decision:

6. MEMBERSHIP

6.1. Admittance of new Member Associations

FIG Council has received one application for member association since the 38th General Assembly.

6.1.1. Géographie, Topographie, Hydraulique, Energie et Construction (GEOTHECO) Uganda MA-10127

Géographie, Topographie, Hydraulique, Energie et Construction (GEOTHECO), Uganda has applied for association membership. The association was established in 2008. Their total membership (all categories) is 42. Géographie, Topographie, Hydraulique, Energie et

Construction (GEOTHECO) 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 Géographie, Topographie, Hydraulique, Energie et Construction (GEOTHECO), Uganda

Motion: That the General Assembly admits Géographie, Topographie, Hydraulique, Energie et Construction (GEOTHECO), Uganda to become a member association of FIG.

Decision:

6.2. Other Member Association Issues

6.2.1. Reinstallment of Federación Argentina de Agrimensores (FADA) Argentina, MA-10002

FADA was unfortunately expelled at the General Assembly in 2014 due to lack of payment. FADA has announced that they would like to return to FIG and has agreed to pay old arrears together with the 2016 membership fee. FIG Council has decided to reinstall FADA and to bring this decision forward to the General Assembly.

Motion: That the General Assembly admits to reinstall Federación Argentina de Agrimensores (FADA) Argentina as member association.

Decision/Action:

6.2.2. Termination - College of Engineers and Surveyors of Puerto Rico (MA-10069)

The College of Engineers and Surveyors of Puerto Rico (MA-10069) has regrettably decided to resign from FIG. FIG Council is thankful that the College of Engineers and Surveyors of Puerto Rico has cleared all arrears and there are no outstanding dues. FIG thanks the association for all the work they have done throughout the years they have been member FIG looks forward to a time where they will find it fit to rejoin our global community.

Motion: That the General Assembly notes the resignation of the College of Engineers and Surveyors of Puerto Rico.

Decision:

6.2.3. Termination - The Irish Institution of Surveyors, (Ma-10042)

The Irish Institution of Surveyors has regrettably decided to resign from FIG, since they have merged with RICS, UK and will be represented through RICS from now on.

Motion: That the General Assembly notes the resignation of The Irish Institution of Surveyors

Decision:

6.3. Expulsion of member associations

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

- Croatian Geodetic Society, Croatia (MA-10020)
- Fiji Institute of Surveyors, Fiji (MA-10028) (are trying to pay)
- Licensed Surveyors Association in Palestine, Palestina (MA-10065)
- Cadastral Surveyors Association Liberia (MA-10119)

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 Sofia.

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 the:

- Croatian Geodetic Society, Croatia (MA-10020)
- Fiji Institute of Surveyors, Fiji (MA-10028) (are trying to pay)
- Licensed Surveyors Association in Palestine, Palestina (MA-10065)
- Cadastral Surveyors Association Liberia (MA-10119)

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

Decision/Action:

6.4. Suspended status 2016

In accordance with its administrative measures, FIG Council, has deferred to continue for 2016 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 2015, there remain existing sanctions on Iran, but this might change during 2016. 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 2016. 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 2017.

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

Decision:

6.5. Other membership issues

6.5.1. Affiliate members

The Council has admitted the following national agencies to become affiliate members:

- a) Survey and Land Registration Bureau, Kingdom of Bahrain (AF-20056)
- b) Cadastral Agency of Bulgaria, Bulgaria (AF-20058)
- c) The State Land Service of Latvia (AF-20057)
- d) LINZ – Land Information New Zealand (AF-20059)

Reinstallation:

- e) Dubai Municipality (AF-20032) – has returned as member of FIG and paid all arrears.

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

- a) ANZLIC, Australia (AF-20001)
- b) National Land Centre in the Ministry of Natural Resources, Rwanda (AF-20016)
- c) Alcaldía Mayor de Bogotá D.C., Colombia (AF-20046)

After these changes the number of Affiliate members is 47 from 44 countries.

6.5.2. Corporate members

- a) ISQ Portugal (CM-30051, Category F) has resigned
- b) COWI, Denmark ((CM 30011) has changed their membership to Category D.

After these changes the number of corporate members is now 22.

6.5.3. Academic members

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

- a) Ghent University Belgium (AC-40141)
- b) University West, Department of Engineering, Sweden (AC-40142)
- c) Papua New Guinea University of Technology (AC-40143)
- d) Polytechnic of Namibia, Department of Land and Property Sciences (AC-40144)

The Council has expelled following universities because of unpaid membership subscriptions:

- a) University of Botswana (AC-40010)
- b) University of Mines and Technology, Ghana (AC-40030)
- c) Universiti Teknologi Malaysia, Malaysia (AC-40041)
- d) Agricultural University of Cracow, Poland (AC-40054)
- e) University of Puerto Rico, Mayagüez Campus, Puerto Rico (AC-40055)
- f) Kingston University School of Surveying, United Kingdom (AC-40073)
- g) University of Prishtina Department of Geodesy, Kosovo (AC-40116)

The number of Academic Members after these changes is 90 from 54 countries.

6.5.4. Correspondents

The number of correspondents is unchanged from 2015, and amounts to one from Tonga.

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 Sofia, Bulgaria in May 2015.

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

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

Decision:

8. COUNCIL RESPONSES FROM GENERAL ASSEMBLY 2015

Minutes from FIG Member Association Forum 2015 were presented at the second General Assembly in Sofia, 21 May 2015. The following proposals were presented to the FIG Council.

1. Global Surveyors Day
 - 1.1. Establishment of a Global Surveyors Day, and that there will be a GA decision in New Zealand.
 - 1.2. Celebrations to be dedicated to a Surveyor of the Year and a topic from the broad field of surveying activities. Address to history group to suggest topics, and surveyors who may support the organisation of the events.
2. Improvements in the established relations between the member states
 - 2.1. Short information for every member association on FIG web site
 - 2.2. Link from FIG web site to the national web site
 - 2.3. Template information in all FIG languages
3. Changes and improvements in the management of FIG
 - 3.1. Visibility of the benefits of FIG Membership for the membership of national association
 - 3.2. FIG should provide support for countries with little experience in certain survey practices. Professional support and guidelines are needed for the developing countries and countries in crisis

FIG Council promised to get back to the General Assembly 2016 with a follow up and status on these issues.

Appendix to item 8: Minutes from the FIG Member Association Forum 2015

Motion: That FIG General Assembly notes the update and records its thanks to the participants of the Member Association Forum 2015 for their active role in FIG and constructive proposals.

Decision/Action:

9. REPORTS FROM FIG COMMISSIONS

Each Commission Chair has submitted a written report on their Commission activities since the FIG Working Week in Sofia. These reports include progress reports of the Commission working groups. Each Commission will hold a meeting during the Working Week (Wednesday 4 May, 17:30-18:30). Each Commission will give a short report on Commission activities to the General Assembly.

Appendices to item 9: Commission reports:

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

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:

10. REPORTS FROM FIG NETWORKS

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

Appendices to item 10: Network reports:

- 10.1 Standards Network
- 10.2 Regional Capacity Network
- 10.3 Young Surveyors Network

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

Decision:

11. REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS 2015-2016

11.1. 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 Kuala Lumpur. He will make a short report to the General Assembly.

Appendix to item 11.1: 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:

11.2. 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 Kuala Lumpur. IIHSM will make a short report to the General Assembly.

Appendix to item 11.2: 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:

12. REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2015-2016

Mr. John Hohol, President of the FIG Foundation has prepared a report on the FIG Foundation activities from June 2014 to March 2016. He will make a short report to the General Assembly.

Appendix to item 12: Report of the FIG Foundation activities 2015-2016 and Result 2015.

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 for their past year's work.

Decision:

13. REPORTS FROM THE FIG TASK FORCES (2015-2016)

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

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

Decision:

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 adopts the report from the Task Force and records its thanks to the Chair of the Task Forces and their members.

Decision:

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). Council expects a final proposal to be presented and adopted the General Assembly 2017. A session is included in the technical programme at the WW2016 where the FIG Scientific Journal will be discussed.

Appendix to item 13.3 – Status Report from the Task Force

Motion: That the General Assembly adopts the report from the Task Force, notes the proposed session and time line and records its thanks to the Chair of the Task Forces and their members.

Decision:

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.

At the General Assembly under this agenda item there will be a possibility for discussion of the proposal.

During the conference days of the Working Week Members of FIG will furthermore have a possibility to discuss the proposal in more details with the Task Force at:

- a. Lunch meeting on **Wednesday 4 May** grab your lunch bag and attend at Concourse Room, HA)
- b. The Member Association Forum on **Thursday 5 May** 11:00-12:30

A summary of the comments received during the first General Assembly session and these meetings will be presented at the 2nd General Assembly session together with a proposal on how to take the Task Force forward. In the case that there is a general acceptance of the proposal to make any changes, the Task Force will be asked to finalise their proposal by December 2016 so that it can be included for voting at the 1st General Assembly session in 2017 in Helsinki. If there is agreement on the proposal without any changes, it can be brought forward to a vote already in the second General Assembly 2016. If the general view is against the proposal Council will note this, and will have to decide after the General Assembly whether to close the Task Force or to let the Task Force work on a new proposal based on the comments from the General Assembly if there are clear indications on how the members see a new structure for the commission work.

Appendix to item 13.4 – 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 Forces and their members
- records the organised meetings and possibilities for discussions
- records the proposed working and time schedule for the Task Force

Decision:

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

Since the 38th General Assembly, FIG has continued to collaborate with the World Bank and various agencies and structures within the United Nations.

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:

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 2015 was held in August 2015. 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 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:

16. FIG ACCOUNTS FOR 2015, AUDITOR'S REPORT AND BUDGETS 2016-2019

Vice President Rudolf Staiger will present the report to the General Assembly. This report includes the auditors report from 2015, official accounts (income statement 2015) and balance sheet 31 December 2015, a summary of 2015 accounts, an updated budget for 2016 and proposals for budgets 2017-2019 and proposal for membership fees for member associations in 2018.

Appendix to item 16: Report on Financial Issues (including 2015 accounts and budgets 2016-2019)

Annexes:

- **16A** Auditor's Report, Income Statement for 2015 and Balance Sheet at 31 December 2015.
- **16B** FIG Result 2015
- **16C** FIG Budgets 2016-2019
- **16D** List of member associations whose membership fees are in arrears for 2015 and earlier and that are not allowed to vote - to be published on the FIG web site **04 April 2016**.

Motion: That the General Assembly

- adopts the audited accounts for 2014,
- adopts the Finance Report, and
- adopts budgets for 2015–2018

Decision:

17. SUBSCRIPTION RATES FOR 2017 AND 2018

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 16**.

The 2015 General Assembly approved membership fees for 2017 as follows under the condition that Council would re-consider at the end of 2016 whether it would be responsible to keep the fee stable.

Year	Per capita fee	Minimum fee	Maximum fee
2017	€4.48 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 €2.24 member up to a maximum of 5,500 members.	20 members or €50 (whichever is greater)	5,500 members (€24,640)

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 2017 subscription fees were kept at the same level as for the years 2012-2015.

Although the budget 2017 shows a deficit and 2018 only a small surplus, Council is also 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. Council therefore proposes after reconsidering that the level of subscription for member associations for 2017 and also for 2018 to remain at the same level as in the previous years. 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. The current Memorandum of Understanding with Chinese Society for Surveying, Mapping and Geoinformation, CSSMG on Internships to the FIG office is another way to provide support to FIG.

Motion: That the General Assembly adopts following membership fees payable by member associations in 2017 and 2018:

Year	Per capita fee	Minimum fee	Maximum fee
2017 and 2018	€4.48 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 €2.24 member up to a maximum of 5,500 members.	20 members or €50 (whichever is greater)	5,500 members (€24,640)

Decision:

18. ELECTION OF TWO VICE PRESIDENTS FOR 2017-2020 – PRESENTATION OF CANDIDATES

The FIG Council has received four proposals for the two open posts of FIG Vice President:

- Yerach Doytsher, Association of Licensed Surveyors in Israel
- Orhan Ercan, Chamber of Surveying and Cadastre Engineers of Turkey
- Sunil Laloo, Institute of Surveyors of Trinidad and Tobago
- Mikael Lilje, Swedish professionals for the built environment

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) 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 on Friday 06 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 18 and 24: Profiles of the candidates

- Yerach Doytsher, Association of Licensed Surveyors in Israel
- Orhan Ercan, Chamber of Surveying and Cadastre Engineers of Turkey
- Sunil Laloo, Institute of Surveyors of Trinidad and Tobago
- Mikael Lilje, Swedish professionals for the built environment

Motion: That the General Assembly notes the presentations of the candidates, makes its careful consideration at the elections during the second session of the General Assembly on the 06 May.

Decision:

19. POSTPONEMENT OF ELECTION OF COMMISSION CHAIRS ELECT FOR 2017-2018

The General Assembly will normally elect a Chair Elect for each of the ten FIG Commissions for term of office 1.1.2017-31.12.2018. Under normal circumstances the elected Chair Elect will be elected as the Chair of the Commission at the FIG Congress 2018 for the period 2019-2022.

The General Assembly in 2015 appointed a Task Force to evaluate the current Commission structure and consider if any changes are needed. The recommendations of the Task Force on the Commission Structure and the decision of the General Assembly may or may not affect the number of commissions. Based on this on-going work, respectfully FIG Council has decided to postpone the election of Chair Elect for the 10 Commissions until the new structure has been settled or the current structure confirmed by the General Assembly. Voting for the period 2019 to 2022, for either structure scenario will take place in 2018 at the latest.

Motion: That the General Assembly:

- notes the decision by FIG Council
- adopts the proposed time frame

Decision:

20. DECISION ON THE VENUE FOR FIG WORKING WEEK 2020 – 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 2020 Working Week.

The FIG Council has received two bids to host the FIG Working Week 2020, 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 and has also carried out an evaluation together with the FIG Office that will be presented at the General Assembly. In the summary report the following considerations, as laid out in the invitation documentation, are described for comparison:

1. Rotation of the conferences (region);
2. Country (hosting of earlier FIG events, experience);
3. Member association (its activeness, commitment to FIG and to the Working Week, execution ability for local association);
4. Supporting organisations (local support to the Working Week, governmental support, financial support, general support);

5. Host city (characteristics and interest from congress programme point of view, host city attractiveness, host city offerings);
6. 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);
7. Accessibility (flight connections, several access possibilities, security, visa issues, air fare to destination);
8. Safety and security (political stability, airport safety, city safety, political stability in the country - rating must be 3 or higher);
9. Proposed dates (must meet FIG requirements, Following FIG statutes, practical dates, availability of venue, other conferences at the same time)
10. Technical programme (coverage of all FIG Commissions, potential partners, originality, special ideas);
11. Technical tours (coverage of all FIG Commissions, originality, ideas proposed);
12. Social programme (attractiveness and variety, proposals for dinners, attractiveness of offered dinners, proposals for tours, is the programme following the overall FIG concept);
13. Attendance (expectation of international, regional and local attendance, realistic number of international and national participants);
14. 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);
15. Sponsorship (estimate sponsorship and exhibition income, proposed income, how realistic is proposed income, local sponsor offerings, sponsor interest to conference);
16. Why host (reason for hosting);
17. Objectives and outcomes (thought through why conference should be held at destination, difference to other destinations, short term outcome, long term outcome);
18. Suggested theme (thought of possible theme that fits to local/regional situation);
19. Events organised in the past three years (how experienced is the host in organising events)
20. Major events planned in the proposed city (many events might affect the price level):
21. Initiatives for sustainable conference environment (is host city, venue and local host paying attention to environmental issues);
22. New initiatives or activities (originality – but within the overall FIG concept)
23. 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 Working Week.

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

- a) Amsterdam, Netherlands, Geo-Information Netherlands
- b) Interlaken, Switzerland, geosuisse

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

Appendix to item 20 and 28:

- Summary Reports on the Bids for FIG 2020 Working Week
- Bidding documents for FIG 2020 Working Week:
 - a) Amsterdam, Netherlands, Geo-Information Netherlands
 - b) Interlaken, Switzerland, geosuisse

At the session each candidate will be given the same time (not more than 10 minutes) to make a presentation of their proposal and framework of the Working Week and their bid. FIG Council will present its evaluation and the impact on FIG on the various bids.

Decision on the venue of FIG 2020 Working Week will be made at the second session of the General Assembly on 06 May. The voting will be made by blind votes.

Motion: That the General Assembly notes the submission, the summary report, the presentations and FIG's evaluation of the candidates, makes its careful consideration and decision during the second session of the General Assembly on 06 May.

Decision:

FRIDAY 06 MAY 2016

Friday, 06 May, 08:30-10:30

**Concourse Room,
Horncastle Arena, Christchurch, New Zealand**

Presidents' Meeting (by invitation only)

21. FIG PRESIDENT'S MEETING

Separate invitation to Presidents of the Member Associations.

Friday, 06 May, 11:00–12:30 and 13:30-15:00

**Plenary Hall,
Horncastle Arena, Christchurch, New Zealand
General Assembly, Second Session and Closing Ceremony**

22. ROLL CALL

Vice President Rudolf Staiger to take the 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.

Since only member associations that have paid all their membership fees to the end of 2015 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 12 April 2016.

To be noted that the General Assembly has appointed two representatives as tellers.

Appendix to items 2 & 22: Roll Call including information about member associations that are not allowed to vote at the General Assembly because of unpaid membership fees for 2015 and earlier.

Motion: Those members present are recorded in the minutes.

Decision:

23. MEMBERSHIP

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

Motion: That the General Assembly decides on the membership issues based on the proposal of the Council.

Decision:

24. ELECTION OF TWO FIG VICE PRESIDENTS FOR 2017-2020

This General Assembly will elect two Vice Presidents for the term of office 1.1.2017-31.12.2020. The election will take place between:

- Yerach Doytsher, Association of Licensed Surveyors in Israel
- Orhan Ercan, Chamber of Surveying and Cadastre Engineers of Turkey
- Sunil Laloo, Institute of Surveyors of Trinidad and Tobago
- Mikael Lilje, Swedish professionals for the built environment

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.

Motion: This General Assembly elects two Vice Presidents for the term 2017-2020.

Decision:

25. REPORTS FROM COMMISSIONS, NETWORKS, PERMANENT INSTITUTIONS, FIG FOUNDATION AND OTHER WORKING WEEK ACTIVITIES (IF ANY)

Commission Officers (ACCO), Commissions, Networks, Permanent Institutions, FIG Foundation and others will have their annual and other administrative meetings and technical sessions in Christchurch. 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:

26. FIG TASK FORCES

The four Task Forces will have meetings during the Working Week. The Task Force Chairs may report back to the General Assembly on issues that may need the endorsement of or are of general interest to the General Assembly.

:

26.1. Real Property Markets

Motion: That the General Assembly records the report.

Decision:

26.2. FIG Corporate Members

Motion: That the General Assembly records the report.

Decision:

26.3. Scientific Journal

Motion: That the General Assembly:

- records the report
- endorses results from the meeting
- endorses suggested time schedules and action items for the future work of the Task Forces

Decision:

26.4. Commission Structure

Motion: That the General Assembly:

- records the report(s)
- endorses results from the meetings

- votes on the proposal if possible
- endorses suggested time schedules and action items for the future work of the Task Forces

Decision:

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

During the Working Week there will be Member Association Forum, the Director General's/Affiliate Members Forum, Academic Members 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:

28. DECISION ON THE VENUE FOR 2020 FIG WORKING WEEK

Candidates for FIG 2020 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:

- Amsterdam, Netherlands, Geo-Information Netherlands
- Interlaken, Switzerland, geosuisse

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

Motion: This General Assembly decides the host and venue for FIG 2020 Working Week.

Decision:

29. 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:

30. 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:

31. REPORT ON THE FIG CONGRESS 2018 IN ISTANBUL, TURKEY

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

Motion: That the General Assembly records the report

Decision:

32. REPORT ON THE FIG WORKING WEEK 2017 IN HELSINKI, FINLAND

Co-conference director Pekka Halme and representatives from the Local Organising Committee from the Finnish Associations MIL and MAKLI will give a presentation on preparations of FIG Working Week 2017.

Motion: That the General Assembly records the report.

Decision:

33. PRESENTATION OF CERTIFICATES OF APPRECIATION AND CLOSING CEREMONY

Country	Members hipID	Organisation	Members - vote	Nom votes	02-May	06-May
MEMBER ASSOCIATIONS						
Algeria	MA-10001	Order of Land Surveyors Expert. (O.G.E.F), Algeria	500	1		
Argentina	MA-10002	Federación Argentina de Agrimensores	150	1		
Australia	MA-10004	SSSI - The Surveying and Spatial Sciences Institute	1787	2		
Austria	MA-10005	Austrian Society for Surveying and Geoinformation	632	1		
Bahamas	MA-10006	Bahamas Association of Land Surveyors	50	1		
Belarus	MA-10007	Land Reform Association (NGO)	49	0		
Belgium	MA-10008	Union Belge des Géomètres-Experts Immobiliers	388	1		
Benin	MA-10113	Order of the Expert Geometricians of Benin	57	0		
Bosnia and Herzegovina	MA-10112	Geodetic Association of Herceg-Bosnia, Bosnia- Herzegovina	66	1		
Botswana	MA-10010	Botswana Surveying and Mapping Association	23	0		
Brazil	MA-10011	Sociedade Brasileira de Cartografia, Geodésia, Fotogrametria e Sensoriamento Remoto	116	0		
Brunei Darussalam	MA-10012	Brunei Institution of Geomatics (BIG)	30	1		
Bulgaria	MA-10013	Union of Surveyors and Land Managers in Bulgaria	100	1		
Bulgaria	MA-10108	Chamber of Graduated Surveyors	300	1		
Burkina Faso	MA-10014	Association des Géomètres et Topographes du Burkina (AGT-B)		1		
Canada	MA-10016	Canadian Institute of Geomatics	300	0		
China	MA-10017	Chinese Society for Surveying, Mapping and Geoinformation, CSSMG	1300	2		
China	MA-10102	China Institute of Real Estate Appraisers and Agents (CIREA)	2750	2		
China	MA-10120	China Land Science Society - CLSS	1130	2		
Colombia	MA-10124	Colombian Society of Surveyors	70	1		
Congo, Democratic Republic of the	MA-10101	Federation of Geometers and Surveyors - Congo	53	1		
Costa Rica	MA-10019	Colegio de Ingenieros Topógrafos de Costa Rica	476	0		
Croatia	MA-10020	Croatian Geodetic Society	552	0		
Cyprus	MA-10022	Cyprus Association of Rural and Surveying Engineers	58	1		
Cyprus	MA-10111	Cyprus Association of Valuers & Property Consultants	83	1		
Czech Republic	MA-10023	Czech Association of Certified Property Appraisers	259	1		
Czech Republic	MA-10024	Czech Union of Surveyors and Cartographers	116	1		
Denmark	MA-10025	The Danish Association of Surveyors	998	1		
Egypt	MA-10026	Egyptian Committee of Surveying and Mapping	200	1		
Estonia	MA-10027	Association of Estonian Surveyors	200	1		
Ethiopia	MA-10115	Ethiopian Surveying Professionals Association (ESPA)	160	0		

Roll Call FIG Working Week 2016

Fiji**	MA-10028	Fiji Institute of Surveyors	25	0		
Finland	MA-10029	Finnish Association of Geodetic and Land Surveyors MIL	785	1		
Finland	MA-10030	Maanmittausalan ammattikorkeakoulu- ja opistoteknisten Liitto MAKLI ry	480	1		
France	MA-10031	Ordre des Géomètres-Experts OGE	1813	2		
France	MA-10032	French Association of Topography, AFT	355	1		
Gabon	MA-10122	Association des Professionels de l'Ingenierie Topographique du Gabon, APIT	40	0		
Georgia	MA-10099	Society of Professionals of Land Information Technologies SPLIT	50	0		
Germany	MA-10033	DVW – Society of geodesy, geoinformation and landmanagement	7282	3		
Ghana	MA-10034	Ghana Institution of Surveyors	897	1		
Ghana	MA-10126	Licensed Surveyors Association of Ghana (LISAG)	100	1		
Greece	MA-10035	Technical Chamber of Greece	1500	0		
Hong Kong SAR, China	MA-10100	The Hong Kong Institution of Engineering Surveyors	396	1		
Hungary	MA-10038	Hungarian Society of Surveying, Mapping and Remote Sensing	390	1		
Indonesia	MA-10039	Indonesian Surveyor Association	258	0		
Iran	MA-10040	Iranian Professional Society of Surveying Engineers (ISS)	425	0		
Israel	MA-10043	Association of Licensed Surveyors in Israel	182	1		
Italy	MA-10044	National Council of Italian Surveyors	100000	3		
Jamaica	MA-10045	The Land Surveyors Association of Jamaica LSAJ	100	1		
Japan	MA-10046	Japan Federation of Surveyors	445	1		
Kenya	MA-10047	Institution of Surveyors of Kenya ISK	355	1		
Korea, Republic of	MA-10048	Korea Confederation of Surveyors	850	1		
Kosovo	MA-10049	Kosova Association of Surveyors	105	1		
Latvia	MA-10050	Latvian Association of Surveyors (LMB)	80	1		
Lebanon	MA-10051	Order of Surveyors - Lebanon	437	1		
Liberia*	MA-10119	Cadastral Surveyors Association of Liberia, Inc.	70	0		
Lithuania	MA-10053	Lithuanian Association of Surveyors	70	1		
Luxembourg	MA-10054	Ordre Luxembourgeois des Géomètres (OLG)	44	1		
Malaysia	MA-10055	Association of Authorised Land Surveyors - Malaysia	450	1		
Mali	MA-10117	Ordre des Geometres Experts du Mali (OGE)	42	0		
Malta	MA-10056	Malta Institution of Surveyors	45	0		
Mongolia	MA-10098	Mongolian Association of Geodesy Photogrammetry and Cartography (MAGPC)	155	1		
Morocco	MA-10059	National Order of Surveying Engineers and Surveyors	995	1		
Nepal	MA-10110	Nepal Institution of Chartered Surveyors (NICS)	26	1		

Roll Call FIG Working Week 2016

Netherlands	MA-10060	Geo-Information Netherlands	1200	2		
New Zealand	MA-10061	New Zealand Institute of Surveyors	913	1		
Nigeria	MA-10062	Nigerian Institution of Surveyors (NIS)	1320	2		
Nigeria	MA-10063	The Nigerian Institute of Quantity Surveyors	344	0		
Nigeria	MA-10118	Nigerian Institution of Estate Surveyors and Valuers	450	0		
Norway	MA-10064	Norges Jordskifte kandidatforening, faglig gruppe av Tekna (NJKF) and GeoForum	1350	2		
Palestine, State of**	MA-10065	Licensed Surveyors Association in Palestine		0		
Papua New Guinea	MA-10066	Association of Surveyors of Papua New Guinea (ASPNG)	100	0		
Philippines	MA-10107	Geodetic Engineers of the Philippines, Inc.	500	1		
Poland	MA-10067	Association of Polish Surveyors	612	1		
Portugal	MA-10068	Order of Engineers - College of Geographical Engineering	239	1		
Romania	MA-10070	Union of Romanian Geodesy	150	1		
Romania	MA-10105	Romanian Association of Private Surveyors	187	1		
Russian Federation	MA-10071	The Federal Service for State Registration, Cadastre and Cartography (Rosreestr)	615	1		
Russian Federation	MA-10121	None commercial partnership "Self-regulated organization of activity of cadastral engineers"	451	1		
Rwanda	MA-10125	Distinctive Engineering Group	32	1		
Saint Lucia	MA-10123	The Institute of Surveyors (St. Lucia) Inc. ISSL	66	0		
Senegal	MA-10116	National Order of Surveyors of Senegal	66			
Serbia	MA-10072	Serbian Union of Surveyors	100	0		
Slovakia	MA-10074	Slovak Union of Surveyors and Cartographers	89	1		
Slovakia	MA-10075	Chamber of Surveyors and Cartographers, CSC	257	11		
Slovenia	MA-10076	Association of Surveyors of Slovenia	700	1		
South Africa	MA-10077	South African Council for Professional and Technical Surveyors	546	1		
South Africa*	MA-10128	The South African Geomatics Institute	570	1		
Spain	MA-10078	Colegio Oficial de Ingenieros Técnicos en Topografía	500	0		
Sri Lanka	MA-10079	Institute of Surveyors Sri Lanka	220	0		
Sweden	MA-10080	Swedish professionals for the built environment	1440	2		
Switzerland	MA-10081	Swiss society of geomatics and landmanagement	670	1		
Syrian Arab Republic	MA-10082	Order of Syrian Engineers and Architects / OSEA	200	0		
Togo	MA-10084	Ordre des Géomètres du Togo		0		
Trinidad and Tobago	MA-10085	Institute of Surveyors of Trinidad and Tobago	198	1		
Turkey	MA-10087	Chamber of Surveying and Cadastre Engineers of Turkey	1660	2		
Uganda*	MA-10127	Géographie, Topographie, Hydraulique, Energie et Construction (GEOTHECO)*	42	1		

Ukraine	MA-10088	Ukrainian Society of Geodesy and Cartography	215	0		
United Kingdom	MA-10090	Chartered Institution of Civil Engineering Surveyors ICES	674	1		
United Kingdom	MA-10091	The Royal Institution of Chartered Surveyors RICS	100000	3		
United States	MA-10092	National Society of Professional Surveyors (NSPS)	4125	2		
Uruguay	MA-10094	Surveyors Association of Uruguay	50	0		
Vietnam	MA-10095	Vietnam Association of Geodesy - Cartography - Remote Sensing	300	1		
Zimbabwe	MA-10097	Survey Institute of Zimbabwe	75	0		
Total				100	/104	
*		New members				
**		To be expelled				
AFFILIATE MEMBERS						
Albania	AF-20049	Central Office of Immovable Property Registration – IPRO Albania				
Argentina	AF-20047	Federal Council of Cadastre of Argentina				
Azerbaijan	AF-20048	State Committee for Land and Cartography, State Aerogeodesy Corporation, Azerbaijan				
Bahrain	AF-20056	Survey and Land Registration Bureau				
Belgium	AF-20002	General Administration of the Patrimonial Documentation				
Benin	AF-20055	General Direction of Land Registry, mapping and Cadastre				
Brunei Darussalam	AF-20003	Survey Department				
Bulgaria	AF-20058	Geodesy, Cartography and Cadastre Agency of Bulgaria	0			
Cambodia, Kingdom of	AF-20004	Ministry of Land Management,				
Chile	AF-20005	Servicio Hidrográfico y Oceanográfico de la Armada de Chile				
China	AF-20043	China Land Surveying and Planning Institute, Ministry of Land and Resources				
Colombia	AF-20006	Instituto Geográfico Agustín Codazzi				
Croatia	AF-20042	State Geodetic Administration Of Republic Of Croatia				
Cyprus	AF-20045	Cyprus Lands and Surveys Department				
Denmark	AF-20026	Danish Geodata Agency				
Fiji	AF-20039	Ministry of Lands and Mineral Resources				
Fiji	AF-20051	iTaukei Land Trust Board, FIJI				
Finland	AF-20030	National Land Survey of Finland				
Guatemala	AF-20053	Guatemalan Registry of Cadastral Information				
Hungary	AF-20009	Institute of Geodesy, Cartography and Remote Sensing (FÖMI)				
Iceland	AF-20010	Register Iceland				
Iran	AF-20036	National Cartographic Center of Iran				
Iraq	AF-20031	General Directorate for Surveying				
Israel	AF-20040	Survey of Israel				
Italy	AF-20035	SIFET-Italian Society of Photogrammetry and Topography				
Japan	AF-20052	Geospatial Information Authority of Japan				
Jordan	AF-20011	Department of Lands & Survey				
Latvia	AF-20057	The State Land Service of Latvia				
Lesotho	AF-20054	Land Administration Authority, Lesotho				
Macedonia, FYR	AF-20019	The Agency for Real Estate Cadastre, AREC				
Mexico	AF-20012	National Institute of Statistics and Geography (INEGI)				

Moldova, Republic of	AF-20041	Agency for Land Administration and Cadastre of Rep. of Moldova				
Mongolia	AF-20018	Administration of Land Affairs, Construction, Geodesy & Cartography				
Namibia	AF-20013	Office of the Surveyor General				
Nepal	AF-20021	Topographical Survey Branch, HMG Survey Department				
Netherlands	AF-20025	Cadastre, Land Registry and Mapping Agency				
New Zealand	AF-20059	Land Information New Zealand	1			
Norway	AF-20023	Norwegian Mapping and Cadastre Authority				
Romania	AF-20020	National Agency for Cadastre and Land Administration				
Russian Federation	AF-20029	Siberian State University of Geosystems and Tehnologies				
Saudi Arabia	AF-20017	Ministry of Municipal and Rural Affairs				
Saudi Arabia	AF-20050	General Commission for Survey (GCS), General Directorate of Geodesy and Land Survey (GLS), Saudi Arabia.				
Sri Lanka	AF-20044	Survey Department, Sri Lanka				
Sweden	AF-20027	Lantmäteriet - The Swedish mapping, cadastral and land registration authority				
Switzerland	AF-20033	Swiss Federal Office of Topography swisstopo				
United States	AF-20024	United States Department of Commerce / National Oceanic and Atmospheric Administration				

Total

/47

CORPORATE MEMBERS

Netherlands	CM-30005	Trimble Europe B.V. - Category A - Platinum level				
Switzerland	CM-30003	Leica Geosystems AG Category A - Platinum level				
United States	CM-30035	Bentley Systems Inc. - Category A - Platinum level				
United States	CM-30001	Environmental Systems Research Institute, Inc. ESRI Category A - Platinum level				
Italy	CM-30043	Geoweb S.p.A, Category C - Silver level				
Russian Federation	CM-30049	Research and Production Geodetic Entreprise "Meridian+" LLC Category C - Silver level				
Ukraine	CM-30053	The State Enterprise "State Land Cadastre Centre", Ukraine Category C - Silver level				
United States	CM-30024	Thomson Reuters Category C - Silver level				
China	CM-30050	KQ Geo Technologies Co. Ltd. Category D - Bronze level				
Denmark	CM-30011	COWI A/S Category D - Bronze level				
Japan	CM-30057	RIPRO - Japan Category D - Bronze level				
Netherlands	CM-30012	GIM International - Geomares Category D - Bronze level				
Turkey	CM-30038	Derinsu Underwater Engineering Ltd. Category E - Basic level				
Vietnam	CM-30056	NEH Vietnam Category E - Basic level				
Egypt	CM-30058	Innovation for Trading and Contracting Category F - Regional level				
India	CM-30042	Coordinates Magazine Category F - Regional level				
Kazakhstan	CM-30055	Branco Etera Kazakhstan Category F - Regional level				
Nigeria	CM-30059	DataLife Environmental Services Category F - Regional level				
Qatar	CM-30048	Concord Surveying Works Co. Category F - Regional level				

Saudi Arabia	CM-30036	ORBITS Engineering Firm Category F - Regional level				
Sri Lanka	CM-30054	JKO Surveyors & Consultants (Pvt) Ltd, Sri Lanka Category F - Regional level				
United Kingdom	CM-30018	GEO:connexion Ltd Category F - Regional level				
Total		22	/22			
ACADEMIC MEMBERS						
Australia	AC-40002	The University of Melbourne				
Australia	AC-40003	RMIT University				
Australia	AC-40004	University of New South Wales				
Australia	AC-40005	University of Southern Queensland				
Australia	AC-40006	University of Technology Sydney				
Austria	AC-40007	Universität für Bodenkultur Wien BOKU				
Belgium	AC-40093	ECAM - Haute Ecole Leonard de Vinci				
Belgium	AC-40096	Universite de Liege				
Belgium	AC-40123	Antwerp Maritime Academy				
Belgium	AC-40141	Ghent University				
Brazil	AC-40011	Universidade do Vale do Rio dos Sinos – UNISINOS				
Canada	AC-40012	University of Calgary				
Canada	AC-40013	University of New Brunswick				
Canada	AC-40092	Université Laval				
China	AC-40091	School of Public Administration				
China	AC-40126	The University of Nottingham Ningbo China				
Colombia	AC-40016	Universidad Distrital Francisco José de Caldas				
Colombia	AC-40017	Universidad Distrital Francisco José de Caldas				
Colombia	AC-40128	Daniel Paez, Universidad de los Andes				
Croatia	AC-40020	University of Zagreb				
Czech Republic	AC-40107	Brno University of Technology				
Denmark	AC-40021	Aalborg University				
Ethiopia	AC-40103	Institute of Land Administration				
Fiji	AC-40053	University of the South Pacific				
Finland	AC-40022	Aalto University				
Finland	AC-40023	Helsinki Metropolia University of Applied Sciences				
Finland	AC-40129	Lapland University of Applied Sciences				
France	AC-40024	Ecole Supérieure des Géomètres et Topographes (ESGT)				
Gabon	AC-40132	Ecole Nationale du Cadastre et des Sciences Géographiques, ENCSG				
Germany	AC-40025	Anhalt University of Applied Sciences				
Germany	AC-40026	Technische Universität München (TUM)				
Germany	AC-40027	Berlin Institute of Technology				
Germany	AC-40127	University of Stuttgart				
Ghana	AC-40136	Kwame Nkrumah University of Science and Technology				
Greece	AC-40031	School of Rural and Surveying Engineering				
Hong Kong SAR, China	AC-40033	The Hong Kong Polytechnic University				
Hungary	AC-40034	The University of West Hungary				
Ireland	AC-40036	Dublin Institute of Technology				
Israel	AC-40104	Technion Research & Development Foundation				
Jamaica	AC-40037	University of Technology Jamaica				
Kazakhstan	AC-40112	East Kazakhstan State Technical University named after D. Serikbayev				
Kazakhstan	AC-40125	Kazakh National technical University after K. I. Satpaev				
Latvia	AC-40090	Riga Technical University				

Lebanon	AC-40124	Lebanese Canadian University (LCU)				
Lebanon	AC-40130	Lebanese International University, LIU				
Mexico	AC-40101	Universidad Autonoma de Nuevo León				
Multinational	AC-40120	UNIGIS International Association				
Namibia	AC-40144	Polytechnic of Namibia				
Nepal	AC-40089	Land Management Training Centre				
Netherlands	AC-40046	ITC - Faculty of Geo-Information Science and Earth Observation of the University of Twente				
New Zealand	AC-40047	University of Otago				
Nigeria	AC-40049	University of Lagos				
Nigeria	AC-40050	Nnamdi Azikiwe University				
Nigeria	AC-40121	ABIA State Polytechnic, ABA, Nigeria				
Nigeria	AC-40137	Kaduna Polytechnic University				
Nigeria	AC-40138	University of Benin				
Nigeria	AC-40139	Federal University of Technology, Nigeria				
Nigeria	AC-40140	University of Nigeria Nsukka Enugu Campus				
Norway	AC-40052	Norwegian University of Life Sciences				
Norway	AC-40113	Bergen University College				
Palestine, State of	AC-40099	Palestine Polytechnic University				
Papua New Guinea	AC-40143	Papua New Guinea University of Technology				
Puerto Rico	AC-40056	Polytechnic University of Puerto Rico				
Romania	AC-40058	"1 Decembrie 1918" University of Alba Iulia				
Romania	AC-40134	Technical University Bucharest, Romania				
Russian Federation	AC-40060	Moscow State University of Geodesy and Cartography				
Russian Federation	AC-40094	State University of Land Use Planning				
Rwanda	AC-40131	INES-Ruhengeri				
Senegal	AC-40133	University of Thies, UFR Science of engineering				
Serbia	AC-40097	University of Novi Sad				
Slovenia	AC-40062	University of Ljubljana				
South Africa	AC-40063	University of Cape Town				
Spain	AC-40064	Thecnical University of Madrid, Higher School of Engineers in Surveying, Geodesy and Cartography				
Spain	AC-40122	University of Jaen Spain				
Sri Lanka	AC-40135	Sabaragamuwa University of Sri Lanka				
Sweden	AC-40067	Royal Institute of Technology				
Sweden	AC-40068	Department of Real Estate Science at Lund University				
Sweden	AC-40142	University West				
Switzerland	AC-40069	University of Applied Sciences Northwestern Switzerland				
Trinidad and Tobago	AC-40085	University of the West Indies				
Turkey	AC-40071	Istanbul Technical University				
Uganda	AC-40119	Makerere University				
United Kingdom	AC-40074	Oxford Brookes University				
United Kingdom	AC-40076	Sheffield Hallam University				
United Kingdom	AC-40078	The University of Nottingham				
United Kingdom	AC-40079	University of the West of England				
United Kingdom	AC-40110	School of Rural Estate and Planning, Reading University				
United States	AC-40081	New Mexico State University				
United States	AC-40084	Texas A&M University - Corpus Christi				
United States	AC-40108	University of Houston				

Total			/90	
CORRESPONDENT MEMBERS				
Tonga	CR-50017	Mr. Viliami Folau		

- *) to be expelled 02 May 2016
- ***) membership to be approved 02 May 2016
- ***) suspended membership

Not able to vote

2 votes

3 votes

INTERNATIONAL FEDERATION OF SURVEYORS**FIG 38th GENERAL ASSEMBLY****17 and 21 May 2015****National Palace of Culture – Congress Centre Sofia - Sofia, Bulgaria****PROGRAMME**

Sunday, 17 May 2015		
National Palace of Culture – Congress Centre Sofia – Sofia, Bulgaria		
Sunday	09:00-12:30	General Assembly, First Session
17 May	13:30-16:00	
	Hall 3, 7 th floor	
Monday, 18 May – Wednesday, 20 May 2015		
FIG 2015 Working Week		
National Palace of Culture – Congress Centre Sofia - Sofia, Bulgaria		
www.fig.net/fig2015		
Monday, 18 May – Wednesday, 20 May 2015		
FIG 2015 Working Week Exhibition		
National Palace of Culture – Congress Centre Sofia		
www.fig.net/fig2015		
Monday- Tuesday 18-19 May		Annual Meetings of FIG Commissions and Networks
Tuesday 19 May	To be announced later, CCS, Sofia	FIG Member Associations Forum These two sessions are reserved for Presidents or Heads of delegation (or their representatives) of member associations to discuss issue of their common interest. President of Chamber of Surveyors, Bulgaria chairs the meeting. By invitation only
Wednesday 20 May	11:00-12:30 and 13:30- 15:00 Congress Center Sofia	Director/Surveyor General Forum
Wednesday 20 May	Congress Center Sofia	Academic Members Forum
Wednesday 20 May	Congress Center Sofia	Corporate Members Meeting
Thursday, 21 May 2015		
Congress Center Sofia, Bulgaria		
Thursday 21 May	Presidents' Meeting 08:30 – 10:30	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
Thursday 21 May	11:00–12:30 13:30-15:00 Hall 3, 7 th floor CCS	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 New Zealand Institution of Surveyors, host of FIG Working Week 2016.

FIG 38th GENERAL ASSEMBLY

List of Agenda Items

Sunday, 17 May, 09:00-12:30 and 13:30-16:00

1	OPENING PROCEEDINGS	5
2	ROLL CALL	5
3	APPOINTMENT OF TELLERS.....	6
4	ADOPTION OF THE AGENDA	6
5	ADOPTION OF THE MINUTES OF THE 37 th GENERAL ASSEMBLY	6
6	MEMBERSHIP	6
6.1.	Member Associations	6
6.1.1	New Member Associations	6
6.1.2	College of Engineers and Surveyors of Puerto Rico (MA-10069)	7
6.1.3	Geodetic Engineers of the Philippines, Inc. (MA-10107).....	7
6.2	Expulsion of member associations	8
6.3	Suspended status 2015	8
6.4	Other membership issues	8
6.4.1.	Affiliate members.....	8
6.4.2.	Corporate members	9
6.4.3.	Academic members	9
6.4.4.	Correspondents.....	10
7	APPOINTMENT OF HONORARY MEMBER.....	10
8	PRESIDENT’S REPORT.....	11
9	COUNCIL RESPONSES FROM GENERAL ASSEMBLY 2014.....	11
10	REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS AND STANDARDS NETWORK 2014-15	12
10.1	International Office of Cadastre and Land Records (Office International du Cadastre et du Régime Foncier) OICRF.....	12
10.2	International Institution for the History of Surveying and Measurement, Permanent Institution of FIG	12
10.3	Standards Network	13
11	REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2014-2015	13
12	FIG COUNCIL WORK PLAN 2015-2018	13
13	COMMISSION WORK PLANS 2015-2018	14
14	NEW NETWORK: REGIONAL CAPACITY DEVELOPMENT NETWORK.....	15
15	NEW TASK FORCES – 2015-2018	15
15.1	Task Force on Real Property Markets.....	15
15.2	Task Force on Commission Structure	16
15.3	Task Force on Corporate Members.....	17
15.4	Task Force on Scientific Journal.....	17
16	FIG ACCOUNTS FOR 2014, AUDITOR’S REPORT AND BUDGETS 2015-2018.....	18
17	SUBSCRIPTION RATES FOR 2017	19
18	CO-OPERATION WITH THE UNITED NATIONS AND THE WORLD BANK	20
18.1	Meetings and conferences	20
18.2	Global Geodetic Reference Frame for Sustainable Development resolution	21

19 LIAISON WITH INTERNATIONAL PROFESSIONAL ORGANISATIONS.....	21
20 DECISION ON THE VENUE FOR 2019 FIG WORKING WEEK	22
Thursday, 21 May, 08:30-10:30	24
21 FIG PRESIDENT’S MEETING.....	24
Thursday, 21 May, 11:00–12:30 and 13:30-15:00.....	24
22 ROLL CALL	24
23 MEMBERSHIP	25
24 REPORTS FROM ASSOCIATION, AFFILIATE, ACADEMIC AND CORPORATE MEMBERS FORUM (IF ANY)	26
25 REPORTS FROM COMMISSIONS, NETWORKS AND TASK FORCES (IF ANY)	27
26 REPORTS FROM PERMANENT INSTITUTIONS (IF ANY).....	28
27 REPORT FROM FIG FOUNDATION (IF ANY).....	28
28 DECISION ON THE VENUE FOR 2019 FIG WORKING WEEK	28
29 REPORT ON THE FIG CONGRESS 2018 IN ISTANBUL, TURKEY	29
30 REPORT ON THE FIG WORKING WEEK 2017 IN HELSINKI, FINLAND.....	29
31 REPORT ON THE FIG WORKING WEEK 2016 IN CHRISTCHURCH, NEW ZEALAND	29
32 PRESENTATION OF CERTIFICATES OF APPRECIATION	30
CLOSING CEREMONY	30

FIG 38th GENERAL ASSEMBLY

MINUTES

for the meetings held on Sunday 17 May 2015 in Hall 3 and on Thursday 21 May 2015 in Hall 3 at the National Palace of Culture - Congress Centre Sofia, Sofia, Bulgaria

SUNDAY, 17 MAY

Sunday, 17 May, 09:00-12:30 and 13:30-16:00
Hall 3, National Palace of Culture - Congress Centre Sofia
General Assembly, First Session

1 OPENING PROCEEDINGS

President Chryssy Potsiou opened the 38th General Assembly and welcomed all members to Sofia, Bulgaria to the current council's first General Assembly with a short address. President Potsiou noted that the General Assembly was held in the exact same Hall in the National Palace of Culture in 1983. At this occasion the FIG Fanfare was played for the first time.

The President expressed her gratitude to members and delegates for their participation and acknowledged the efforts of Chamber of Graduate Surveyors, Bulgaria, the local organising committee towards a successful Congress with around 900 participants from approximately 70 countries.

The President expressed condolences in memory of Paul Marshall, President of the South African Council for Professional and Technical Surveyors, who has been an active participant at many FIG Events, and for the natural disasters hereunder especially the recent in Nepal and the countries around that has affected many people. The General Assembly observed a moment of silence. The president announced that there would be some activities on surveyors' rapid response to mapping for disaster management carried out by Commissions and Young Surveyors during the Working Week.

2 ROLL CALL

Vice President Rudolf Staiger took the roll call. The roll call was done for member associations only. Since only member associations that have paid all their membership fees to the end of 2014 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 **15 April 2015**, and updated 21 May 2015.

Appendix to items 2 & 22: Roll Call

Appendix to items 2 & 22: List of member associations that are not allowed to vote at the General Assembly because of unpaid membership fees for 2014 and earlier. Posted 15 April 2015, updated 21 June 2015.

Motion: That members present are recorded in the minutes (in appendix to items 2 and 22 – Roll Call).

Decision: The motion was adopted.

3 APPOINTMENT OF TELLERS

The General Assembly appointed two persons as tellers for the entire General Assembly. The tellers represent member association that hosted the preceding (Dr, Zaid, President of PEJUTA, Malaysia) and the host of the proceeding following General Assembly (Jeff Needham, President of NZIS, New Zealand).

Motion: That the General Assembly appoints a representative from PEJUTA and NZIS as tellers for this General Assembly.

Decision: Dr, Zaid, President of PEJUTA, Malaysia and Jeff Needham, President of NZIS, New Zealand were appointed tellers by the General Assembly.

4 ADOPTION OF THE AGENDA

The Agenda for the General Assembly was issued as mandated, on 17 March 2015.

Motion: That the agenda be adopted.

Decision: The motion was adopted.

5 ADOPTION OF THE MINUTES OF THE 37th GENERAL ASSEMBLY

Minutes have been circulated previously.

Appendix to item 5: Minutes of the General Assembly in Kuala Lumpur, Malaysia, June 2014, without appendices.

Motion: That the minutes be adopted as recorded.

Decision: The motion was adopted.

6 MEMBERSHIP

6.1. Member Associations

6.1.1 New Member Associations

Two new applications for member associations have arrived and have been discussed at the Council meeting who decided to bring forward the applications to the General Assembly:

Colombian Society of Surveyors, Sociedad Colombiana de Topografos (S.C.T.) (MA-10124)

The Colombian Society of Surveyors has applied for membership. The association was established in 1963. Their total membership (all categories) is 70. Colombian Society of Surveyors fulfils the criteria of FIG Member association. Application form is attached as appendix to agenda item 6.1

Distinctive Engineering Group, Rwanda (MA-10125)

The Distinctive Engineering Group, Rwanda has applied for membership. The association was established on 27 March 2015. Their total membership is 32, and the number of qualified members is 25. Distinctive Engineering Group, Rwanda fulfils the criteria of FIG member association. Application form is attached as appendix to agenda item 6.1

Motion: That the General Assembly admits the Colombian Society of Surveyors, Sociedad Colombiana de Topografos (S.C.T.) and Distinctive Engineering Group, Rwanda to become member associations of FIG

Decision: The motion was adopted.

6.1.2 College of Engineers and Surveyors of Puerto Rico (MA-10069)

FIG General Assembly expelled College of Engineers and Surveyors of Puerto Rico (MA-10069) at the General Assembly meeting in 2014 due to the fact that the association was in arrears for 3 years. FIG office has however later received the full payment from College of Engineers and Surveyors of Puerto Rico. FIG Council therefore proposes to cancel the expulsion and note them as reinstated as member of FIG.

Motion: That the General Assembly admits to reinstall College of Engineers and Surveyors of Puerto Rico (MA-10069) as member association.

Decision/Action: The motion was adopted

6.1.3 Geodetic Engineers of the Philippines, Inc. (MA-10107)

At the FIG General Assembly 2014 Geodetic Engineers of the Philippines, Inc. (MA-10107) was supposed to be expelled from FIG but FIG Council received a letter from the association that they would pay their arrears before 1 October 2014. FIG Office received the payment and FIG Council informs the General Assembly that they will remain as member.

Motion: That FIG General Assembly notes the update of Geodetic Engineers of the Philippines (MA-10107) that they remain as member of FIG.

Decision/Action: The motion was adopted

6.2 Expulsion of member associations

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

- Ordre National des Geometres du Cameroun (MA-10015)
- Tunisian Association of Chartered Surveyors (MA-10086)

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 a letter 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 Sofia.

After acceptance of new member associations and expulsions the number of FIG member associations is 102 from 89 countries.

Motion: That the General Assembly expels the:

- Ordre National des Geometres du Cameroun (MA-10015)
- Tunisian Association of Chartered Surveyors (MA-10086)

Decision/Action: The motion was adopted

6.3 Suspended status 2015

In accordance with its administrative measures, FIG Council, has deferred to continue for 2015 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 2014, there remain existing sanctions on Iran. The FIG office in Denmark cannot 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 2014. 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 2016.

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

Decision: The motion was adopted

6.4 Other membership issues

6.4.1. Affiliate members

The Council has admitted the following national agencies to become affiliate members:

- a) iTaukei Land Trust Board, Fiji – AF-20051

- b) Geospatial Information Authority of Japan/Geodetic Department – AF-20052
- c) Guatemalan Registry of Cadastral Information (Registro de Información Catastral de Guatemala – RIC), AF-20053
- d) Land Administration Authority (LAA) Lesotho – AF-20054
- e) General Direction of Land Registry, Mapping and Cadastre, Benin – AF-20055

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

- a) National Land Centre in the Ministry of Natural Resources, Rwanda (AF-20016)
- b) Bureau of Land Management, Department of Interior, USA (AF 20037)
- c) AIMS-Afghanistan Information Management Services, Afghanistan (AF-20038)

After these changes the number of Affiliate members is 42 from 39 countries.

6.4.2. Corporate members

The Council has admitted the following companies as Corporate Members of FIG after the General Assembly in 2014:

- a) Branco Etera Ltd, Kazakhstan – CM-30055 (Category F)
- b) NEH Engineering survey and mapping limited company, Vietnam – CM-30056 (Category E)
- c) Ripro Corporation, Japan – CM-30057 (Category D)
- d) Datalife, Nigeria – CM-30059 (Category F)

Following corporate member has resigned from their membership from 1.1.2015:

- a) MondoGeo (category F –regional level)

Following corporate members have been expelled by FIG Council:

- a) Cameroon Engineering S.A., Cameroon (CM-30027)
- b) SEPRET (Société des Etudes de Projets et Réalisation des Travaux, S.A.R.L.), Morocco (CM-30031)
- c) Global Survey Qatar, Qatar (CM-30047)

After these changes the number of corporate members is now 21.

6.4.3. Academic members

FIG Council has admitted the following Universities to become Academic members:

- a) Technical University of Civil Engineering - Faculty of Geodesy, Bucharest, Romania (AC-40134)
- b) Sabaragamuwa University of Sri Lanka, Faculty of Geomatics (AC-40135)
- c) Kwame Nkrumah University of Science and Technology, Department of Geomatic Engineering, Ghana, (AC-40136)

The following academic member has terminated its membership:

- a) "TECRS" The Environmental Center of Remote Sensing Dept. of Geosystem Technology, Saudi Arabia (AC-40117)

The Council has expelled following universities because of unpaid membership subscriptions:

- a) Neapolis University, Cyprus (AC-40114)
- b) IAV, Institut Agronomique et Vétérinaire Hassan II, Morocco (AC-40118)

The number of Academic Members after these changes is 89 from 55 countries.

6.4.4. Correspondents

Council has ended its cooperation with two of the Correspondent Members since General Assembly 2014 and the number of correspondents is now 1.

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

Decision: The motion was adopted

7 APPOINTMENT OF HONORARY MEMBER

a. Appointment of Honorary Member

Geo-Informatie Nederland GIN of the Netherlands has sent a nomination letter in which it proposes that FIG appoints **Christiaan Lemmen** as an Honorary Member of FIG.

FIG Council has considered the nomination and considers that it fulfils the criteria (see criteria at: <http://www.fig.net/pub/figpub/pub40/figpub40.htm#Criteria>) for an Honorary Member and therefore proposes to the General Assembly that it appoints Christiaan Lemmen as an Honorary Members of the Federation for the outstanding services he has provided to the Federation. **Appendix to agenda item 7:** The nomination letter from Geo-Informatie Nederland GIN

b. Appointment of Honorary President

The Association of Authorised Land Surveyors Malaysia, PEJUTA has sent FIG Council a proposal that it makes a nomination to the General Assembly of appointing Mr **CheeHai Teo**, the immediate Past President of FIG as an Honorary President of the Federation. The letter is attached as **appendix to agenda item 7**. FIG Council has decided to bring forward this proposal to the General Assembly, noting that CheeHai Teo fulfils the criteria for an Honorary President and his achievements as the President have contributed the Federation to extend that he without any doubt deserves to be appointed as an FIG Honorary President.

c. FIG Appreciation to Clarissa Augustinus UN-Habitat

Clarissa Augustinus, UN-Habitat, has worked closely with FIG for many years and is now standing down from UN-HABITAT. FIG Council would like to acknowledge the longstanding cooperation with Clarissa Augustinus. As a special consideration FIG Council

has decided to appreciate her as FIG Honorary Ambassador. Her certificate was presented to her during the Plenary session 2 on 19 May where she was one of the plenary speakers.

Motion: That the General Assembly appoints Christiaan Lemmen as Honorary member and appoints CheeHai Teo as FIG Honorary President, and that the General Assembly notes the special appreciation to Clarissa Augustinus as FIG Honorary Ambassador.

Decision/action: The motion was adopted with standing ovation. Christiaan Lemmen received his silver pin and certificate with acclamation and CheeHai Teo received his gold pin together with his certificate and was honoured with a standing ovation from the delegates.

8 PRESIDENT'S REPORT

President Chryssy Potsiou presented the President's report on the activities of the Federation since the General Assembly in Kuala Lumpur, Malaysia in June 2014.

Appendix to item 8: President's report (hand outs):

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/08_presidents_report.pdf

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

Decision: The motion was adopted.

9 COUNCIL RESPONSES FROM GENERAL ASSEMBLY 2014

At the General Assembly 2014 the following items were discussed:

- a. Proposal from Geosuisse, Switzerland (1: nomination body; 2: VP's nominated through regional bodies; 3: Commission Chairs Elects elected by the Commissions)
- b. Proposal from DdL, Denmark, on change of term for the President (to start immediately after election)
- c. Surveyors day/week (Presented by John Hohol at the General Assembly 2014)

FIG Council promised to get back to the General Assembly 2015 with a follow up and status on these issues.

Motion: That FIG General Assembly notes the update and records its thanks to the submitters of the proposals for their active role in FIG.

Decision/Action: President Potsiou reported that:

- a. The proposal no 3 from Geosuisse will be included in the Task Force on Commission Structure. Geosuisse is withdrawing the other two proposals.
- b. Council has considered the proposal at its meetings and has decided not to take further this proposition. The reasons for this decisions are:
 - Quality time to develop and prepare for an incoming president a four-year work plan

- Time to get fully updated with the work of FIG office
 - Ensure financial rigor in order to close the year end accounts
 - Senior leadership good practice is to have a hand over period (contested situation)
- c. Council considers that the idea of a Surveyors Day/Week as very interesting for the profession; but Council believes that the action items should be initiated and realised on a national level by its Member Associations. There will be a large variety (in terms of actions) from country to country. Therefore Council is convinced that FIG cannot be in a leading role here. However, FIG Council sees our organisation as a useful platform of exchange of ideas and information. FIG Council also suggested that the execution of a surveyors day/week will be discussed at the FIG Member Association Forum during the FIG Working Week.

The motion was adopted.

10 REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS AND STANDARDS NETWORK 2014-15

10.1 International Office of Cadastre and Land Records (Office International du Cadastre et du Régime Foncier) OICRF

Mr. Christiaan Lemmen, Director of OICRF has prepared a written report on the OICRF activities since the General Assembly in Kuala Lumpur. He presented a short report to the General Assembly.

Appendix to item 10.1: 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.

10.2 International Institution for the History of Surveying and Measurement, Permanent Institution of FIG

Mr. Jan de Graeve, Director of the IIHSM has prepared a written report on the IIHSM activities since the General Assembly in Kuala Lumpur. IIHSM was not present at the first General Assembly day, and referred instead to the written report, submitted in the General Assembly agenda.

Appendix to item 10.2: 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.

10.3 Standards Network

Mr David Martin, Chair of the FIG Standards Network was unfortunately not present at the General Assembly.

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

Decision: No report was submitted or presented at the General Assembly.

11 REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2014-2015

Mr. John Hohol, President of the FIG Foundation has prepared a written report on the FIG Foundation activities from June 2014 to March 2015. He presented a short oral summary to the General Assembly.

Appendix to item 11: Report of the FIG Foundation activities 2014-2015 and Result 2014.

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 for their past year's work.

Decision: The motion was adopted.

12 FIG COUNCIL WORK PLAN 2015-2018

The Council has prepared the FIG Council Work Plan for 2015-2018. Together with the Commission Work Plans the Council Work Plan will form the FIG Work Plan for the next four years. The proposal for the Council Work Plan 2015-2018 was attached to the agenda and is based on preparations made in a Council meeting and in a meeting with the Commission Chairs during the Kick-Off Event in January 2015 in Athens, Greece as well as responses from the Kick Off Event. The Council Work Plan has also been coordinated with the Commissions', Networks', Task Forces' and Permanent Institutions' Work Plans.

President Potsiou presented the Work Plan at the meeting.

The Council has also decided on responsibilities of individual Council members. This list is included as an appendix to the Council Work Plan. An up-to-date list will always be available on the FIG web site.

Appendix to item 12: FIG Council Work Plan 2015-2018 – handouts:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/12_council_wp_report.pdf

Motion: That the General Assembly adopts the Council Work Plan for 2015-2018.

Decision: The motion was adopted.

13 COMMISSION WORK PLANS 2015-2018

Commission Chairs have prepared their Commission Work Plan for 2015-2018 based on discussions at their Commission meetings at the FIG Congress in Kuala Lumpur. After Kuala Lumpur the Work Plans have been coordinated with the Council Work Plan and with other Commission Work Plans at the meeting of Commission chairs and the FIG Council in conjunction to the FIG Kick-Off Meeting in January 2015 in Athens, Greece.

All Commission Work Plans have now been finalised and synchronised with the Council Work Plan and were presented for the General Assembly for its approval in Sofia in May 2015.

At the General Assembly there was also time for the members to discuss the Work Plans and Commission activities with the Commission Chairs. This discussion was chaired by Vice President Diane Dumashie, who will be chairing ACCO (2015-2016).

There were several questions and a big interest to the work of the commissions. Among the questions and comments were:

- how to fit in the Fit-for-Purpose approach in the work of the commissions,
- the work on mutual recognition since especially young surveyors need standards of recognition,
- the importance of including educational issues in all especially technical commissions,
- the level of communication from commissions to delegates,
- now that commission has worked on boundaries on land to encourage FIG to also work with maritime boundaries which is an area that can need further investigations
- how neighbouring countries can cooperate and help each other and ask each other for advise

Appendices to agenda item 13:

- 13.1: Commission 1 Work Plan 2015-2018
- 13.2: Commission 2 Work Plan 2015-2018
- 13.3: Commission 3 Work Plan 2015-2018
- 13.4: Commission 4 Work Plan 2015-2018
- 13.5: Commission 5 Work Plan 2015-2018
- 13.6: Commission 6 Work Plan 2015-2018
- 13.7: Commission 7 Work Plan 2015-2018
- 13.8: Commission 8 Work Plan 2015-2018
- 13.9: Commission 9 Work Plan 2015-2018
- 13.10: Commission 10 Work Plan 2015-2018
- 13.11 Young Surveyors Network Work Plan 2015-2018

Handouts – presentation of the commissions:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/13_GA.pdf

Motion: That the General Assembly adopts the Commission Work Plans.

Decision: The motion was adopted.

14 NEW NETWORK: REGIONAL CAPACITY DEVELOPMENT NETWORK

The Council has established a new Network. This network originates from the Africa Task Force 2009-2014 and will in the term 2015-18 concentrate on Africa. This Network is chaired by FIG Vice President Diane Dumashie. The Network will work in close co-operation with all Commissions. The Network will have its first meeting in Sofia where members of the Network will be appointed by the Council and brought to the General Assembly for endorsement.

Appendix to item 14: Terms of Reference for the Network on Regional Capacity Development.

Presentation by Diane Dumashie, Chair of the Regional Capacity Development network – Handouts:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/14_GA.pdf

Motion: That the General Assembly records the Council's decision of establishment of the Regional Capacity Development Network, appointment of Vice President Diane Dumashie to chair the Network and its terms of reference for information.

Decision: The motion was adopted.

15 NEW TASK FORCES – 2015-2018

The Council has established four new Task Forces for 2015-2018.

15.1 Task Force on Real Property Markets

The first Task Force will assess the progress of establishing the real property markets in the countries with economies in transition. The Task Force will be chaired by Pekka Halme, Finnish Association of Geodetic and Land Surveyors MIL. The Task Force will have its first meeting in Sofia where members of the Task Force will be appointed by the Council and brought to the General Assembly for endorsement.

There were questions from the delegates why South America and Africa are not taken into consideration, these countries are poor and have problems with the property markets. Council responded that a study will be carried through in the countries around the Black Sea where the situation is far from ideal, and the experiences and results can be helpful for the rest of the world.

Appendix to item 15.1: Terms of Reference for the Task Force on Real Property Markets.

Handouts:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/15_1_GA.pdf (presentation 17 May 2015)

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/25_4_GA.pdf (presentation 21 May 2015)

Motion: That the General Assembly endorses the Council's proposal to establish the Task Force on Real Property Markets, appointment of Pekka Halme to chair the Task Force and its terms of reference.

Decision: The motion was adopted

15.2 Task Force on Commission Structure

The second Task Force will assess the Commissions and investigate if there is a need to revise their structure and provide a proposal on possible improvements.

The Task Force is originated from two proposals from FIG Member Associations. One proposal originating from Geosuisse that was discussed at the General Assembly 2014, who proposed:

For Commission Chairs Elect, the right to nominate should be with the Commissions themselves. They have to evaluate the candidates and to make sure that she/he is able to fulfil the responsibility. The Commissions are the only bodies that have sufficient knowledge of their national delegates and who are able to judge their eligibility. Commissions will discuss with the national association the candidate they wish to nominate.

The second proposal that FIG Council has received is from the following member associations:

- Danish Association of Chartered Surveyors (Denmark)
- Finnish Association of Geodetic and Land Surveyors MIL (Finland)
- Norges Jordskifte kandidatforening, faglig gruppe av Tekna (NJKF) (Norway)
- Swedish professionals for the built environment

This proposal suggests evaluating the current Commission Structure in order to secure the efficiency of the FIG Commissions. Based on the above mentioned suggestions and further discussions in Council, Council has decided to establish a Task Force that in general will assess and evaluate the current structure of the commissions. The Task Force will be chaired by Mikael Lilje, Swedish professionals for the built environment, Samhällsbyggarna. The Task Force will have its first meeting in Sofia where members of the Task Force will be appointed by the Council and brought to the General Assembly for endorsement.

General Assembly representatives commented that they would prefer to wait to adopt the Task Force until the second General Assembly meeting in order to have the Terms of Reference discussed during the meeting that was organised during the Working Week.

At the second General Assembly meeting on 21 May Council returned to agenda item 15.2 for the adoption of the motion.

Appendix to item 15.2: Terms of Reference for the Task Force on Commission Structure
Hand outs:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/15_2_GA.pdf (presentation 17 May 2015)

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/25_5_GA.pdf (presentation 21 May 2015)

Motion: That the General Assembly endorses the Council's proposal to establish the Task Force to assess the commission structure and the appointment of Mikael Lilje to chair the Task Force and its terms of reference.

Decision: The motion was adopted.

15.3 Task Force on Corporate Members

The third Task Force will be established to strengthen the FIG relationship with corporate members. The Task Force will be chaired by John Hohol, National Society of Professional Surveyors (NSPS) in cooperation with Bryn Fosburgh, Vice President of Trimble. The Task Force will have its first meeting in Sofia where members of the Task Force will be appointed by the Council and brought to the General Assembly for endorsement.

Appendix to item 15.3: Terms of Reference for the Task Force on Corporate Members.

Hand outs:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/15_3_GA.pdf (presentation 17 May 2015)

Motion: That the General Assembly endorses the Council's proposal to establish the Task Force on Corporate Members, appointment of John Hohol in cooperation with Bryn Fosburgh to chair the Task Force and its terms of reference.

Decision: The motion was adopted

15.4 Task Force on Scientific Journal

The fourth Task Force will be established to investigate the usefulness and need and if justified, the steps forward in order to introduce an FIG peer reviewed scientific Journal (electronic or printed). The Task Force will be chaired by Yerach Doytsher, Association of Licensed Surveyors in Israel (ALSI). The Task Force will have its first meeting in Sofia where members of the Task Force will be appointed by the Council and brought to the General Assembly for endorsement.

There were several questions and comments from delegates, hereunder:

- There are some excellent papers in FIG that need to be published – will the Task Force also look into other existing journals or only into an FIG Journal?
- In 2009 it was also investigated to start a scientific journal in FIG and the result was that FIG should not go into this field as there was no FIG experience in “peer review” at that time.

It was decided that the final decision on the Task Force should be postponed to the second general assembly meeting so that the Task Force could be discussed at the planned meeting during the Working Week.

At the second General Assembly meeting on 21 May Council returned to agenda item 15.4 for the adoption of the motion.

Appendix to item 15.4: Terms of Reference for the Task Force on Scientific Journal

Hand outs:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/15_4_GA.pdf (presentation 17 May 2015)

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/25_6_GA.pdf (presentation 21 May 2015)

Motion: That the General Assembly endorses the Council's proposal to establish the Task Force on Scientific Journal, appointment of Yerach Doytsher to chair the Task Force and its terms of reference.

Decision: The motion was adopted.

16 FIG ACCOUNTS FOR 2014, AUDITOR'S REPORT AND BUDGETS 2015-2018

Vice President Rudolf Staiger presented the financial report to the General Assembly. This report includes the auditors report from 2014, official accounts (income statement 2014) and balance sheet 31 December 2014, a summary of 2014 accounts, an updated budget for 2015 and proposals for budgets 2016-2018 with notes and proposal for membership fees for member associations in 2017.

Appendix to item 16: Report on Financial Issues (including 2014 accounts and budgets 2015-2018)

Handouts to agenda item 16 and 17:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/16_17_GA.pdf

Annexes:

- **16A** Auditor's Report, Income Statement for 2014 and Balance Sheet at 31 December 2014.
- **16B** FIG Result 2014
- **16C** FIG Budgets 2015-2018
- **16D** List of member associations whose membership fees are in arrears for 2014 and earlier and that are not allowed to vote - to be published on the FIG web site **15 April 2015**.

Motion: That the General Assembly

- adopts the audited accounts for 2014,
- adopts the Finance Report, and
- adopts budgets for 2015–2018

Decision: The motion was adopted

17 SUBSCRIPTION RATES FOR 2017

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 16**.

The 2014 General Assembly approved membership fees as follows:

Year	Per capita fee	Minimum fee	Maximum fee
2016	€4.48 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 €2.24 member up to a maximum of 5,500 members.	20 members or €50 (whichever is greater)	5,500 members (€24,640)

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 2016 subscription fees were kept at the same level as for the years 2012-2015. The Council 2011-14 had to suggest subscription fees up to 2016, however they recognised that there would be a change in leadership and the subscription fees is dependent on the strategies of the council 2015-18.

Although the budgets 2017 and 18 predict a deficit, Council is also 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. Council therefore proposes the level of subscription for member associations for 2017 to remain at the same level as in the previous years. Council has initiated a Task Force 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. FIG Council will evaluate after a year how this work develops, and if the work on corporate members does not show positive effect, Council suggests reconsidering the membership fee for 2017 at the General Assembly in 2016.

Motion: That the General Assembly adopts following membership fees payable by member associations in 2017:

Year	Per capita fee	Minimum fee	Maximum fee
2017	€4.48 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 €2.24 member up to a maximum of 5,500 members.	20 members or €50 (whichever is greater)	5,500 members (€24,640)

and that the General Assembly notes that based on councils evaluation of the finances at the end of 2015, the level for 2017 might be increased at the General Assembly 2016.

Decision: The motion was adopted.

18 CO-OPERATION WITH THE UNITED NATIONS AND THE WORLD BANK

18.1 Meetings and conferences

The main activities in the co-operation with the United Nations and the World Bank since the FIG congress in Kuala Lumpur have been:

- President Teo participated in UNESCAP, FAO and UN-Habitat co-organised Regional Multi-stakeholder Consultation on Land Tenure in Asia-Pacific
- President Teo participated in 21st Meeting of the International Steering Committee on Global Mapping, 5 August 2014, United Nations Headquarters in New York
- President Teo participated in Fourth Session of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), 6 – 8 August 2014, United Nations Headquarters in New York
- FIG Young Surveyors and UN-Habitat/GLTN organised a workshop on The Social Tenure Domain Model – Training of Trainers, 7-10 November 2014 in Addis Ababa, Ethiopia primarily for African participants.
- Vice President Pengfei Cheng and Past President Teo attended the Third High Level Forum on Global Geospatial Information Management, 22-24 October 2014, Beijing, PR China
- FIG undertook two expert group meetings in Bangkok in cooperation with UN-Habitat/GLTN on Valuation of Unregistered Land and Properties Expert Group Meeting, Bangkok, Thailand, 13 - 14 October 2014 and Modernising Land Agencies Budgetary Approach: Costing and Financing of Land Administration Services in Developing Countries, Validation Workshop (CoFLAS), 15 - 16 October 2014, Bangkok, Thailand
- UN-GGIM-AP - Third Plenary Meeting 10 – 12 November 2014 Kuta, Bali, Republic of Indonesia, represented by FIG Past President Teo.
- Ninth Meeting of the International Committee on Global Navigation Satellite Systems (ICG-9), Mikael Lilje, Chair of FIG Commission 5 and UNOOSA representative, 9 – 14 November 2014 Kuta, Prague, Czech Republic

- UNECE CHLM, Geneva, February 2015 on Sustainable Land Management Week represented by President Chryssy Potsiou
- World Bank Conference March 2015 represented by President Chryssy Potsiou. There was a special side activity on the FIG Work Plan.
- UNHABITAT Prep II event, Nairobi, April 2015, represented by President Chryssy Potsiou and FIG Commission 7 chair Gerda Schennach

18.2 Global Geodetic Reference Frame for Sustainable Development resolution

At the FIG General Assembly 2014 FIG Council presented a FIG Statement on Global Geodetic Reference Frame for Sustainable Development where FIG expressed the importance of the resolution and urged the member organizations to bring the Statement back home to the respective countries.

The Global Geodetic Reference Frame for Sustainable Development (GGRF) resolution was adopted by the United Nations General Assembly on Thursday 26 February 2015

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: The motion was adopted.

19 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 2014 was held in August 2014 and was attended by nine of the ten participating international organization. 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.

President CheeHai Teo attended the International Union of Notaries Conference on Land Tenure Security in Asia, 12-13 December 2014, Ho-Chi-Minh City, Vietnam.

IPMS, is mainly driven by our member association RICS, and FIG was until the end of last period represented by FIG Commission 9 Chair Frances Plimmer, and FIG Council thanks her for her work. FIG Council will appoint a new representative to IPMS. In December 2014 there was launch of a new International Property Measurement Standard (IPMS) for Office Buildings.

FIG is a member of the International Council for Science (ICSU) and 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

20 DECISION ON THE VENUE FOR 2019 FIG WORKING WEEK

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 2019 Working Week.

The FIG Council has received five bids to host the FIG Working Week 2019, 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 and has also carried out an evaluation together with the FIG Office that will be presented at the General Assembly. In the summary report the following considerations, as laid out in the invitation documentation, are described for comparison:

1. Rotation of the conferences (region);
2. Country (hosting of earlier FIG events, experience);
3. Member association (its activeness, commitment to FIG and to FIG 2017, execution ability for local association);
4. Supporting organisations (local support to the Working Week, governmental support, financial support, general support);
5. Host city (characteristics and interest from congress programme point of view, host city attractiveness, host city offerings);
6. 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);
7. Accessibility (flight connections, several access possibilities, security, visa issues, air fare to destination);
8. Safety and security (political stability, airport safety, city safety, political stability in the country - rating must be 3 or higher);
9. Proposed dates (must meet FIG requirements, Following FIG statutes, practical dates, availability of venue, other conferences at the same time)
10. Technical programme (coverage of all FIG Commissions, potential partners, originality, special ideas);
11. Technical tours (coverage of all FIG Commissions, originality, ideas proposed);
12. Social programme (attractiveness and variety, proposals for dinners, attractiveness of offered dinners, proposals for tours, is the programme following the overall FIG concept);
13. Attendance (expectation of international, regional and local attendance, realistic number of international and national participants);
14. 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);

15. Sponsorship (estimate sponsorship and exhibition income, proposed income, how realistic is proposed income, local sponsor offerings, sponsor interest to conference);
16. Why host (reason for hosting);
17. Objectives and outcomes (thought through why conference should be held at destination, difference to other destinations, short term outcome, long term outcome);
18. Suggested theme (thought of possible theme that fits to local/regional situation);
19. Events organised in the past three years (how experienced is the host in organising events)
20. Major events planned in the proposed city in 2017 (many events might affect the price level):
21. Initiatives for sustainable conference environment (is host city, venue and local host paying attention to environmental issues);
22. New initiatives or activities (originality – but within the overall FIG concept)
23. 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. 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 Working Week.

The Council has considered the bids and has decided to present four of the five submitted bids to the General Assembly for its decision. The following four bids fulfilled the basic requirements:

- a) Dublin, Ireland, Society of Chartered Surveyors, Ireland (RICS)
- b) Nairobi, Kenya, Institution of Surveyors, Kenya
- c) Geneva or Interlaken, Switzerland, geosuisse
- d) Hanoi, Vietnam, The Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR)

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

Appendix to item 20 and 28:

Summary Reports on the Bids for FIG 2019 Working Week

Bidding documents for FIG 2019 Working Week:

- a) Dublin, Ireland, Society of Chartered Surveyors, Ireland (RICS)
- b) Nairobi, Kenya, Institution of Surveyors, Kenya
- c) Geneva or Interlaken, Switzerland, geosuisse
- d) Hanoi, Vietnam, The Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR)

At the session each candidate was given the same time (not more than 10 minutes) to make a presentation of their proposal and framework of the Working Week and their bid. FIG Council furthermore presented its evaluation and the impact on FIG on the various bids.

Decision on the venue of FIG 2019 Working Week will be made at the second session of the General Assembly on 21 May. The voting will be made by blind votes. If there will be no absolute majority in the first voting for any of the proposals, a second vote will be organised between those two candidates that have most votes.

Council presentation:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/20_20_19_voting.pdf

Motion: That the General Assembly notes the submission, the summary report, the presentations and FIG's evaluation of the candidates, makes its careful consideration and decision during the second session of the General Assembly on 21 May.

Decision: The motion was adopted.

THURSDAY 21 MAY 2015

Thursday, 21 May, 08:30-10:30
Hall 3.2, National Palace of Culture - Congress Centre Sofia
Presidents' Meeting (by invitation only)

21 FIG PRESIDENT'S MEETING

Separate invitation was sent to Presidents of the Member Associations. Altogether 49 Member Associations were represented. At the meeting the Member Associations were asked to respond to: How do associations work on preparing the surveyor of tomorrow.

Thursday, 21 May, 11:00–12:30 and 13:30-15:00
Hall 3, 7th floor,
National Palace of Culture - Congress Centre Sofia
General Assembly, Second Session and Closing Ceremony

22 ROLL CALL

The agenda item 22 roll call was moved to right before agenda item 28 to be sure that all member associations had arrived. Together with the roll call the voting sheets were distributed by the tellers in accordance with the decision made by the General Assembly in 2014 diversifying the number of voting sheets given to each member association consistent with the recorded number of members.

Vice President Rudolf Staiger took the roll call. The roll call was done for member associations only. Since only member associations that have paid all their membership fees to the end of 2014 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 15 April 2015, and updated 21 May 2015.

In total 56 member associations out of 103 participated in the 2nd session of the General Assembly, and 75 voting sheets were handed out to the members who were allowed to vote.

Appendix to items 2 & 22: Roll Call

Appendix to items 2 & 22: List of member associations that are not allowed to vote at the General Assembly because of unpaid membership fees for 2014 and earlier. Posted 15 April 2015, updated 21 June 2015.

Motion: That members present are recorded in the minutes.

Decision: The motion was adopted.

23 MEMBERSHIP

During the week FIG Council received one further application for membership from an association which was brought to the General Assembly for decision. Furthermore FIG council received 4 applications for academic membership and one application for corporate membership that was brought forward to General Assembly for information.

Member Associations

Licensed Surveyors Association of Ghana (LISAG) MA-10126

The Licensed Surveyors Association of Ghana (LISAG) has applied for membership. Their number of members is 100. Licensed Surveyors Association of Ghana fulfils the criteria of FIG Member association. The application has been approved by the existing member association from Ghana, Ghana Institution of Surveyors. Application form is attached as appendix to agenda item 23.1.

The number of Member Associations is hereafter 103 from 89 countries.

Motion: That the General Assembly admits the Licensed Surveyors Association of Ghana (LISAG) to become member association of FIG.

Decision: The motion was adopted.

Other membership matters

The Council has admitted the following academic member:

- Kaduna Polytechnic – Department of Topographic Science, Nigeria (AC-40137)
- University of Benin, Nigeria – Faculty of Environmental Sciences & Technology, Nigeria (AC-40138)
- Federal University of Technology, Surveying & Geoinformatics Nigeria (AC-40139)
- University of Nigeria Nsukka Enugua Campus, Surveying and Geoinformatics UNES (AC-40140)

The number of academic members is hereafter 93 from 55

The Council has admitted the following corporate member

- Innovation for Trading and Contracting (Category F) (CM-30058)

The number of corporate members is hereafter 22.

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

Decision: The motion was adopted

24 REPORTS FROM ASSOCIATION, AFFILIATE, ACADEMIC AND CORPORATE MEMBERS FORUM (IF ANY)

During the Working Week there were several Forums and meetings. President Angel Yanakiev, Bulgaria, reported back from the Member Association Forum, and the minutes from the forum is attached as appendix to item 24.

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/24_1_ma.pdf

FIG Vice President Pengfei Cheng reported back from the Director General's/Affiliate Members Forum. He reported that 15 countries were represented. Bengt Kjellson, Lantmäteriet, Sweden chaired the Forum, and started the Fourm with a short presentation.

Academic Members Forum was chaired by Chair of Commission 2 Liza Groenendijk, who reported back that there was not such a big attendance; however the two sessions had been very interesting. First the participants had been visualising the surveyor of tomorrow. Some of the characteristics are that they will be dealing with multiple issues, have high responsibility and is still skilled in the technical issues – altogether many things to cover for one person. Their vision was furthermore that hopefully in 2030 there will be more women in surveying. At the 2nd session FIG as knowledge platform was discussed.

Finally Brent Jones, ESRI gave a short report from the Corporate Members Meeting.

Corporate members report:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/24_GA.pdf

Motion: That the General Assembly records the reports

Decision: The motion was adopted.

25 REPORTS FROM COMMISSIONS, NETWORKS AND TASK FORCES (IF ANY)

FIG Vice President Diane Dumashie gave a summary report on the work and achievements of the FIG Commissions and the annual commission meetings during the week.

www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/25_1_GA.pdf

The Networks reported back to the General Assembly:

Young Surveyors Network:

www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/25_2_GA.pdf

Regional Capacity Development Network:

www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/25_3_GA.pdf

The Task Forces reported back to the General Assembly. Since two of the Task Forces were not yet endorsed by the General Assembly Council referred back to agenda items 15.2 and 15.4 for the final endorsement of the Task Forces.

Task Force reports:

Real Property Markets:

www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/25_4_GA.pdf

Commission Structure:

www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/25_5_GA.pdf

Scientific Journal:

www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/25_6_GA.pdf

Commission 9

The chair of Commission 9, Dr. Liao Junping has unfortunately decided to step down from his position. Council has therefore discussed the situation and has decided to appoint a new commission chair for the remaining period.

Motion: That the General Assembly records the reports and that the General Assembly records the decision by Council to appoint Mr Steven Nystrom, NSPS as chair of commission 9 for the remaining period.

Decision: The motion was adopted

26 REPORTS FROM PERMANENT INSTITUTIONS (IF ANY)

John Brock, The permanent institution on History (IIHS&M), reported back that they had a nice participation at the history sessions. They were especially glad to see that there are also Young Surveyors who are interested in history. Hereto John Brock commented the book that was included in the conference bags “Studies on History of Geodesy and Cartography in Bulgaria by Assoc. Prof. Dr. Eng. Veneta Kotseva. This is a very interesting book and a wonderful gift by the local organisers.

Motion: That the General Assembly records the report.

Decision: The motion was adopted.

27 REPORT FROM FIG FOUNDATION (IF ANY)

A meeting for FIG Foundation was organised in Sofia and various activities took place during the Working Week.

Motion: That the General Assembly records the report.

Decision: The motion was adopted.

28 DECISION ON THE VENUE FOR 2019 FIG WORKING WEEK

The agenda item 28 was moved to before agenda item 25 due to time constrains and in order to be able to finalise the voting before lunch. Agenda Items 25, 26 and 27 were included in between the voting.

Candidates for FIG 2019 Working Week had made their presentations in the first session of the General Assembly and FIG Council presented its evaluation. The decision was made between:

- Dublin, Ireland, Society of Chartered Surveyors, Ireland (RICS)
- Nairobi, Kenya, Institution of Surveyors, Kenya
- Geneva or Interlaken, Switzerland, geosuisse
- Hanoi, Vietnam, The Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR)

The decision took place by blind votes following the FIG statutes and internal rules. If there was no absolute majority in the first round of voting, a second vote would be organised between those two candidates that have most votes.

Motion: This General Assembly decides the host and venue for FIG 2019 Working Week.

Decision: A total of 75 votes were cast and the result of the ballot was as follows:

- Candidate A: Dublin, Ireland, Society of Chartered Surveyors, Ireland (RICS) – 8 votes
- Candidate B: Nairobi, Kenya, Institution of Surveyors, Kenya – 4 votes
- Candidate C: Geneva or Interlaken, Switzerland, geosuisse – 37 votes

- Candidate D: Hanoi, Vietnam, The Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR) – 26 votes

Since no candidate had full majority a new voting was carried through. A total of 75 votes were cast and the result of the ballot was as follows:

- Candidate 1: Geneva or Interlaken, Switzerland, geosuisse – 35 votes
- Candidate 2: Hanoi, Vietnam, The Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR) – 40 votes

The General Assembly decided that the FIG Working Week 2019 will be co-organised with The Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR) in Hanoi, Vietnam.

29 REPORT ON THE FIG CONGRESS 2018 IN ISTANBUL, TURKEY

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

Report:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/29_GA.pdf

Motion: That the General Assembly records the report

Decision: The motion was adopted.

30 REPORT ON THE FIG WORKING WEEK 2017 IN HELSINKI, FINLAND

Representatives from the Local Organising Committee from the Finnish Associations MIL and MAKLI will give a presentation on preparations of FIG Working Week 2017.

Report:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/30_GA.pdf

Motion: That the General Assembly records the report.

Decision: The motion was adopted.

31 REPORT ON THE FIG WORKING WEEK 2016 IN CHRISTCHURCH, NEW ZEALAND

Representatives from the Local Organising Committee from New Zealand Institute of Surveyors will give a presentation on preparations of FIG Working Week 2016.

Report:

www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/31_GA.pdf

Motion: That the General Assembly records the report.

Decision: The motion was adopted

32 PRESENTATION OF CERTIFICATES OF APPRECIATION

The President acknowledged all involved in the preparation, organizing and delivery of the FIG Working Week 2015. Certificates of appreciation were handed out including to Col. Eng. Rumen Dimitrov, LTC PhD Mariyan Markov and Major eng. Svetoslav Tsarovski from Military Geographic Serves, Eng. Svetoslav Nakov, Director of the Agency of Geodesy Cartography and Cadastre Company for International Congresses, Ltd, Cadastre Agency at the Minister of Regional Development and the local organising committee Eng. Georgi Zlatanov, Dr. Alexander Yanakiev, Dipl. eng. Kremena Boyanova, President Chamber of Graduated Surveyors Dipl. eng. Angel Yanakiev, and Co-conference director Zlatan Zlatanov.

CLOSING CEREMONY

The President presented her closing address that summarized the main outcomes of FIG Working Week 2015

Handouts of the President's Closing Address:

http://www.fig.net/organisation/general_assembly/agendas_and_minutes/2015/minutes/closing_potsiou.pdf

At the closing ceremony the FIG banner was handed over by Mr. Yanakiev Angel Krumov, President of the Chamber of Graduated Surveyors in Bulgaria to and the President of NZIS, Jeff Needham.

The FIG Working Week 2016 will be held in Christchurch, New Zealand on 2-6 May 2016.

President Chryssy Potsiou closed the 38th FIG General Assembly at the FIG Working Week



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

Membership Application for a Member Association

General

Full membership of the International Federation of Surveyors (FIG) is open to a national association representing one or more of the disciplines of surveying (see the following FIG definition of a surveyor) and whose members

- possess relevant academic qualifications (which should normally be equivalent to at least UNESCO International Standard Classification of Education (ISCED) level 5 degrees) plus approved professional experience; and
- who provide professional services in accordance with ethical standards.

Associations which include technician grades of membership are also eligible for membership of the Federation.

A group of surveyors or surveying organisation, comprised of individuals who practise the profession of surveying, which does not fulfil the criteria for membership as a member association can be admitted to join the Federation as an affiliate member. An affiliate may be admitted to membership where the discipline or disciplines it represents are not already represented within the Federation by a member association from the same country. The admission of an affiliate should normally be a step towards the development of an association which can eventually become a member association.

Each category of membership provides opportunities for establishing contact with the international surveying community and thereby assisting with the development of indigenous academic and professional training programmes, including CPD facilities, and the development of technical and professional standards.

Only member associations are entitled to vote at FIG's annual administrative meetings. An affiliate and other members may nominate a representative to attend as an observer. All FIG members receive copies of FIG publications, monthly e-Newsletters and the Annual Review; and are entitled to nominate one delegate to each of FIG's ten technical commissions. Participation to the Commission work is one of the most important benefits of membership of FIG. However these benefits only come about if those nominated as delegates participate in the work of the commissions and publicise the results within their own countries; and FIG has therefore published guidelines for its members and for their national commission delegates.

As from 1 January 2014 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 2014.

An association wishing to apply for full membership should complete the relevant application form and return it to the Council. Applications are assessed first by the Council, which decides whether to recommend them for approval by the General Assembly.

In the case of an application received from an association in a country which already has one or more member associations, these associations shall be informed of the application and their comments sought.

FIG DEFINITION OF SURVEYOR

A surveyor is a professional person with the academic qualifications and technical expertise to practise the science of measurement; to assemble and assess land and geographic related information; to use that information for the purpose of planning and implementing the efficient administration of the land, the sea and structures thereon; and to instigate the advancement and development of such practices.

Practice of the surveyor's profession may involve one or more of the following activities which may occur either on, above or below the surface of the land or the sea and may be carried out in association with other professionals.

1. The determination of the size and shape of the earth and the measurement of all data needed to define the size, position, shape and contour of any part of the earth.
2. The positioning of objects in space and the positioning and monitoring of physical features, structures and engineering works on, above or below the surface of the earth.
3. The determination of the position of the boundaries of public or private land, including national and international boundaries, and the registration of those lands with the appropriate authorities.
4. The design, establishment and administration of land and geographic information systems and the collection, storage, analysis and management of data within those systems.
5. The study of the natural and social environment, the measurement of land and marine resources and the use of the data in the planning of development in urban, rural and regional areas.
6. The planning, development and redevelopment of property, whether urban or rural and whether land or buildings.
7. The assessment of value and the management of property, whether urban or rural and whether land or buildings.
8. The planning, measurement and management of construction works, including the estimation of costs.
9. The production of plans, maps, files, charts and reports.

In the application of the foregoing activities surveyors take into account the relevant legal, economic, environmental and social aspects affecting each project.

FIG MEMBERS AND THEIR COMMISSION DELEGATES

The purpose of these guidelines is to help ensure that the full benefits of FIG membership are passed down to all the individual members of associations or other organisations that are members of the Federation.

To ensure that these individual members are kept fully informed of and input where necessary to the work of FIG and its commissions, FIG recommends that

- FIG members should support, or encourage others to support, the attendance of national commission delegates at annual FIG working weeks (including annual commission delegate meetings and technical symposia) and other symposia organised by the commissions
- FIG members and their national commission delegates should consider establishing networks within their countries to communicate information and obtain feedback
- national commission delegates should be actively involved in commission activities, including responding to questionnaires or correspondence and identifying topics and authors of papers for commission symposia and FIG congresses
- FIG members should seek and encourage funding support to enable national commission delegates to attend FIG activities, including commission meetings

National commission delegates should write at least one annual report for publication in a local newsletter or technical journal or for dissemination by some other means to individual members of their association or organisation.

International Federation of Surveyors

Application form for Membership as a Member Association

1. Name of association
Géographie, Topographie, Hydraulique, Energie et Construction
(GEOTHECO)
2. Address. UGANDA-KAMPALA
3. Telephone no (+256)753931564,+256787529763
4. Fax no.
5. e-mail address. . geohteco80@gmail.com ,geothecosarl@yahoo.fr
6. Home page address. www.geotheco.com
7. Logo (please attach a high resolution logo of the association as .jpg file or add the link):



GEOTHECO Company Ltd

GEOGRAPHIE, TOPOGRAPHIE, HYDRAULIQUE, ENERGIE ET CONSTRUCTION

Tel.:+256753931564 /+ 256787529763

E-mail:geothecosarl@yahoo.fr
geotheco80@gmail.com

6. Name of President . .RUZIRAGUHUNGA Emmanuel.
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

MUGISHA David

42 Members

8. Date of formation of association 10/09/2008

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).

10. Routes of entry to membership

Please provide the following information on a separate sheet

- the title held by qualified members of the association
Civil Engineers , Land Surveyors ,Real estate and Valuation, Geology and Mine
- the level of academic qualification required to obtain the title
Level 5 and Msc
- whether academic training programmes to this level are available in your country (if not, please state how and where members obtain their academic training)

National University of Rwanda (NUR)

Institut D'enseignement Supérieur de Ruhengeri (INES-Ruhengeri)

Makerere University (Uganda)

Institut polytechnique de Tacheten

- what approved professional experience is required on completion of academic training and prior to acquisition of the title
All course from level 1 to level 5 and professional internship
- what the requirements are for continuing professional development and whether this is mandatory or voluntary

It is mandatory for members to be definite surveyor and engineer.

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

We admit full professional only.

11. Members

No. of holders the title
qualified. 42
qualifying 0

No. of technician or sub-professional members
qualified . 0
qualifying 0

12. Specialisations

% of qualified members whose principal specialisation is

- hydrography 6%
- positioning/measurement 30%
- engineering surveys 9%
- cadastre/land management 8%

- spatial planning/development 12%
- valuation/real estate management 12%
- construction cost management 23 %

13. Statutory recognition

Is the association constituted by statute? No

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.

RUZIRAGUHUNGA Emmanuel

14. Employment

% of qualified members

- self-employed and employed in private practice. **96%**
- teaching **2%**
- employed by government **2%**
- employed in the commercial or other sectors. **0%**

15. Subscriptions

Please state the annual subscription payable by each grade of membership

Free

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.

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, tel. + 45 3886 1081, fax + 45 3886 0252



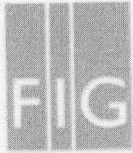
**Nomination Template
Vice President
(2017-2020)**

Nominee:	
Name:	DR. SUNIL LALLOO
Member Association:	THE INSTITUTE OF SURVEYORS OF TRINIDAD AND TOBAGO
Country:	TRINIDAD AND TOBAGO
Contact address:	EMROND HOUSE, 111 OXFORD STREET, PORT-OF-SPAIN, TRINIDAD W.I.
Email address:	sunil.laloo@gmail.com
Age:	31
Educational background & Qualifications:	B.Sc. (first class honours) Surveying and Land Information LLB (hons) Pg.Dip Land Management and informal settlements regularisation PhD Surveying and Land Information MISTT
Field of surveying discipline	Geomatics and Valuation
History of Employment:	Surveyor (valuation) – Raymond and Pierre Limited
- Current position	
- Previous position(s)	Asst. Lecturer – The University of the West Indies Consultant – OECS/UWI/UN-HABITAT Consultant – Chaplan Ltd Lecturer – The University of Trinidad and Tobago Surveyor – Voltec Engineering and Surveying Services Ltd.



Nomination Template
Vice President
(2017-2020)

Nominee:	
Position of Trust: - Current position(s)	Member – management committee – The Institute of Surveyors of Trinidad and Tobago
- Previous position(s)	-
FIG Positions/Responsibilities: - Current position(s)/ responsibilities	-
- Previous position(s)/ responsibilities	-
Other activities in FIG	Working week 2015 – Sofia, Bulgaria Review team – Fit for purpose guide for Land Administration



Nomination Template
Vice President
(2017-2020)

Nominee's statement	
My motivation to be FIG Vice President:	I have been following the FIG's activities since I was an undergraduate student in Surveying. For me, the FIG represents the global association responsible for the progression and evolution of Surveying theory and practice. Its overarching themes form an umbrella for other surveying institutions such as the RICS, CASLE and the ISTT, of which I am a part. Given my background, I think the role of Vice-President of the FIG will give me the advancement that I need to provide leadership in the FIG and in the surveying profession in the Caribbean and Latin America.
What I can offer in support of FIG's aims and objectives:	Given the global context of the FIG, I intend on pushing an agenda for the reform of land policy toward sustainable development internationally. This reform should focus on the developing countries, particularly in West Africa and East Asia where land policy reform would have the greatest impact on development and the alleviation of poverty.
My key skills for the Vice Presidency and FIG Council:	Being qualified in both valuation surveying and geomatics, I can work with both fraternities to develop best practice tools to advance the profession. As an academic and practitioner, I can also assist in bridging the gap between advances in surveying theory and practice. My background in law can also prove useful in the Council in developing rules and guide notes for the Council and the member associations.
Any other supporting information:	-



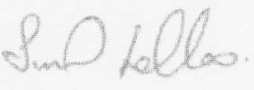



Nomination Template Vice President (2017-2020)

Nominator	
Name of Member Association:	Institute of Surveyors of Trinidad and Tobago
Name of Proposer:	Marcia Prince-Assam
Position in Association	President
Contact address:	The Professional Centre 11-13 Fitzblackman Drive Woodbrook, Port of Spain Trinidad and Tobago
Email address	marciaprinceassam@gmail.com : info@instituteofsurveyors.com
Proposer's Statement	
Why the Association wants to propose the Nominee	The ISTT's executive decided to nominate Dr. Laloo as we believe his combination of qualifications in Geomatics, Valuation and Law as well as his consultancy experience in Land Administration and Land Management would make him an asset to the FIG Council. We are also confident that Dr. Laloo would adequately represent the issues faced by the Region (Caribbean and the Americas) in the context of sustainable development.
What support (financial, administrative and others) can the Association provide to the Nominee if elected Vice President	The ISTT is willing to support Dr. Laloo in terms of his administrative and technical needs as they relate to the goals of the FIG. This is also consistent with the existing support that the ISTT provides to the FIG.
Any other supporting information:	
Name of Seconder:	Michael Samms
Position in Association	Vice President
Contact address:	18 Picton Street Newtown, Port of Spain



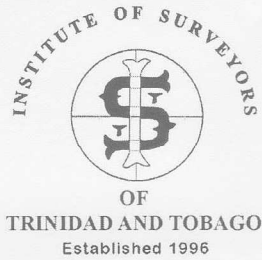
Nomination Template
Vice President
(2017-2020)

Email address	mikesamms@yahoo.com
---------------	---------------------

Signed	
I hereby certify the above is true and correct	
I am available/not available* for the election as Vice President for the remaining two year term (2015 – 2016) if vacancy arises.	
Nominee	
Proposer:	
Seconder:	
Date:	

* Nominee is required to cancel whichever is not appropriate; and
Nominee is requested to initial every page of the nomination template

Clarifying Notes:	<ul style="list-style-type: none">• 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)• 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• Nominating FIG Member Association should ascertain the availability of the nominee over the duration of the term of office• Nominee should preferably have prior or current responsibilities within and working knowledge of FIG, its activities, aims and objectives• Nominee and Nominator are requested to pay attention to the Nominee's Statement and the Proposer's Statement
-------------------	---



INSTITUTE OF SURVEYORS
The Professional Centre, 11-13, Fitzblackman Drive, Woodbrook,
Port of Spain, Republic of Trinidad & Tobago
Email info@instituteofsurveyors.com Web www.instituteofsurveyors.com
Telephone No: 468-3356

January 20, 2016

Ms. Louise Friis-Hansen
FIG Manager
International Federation of Surveyors
Kalvebod Brygge 31-33
DK-1780 Copenhagen V

Dear Sir/Madam,

Re: ISTT Nomination for Dr. Sunil Lalloo to the position of Vice President (FIG)

This letter serves as our confirmation of our support of the nomination of Dr Sunil Lalloo to the position of Vice President of the International Federation of Surveyors (FIG).

Dr Lalloo currently serves on the Management Committee of the Institute of Surveyors (ISTT) and is the holder of a PhD in Surveying and Land Information. He also has considerable experience in the tertiary education sector having lectured at both the University of the West Indies and the University of Trinidad and Tobago. Additionally, he has served as a Consultant to the OECS/UWI/UN-HABITAT.

We therefore submit our nomination in support of Dr Lalloo.

Yours sincerely

INSTITUTE OF SURVEYORS OF TRINIDAD AND TOBAGO

Marcia Prince-Assam
PRESIDENT



FIG Member Association Forum

Minutes

Chair: Dipl. Eng. Angel Krumov Yanakiev

Tuesday, 19 May

The forum took place at the FIG Working Week 2015, 17-21 May, Sofia, Bulgaria. The President of the Chamber of Graduated Surveyors in Bulgaria was chairing it. Minutes – Kremena Boyanova and Alexander Yanakiev. About 30 delegates took part in the meeting. Find list of participants that provided their names and organisations in [Annex 1](#).

AGENDA

The following agenda was suggested for discussion:

1. Proposal for establishment of Global Surveyors Day.
2. Possible improvements in the established relations between the member associations.
3. Recommendations for changes and improvements in the management of FIG.

The agenda was accepted.

1. Proposal for establishment of Global Surveyors Day.

It was suggested that, following the example of the CLGE for establishment of European Surveyors Day, the establishment of Global Surveyors Day should be suggested to the FIG Management. The delegate from the National Society of Professional Surveyors (USA)– John Hohol, have suggested this already on the FIG Working Week 2014 in Kuala Lumpur, Malaysia, considering the tendency for establishment of worldwide celebration days in many fields – GIS day, Museums Day, Water Day, etc. Many benefits from the establishment of Global Surveyors Day were mentioned:

- Will promote the profession;
- Will highlight the importance of the profession to the society;
- Will increase the awareness among surveyors and society about FIG and their national organisations.

The Surveyors Day should be on the same date for all national, regional and global organisations and should be celebrated simultaneously by all surveyors and institutions around the world. The organization of the event should happen on national level by the local authorities. For example,

the European Surveyors Day is celebrated by CLGE every year in Brussels. In Bulgaria there are also big celebrations for the Surveyors Day, but on a different day.

In addition to the Global Surveyors Day, the celebrations should be dedicated to a selected Surveyor of the Year, again following the practice of CLGE. For example, 2015 is Euclid Year in Europe. Also, all topics of survey should be embraced as topics of the celebrations, not only the most applied ones, like land management.

There are no criteria yet for the choice of Surveyor of the Year and the celebrations' topic. Such criteria should be established, if the proposal gets accepted by the General Assembly. The task should be addressed to the history group, which can suggest topics, surveyors and support the organization of the events.

The proposal should be submitted for consideration at the General Assembly on Thursday, 21 May, so the decision can take place at the General Assembly in New Zealand 2015.

2. Possible improvements in the established relations between the member associations.

An improvement of the established relations within FIG is needed, in order the collaboration and support between the members to be increased. Surveyors are not equally distributed around the world – there are countries in which the number of specialists exceeds the demand and such, in which there are not enough specialists. Such issues should be addressed within the community. There were three suggestions made for the improvement of the relations between the FIG members:

- i. Short information for every member association should be provided in English in addition to the title of the association on the FIG website. A template for this information should be developed and all institutions should use it.
- ii. Additional to the information template on the website, each organization should provide a link to their website, preferably to its English version, if it is available.
- iii. Since many of the members of the national organisations don't speak English, all the template information for the national organisations should be provided in all FIG languages, in order to be available for all member surveyors.

3. Recommendations for changes and improvements in the management of FIG.

It was pointed that the outreach program of FIG should be improved and better managed. The benefits from the membership in the organization should become more visible, since there are many members of the national organisations that don't see the benefits from the membership and the role of FIG in their country. This outreach should happen not only by internet but also through other activities, since there are still many countries that don't have good access to internet.

In addition to the communication issues, it was also pointed out that FIG should provide support for countries with little experience in certain survey practices. Professional support and guidelines are needed for the developing countries and countries in crisis.

PROPOSALS TO THE GENERAL ASSEMBLY:

- 1) Global Surveyors Day to be established. It should be same for all national, regional and global organisations.
- 2) Celebrations to be dedicated to a Surveyor of the Year and a topic from the broad field of survey activities. The choice should be addressed to the history group, which can suggest topics, surveyors and can support the organization of the events.
- 3) Short information for every member association should be provided in English in addition to the title of the association on the FIG website. A template for this information should be developed and all institutions should use it.
- 4) Each organisation should provide a link to their website, preferably to its English version, if it is available, again for the list of member associations on the website.
- 5) All the information for the member institutions and national organisations should be provided in all FIG languages, in order to be available for all member surveyors that don't speak English.
- 6) The outreach program should be better managed and improved and the benefits from FIG should be more visible by the members of the national organisations.
- 7) FIG should provide support for countries with little experience in certain survey practices. Professional support and guidelines are needed for the developing countries and countries in crisis.

Annex 1. List of participants

	Name	Organisation	Country
1	Angel Yanakiev	Chamber of Graduated Surveyors	Bulgaria
2	Alexander Yanakiev	Chamber of Graduated Surveyors	Bulgaria
3	Kremena Boyanova	Chamber of Graduated Surveyors	Bulgaria
4	Ivan Kaltchev	Union of Surveyors and Land Managers in Bulgaria	Bulgaria
5	Jan Hardos	Chamber of Surveyors and Cartographers	Slovakia
6	Maria Joao Henriques	Laboratorio Nacional de Engenharia Civil	Portugal
7	Teresa Sa Pereira	Porto de Lisboa	Portugal
8	Murtala Aliyu	Nigerian Institute of Quantity Surveyors	Nigeria
9	Akin Oyegbola	Nigerian Institution of Surveyors	Nigeria
10	Isa Sani Mohammed	Nigerian Institution of Surveyors	Nigeria

11	Bern Omo Akhigbe	Nigerian Institution of Surveyors	Nigeria
12	Kunle Ogunbadewa	Nigerian Institution of Surveyors	Nigeria
13	Olumide Adewebi	Nigerian Institution of Surveyors	Nigeria
14	Yoshiro Nakahori	Japan Association of Surveyors	Japan
15	Trinh Anh Co	Vietnam Association of Geodesy – Cartography – Remote Sensing	Vietnam
16	Tran Bach Giang	Vietnam Association of Geodesy – Cartography – Remote Sensing	Vietnam
17	Karl-Friedrich Thöne	German Association of Geodesy, Geoinformation and Land Management	Germany
18	Eberhard Ziem	German Association of Geodesy, Geoinformation and Land Management	Germany
19	John Hohol	National Society of Professional Surveyors	USA
20	Julius Ernst	Austrian Society for Surveying and Geoinformation	Austria
21	Moha El-Ayachi	Ordre National des Ingénieurs Géomètres Topographe	Morocco
22	Thomas Glatthard	Swiss Organisation for Geoinformation	Switzerland
23	Martti Pietikäinen	National Land Survey of Finland	Finland
24	Lopang Maphale	Botswana Surveying and Mapping Association	Botswana
25	Mark Straughan	South African Council for Professional and Technical Surveyors	South Africa

Commission 1 2016 report

A Commission Newsletter was sent out from the Chair and Vice Chair (Administration and communication) through the FIG office in Copenhagen in 2014 and the Chair has had regular contact with the team of Working Group Chairs.

The Working Groups progress report is as follows:

WG 1.1 - International Ethics Standards

The International Ethics Standards Coalition (IESC), comprising 63 professional bodies and non-governmental organisations, have published the IES consultation draft written by an independently appointed Standards Setting Committee (SSC) of experts. It sets out the first set of high level global business ethics principles for practitioners operating across land, property, construction, infrastructure and related professions. As part of the consultation process the IESC want to hear what everyone thinks about the first set of universal truly global ethics principles. The FIG Ethics Working Group would be grateful for any participation and assistance in the consultation process, so that all sectors and subsectors participate in the consultation, so that the resultant IES meets market needs. Once the IES is published, the Working Group will turn its attention to updating the existing FIG Ethics document to align with or adopt the wording of the IES. At the FIG Working Week in Christchurch, the Commission 1 Ethics Working Group will be running a roundtable workshop discussion on ethics and the draft standard.

WG 1.2 Women in Surveying

The WG is preparing a survey based on one created in Australia a few years ago, that will be circulated amongst FIG member associations and all other interested surveying contacts in mid 2016. The findings will be analysed in 2016 and the WG will report back on the findings at the Working Week in Helsinki. The Christchurch Working Week Organisers have arranged for a breakfast meeting in the Programme, for which an international speaker is being organised. It is hoped that this will provide a springboard for the development of a forum for the discussion of topical and relevant issues.

WG 1.3 International Boundary Settlement and Demarcation

There is one paper relating to boundary definition being presented in Christchurch, and a small workshop for discussion on how to progress the activities of WG1.3 will be organised with a view to having a session / symposium at FIG Working Week 2017 in Helsinki. An aim of this working group will be to investigate the long term definition and demarcation of international boundaries - in particular considering the effects of earth deformation and changes in international reference frames. Other topics of interest to delegates will also be addressed and there will be liaison in Christchurch with delegates from Commissions 4, 5 and 7 on common interests.

WG 1.4 Forum on Engagement of Private Practitioners

An open discussion session has been arranged by the WG for the Christchurch Working Week with the objective of beginning to discuss issues and set an agenda for ensuring a continued level of private practice participation in future FIG Working Weeks and Congresses. It is hoped that as many as can contribute will participate in the Forum so that attractive programmes can continue to be arranged that engage surveyors in private practice or in business.

WG 1.5 Forum on Mutual Recognition

The Mutual Recognition WG/Forum will host a session during the WW that includes experiences from Australia, ASEAN, Europe and Africa on key challenges. The ASEAN work in particular is linking to the Cadastral Template (with new entries/updates from Brunei, Cambodia, Philippines) on the basis that mutual understanding is a critical precursor to mutual recognition agreements. An

Education Template and Professional Profile Template have been developed, drawing on Europe's experience to assist countries to identify commonality and regional needs, and the application of this will be discussed during the session. Outcomes from the WW will guide future action - in particular, any updates to the FIG Publication.

It is anticipated that all of the Working Groups will advance their agendas during the Working Week in Christchurch.

Brian J Coutts
Chair, Commission 1

FIG Commission 2 Annual Report 2015

General Assembly FIG WW in Christchurch, New Zealand.

Introduction

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

All working groups work together to contribute to the FIG Commission 2 focus areas for its term 2015 – 2018:

1. Becoming an active Commission
2. Professional education world-wide
3. The chain of professional surveying education
4. Towards educating the land professional

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.

Highlights 2015

FIG Working Week, Sofia, Bulgaria, 17-21st May 2015

Overview activities by FIG Commission 2 during the FIG Working Week in Sofia:

- Commission 2 Annual Meeting
- The Commission 2 diner organized together with FIG Commission 1
- Three technical sessions:
 1. Innovative Approaches in Teaching and Learning
 2. Training New Generations
 3. Capacity Needs and Continuous Professional Development (with Commission 1)
- Academic Members Forum 1.
 - Research to support the surveyor of tomorrow.
- Academic Members Forum 2.
 - OICRF and knowledge management in FIG.

See for a complete report: FIG Commission 2 Newsletter, June 2015



Kathmandu, Nepal, FIG Commission 2 – ISPRS Commission IV Workshop,
25-27th November 2015
<http://www.workshopnepal2015.com.np>

A major event for FIG Commission 2 was the Workshop in Nepal. Kathmandu was from 25 – 27th of November 2015 the host of the International Workshop on the Role of Land Professionals and SDI in Disaster Risk Reduction in the context of Post 2015 Nepal Earthquake. The workshop was an initiative of FIG Commission 2 together with ISPRS Technical Commission IV, and was supported by FIG Commission 7. Over 300 participants attended this successful workshop organized by the Nepal Institution of Chartered Surveyors (NICS) and the Nepal Remote Sensing and Photogrammetric Society (NRSPS). Former FIG President Chee Hai Teo attended the workshop and addressed the audience. Dr. Donald Grant represented FIG Commission 7 as one of the plenary speakers.

With its focus on the Post 2015 Nepal Earthquake, this FIG –ISPRS Workshop in Nepal was a kind of pre-event of the upcoming FIG Working week in New Zealand . The contribution of Alistair Greig and Christofer Pearson from New Zealand was therefore much appreciated.

The chair of the local organizing committee, Ganesh Prasad Bhatta, did a tremendous job. It was proposed to award him with a ‘kind of honourable membership’ of our FIG Commission 2. After consultation with the FIG office this will be a FIG Certificate of Appreciation.

One of the papers presented at the FIG – ISPRS International Workshop in Kathmandu, Nepal, in November 2015, was selected as the FIG article of the Month January 2016 and was written by Reshma Shrestha, vice-chair of Working Group 2.1.

http://www.fig.net/resources/monthly_articles/2016/shrestha_etal_january_2016.asp



General activities

Network Database update: with the help of an intern Fahria Masum updated the list of academic institutions/departments in field of land management and land administration.

Website update: Fahria Masum checked the emails addresses of FIG academic members/ delegates/ commission members and gave the list to Claudia/Hanne to update the website.

The FIG Commission 2 Newsletter June 2015 was published with the latest updates and the report of the FIG Working Week in Sofia, Bulgaria.

http://www.fig.net/organisation/comm/2/activities/newsletters/Newsletter_June_2015.pdf

FIG Commission 2 has been requested to increase to involvement of Arab countries. Fahria Masum is in contact with Willi Zimmermann in order to see what can be done. It has the attention by the commission.

Reports from the Working Groups

Working Group 2.1 – Towards educating the land professional

Chair: Dr.-Ing. Fahria Masum (Germany): masum@landentwicklung-muenchen.de

Co-chair: Reshma Shrestha (Nepal) (shrestha19012@itc.nl);

Co-chair: Gordon Wayumba (Kenya) (gowayumba@gmail.com)

This working group supported the organization of the FIG Commission 2 – ISPRS Commission IV Workshop, 25-27th November 2015, in Kathmandu, Nepal. In particular Reshma Shrestha played a key role in facilitating and supporting the local organizing committee and therefore contributed highly to the success of this great event for Commission 2.

The chair of the working group Fahria Masum developed a concept note for an FIG Commission 2 publication: 'Enhancing the role of surveyors: The need for a new and broadened curriculum'. Also Working Group 2.2. has a similar initiative and a joint publication will be proposed.

New members joined the working group: Fabian Thiel and Eugene Chigbu.

Working Group 2.2 – Innovative learning and teaching

Chair: Dr. Audrey Martin, audrey.martin@dit.ie

This working group worked together online and came up with a proposal for a publication. Audrey Martin together with Reinfried Mansberger proposed producing a FIG publication entitled 'Good Practice in Teaching Surveying and Land Management'. An initial draft have been send to the working group members and to Working Group 2.1.

The Working Group intended to have a workshop in Dublin in June, 2016. But this got not much support by the FIG office as it might diminish the numbers able to afford to travel to the FIG Working Week in Christchurch New Zealand. So preparations have not started.

Working Group 2.3 –Demand for and supply of Professional Education

Chair: Dr. Nadezda Kamynina (kamyninan@gmail.com)

Online communication and support to Commission 2 in general.

No special events by Working Group 2.3 for 2015. More activities expected in 2016.

Working Group 2.4 - Accreditation and Quality Assurance

Chair: Prof. Alias Abdul Rahman (alias.fksg@gmail.com)

During the Joint International Geo-information Conference 2015 held from 28 to 30 October in Kuala Lumpur, Malaysia, Professor Alias Abdul Rahman organized a special session on Geomatic Education as part of an FIG Commission 2 event. Papers addressed the following subjects: geomatic education; geoinformatic education; programme accreditation and professional and industry related programs and courses. During this important conference the FIG Track hosted two sessions, each with 5 papers in the domain of geomatics education (and contributing to the work of WG 2.1. as well). A great achievement of Professor Alias Abdul Rahman, who was at the same time, and in a more important role, the chairman of the organising committee of the JIGI Conference. Congratulations from FIG Commission 2 with this major achievement.



Program: <http://www.geoinfo.utm.my/jointgeoinfo2015/program.html#FIG1>

Abstracts: <http://www.geoinfo.utm.my/jointgeoinfo2015/download/JIGAbstractBook.pdf>

Certificates of Appreciation

A proposal has been forwarded to the FIG Secretariat to award Buddhi Narayan Shrestha, president of the Nepal Institution of Chartered Surveyors (NICS) and chair of the steering committee of the Nepal workshop, and Ganesh Prasad Bhatta, chair of the organising committee of the Nepal Workshop with a Certificate of Appreciation.

Young Surveyors

FIG Commission 2 supported the FIG Young Surveyors Network. During the working week in Sofia we participate in some sessions. During the workshop in Nepal the FIG Young Surveyors Network, under the guidance of Eva Maria Unger and Paula Dijkstra organized a special session for the Nepalese young surveyors, which was attended by more than 50 participants. Commission 2 was involved in the organisation and implementation. In groups, four disaster risk reduction 'tools' were proposed and elaborated and 'pitched' in a so-called market place. The winning tool 'a format for standardized hashtags for location-based social media posts for post-disaster information management' will be presented at the FIG Working Week in New Zealand.

FIG Foundation

On behalf of FIG Commission 2 the chair participated in the Meeting of the FIG Foundation during the FIG Working Week in Sofia. She further participated in the discussions and decisions regarding requests for FIG grants. Further information in the FIG Foundation annual report.

Planning 2016

Joint Publication

Both Working Group 2.1 and Working Group 2.2. came up with a proposal for a publication:

WG. 2.1.: Enhancing the role of surveyors: The need for a new and broadened curriculum

WG 2.2.: Good Practice in Teaching Surveying and Land Management

The two proposals have in common that they focus on surveying education taking into account the new roles and challenges for the surveyor. It contributes to the Commission's focus area 4: Towards Educating the Land Professional. It has been proposed to produce a joint publication.

During 2016, the Working Groups 2.1 and 2.2. will come up with a joint proposal, including the main structure for the publication. Based on that, a plan of action with task descriptions for the contributing authors will be proposed. Given the theme of the publication, FIG Commission 7 will be contacted for their interest and support.

Working Group 2.1 – Towards educating the land professional

Dr. Fahria Masum has been in contact with Prof. Thöne, president of The German Society for Geodesy, Geoinformation and Land Management (DVW). He is interested to arrange a workshop on behalf of FIG Commission 2 in co-operation with DVW. It was suggested to arrange a workshop on 'new role of surveyor and professional education' during the upcoming INTEGEO 2017 in Berlin, taking place September 19-21. Fahria has developed a Concept Note for the workshop. This will be discussed in the DVW's annual meeting in March.

With Gordon Wayumba, Technical University of Kenya, ideas have been exchanged for an FIG Commission 2 workshop in 2017 next to the yearly meeting of the East African Land Administration Network (EALAN). He will explore this possibility further and a decision will be made as soon as we know where the next EALAN meeting will take place. The intention is to have it in Nairobi, Kenya.

Working Group 2.2 – Innovative learning and teaching

As discussed last year the idea of a Workshop in Dublin was not seen as financially viable for many due to the costs of attending the FIG Working Week in NZ. However, the working group and the chair of FIG Commission 2 would like to reconsider the decision. Most FIG Commission 2 members do not travel to New Zealand and therefore we will not meet there.

In order to have an FIG Commission 2 meeting it is worthwhile (re-)considering to organise a small event in Dublin where most of our membered could meet. Dr. Aubrey Martin remains willing to organise such an event at DIT. It is therefore proposed to organise an FIG Commission 2 Meeting in Dublin with the main aim of putting a the ideas for the FIG Commission 2 Publication together and develop a work plan.

Working Group 2.3 –Demand for and supply of Professional Education

Will be involved in the joint publication. Role in organizing online Commission Meetings.

Working Group 2.4 - Accreditation and Quality Assurance

Will be involved in the joint publication. Represent Asian-Pacific region.

FIG Commission 2 Event Calendar 2016		
<i>Event</i>	<i>Place</i>	<i>Time</i>
FIG Commission 2 Pre - WW Meeting WG Chairs	Online	April 2016
FIG Working Week <ul style="list-style-type: none"> • Technical sessions (3) • Academic Forum 	Christchurch, New Zealand	2-6 May 2016
FIG Commission 2 Meeting	Dublin, Ireland	End May/June or Sept/Oct 2016

ANNUAL REPORT COMMISSION 3 - 2015

The activities of the FIG Commission 3 have resulted in a new interest for delegates. In the matters of competence of the Commission, starting from the Annual Meeting and Workshop held in Bologna in 2014, it has been given greater emphasis to the study of the formation and collection of geospatial data processes with particular reference to crowdsourcing. This approach, which at this time is finding widespread application, has become a subject of research and criticism in relation to the benefits and the problems that may arise from the use of it. The topic about the use of "crowdsourcing" had also a prominent importance in the ACCO meeting during last FIG WW 2015 in Sophia.

The importance of the general topics as SDI, SIM, GIS, etc. together with VGI has drawn the attention of many delegates who have allowed to carry out interesting working sessions. In fact, in the FIG WW in Sofia Commission 3 had more than 50 interesting and innovative presentations, divided into 11 sessions, by delegates from all over the world.

The success was then repeated in the Annual Meeting and Workshop held in Malta in november 2015 together with Commission 7. During this event, in which the Annual Meeting of Commission 3 was held too, there was the participation of about 80 delegates, 43 of them were of Commission 3.

The workshop focused on effective utilization of VGI within the framework of SDI and SIM, many different and interesting topics related to SDI, SIM, VGI and crowdsourcing were discussed. Other topics included also:

- National Mapping Agencies (NMAs): practices with VGI and managing of spatial information; theory, applications and best practice studies
- Land management tools and innovative spatial information solutions addressing global and national challenges
- Utilization of VGI and crowdsourcing with SDI and SIM on collection, dissemination, analysis, maintenance, and visualization
- Applications of VGI in managing the built environment, legalization monitoring, property registration, planning reforms
- Early warning systems, climate change, natural disasters and environmental protection: adapting working paradigms; case studies and possibilities
- Tackling VGI and PM credibility issues: interoperability, uncertainty, quality, authenticity, validity
- PM and Citizens Science – case studies and processes

The Crowdsourcing of Land Information has had a good effect on the involvement of both the academic and professionally world.

Thanks to the cooperation of the chairs of the working groups, who I thank for their invaluable collaboration, more research was discussed under the following matters:

- 1) SIM Infrastructure;

- 2) Technical Aspects of SIM;
- 3) 3D Cadastre;
- 4) Crowdsourcing and VGI supporting SDI;

For the FIG WW 2016 in Christchurch, the participation of many delegates is expected. The technical programme of Commission 3 will be divided into six sessions plus 2 joint sessions with Commission 7 covering the general topic of the Commission with particular focus with the theme of the event (Recovery from Disaster).

FIG Commission 5

Annual Report of Activities 2015

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.

The year 2015 for Commission 5 has been primarily focused on the technical activities for the FIG operational surveyor. Our activities have been associated with the technical programme for the FIG 2015 Working Week in Sofia. The FIG/IAG/ICG/UN-GGIM-AP Reference Frame in Practice Technical Seminars were held in conjunction with the South East Asia Survey Congress (SEASC 2015) in Singapore. 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, especially at the Pacific Geospatial and Surveying Council Meeting and GIS/ RS User Conference in Suva, Fiji. Furthermore, the Commission has been preparing the next FIG Technical Seminar on Reference Frame prior to FIG Working Week 2016 in Christchurch (1-2 May 2016).

A summary of the working group activities in 2015 is as follows:

2. Working Groups

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 where the details and how measurement results are produced are not fully understood by the average practicing surveyor. Even if they are not directly implicated, they are very reliant upon standards underpinning the correct functioning of their instruments.

Working Group 5.1 has actively participated and will continue to participate in the development of technical sessions and creation of presentations for technical seminars and Working Weeks.

Working Group 5.1 continues to be the contact for FIG liaison to the ISO Technical Commission (TC) 211 (<http://www.isotc211.org/>) and Technical Committee ISO/TC 172/SC 6. Presently, Nic Donnelly, from Land Information New Zealand, is the FIG liaison to TC211.

Recall, 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, analyzing, 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.

ISO/TC 172/SC 6 deals more closely with classical surveying instruments. Standards deal with field procedures for testing geodetic and surveying instruments such as theodolite, total stations levels and GNSS in real-time kinematic (RTK). Several of these standards are presently being revised.

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.

WG 5.2 – 3D Reference Frames

Chaired by Nic Donnelly

The 3D Reference Frames Working Group is a successor to Commission 5's previous "Reference Frames in Practice" group. As such, it maintains a very practical focus on helping the surveying and spatial community understand and utilise 3D reference frames (or datums). A 3D reference frame (also known as a geometric reference frame) is often realised by stations with X, Y and Z geocentric coordinates, or latitude, longitude and ellipsoidal height. There are very close linkages with WG 5.3 – Vertical Reference Frames, which covers on physical heights.

Technical issues covered by this Working Group include global and local 3D reference frames, relationships between them, infrastructure and software to realise them and their use to support spatial positioning. There is also a focus on the relationships between 3D and vertical reference frames.

A key focus for this year has been education, with two workshops being run on the topics of vertical reference frames (in conjunction with WG5.3) and kinematic reference frames. The Technical Seminar on Vertical Reference Frames in Practice was held in Singapore from 27-28 July 2015, immediately before the South East Asian Survey Congress. Topics covered included the theory of vertical reference frames and physical height systems, airborne gravity, vertical deformation and case studies from a number of countries. There were about 20 participants from around the world, including a number from developing countries supported by the International Committee on GNSS (ICG), part of the United Nations Office of Outer Space Affairs (UNOOSA). The workshop was run with the support of partner organisations:

the International Association of Geodesy (IAG), the United Nations Initiative on Global Geospatial Information Management for Asia-Pacific (UN-GGIM-AP) and the Singapore Land Authority (SLA). The event was also well-supported by corporate sponsors Trimble and Leica.

A second technical seminar is planned for the two days preceding the 2016 Working Week in Christchurch. This will focus particularly on kinematic reference frames and deformation, issues of particular relevance to this part of the world. Once again, there is strong support from partner organisations and particular efforts are being made to support attendees from the Pacific Islands and other developing nations.

WG 5.3 – Vertical Reference Frames

Chaired by Kevin M. Kelly and Dan Roman

At the 2014 FIG Congress in Kuala Lumpur, Commission 5 established a new working group, WG5.3 – Vertical Reference Frames (VRF). Although Commission 5 has WG 5.2 – 3D Reference Frames, it was felt that the importance and unique issues involving heights and height systems justified its own dedicated working group. Some, although not all, of these issues include environmental ones like sea level rise and other geodynamic processes, climate change, etc. Among the more practical geodetic issues that WG5.3 – VRF will address 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.

As WG5.3 is brand new, focus has been on building its membership. To date WG5.3 has 10 members representing Africa, Asia, Central America, Europe, New Zealand and U.S.A. Although organized and put on by WG5.2, the technical program and suggested speakers for *Technical Seminar on Vertical Reference Frames*, held 27-28 July 2015 in Singapore was designed by WG5.3. WG5.3 will also participate in the FIG Commission 5 *Technical Seminar on Reference Frames in Practice* to be held at the 2016 FIG Working Week in Christchurch, New Zealand with two invited speakers: Dr. Bill Kearsly from University of New South Wales and Mr. Kevin Kelly from Esri.

WG 5.4 – GNSS

Chaired by Neil D. Weston and Suelynn Choy

WG 5.4 was active at the 2015 FIG Working Week in Sofia with five technical sessions on GNSS specific topics:

1. Atmospheric Application of GNSS (dedicated session)
2. GNSS Precise Point Positioning (PPP)
3. Multi-GNSS and GNSS Specialities
4. Geo-Dynamics and GNSS Analysis
5. GNSS for Monitoring (joint Commission 5 and 6 session)

GNSS plays a vital and growing role in areas as diverse as transportation, agriculture, surveying and engineering, mapping, emergency services, as well as geophysical and atmospheric research. Over the next five years, there will be a surge of new GNSS and RNSS satellites launched: the U.S. modernised GPS constellation, Russia’s revitalised GLONASS, European Union’s Galileo, China’s BeiDou, Japan’s QZSS and India’s IRNSS systems. Multi-frequency multi-constellation GNSS is active topic as multi-GNSS provides improved performance over those of a standalone system in terms of accuracy, availability, continuity and reliability. The advent of PPP technique and online processing services have also attracted the attention of many GNSS users.

WG 5.4 aims to provide practitioners with up-to-date information on the rapid development of multi-GNSS and advancement in GNSS precise positioning techniques. An article of the current performance of PPP technique and its future prospects has been prepared and is currently under review for publication. WG 5.4 is also in close collaboration with IAG WG 4.4.2 on “Integer Ambiguity Resolution for Multi-GNSS PPP and PPP-RTK”.

NOAA’s National Geodetic Survey Hosted 2015 Geospatial Summit, April 13 – 14

The National Geodetic Survey (NGS) hosted a 2015 Geospatial Summit on April 13 and 14 to share updates on the planned 2022 release of new geodetic datums being developed to replace the North American Datum of 1983 (NAD 83) and the North American Vertical Datum of 1988 (NAVD 88). The summit provided an opportunity for NGS to outline its road map for retiring NAD 83 and NAVD 88 and apprise participants of the tools available to ease the transition to the new, more accurate datums.

The mission of NGS, an office of the National Oceanic and Atmospheric Administration (NOAA), is to define, maintain, and provide access to the National Spatial Reference System (NSRS— the consistent coordinate system that defines latitude, longitude, height, scale, gravity, and orientation throughout the United States and is designed to meet the nation’s economic, social, and environmental needs. At the summit, NGS provided plans to meet this mission in the future through defining new geometric (horizontal) and geopotential (vertical) datums. NGS shared strategies to better enable the mapping and surveying communities and other constituents to prepare well ahead of time, thus facilitating a smooth transition and minimizing the impact the new datums will have on these and other related industries.

Surveyors, GIS professionals, federal, state, and local government agencies, university students and educators and other interested parties participated and shared their comments, questions, and concerns regarding the effect the new datums will have on their work.

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. It focuses on the development of shared resources that extend our understanding of the theory, tools and technologies applicable to the development of multi sensor systems. It has a major focus on:

- Performance characterization of positioning sensors and technologies that can play a role in augmenting core GNSS capabilities

- Theoretical and practical evaluation of current algorithms for measurement integration within multi sensor systems
- The development of new measurement integration algorithms based around innovative modeling techniques in other research domains such as machine learning and genetic algorithms, spatial cognition etc.
- Establishing links between the outcomes of this WG and other IAG and FIG WGs (across the whole period)
- Generating formal parameters that describe the performance of current and emerging positioning technologies that can inform FIG and IAG members.

In 2015, members of this working group participated actively in the following events:

- The Institute of Navigation (ION) Pacific PNT conference, Hawaii.
- The Institute of Navigation (ION) GNSS+ conference, Florida.
- Mobile Mapping Symposium, Sydney.
- FIG Working Week, Sofia.
- IUGG, Prague.
- Geomatics Indaba, Johannesburg.
- IGNSS, Surfers Paradise.
- Emparco Workshop, Athens.
- IPIN, Banff.

WG 5.6 – Cost Effective Positioning

Chaired by Leonid A. Lipatnikov

The working group WG 5.6 was established in 2015 to continue successful efforts of the Special Study Group “Cost-Effective GNSS” within WG 5.4 “GNSS”. The main policy issues for WG 5.6 are education on when to use which surveying instrument or evaluation software taking into account economic reasons, designing fit-for-purpose cost-effective surveying systems and support to decision makers for establishing cost-effective positioning solutions.

In 2015 development of guidelines for cost-effective use and design of survey solutions including costs for labour and investment was initiated. The guidelines are intended to become a practice-oriented complementation to previous publications including FIG paper 49 “Cost Effective GNSS Positioning Techniques” by Neil D. Weston and Volker Schwieger. The concept of the guidelines has been shaped. Currently preparation of material is under way along with efforts to raise awareness and involve experts in the particular field as co-authors. WG 5.6 was presented at the International Seminar on Geo-Information Technology in Central Asia held in Urumqi, China on 28–30 September 2015. Participation in the Interexpo GEO-Siberia in Novosibirsk and the FIG Working Week in Christchurch is scheduled for 2016.

3. Cooperation, Seminars and Workshops

3.1 Cooperation with Other Commissions

During the 2015 period Commission 5 collaborated with other FIG Commissions as required. This cooperation primarily consisted of holding joint technical sessions (e.g. Terrestrial Laser Scanning at Working Week in Sofia) and meetings at FIG-related events as well as co-sponsoring symposia. For example, FIG Commission 5's alliance with Commission 6 to address contemporary issues relating to Terrestrial Laserscanning (TLS), deformation measurement, calibration of instruments, long range measurement, satellite and terrestrial imagery measuring techniques.

3.2 Cooperation with Sister Organisations

Commission 5 has continued to maintain a successful working relationship with the International Association of Geodesy (IAG), the ION and the ISPRS. This was achieved by convening joint Technical Seminars on Reference Frames in Practice, technical sessions and holding joint administrative meetings on significant issues. Additionally multidirectional exchange on Seminars and Symposia are practised e.g. FIG Commission 5 Chair Volker Schwieger participated at the IAG-EUREF Symposium June 3-5 2015 in Leipzig. He gave a presentation on "The Contribution of FIG to Reference Frames" presenting the FIG, especially Commission 5 and their relations to static as well as kinematic reference frames.

During 2015, the following events were held with sister organisations;

- FIG/IAG/ICG/UN-GGIM-AP/SLA Technical Seminar on Vertical Reference Frame in Practice in Singapore
- Pacific Geospatial and Surveying Council Meeting and GIS/ RS User Conference in Suva, Fiji

Report on FIG/IAG/ICG/UN-GGIM-AP/SLA Technical Seminar on Vertical Reference Frame in Practice in Singapore

The Technical Seminar on Vertical Reference Frames in Practice was held in Singapore on 27-28 July 2015. The seminar had a particular focus on vertical reference frames, in response to requests from the region. This complemented a previous seminar held in Manila in 2013, which focussed on 3D frames. It was organised by FIG Commission 5, in conjunction with the International Association of Geodesy (IAG), the International Committee on GNSS (ICG), the United Nations Initiative for Global Geospatial Information Management for Asia-Pacific (UN-GGIM-AP) and the Singapore Land Authority (SLA). Organisational representatives were as follows: Nic Donnelly (FIG), Chris Rizos (IAG), Sharafat Gadimova (ICG), John Dawson (UN-GGIM-AP), Victor Khoo (SLA).

The seminar was held in conjunction with the 13th South East Asian Survey Congress at the Marina Bay Sands Convention Centre. Local organisational support was provided by Victor Khoo and Richard Loo of the Singapore Land Authority. There were 22 participants, including presenters, from around the world. Countries represented included Singapore, Japan, Pakistan, Fiji, Australia, New Zealand, Nigeria, Hong Kong, Poland, France and Austria. Attendees represented a mix of academic, government and commercial institutions. The seminar focussed on the theory and practice of vertical reference frames. Topics covered included: Introduction to Vertical Reference Frames, Time Dependence and Transformations,

Airborne Gravity Data Collection and Analysis, International GNSS Service, Vertical Deformation, GNSS Heighting, Case Studies Australia Hong Kong Japan New Zealand Singapore.

There were excellent opportunities to network and socialise during the lunch and tea breaks, which the participants took advantage of. One of the highlights of the seminar was the dinner held on the first evening, facilitated by our Singaporean hosts. Dinner was held at Satay by the Bay and provided an opportunity to sample a number of local dishes and continue the networking. The seminar was well supported by Leica and Trimble, in terms of both financial support and attendance. The ICG provided financial support to several participants from developing nations.

Report on the Pacific Geospatial and Surveying Council Meeting

The 2nd Pacific Geospatial and Surveying Council (PGSC) meeting was held on the 19 – 20 November 2015 at the premises of the Secretariat of the Pacific Community (SPC) in Nubua, Suva. The meeting was co-organised by The Australian Government’s Climate and Oceans Support Program in the Pacific (COSPAc) and SPC Geoscience Division. FIG Commission 5 representative Rob Sarib and United Nations Global Geospatial Information Management (UN GGIM) spokesperson, John Dawson (also from Geoscience Australia), were invited to participate in discussions by contributing to the workshop development of a “strategy document” for the PGSC.

The PGSC was established in November 2014 and comprises of Pacific Island surveyors, hydrographers and geospatial scientists. The PGSC developed a Charter in response to the FIG Small Islands Developing States (SIDs) Suva Statement on Spatially Responsible Governance. The PGSC Charter was formulated to recognise regional challenges and the opportunities to improve capacity building, knowledge and data sharing, and the appreciation and enhancement of co-operation for responsible governance of tenure of land, fisheries and forest, of geospatial (and survey) infrastructure and information management. To date, 11 of the 14 participating countries have endorsed the PGSC Charter and it is expected the PGSC Strategic and Action plans will be finalised in the next 6 months.

It has to be mentioned that the adoption of the United Nations (UN) resolution, initiated by the Republic of Fiji, on Global Geodetic Reference Frame for Sustainable Development at the UN General Assembly on 26 February 2015, may have provided the much needed political will and momentum for this regional action.

From an FIG perspective the work done by the PGSC needs to be acknowledged as the effort, the desire to succeed and the political will is evident. The PGSC through the development of their strategy plan are aligned the global sustainable development agenda, building the capacity of surveyors for change, and the importance of regional collaboration. It is also apparent that PGSC members are cognisant of the need for regional surveyors to measure, monitor and analyse the tangible or real effects of climate change (such as sea level rise) on achieving sustainable development. The PGSC and Pacific Island Countries and Territories are aware of the social, economic, environmental and technological challenges ahead, and look forward to any support that FIG can provide to assist fellow professionals in this region.

For more information refer to the report at web location –

http://www.fig.net/news/news_2015/2015_11_GIS_RS-User_Conf.asp

3.3 Cooperation with UN

As mentioned partly in 3.2 strong collaboration is also realized with different branches of the United Nations (UN): the United Nations Global Geospatial Information Management – Asia Pacific (UN GGIM-AP) and the International Committee on GNSS (ICG). The joint Technical Seminar was held in July at Singapore (see 3.2). Additionally the UNOOSA ICG held its annual meeting in Boulder, US in early November. Neil Weston and Mikael Lilje represented FIG.

Most important, the UN Resolution *Global Geodetic Reference Frames for Sustainable Development* was endorsed in February. This is the first UN Resolution concerning geospatial information and is a result of the successful work of UN GGIM and its working group on Global Geodetic Reference Frame. For more information, documents, newsletters and videos please visit http://ggim.un.org/UN_GGIM_wg1.html.

For more detailed reports from these events please refer to our Commission website.

3.4 Cooperation with ISO

ISO/TC211 is the technical committee of the International Organization for Standardization that deals with geographic information, including geodetic datums and reference frames. Nic Donnelly is the FIG Special Liaison to ISO/TC211. In the geodesy sphere, there are several initiatives of interest to FIG underway.

Firstly, an international standard (ISO19127) has been drafted which defines requirements for a geodetic registry. Secondly, a geodetic registry is being developed, which will contain authoritative data on key global and national reference frames. Thirdly a new work item has been proposed to update *ISO19111 – Spatial Referencing by Coordinates* to better account for modern reference frames, such as those with deformation models and geoid models.

4. Events

2015

A summary of the Commission 5 activities at events in 2015 can be found on our website <http://www.fig.net/commission5/index.htm>

2016

In 2016 Commission 5 will endeavour to send representatives to the following conferences:

- 2016 IGS workshop, 16-19 February 2016, Sydney, Australia
- 3rd Joint International Symposium on Deformation Measurements, JISDM, 30 March - 1 April, 2016, Vienna, Austria
- Interexpo GEO-Siberia, 20-22 April 2016, Novosibirsk, Russia
- FIG/IAG/ICG/UN-GGIM-AP Reference Frame in Practice technical seminars, 1-2 May 2016, Christchurch, New Zealand
- FIG Working Week, 2-6 May, 2016, Christchurch, New Zealand
- International Workshop on Accelerator Alignment (IWAA), 3-7 October 2016 at the European Synchrotron Radiation Facility in Grenoble, France
- Machine Control & Guidance (MCG), 5-6 October 2016 in Clermont-Ferrand, France

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>

Volker Schwieger

Chair

Chair of FIG Commission 5

February 2016

ANNUAL REPORT

FIG COMMISSION 8 – SPATIAL PLANNING AND DEVELOPMENT

1. Introduction

Commission 8 is responsible spatial planning and development with a mission to unpack the linkages between sustainable development and resource utilization and with the following terms of reference.

2. Terms of Reference and work plan

- 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 and land governance
 - Disaster risks management and resilience
 - Inter-relationship between and amongst Commissions
-
- 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. Co-operation with Other Commissions and organisations

During the year, Commission 8 collaborated particularly with Commission 7 in some of its activities during the working week in Sofia. Another significant milestone was its collaboration with the Chartered Institute for Water and Environmental Management (CIWEM). This relationship has occasioned the creation of a special sessions for FIG and CIWEM delegates for the Christchurch, New Zealand 2016 WW. The Commission will also participate and celebrate with the Dutch Kadaster for its 2016 programmes and the Commission is represented by Mr. Peter Laarrakker.

4. Annual Meeting in Sofia, Bulgaria

This was attended by several stakeholders including GLTN delegates. It focussed on building synergies between the Commission 8 and other partners with special focus on planning. Delegates offered suggestions for the implementation and realization of the work plans for the working groups.

5. Conclusion

During the year, the Commission's WG Chairs have been communicating and consistently developing strategies for the Christchurch congress. It is our hope that the WW 2016 will attract more delegates to the Commission's activities

Commission Chair

Kwame Tenadu, M.A (Envt. Mgt & Policy)

President, Licensed Surveyors Association of Ghana
P. O. Box CC 564
Cape Coast
Ghana
Cell: +233206654219
Cell: +233243241121
Skype: kwame.tenadu
Email: tenaduk@yahoo.com, kwametenadu@gmail.com

Chair of Working Group 8.1

New Zealand

Chair of Working Group 8.2

Bruce Keith (UK) and Yvonne Sowah(Ghana)

Chair of Working Group 8.3

Peter Laarrakker, (Professor)
Dutch Kadaster
The Netherlands

Chair of Working Group 8.4

Dr Frank Friesecke
Die STEG Stadtentwicklung GmbH
Olgastr. 54
D- 70182 Stuttgart
GERMANY
Tel: +49 71121068118
Email: frank.friesecke@steg.de

Chair of Working Group 8.5

1. Ms. Rosy LiaoRong
China Land Surveying and Planning Institute
The Ministry of Land and Resources
NO. 37 Guan Yin Yuan Xiqu,
Xicheng District
Beijing 100035
The Peoples' Republic of China
Email: ROSYLiao rosyliao@outlook.com

2. Dr.-Ing. Michael Klaus,
Regional Project China of Hanns Seidel Foundation & Technical University
Munich (Germany)

Vice Chair Administration and Coordinator – Inter Commission relations

Dr Kweku Yeboah

Faculty of planning and land Economy

Kwame Nkrumah University of Science & Technology (KNUST)

Kumasi

Ghana

Kwame Tenadu

Chair, FIG Commission 8

www.fig.net/commission8

January 2016

Commission 9 – Valuation and the Management of Real Estate

Annual Report 2015

1. Title

VALUATION AND MANAGEMENT AT THE CORE OF SUCCESSFUL LAND POLICY

2. Terms of Reference

- Valuation, being the estimating of value of all kinds of real estate by valuers and appraisers for various purposes, including market value, property taxation, eminent domain, investment, redevelopment and refurbishment, and for both public and private purposes;
- Investment in real estate, investment planning and real estate investment vehicles;
- Real estate finance, development finance, land use feasibility planning;
- Real estate economics, markets and market analysis;
- Management of all kinds of real estate at all levels;
- Asset management for corporate private and public sectors;
- Management of the use of buildings to ensure optimum benefits to occupiers.

3. Mission Statement

The mission of Commission 9 is:

- To advance the professional practice of valuers and property managers working in all areas of real estate valuation and management;
- To research and publish “best practice” for the benefit of valuers and property managers in different jurisdictions and sectors of the industry. This will benefit of the surveying community and improve our services to the wider public;
- To facilitate and generate the exchange of information, knowledge and experience between surveyors for the benefit of the profession, our clients and the wider public;
- To publicise and promote the work of surveyors to the public, particularly to young people, governments and non-government organisations and to enhance the value and perception of the value of surveyors and the services they can deliver, especially in support of the global sustainability agenda and the Millennium Development Goals;
- To co-operate and work with fellow surveyors in all specializations of the profession to further the broader objectives of FIG.

4. Themes

This work plan focuses on three highly relevant themes, Property Taxation, Real Estate Market Policy Frameworks, and Valuation Methods and Standards.

Following on the successful previous four years of study, Commission 9's Working Group 9.2 focuses on the efficient use of mass appraisal valuations. This continues to address international and pressing need in the use of property taxes for the benefit of local communities and demonstrates an important opportunity for FIG to continue to use the international experiences of its members to contribute to and inform the global debate on property taxation.

Working Group 9.1 will expand the debate surrounding the United Nations published the *Policy Framework for Sustainable Real Estate Markets* booklet. The aim of Working Group 9.1 is to discuss, analyse and expand upon the 10 principles within this text, to allow for greater understanding and applicability in their implementation. This should benefit all interested actors, government organizations, and non-government organizations.

Round Table Discussions 9.3 will identify the commonly used standards in different markets and study the valuation methodologies adopted. Local actors will share and discuss templates and techniques used so that the industry can broaden its base of knowledge, enhancing the ability of practitioners to support their local economies and professional organizations.

All of the Working Groups and Round Tables have the goal of expanding the knowledge bases and skill sets of our professional organizations, their individual members, national governments, non-government and international aid organizations, and by extension the global economy.

5. Working Groups

Working Group 9.1 – Expanded Policy Framework for Sustainable Real Estate Markets

In 2010, the United Nations published the *Policy Framework for Sustainable Real Estate Markets* booklet. This document provides a short discussion of 10 Principles and related guidance for the development of a country's real estate sector. The aim of Working Group 9.1 is to discuss, analyse and expand upon these 10 principles, to allow for greater understanding and applicability in their implementation. In effect, this Working Group will broaden the discussion surrounding the individual 10 principles to include more specific details, as well as outline possible economic and social impacts. This should benefit all interested actors, government organizations, and non-government organizations as it relates to regulating, improving or developing a sustainable national real estate market.

In 2015 the early data gathering and analysis of the Policy Framework had begun. In 2016, comprehensive analysis and round table discussions at the FIG Working Week will be the platform for expanded applicability and transparency of these Framework components.

Working Group 9.2 – Mass Appraisal Systems

This working group will investigate and publish appropriate guidelines for the development of mass appraisal techniques to support property tax assessments, including the appropriateness original data sources (property characteristics, sales, rents, yields, costs asking prices, or valuations) and of indices to monitor the property market, which will be particularly useful during the current economic climate.

This analysis has begun and will leverage off past FIG efforts. In 2016, case studies will be explored showing where and when implementation was and was not successful so that key elements for a successful system can be identified.

Round Table 9.3 – Valuation Methods and Standards Worldwide

There is an abundance of valuation report templates and techniques for the analysis of differing property types. However, few valuation professionals have access to more than a handful of these templates, limiting their ability to creatively address a specific appraisal problem.

In 2015 templates were considered and gathered for analysis in 2016. At the 2016 FIG Working Week, roundtable discussions will bring together real estate professionals (valuers, managers, brokers, state and private ownership organizations) to share templates and techniques used to value and analyse specific property types.

6. Co-operation with Other Commissions and organisations

Commission 9 will support and contribute to FIG task forces, and, in particular, to the Property Markets Task Force, the Young Surveyors Network, the United Nations organizations, UNECE, WPLA, REAG, FAO, UNHABITAT, GLTN, ECE, and the World Bank. It is envisaged that such international organisations will be particularly interested in the work of the Working Group 9.1 and 9.2. The possibility of joint events will be investigated.

7. Co-operation with United Nation Organisations, Sister Associations and other Partners

Commission 9 is co-operating with FAO, UNECE, GLTN and UN-HABITAT on Commission 9 related issues. We have also worked with the Economic Commission for Europe in 2015 to help find solutions to the Greek crisis.

Over the coming years, Commission 9 will investigate co-operation opportunities with a range of relevant international organisation, including the Internal Property Taxation Institute (IPTI), International Association of Assessing Officers (IAAO) and the Lincoln Institute of Land Policy.

Mr. Steven Nystrom
Chair of Commission 9
E-mail: nystrom@newstreamcompanies.com
March 2016

FIG STANDARDS NETWORK REPORT TO THE 2016 FIG GENERAL ASSEMBLY

David Martin 29 February 2016

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 this 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.

FIG 2016 Christchurch Working Week Standards Network Meeting

The last Network meeting was during the 2014 FIG Congress in Kuala Lumpur. ***The Standards Network is scheduled to meet in Christchurch on Thursday 5 May at 16:00-17:30.***

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. It 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, analyzing, 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.

ISO TC211 Liaison Report – March 2016

Nic Donnelly

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 vacant.

Liaison Involvement

There were two meetings of the ISO technical committee in 2015; Southampton (June) and Sydney (December). Nic Donnelly attended Sydney meeting. The next meeting is in Norway in June 2016.

The main direct involvement that FIG currently has is with the Control Body for the ISO Geodetic Registry, of which Nic Donnelly is a member.

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.

Key Work Items of Interest to FIG

Geodetic Registry

This project aims to establish a registry for geodetic codes and parameters. The first phase of software development is complete and is being tested. This testing has identified enhancements which are currently being made. Improvements are steadily being made and the Norwegian Mapping Authority will host the software on their servers. It is anticipated that an initial public release will occur later in 2016.

The process of entering data into the registry has highlighted potential limitations with the existing ISO19111 standard, particularly relating to kinematic reference frames, which has led to a new work item proposal to revise this standard.

FIG was invited to nominate someone for the Control Body of the registry. The Control Body has responsibility for the management and strategic direction of the registry, on behalf of ISO/TC211. Nic Donnelly is the principal representative, with Volker Schwieger of Germany as alternate. Larry Hothem, who is also active in FIG, is Vice-Chair of the Control Body, which is chaired by Mike Cramer of Canada.

Review of ISO/TS 19127:2005 Geodetic codes and parameters

“ISO TS 19127:2005 defines rules for the population and maintenance of registers of geodetic codes and parameters and identifies the data elements, in compliance with ISO 19135 and ISO 19111, required within these registers. Recommendations for the use of the registers, the legal aspects, the applicability to historic data, the completeness of the registers, and a mechanism for maintenance are specified by the registers themselves”

A decision was made in Shenzhen to review this technical specification and turn it into an international standard. This is usual practice, as technical specifications are not designed for very long-term use. If they are valuable, they should be converted to a full international standard. The

editing committee has produced a draft version of the standard, which will now be voted on by member bodies of ISO/TC211. There are strong linkages between this work and that of the Control Body, with a significant overlap of membership between the two. Nic Donnelly and Larry Hothem are on this review committee.

Potential review of ISO 19111:2007 Geographic Information – Spatial Referencing by Coordinates

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

The standard is not particularly well-suited to some aspects of modern reference frames, such as time-dependent coordinates and transformations, geoid models and deformation models. A workshop was held at the Southampton meeting in June, which has led to a new work item being proposed to revise the standard. ISO is currently seeking comment on the proposal from national standards bodies, after which a decision will be made on whether to proceed with a full review. This decision is expected in May 2016.

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. ISO 19152:2012 was published in 2012. From the ISO website, ISO 19152:2012:

- defines a reference Land Administration Domain Model (LADM) covering basic information-related components of land administration (including those over water and land, and elements above and below the surface of the earth);
- provides an abstract, conceptual model with four packages related to parties (people and organizations); basic administrative units, rights, responsibilities, and restrictions (ownership rights); spatial units (parcels, and the legal space of buildings and utility networks); spatial sources (surveying), and spatial representations (geometry and topology);
- provides terminology for land administration, based on various national and international systems, that is as simple as possible in order to be useful in practice. The terminology allows a shared description of different formal or informal practices and procedures in various jurisdictions;
- provides a basis for national and regional profiles; and
- enables the combining of land administration information from different sources in a coherent manner.

The Land Administration Domain Model (LADM) Edition 1 was published in 2012 (ISO 19152). 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. These trends may be relevant for the development of a second edition of the LADM over the coming years.

Key areas of LADM 2.0 development include:

- The development of an Information infrastructure for the full use of modern information and communication technology.
- Integration of the forth temporal dimension, valuation and legal refinement (categorisation).
- Careful work on semantics – correction and clarification of terminology and other concepts which are used by different land administration systems.
- Appreciation of the full Spatial Development Life Cycle.
- Integration and development of a Community Driven Cadastral mapping.
- Maintenance and development of the LADM taking into account elements from the Social Tenure Domain Model and Fit For Purpose approaches.

The LADM standard published in 2012 was ground breaking. However as we move into the future, it is hoped that access to land-related information will be enabled for everybody (via the internet), creating a 'spatially enabled society'. Many - Information Communication Technology - related developments will strengthen the relationship between land administration and other registrations, such as building, address, company and population registrations.

For more information contact Chrit Lemmen (chair of the FIG Commission 7 Working Group 7.1 on Fit-for-Purpose Land Administration and director of the FIG International Office of Cadastre and Land Records (OICRF))

See also:

Peter van Oosterom, Christiaan Lemmen, *Developing a Second Edition of the Land Administration Domain Model: Trends in Spatial Domain Standards*, GIM - Issue 12 - Volume 29, December 2015.

Christiaan Lemmen, Peter van Oosterom and Rohan Bennett (2015). *The land administration domain model*. Land Use Policy 49 (December 2015), 535-545
<http://www.sciencedirect.com/science/article/pii/S0264837715000174>

ISO/TC 172 SC6 Work on Survey Instrument Standards

Hans Heister was the representative to ISO/TC 172 SC6 for FIG for many years. He stepped down as our lead at the Kuala Lumpur Congress. In principle Prof Dr. Ingo Neumann from the University of Hannover, who is a member of FIG Commission 5 as well a member of the mirror committee NA 005-03-04 in DIN (the German standards organisation), was designated to report on the activities of ISO /TC 172 SC6 in the future. Unfortunately he has not submitted a report. We will discuss the status of the FIG representative to ISO /TC 172 SC6 at the Standards Network meeting in Christchurch.

Standards under the responsibility of the ISO /TC 172 SC6 are the following:

Standard and/or project

ISO 9849:2000

Standard and/or project

Optics and optical instruments -- Geodetic and surveying instruments -- Vocabulary

[ISO 12858-1:2014](#)

Optics and optical instruments -- Ancillary devices for geodetic instruments -- Part 1: Invar levelling staffs

[ISO 12858-2:1999](#)

Optics and optical instruments -- Ancillary devices for geodetic instruments -- Part 2: Tripods

[ISO 12858-2:1999/Amd 1:2013](#)

[ISO 12858-3:2005](#)

Optics and optical instruments -- Ancillary devices for geodetic instruments -- Part 3: Tribrachs

[ISO 16331-1:2012](#)

Optics and optical instruments -- Laboratory procedures for testing surveying and construction instruments -- Part 1: Performance of handheld laser distance meters

[ISO 17123-1:2014](#)

Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments -- Part 1: Theory

[ISO 17123-2:2001](#)

Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments -- Part 2: Levels

[ISO 17123-3:2001](#)

Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments -- Part 3: Theodolites

[ISO 17123-4:2012](#)

Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments -- Part 4: Electro-optical distance meters (EDM measurements to reflectors)

[ISO 17123-5:2012](#)

Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments -- Part 5: Total stations

[ISO 17123-6:2012](#)

Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments -- Part 6: Rotating lasers

[ISO 17123-7:2005](#)

Standard and/or project

Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments
-- Part 7: Optical plumbing instruments

[ISO 17123-8:2015](#)

Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments
-- Part 8: GNSS field measurement systems in real-time kinematic (RTK)

[ISO/CD 17123-9](#)

Optics and optical instruments -- Field procedures for testing geodetic and surveying instruments
-- Part 9: Terrestrial laser scanners

International Measurement Standard of Property (IPMS)

The International Property Measurement Standards Coalition (IPMSC) was formed during a meeting at the World Bank in Washington on 01-02 May 2013. The IPMSC is a group of 70 professional and not-for-profit organisations from around the world, working together to develop and implement international standards for measuring property. Member organisations of the IPMS Coalition have made a commitment to promote the implementation the new international standards when published. FIG is one of the member organisations of the IPMSC.

IPMS for Office Buildings has been drafted by the independent Standards Setting Committee and establishes a consistent methodology for measuring office buildings around the world. It is available to freely download below in several language versions. The final version of IPMS for Office Buildings was published in November 2014.

Standards Issues in other Commissions

[The Standards Network Template- list of commission topics](#)

Each Commission is invited to nominate a representative to the Standards Network. This representative should attend the Standards Network meeting to discuss topics relevant to their Commission's activities. A key point of discussion at the meeting will be how best to communicate and represent Commission's activities. In the past a *Standards Template* was maintained to help facilitate this.

[Standards issues initiatives in the FIG commissions](#)

[Standards issues related to FIG Commission 2](#)

People working in different countries have different competencies. One key issue is to establish a database on body of knowledge in land surveying. Distance and e-learning are important points of reflection and development.

Standards issues related to FIG Commission 4

The International Board (IHO, FIG and ICA) has published 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, land xml for 3D models, integrating BIM model and machine guidance, exchange of data.

Standards issues related to FIG Commission 7

See remarks on *ISO 19152 on the Land Administration Domain Model (LADM)* above.

Standards issues related to FIG Commission 9

See remarks on the *International Measurement Standard of Property (IPMS)* above.

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 IPM 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. Each Commission sends a representative to the meeting to discuss their Commission's interest and requirements in standards.

Recall the Christchurch FIG ***Standards Network meeting is scheduled for Thursday 5 May at 16:00-17:30***. All those interested in the work of the Standards Network are cordially invited to attend.

Report to the 39th FIG General Assembly

FIG Working Week Christchurch, New Zealand 2016

Regional Capacity Development Network Report of Activities Africa FIG Regional Workshop (East), November 2015

The FIG Regional Capacity Development Network 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. The Network terms of reference and supporting material can be viewed at www.fig.net/organisation/networks/capacity_development/index.asp

The Africa Regional Network (ARN) is the first to be established under this umbrella, as an initiative of the FIG Africa Task Force set up in the 2009-14 FIG term. Although the focus of this particular network is on Africa, the results can, of course, be multiplied for implementation in other regions, such as Asia, Latin America and the Arab Nations. Importantly, the establishment of a regional network should be supported by an appropriate business case agreed at FIG Council, with the overarching mandate for each region clearly stating "how to develop and build the capacity of land professionals to enable them to effectively embrace current global trends in their respective regions".

The ARN's key purpose is to enable the surveying profession in the region to deal with social responsibility to help realise the post-2015 Sustainable Development Goals (SDGs), adopted at the UN Summit in New York in 2015. In this regard, surveyors' role as 'change agents' engaging with politicians and communities is important.

The ARN will, through workshops, consider and present new, creative tools and other means to revitalise and strengthen Land professional members in sub-Saharan Africa. Fig member associations will focus on building the capacity of surveying associations and individual surveyors to facilitate positive change and encourage development and growth for the benefit of Africa and its people.

This is the Chair's report on the preparation and running of the two-day **Africa Regional Network (ARN) 2015** workshop with a focus on **Intergenerational Diversity in the Land Professional Sector**, held on 21-22 November 2015 in Nairobi, Kenya.

Every year, ARN invites an African member association to co-host the workshop. The Network was pleased to welcome **Paul Wambua, Chairman of the Institution of Surveyors of Kenya (ISK)**. The ISK team organised the logistical arrangements for the event.

The network activity was based on collaboration with a range of stakeholders. The **FIG Young Surveyors Network (YSN)**, in particular, was integral to delivering workshop content, complementing ARN's ethos to build the profession for future generations.

In addition, a key partner stakeholder in 2015 was FIG corporate member **Thomson Reuters**, which provided unbiased content and sponsorship, and supported the attendance of the leading Regional Africa Young Surveyor.

The workshop considered and devised action-oriented agendas with key messages to encourage intergenerational diversity in the workplace and support FIG members in

sub-Saharan Africa in adapting to emerging global trends. The workshop findings will be presented at FIG Working Week 6-10 May 2016 in Christchurch, New Zealand.

Key activities undertaken

Seminar organisation and programme

The workshop brought together decision makers and practitioners from several Anglophone and Francophone African nations (Botswana, Rwanda, Ghana, Kenya, Nigeria, Tanzania, Senegal, South Africa and Uganda), with expertise across the range of land professional disciplines within FIG membership.

To ensure African members provide valuable input for the network's work, a series of themed regional workshops will be arranged in Africa, falling in between FIG Working Weeks. The workshops will develop tools for use by members and validated at roundtable discussions at the following FIG Working Weeks. The next meeting is scheduled in Christchurch, New Zealand, in May 2016.

The objectives of the workshop

The 2015 workshop theme was Intergenerational Diversity, with the aim of developing awareness among member associations of significant changing trends in the workplace, and ways of adapting to the changes to the benefit of the profession and society.

Participatory group work blended and combined with the mentoring activity that was spearheaded by the FIG Young Surveyors Africa Network, enhanced delegates' knowledge and enabled them to share their experience. This facilitated a focus on identifying priorities in the workplace, seen through the lens of Big Data and technology, and examining the impact on society as measured by the SDGs.

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

- *To define and use participants' insights to explore the implications that the Land sector is likely to see in the workplace in future*
- *To devise appropriate tools that will be helpful to member associations to help their members ensure intergenerational diversity in the workplace, and*
- *To deliberate on the technological application of comprehensive Big Data management.*

These objectives were achieved and led to each group drafting an agenda for action with final draft documents expected to be uploaded on the website in preparation for a roundtable discussion at the Working Week in Christchurch in May 2016.

How this was achieved is explained in the Chairs workshop web report www.fig.net/arn and accompanying presentations at www.fig.net/resources/proceedings/2015/2015_11_ARN.asp.

Speakers and participants

An invitation was sent to all member associations in sub-Saharan Africa, requesting that they circulate it among their members. Special invites were also sent to African land professionals (planners and engineers).

In addition, the FIG Young Surveyors Network gratefully accepted sponsorship from **Thomson Reuters**, who funded a young professionals to attend the workshop.

Delegates registered their interest, and participants were drawn from the registration process organised by ISK.

Deliberations

Considering the SDGs and the ethics that underpin everything Land professionals do, the workshop was informed by two topics that affect the economic sustainability of professional land businesses and society: Firstly, generational diversity in the workplace and the need to attract and retain talent to ensure viability; and, secondly, complementing the current FIG work plan the theme of managing Big Data and understanding its relevance to the SDGs in geospatial and urban practices.

The focus was on how to build up skills across the Land sector to meet the above challenges and how to ensure economic viability for land and real estate firms, while delivering on social needs as articulated in the SDGs. An agenda for action will be explored and developed to address the following:

Generational diversity. To attract young talent, our profession has to remain relevant and attractive to future generations. Younger land professionals, who have grown up with social media and digital technology, are quick to take up new approaches to work. Also, with people choosing to work past the usual retirement age, this can result in four generations together in the workplace. Consequently, greater intergenerational understanding is paramount.

Technology development: A technological revolution is driving demand for key data analytics and related skills for existing land and property professionals. The way land business is conducted is changing, and data management allows comprehensive management of the land administration life cycle, i.e. survey through to valuation. Above all, the importance of all our disciplines in land and property was stressed.

Day 1

The introduction on the first day of the workshop drew upon Futures work undertaken by Prof Lynda Gratton (see www.lyndagrattton.com). The scene was set as follows: *"If you want to understand the future, you need to start with the five forces that will shape our work over the coming decades."*

Two young surveyors, Taiye Taiwo from Nigeria and Leah Njugana from Kenya, delivered presentations, highlighting their views on the significant influencers in the workplace over the next 10 years and the skill sets needed in the next five.

The afternoon of day one concentrated on participants' understanding of technological advancements across society and Big Data. **Gasant Jacobs** (Thomson Reuters Regional Business Director) lead an exciting afternoon discussion, the introduction provided by a surprise and welcomed guest, **Aarti Shah** (Thomson Reuters Head of Government Relations: Africa), while **Gasant** continued to present the Big Data and technology storyline and, crucially, its impact on the surveying profession and the emerging educational trends.

The final presentation, by Honorary FIG President **Professor Stig Enemark**, outlined what the SDGs may mean to land professionals. His address was important, as it drew from the network's deliberations in 2014 that land professionals in sub-Saharan Africa should continue to apply their collective knowledge and build their capacity to address the emerging United Nations post-2015 development agenda of SDGs.

At the end of the first day, it was clear that any action needed would have to recognise that, in the emerging workplace, four generations will work together. Accordingly:

- It is inevitable that for younger people their work will change perhaps unrecognisably- And
- those of us already in the workforce will be employed in ways we can hardly imagine

Day 2

The morning opened with reflections followed by participants thinking innovatively and to work within their groups to finalise information for their agendas for action and accordingly present their proposals and receive positive feedback.

The final afternoon session was designed to link with the workshop themes of intergenerational diversity and technological adeptness and to reach across the generations. **Pamela Agbonika** (FIG Africa YSN) enthusiastically presented the mentoring theme explaining that Working Group 3 was seeking to develop a mentoring approach within FIG in line with the Young Surveyors Network business plan. The African region has taken up the challenge and, using the ARN platform, shared information about the mentoring process.

In the final wrap-up session, participants agreed that the 2015 ARN workshop had successfully outlined the interrelationship of two pivotal global trends and its implications for the way we will work in future.

The central messages outlined in the workshop report are on data:

- The data revolution taking place in commerce, advertising and surveillance should be fully understood and used to best effect in land professional processes.
- Land professionals should seek to build on the increasing need for Big Data management in the workplace and contribute to the SDG land targets.
- Without measurements, we are guessing. The collection, sharing and analysis of data is important for the success of the SDGs.
- The question "How big is Big Data?" is a moving answer – what is big today may not be big tomorrow.

On diversity and inclusivity:

- Diversity is simply what you can see, whether it is race, gender, religion or disability. A culture of inclusivity is more important, and it should be the norm for people from different backgrounds who think differently to come together to share a wide range of experiences.
- The profession needs to build and showcase a reputation that it is valued and can (and does) offer exciting careers with a social purpose. So it needs to attract the best and the brightest, regardless of where they come from, because this will be the only way the profession to significantly evolve.

Each group will finalise the material developed and it will be published to be further discussed at the Africa Regional Network Roundtable to be held at the FIG Working Week in May 2016.

Outcome of the workshop

The outcome of the two days' deliberations resulted in work that:

- Expressed a **call for action** for the next five-year period
- Enabled member associations to help their members to **acknowledge intergenerational diversity** in the work place
- Identified **priority areas that will affect** those operating in the land professional sector across Africa, such as mentoring

- Sought to build on **awareness** of the increasing use of **Big Data management** in the workplace and of the contribution land professionals should make to the **SDG land targets**
- Led to a draft communique on the YSN mentoring development programme by the Young Surveyors Network in Africa.

These outcomes will be fully discussed at the FIG working week in Christchurch in May 2016.

Closing remarks

In this first of three ARN workshops in the current FIG term (2015-17), addressing the *Challenges and Opportunities in Facing the SDGs*, we are 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 Futures, Ghana 2012).

In the context of the FIG work plan for 2015-18 with an emphasis on Big Data, the sentiment particularly applicable to the Africa region is that unfamiliar geographical markets will quickly become major sources of work. And, regardless of individual specialisms, computer technology is sure to change, with more professionals ditching personal computers "in favour of dynamic, flexible cloud-based systems connected to phones, tablets and laptops" (*Modus*).

Underpinning the workshop deliberations was the challenge for individual member associations to work towards implementing the outcomes to facilitate intergenerational diversity and inclusion. The workshop built on a continuing conversation about the future of the profession in an advocacy role, and especially the opportunity to be taken up by the member associations.

Above all, the workshop reinforced the imperative that Land professionals across the world remain engaged in initiatives that will enable them to make a difference. The desire by participants to renew the commitment to benefitting society in the work they do by ensuring their own capacity continues to be developed in a way that understand the huge society trends emerging across the globe remains through active deliberation and expectations to implement.

The attending participants and those from the wider ARN network are proving 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. The upcoming workshops in 2016 and 2017 will continue to strive to optimise and continue the network's deliberations in Africa.

Dr Diane Dumashie, Chair, Regional Capacity Development Network 2016

FIG Foundation Grants for YS



Thank you FIG Foundation
Congrats to the YS

Personal Achievements

Kazuaki Fujii YS Representative - Japanese Federation
of Surveyors

Diana Becirevic YS Representative - CLGE

Rhea Lyn Dealca YS working for UN-Habitat/GLTN



Congratulations to all of you

Harvest of Ideas



Congratulations and Thank you to the
Young Surveyors in Nigeria

Geospatial World Forum



Congratulations and Thank you to the
Young Surveyors in Portugal

XyHt '40 under forty'



Congratulations to all the YS who got
selected to be a 40 under forty
remarkable geospatial professional

Nepal Session during FIG WW and Workshop in Kathmandu, Nepal



Thank you to all the participants and
organisers of both events

Vamos a la Latin America



Congratulations and Thank you to
Melissa Robert

Thank
You!!!



FIG YOUNG SURVEYORS NETWORK

Meetings & Activities 2015



ATHENS,
GREECE

01/15

FIG Kick-Off
FIG ACCO Meeting



VILLARS,
SWITZERLAND

02/15

CLGE Executive
Board Meeting



SOFIA,
BULGARIA

05/15

3rd YSEM
FIG WW 2015
STDM ToT



EDINBURGH,
SCOTLAND

06/15

CLGE Executive
Board Meeting



SINGAPORE,
SINGAPORE

07/15

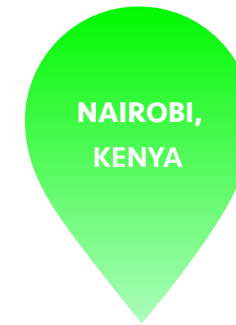
13th South East
Asian Survey
Congress



STUTTGART,
GERMANY

09/15

INTERGEO



NAIROBI,
KENYA

10/15

UN-Habitat/GLTN
Expert Group Meeting



OHIO,
USA

10/15

NSPS Young Surveyor
Presentation at Professional
Land Surveyors Conference
of Ohio



SANTA FE,
ARGENTINA

10/15

V Encuentro Nacional
de Estudiantes de
Agrimensura



NAIROBI,
KENYA

11/15

Africa Regional
Network Meeting



PORT-HARCOURT,
NIGERIA

11/15

1st Professional
Knowledge Sharing
Conference



BOGOTA,
COLOMBIA

11/15

X Congreso
Nacional Y VII Internacional
De Topografia



VALETTA,
MALTA

11/15

Joint Workshop
FIG Com. 3 &
Com. 7 and
Annual Meeting



KATHMANDU,
NEPAL

11/15

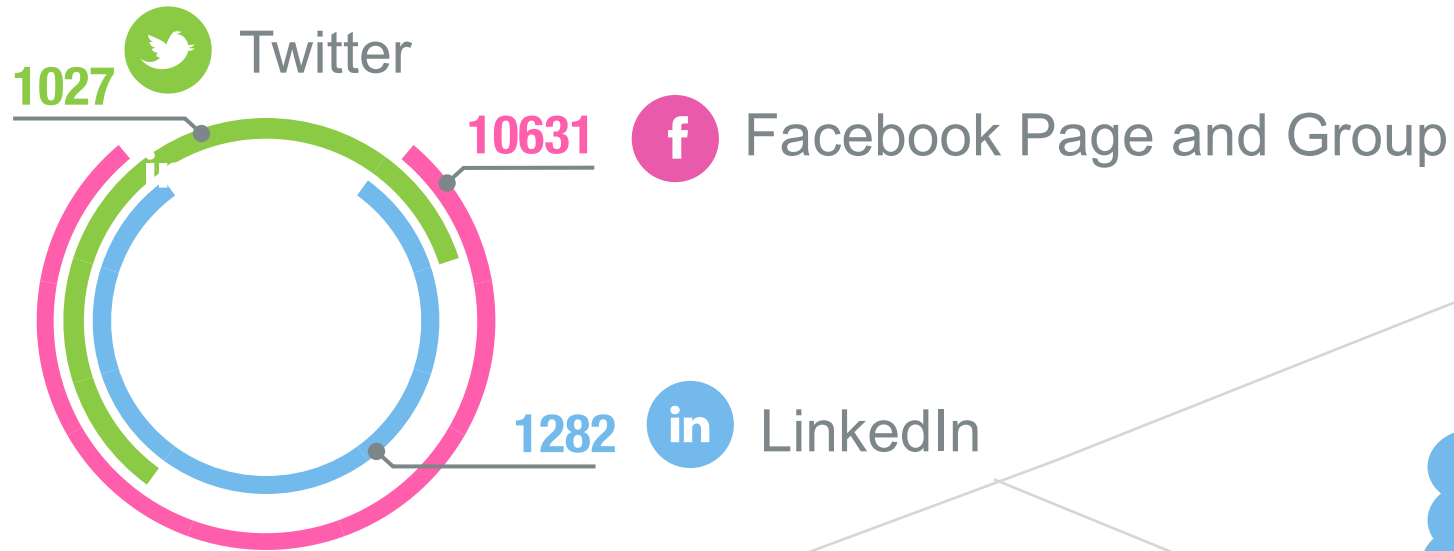
Int. Workshop on
the role of land
professionals and
SDI in disaster risk
reduction



FIG YOUNG SURVEYORS NETWORK

Social Media Activities 2015

Followers

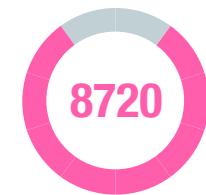


Followers Facebook Page

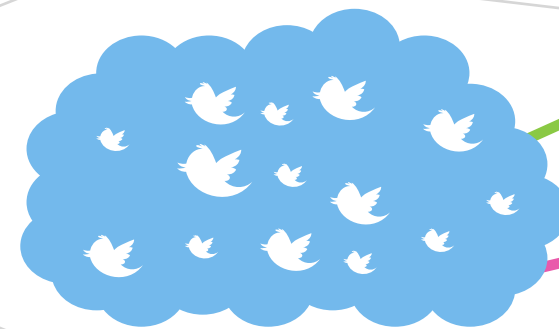


Official information as well as pictures is shared at the page

Members Facebook Group



Everybody can post links, pictures and videos, administrators take care of the content



599 tweets

3117 tweet impressions

Facebook

FIG Young Surveyors

LinkedIn

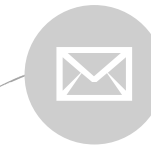
FIG Young Surveyor Network

E-mail

fig.youngsurveyors@gmail.com

Twitter

FIG_young



10 000

IS THE NUMBER OF YOUNG SURVEYORS WE ARE CONNECTED TO

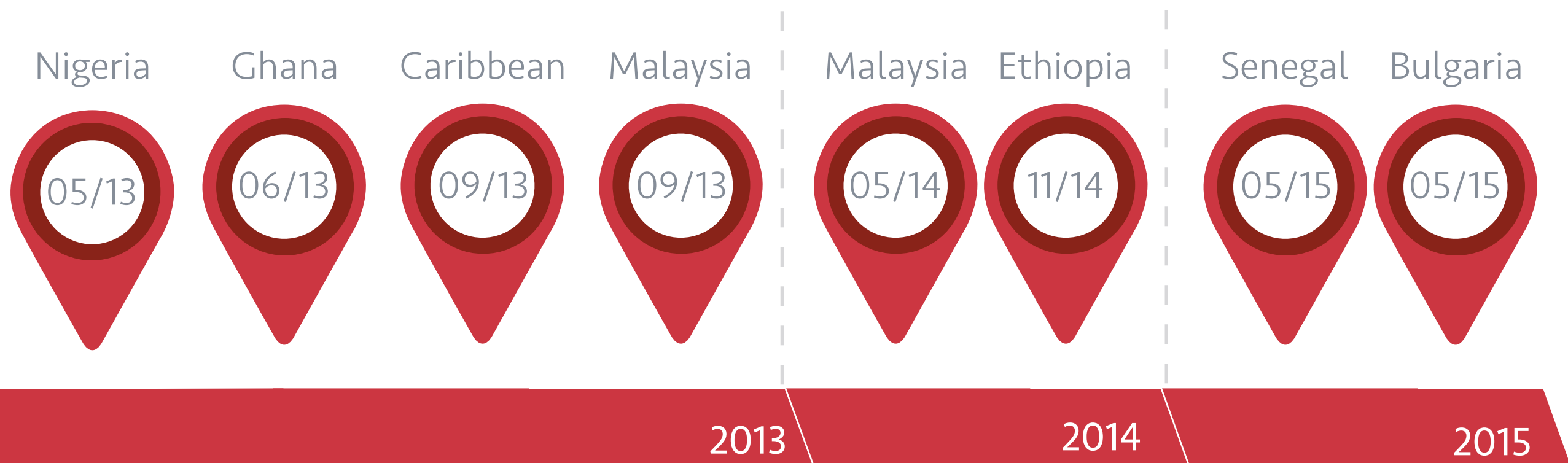
STDM

FIG YSN UN-Habitat/Global Land Tool Network

Social Tenure Domain Model Trained Trainers Overview (2013 - 2015)



Timeline & Countries of Training of Trainers Events



Trained Trainers

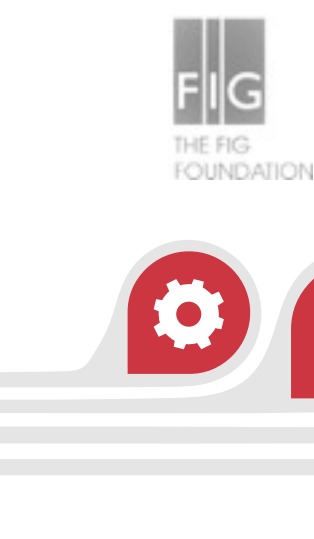


UN-Habitat/GLTN & FIG YSN trained approximately **160 Young Surveyors**



From around **60 countries worldwide** covering every region

Facilitators



- Fig_young
- FIG Young Surveyors
- fig.youngsurveyors@gmail.com
- <http://www.fig.net/organisation/networks/ys/>
- FIG Young Surveyor Network



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

OICRF Annual Report 2015

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 2015

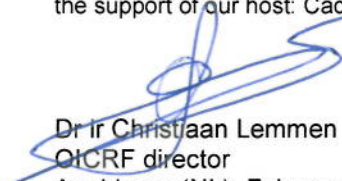
OICRF maintains a digital library that contains 12.087 publications (December 31, 2014). OICRF contents are available in different languages. At the moment there are 284 publications in Dutch, 594 publications in French, 555 publications in German, 64 publications in Italian, 26 publications in Russian, 281 publications in Spanish and 11.507 publications in English. All of the available documents and the most recent publications can be accessed electronically at www.oicrf.org. In 2015 the digital library got about 39.819 visitors. About 27.983 papers have been downloaded. This number is based on the application of Google Analytics; visits from search engines are excluded in this.


Land Administration Domain Model

A special section on the Land Administration Domain Model was published in *Land Use Policy*, Volume 49, December 2015, p527-689. *Land Use Policy* is an international and interdisciplinary journal concerned with the social, economic, political, legal, physical and planning aspects of urban and rural land use. It provides a forum for the exchange of ideas and information from the diverse range of disciplines and interest groups which must be combined to formulate effective land use policies. The special section in December 2015 contains scientific 16 articles. A second edition of the Land Administration Domain Model will be developed in 2017 in close co-operation with the International Organisation for Standardisation. FIG will submit the proposals for the contents of a new edition.

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.


Dr ir Christiaan Lemmen
OICRF director
Apeldoorn (NL), February 16, 2016


Ms Pauline van Eisland,
OICRF secretary
Apeldoorn (NL), February 16, 2016

OICRF Comparative Studies in 2015

- Sengupta, A., Lemmen, C., Devos, W., Bandyopadhyay, D. and van der Veen, A. (2015) Constructing a seamless digital cadastral database using colonial cadastral maps and VHR imagery: an Indian perspective. *Survey Review*, IN PRESS 11p.
- Van der Molen, P. and Mitchell, D. (2015) Climate change, land use and land surveyors. *Survey Review*, IN PRESS 8p.
- Todorovski, D., Zevenbergen, J. and van der Molen, P. (2015) Conflict and post-conflict land administration: the case of Kosovo. *Survey review*, IN PRESS 13p.
- Lemmen, C., Bennett, R., McLaren, R. and Enemark, S. (2015) A new era in land administration emerges. *GIM International*, 29(2015)1 p22-25.
- Van der Molen, P. (2015) Property and administration: comparative observations on property rights and spatial planning with some cases from The Netherlands. *Administration & Society*, 47(2015)2, p171-196.
- Lemmen, C., Augustinus, C., du Plessis, J., Laarakker, P., de Zeeuw, C., Saers, P. and Molendijk, M. (2015) The operationalisation of the Continuum of Land Rights at country level. Annual World Bank conference on land and poverty, 23-27 March 2015, Washington DC, United States. 27p.
- Saers, P., Lemmen, C., Antonio, D., Augustinus, C., Molendijk, M. and de Zeeuw, C. (2015) Strategy for the further development, use, application, and dissemination of the GLTN Tool 'Social Tenure Domain Model (STDM)' with focus on Country Level Implementation. World Bank conference on land and poverty, 23-27 March 2015, Washington DC, United States. 34p.
- Van Oosterom, P. and Lemmen, C. (2015) Cadastre in a changing world: issues and directions: why and what to standardize in land administration?. *Coordinates*, 11 (2015)4 p18-19.
- Van der Molen, P. (2015) An inventory of human rights law relevant for surveyors. FIG Working Week, 17-21 May 2015, Sofia, Bulgaria. 37p.
- Todorovski, D., van der Molen, P. and Zevenbergen, J. (2015) Post - conflict land administration: a facilitator of the post - conflict state building in the case of Timor - Leste. FIG Working Week, 17-21 May 2015, Sofia, Bulgaria. 18 p.
- Lemmen, C. and van Oosterom, P. (2015) LADM est maintenant une norme ISO: dernière partie. *Géomatique*, 41(2015)4, p24-27.
- Germann, M., Kaufmann, J., Steudler, D., Lemmen, C., van Oosterom, P. and de Zeeuw, C. (2015) The LADM based on INTERLIS. FIG Working Week, 17-21 May 2015, Sofia, Bulgaria. 10p.
- Louwsma, M. and Lemmen, C. (2015) Relevance of leased land in land consolidation. FIG Working Week, 17-21 May 2015, Sofia, Bulgaria. 15p.
- de Zeeuw, C. and Lemmen, C. (2015) Securing land rights for the world. FIG Working Week, 17-21 May 2015, Sofia, Bulgaria. 19 p.
- Savoiu, C., Lemmen, C. and Savoiu, I. (2015) Systematic registration in Romania: a new opportunity for land consolidation. FIG Working Week, 17-21 May 2015, Sofia, Bulgaria. 29 p.
- Van der Molen, P. (2015) Rapid urbanisation and slum upgrading: what can land surveyors do? *Survey review*, 47 (2015)343, July 2015, p231-240.
- Todorovski, D., Zevenbergen, J. and van der Molen, P. (2015) Land administration for post - conflict contexts. *Advances in responsible land administration*. Edited by J. Zevenbergen, W. de Vries and R. Bennett. Boca Raton: CRC Press, 2015, p73-90.
- Rugema, D., Verplanke, J. and Lemmen, C. (2015) Digital pen method. *Advances in responsible land administration*. Edited by J. Zevenbergen, W. de Vries and R. Bennett. Boca Raton: CRC Press, 2015, p131-144.
- Biraro, M., Bennett, R. and Lemmen, C. (2015) Accelerated land administration updates. *Advances in responsible land administration*. Edited by J. Zevenbergen, W. de Vries and R. Bennett. Boca Raton: CRC Press, 2015, p145-162.

- Bennett, R., Yimer, F. and Lemmen, C. (2015) Toward fit - for - purpose land consolidation. *Advances in responsible land administration*. Edited by J. Zevenbergen, W. de Vries and R. Bennett. Boca Raton: CRC Press, 2015, p163-182.
- Lengoiboni, M., Bregt, A. and van der Molen, P. (2015) Dynamic nomadic cadastres. *Advances in responsible land administration / edited by J. Zevenbergen, W. de Vries and R. Bennett*. Boca Raton: CRC Press, 2015, p183-200.
- Potel, J., van der Molen, P., Boerboom, L., Todorovski, D. and de Vries, W. (2015) Displacement and land administration. *Advances in responsible land administration*. Edited by J. Zevenbergen, W. de Vries and R. Bennett. Boca Raton: CRC Press, 2015, p235-250.
- Van der Molen, P. (2015) The art of recording: column. *GIM International*, 29 (2015)8 p6.
- Mitchell, D., Enemark, S. and van der Molen, P. (2015) Climate resilient urban development: why responsible land governance is important. *Land Use Policy*, 48 (2015) p190-198.
- Molendijk, M., Morales, J. and Lemmen, C. (2015) Light mobile collection tools for land administration: proof of concept from Colombia. *GIM International*, 29 (2015)11 p20-23.
- Van Oosterom, P. and Lemmen, C. (2015) Trends in spatial domain standards: developing a second edition of the land administration model. *GIM International*, 29 (2015)12 p24-27.
- Van Oosterom, P. and Lemmen, C. (2015) The Land Administration Domain Model (LADM): Motivation, standardisation, application and further development. *Land Use Policy*, 49 (2015) p527-534.
- Lemmen, C., van Oosterom, P. and Bennett, R. (2015) The land administration domain model. *Land Use Policy*, 49 (2015) p535-545.
- Zhuo, Y., Ma, Z., Lemmen, C. and Bennett, R. (2015) Application of LADM for the integration of land and housing information in China: the legal dimension. *Land Use Policy*, 49 (2015) p634-648.
- Paasch, J., van Oosterom, P., Lemmen, C. and Paulsson, J. (2015) Further modelling of LADM's rights, restrictions and responsibilities (RRRs). *Land Use Policy*, 49 (2015) p680-689.

REPORT OF THE INTERNATIONAL INSTITUTION FOR THE HISTORY
OF SURVEYING & MEASUREMENT (IIHSM)
2015-2016

1. Since the symposium on Norfolk Island organised by John Brock in 2014 and the meeting in Sofia in 2015 we met the Board of the FIG Foundation to discuss the programme for enhancing the Struve Geodetic Arc World Heritage Monument with the addition of Central Europe and Eastern Africa including the crossing of the Mediterranean Sea.

We were asking for help to finance the work involved over Africa involving the countries from Libya and Egypt to the Republic of South Africa. We presented the work plan in Sofia to the Surveyor Generals who were present at that meeting for their moral support and practical help on the ground to identify the marks of the 30th meridian. Jim Smith has prepared a 500 page document with all the details relating to that scheme.

We have been regularly attending the meetings of the Struve committee set up after we obtained in 2005 the status of a World Heritage Monument for that Arc.

2. For the plan by the city of Adelaide for the preservation and inscription on the World Heritage list we prepared a detailed plan of the origin point of the coordination system in front of West Terrace and North Terrace. A monument to be erected on the point is to be unveiled on April 27 2016 .

3. The History Section of the International Cartographic Association, until recently chaired by Prof. Elri Liebenberg and now by Professor Imre Demhardt, has shown an interest in joining forces with the IIHS&M for some future events.

4. Jan de Graeve continues to reconstitute the 16 century scientific library of Gerard Mercator and support various meetings and displays of Mercator's work such as that about to take place at the Museum in Cassel, France from March to June.

5. During the year Jan de Graeve and John Brock attended various colloquia on the history of surveying and cartography.

6. Jim Smith continues with the work of compiling and editing the R S Webb notes on the History of the measurement of geodetic meridian arcs. This is likely to finish up in the region of some 2000 pages but in what form it will be produced is yet to be decided.

7. The IIHS&M is still seeking volunteers to join the present officers in the promotion of our activities. Any one interested is asked to contact Jan de Graeve at jan@degraeve-geo.eu or fax **322621033 or in Christchurch FIG Meetings.

Jan de Graeve

Income Statement for 1 January - 31 December 2015 for the FIG Foundation

	<u>2015</u>	<u>2014</u>
	<i>EURO</i>	<i>EURO</i>
Donations		
Personal donations.....	247	1.818
Other donations.....	10.002	11.092
FIG Conferences.....	9.298	27.172
Financial income.....	1.155	2.321
	<hr/>	<hr/>
Total Income	20.702	42.403
 Expenses		
Grants.....	(15.034)	(39.940)
	<hr/>	<hr/>
Total Expenses	(15.034)	(39.940)
	<hr/>	<hr/>
Final Result (Deficit)	5.668	2.463
	<hr/> <hr/>	<hr/> <hr/>

Balance Sheet at 31 December 2015 for The FIG Foundation

	<u>2015</u>	<u>2014</u>
	<i>EURO</i>	<i>EURO</i>
<u>Assets</u>		
Current assets:		
Receivables:		
Account receivable, FIG.....	230.549	225.117
Other receivables.....	1.153	1.156
Cash at hand and bankaccounts.....	<u>5.803</u>	<u>5.567</u>
Total current assets	<u>237.505</u>	<u>231.840</u>
Total assets	<u><u>237.505</u></u>	<u><u>231.840</u></u>
<u>Equity and liabilities</u>		
Equity:		
Equity at the beginning of the year.....	230.840	228.377
Retained earnings.....	<u>5.668</u>	<u>2.463</u>
Total equity	<u>236.508</u>	<u>230.840</u>
Liabilities:		
Other debt.....	<u>997</u>	<u>1.000</u>
Total liabilities	<u>997</u>	<u>1.000</u>
Total equity, reserves and liabilities	<u><u>237.505</u></u>	<u><u>231.840</u></u>

**Report to the 39th General Assembly
FIG Working Week, Christchurch, New Zealand, May 2016**

**FIG Foundation
Report of Activities 2015**



The FIG Foundation

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 2015 was as follows:

- John Hohol, President of the FIG Foundation (USA)
- Prof. Michael Barry, Director (Canada)
- Ir. Liza Groenendijk, Director (Netherlands)
- Dr. Cheng Pengfei, Director (China)
- Prof. Paul van der Molen, Director (Netherlands)

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 2015

The board held its official meeting in Sofia, Bulgaria during the 2015 Working week. Furthermore the board has been in frequent contact through emails.

All members of the Board and the Charter Foundation partner were present.

Eva-Maria Unger and Paula Dijkstra were invited to inform about the Young Surveyors Network and were present.

Jan de Graeve had asked for permission to present the second part of the work with the World Heritage List of UNESCO and was present.

Kenneth Swindaman, USA was invited to get inspiration on the work with a foundation and was present.

Louise Friis-Hansen was invited as representative of the FIG management and was present.

During the Working Week Jeff Needham and Graeme Blick were invited to inform about the Working Week 2016 in New Zealand and the involvement of the Young Surveyors. Both were present (paragraph 19)

John Hohol expressed gratitude to the Board of Directors 2011-2014, Steve Frank, Chryssy Potsiou, Mike Barry and Paul van der Molen, for their contribution to the work with the development of the FIG

4. Grants 2015

Two applications for the Academic Research Grant were received.

It was discussed whether to accept the applications for a second round or not.

One application was rejected due to a lack of focus in the applicant's research record, a lack of publication in the area of the application, and it was not clear how the proposed project was significant in terms of its practical and theoretical contribution to knowledge.

The other application was discussed. There was a perception that the project described was interesting but the application was poor and the application subject matter was on the fringe of what might be covered by an FIG Foundation Academic Research Grant. It was agreed to allow the applicant to go for a second round and thus accept the application. The application was however rejected in the second round.

In 2015 the FIG Foundation awarded grants totalling 9534 EUR to 13 young surveyors to attend and participate in the FIG Working Week 2015 in Sofia, Bulgaria. These were awarded to:

- Nur Zurairah ABDUL HALIM (Malaysia)
- Marina DAVIDOVIC (Serbia)
- Casper FIBAEK (Denmark)
- Franka GRUBIŠIĆ (Croatia)
- Tomislav HORVAT (Croatia)
- Konstantina MANGINA (Greece)
- Miljana PLJEVALJCIC (Serbia)
- Erisem QEHAJA (Albania)
- Georgios RIGOPOULOS (Greece)
- Melissa ROBERT (Uruguay)
- Aliona SCUTELNIC (Moldova)
- Kelvin Kang Wee TANG (Malaysia)
- Benedicta Amarachi UGWULEBO (Nigeria)

The FIG Foundation Board of Directors has also approved a grant to Ms **Melissa Robert, Uruguay** in the amount of 2500 euros in support of attending several conferences to make presentations promoting the FIG Young Surveyors Network and FIG in South America.

CNGeGL, Italy was supported with 3000 EUR to help Young Surveyors to attend the International Summer School for Surveying, Milan, Italy

In total 15,034 EUR was spent in 2015.

5. Donations in 2015

Sofia, Bulgaria:	EUR
Voluntary donations	10,249
Foundation Dinner and registration	<u>9,298</u>
Total	19,547

Interest

Interest 2015	1,155
---------------	-------

<u>Income FIG Foundation 2015</u>	<u>20,702</u>
-----------------------------------	---------------

Unfortunately in 2015, registrations for the Working Week was done locally in Bulgaria, and there was not given the possibility to include any donations in connection with the registration. This has caused a lower income in voluntary donations.

6. Grants 2016

Having re-published the call for grants and extended deadlines the FIG Foundation Academic Research Grants and the FIG Foundation PhD Scholarships will be open for applications in 2015.

The FIG Foundation Academic Research Grants provide grant of up to 30,000 EUR spread over three 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 1 March 2016.

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 March 2016.

Further the FIG Foundation Board of Directors has approved two grants in the amount of 10,000 EUR (5000 EUR each) to support the FIG Young Surveyors Network. These funds will be used to support young surveyors attending the **FIG Young Surveyors North American Meeting** in Minneapolis, Minnesota, USA and the **FIG Working Week 2016** in Christchurch, New Zealand

7. Accounts 2015

The income statement for 2015 and the balance sheet at 31 December 2015 are attached to this report.

The total income in 2015 was 20,702 EUR and expenses 15,034 EUR which gives the net result of 5,668 EUR.

The total assets are 237,505 EUR.

The FIG Foundation would like to sincerely thank all those who have generously donated in 2015 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 and especially Keith Hofgartner, Trimble, for his engagement in the Foundation over many years.

John Hohol

President of the FIG Foundation

March 2016

Web page: www.fig.net/figfoundation

28.1.2016

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. It was considered good for Surveyors to increase their knowledge and activity in real estate markets and on current challenges. The Task Force (TF) was proposed to focus on the ECE region where there are several countries struggling to improve their property markets and overcome crisis. The TF was to carry out a study on the real property markets concerning mainly countries in an economic transition process in its different phases.

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

The other members of the task force are:

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

Also experts from the target countries in the region can be used to form a network to assist the task force in its work. The decision on the network will be taken during the project.

2. THE TASK FORCE ACTIVITIES

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

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 meeting. The agreed list is shown below.

- Government guarantees to register information; Security of ownership/tenure
- Property taxation, appropriate valuation
- Land-Use restrictions, Permitting procedures

28.1.2016

- 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 cannot cover the whole spectrum of the factors mentioned above but rather will prioritize the importance and choose to focus on some aspects before the others. A possible perspective to take is on 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.

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.

2.2. WORK PLAN

The Task Force discussed the Work plan and agreed on the following:

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.

The work will comprise initially:

- task force meetings (at the FIG WGs and independently)
- 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

28.1.2016

Most reporting within the TF will be done by emails and other electronic channels. The TF will have one or two meetings every year.

The TF will organize a session for the FIG WW in New Zealand, May 2016. The session has been accepted as part of the WW program and the papers to be presented in the session are in progress. There will also be a session in the FIG WW in Finland, May-June 2017.

As agreed in the meeting, the TF will arrange two focused seminars of which the first one will be held in Greece on September 18-19, 2016. A first invitation will be sent out early 2016. The seminar will concentrate on getting additional information from the target countries and discussions on the findings and preliminary results gained by then. The Task Force will invite speakers to bring the additional knowledge they can offer. The second seminar, again with invited speakers, will be held in Turkey in 2017 and concentrate on the draft report and conclusions.

2. Methodology or framework and target countries

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

- The International Property Market Scorecard will be used as one of the corner stones for the work and provide the Task Force members with analysis early in 2016. The target countries are preliminarily Russia, Turkey, Greece, Ukraine, Armenia, Romania, and Bulgaria. The Russian and Turkish TF members will then go through the facts concerning their respective countries. Prof. Potsiou will analyze property market needs and challenges in Greece. A basic general study on the target countries is in progress and will be elaborated further by target country representatives. A paper on at least Turkey and Russia will be presented in WW2016.
- The World Bank Doing Business Reports will also be reviewed and the findings will be reported within the TF early 2016.
- Based on the above a list of general questions (topics) will be prepared.

3. Collecting additional information from target countries

This will be done either in the seminars, through the expert network, or through field studies.

It can also be discussed whether any information from developed systems in the non-transitional countries like the U.S., Germany, or the Nordic Countries would be needed for comparison. A definitive decision on the issue as well as on potential field visits will be taken later.

4. Elaboration of the results

This will be done by the Task Force and discussed in the seminars. Beside the conclusions concerning the situation in the target countries, the work should aim 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.

28.1.2016

5. Drafting the report

The report itself will be written by the end of the year 2017.

3. FUNDING

There is no formal budget for the Task Force so far. The funding can potentially be provided from three sources i.e. the TF members' own organizations, the FIG, and external players like the World Bank.

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
TF meeting room	300	300	300
TF accommodation (6)	900	900	900
TF flights (6)	1500	1500	1500
Seminar meeting room	1000	1000	
Seminar catering	1000	1000	
TF attendance in seminars			
- accommodation	900	900	
- flights	1500	1500	
Total	7100	7100	2700

4. OUTCOME

Report on the current situation in the real property market in the 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 will be presented in the FIG Congress in Istanbul in 2018.

FIG TASK FORCE ON CORPORATE MEMBERS

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

ACCOUNT OF ACTIVITIES

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.

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:

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

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

- If you heard of FIG do you know 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%).

Recommendations:

- 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 (ex: Intergeo) where CM are present.
- Solicit support from FIG Member Associations to find and attract potential CM.
- 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 use the FIG logo on their websites, literature, and advertisements to publicize partnership with FIG while also increasing visibility of FIG.
- Encourage CM and technical commissions to engage 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.

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)

FIG Task Force on Commission Structure

Report for discussion

On behalf of the task force; Mikael Lilje, Mikael.lilje@lm.se

1. Executive summary

The Task Force suggests the following changes to the structure for FIG;

Consolidate the number of commissions to FOUR;

- Commission on *Spatial Information Data Management and Systems*
- Commission on *Cadastral*
- Commission on *Positioning, Measurement and Reference Systems*
- Commission on *Spatial Planning, Land, and Marine Management:*

Implement FOUR FIG Networks;

- Education, Professional development and Ethics
- Standards
- Young Surveyors
- Regional Capacity Development

Improve the use of professional Task Forces within FIG

The Task Force also suggests that a decision is taken at the FWW Christchurch to ensure that the new structure could be implemented at the latest the 1st of January, 2019. Call for commission chairs should be sent out for voting at the FWW 2017 in Helsinki.

2. Background

Since FIG's inception in 1878, FIG has grown to be the premier international organization representing the interests of surveyors worldwide. It now consists of a federation of over 100 national member associations and provides a forum for discussions and professional development. Today, FIG members strive to be a modern and sustainable surveying profession in support of society, environment and economy by providing innovative, reliable and best practice solutions to our rapidly changing and complex world, acting with integrity and confidence about the usefulness of surveying, and translating these words into action.

To assist with accomplishing this vision, a Task Force was established at the FIG 2015 Working Week in Sofia to review the Commission Structure, and this was initiated by several requests from member associations. The Task Force was assigned to make recommendations and also consider the following significant challenges for the FIG surveying and spatial community:

- Positioning FIG to address core topics as well as mega-trends in the geospatial sphere
- Advocate the effectiveness of the FIG

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

- Effectively communicate FIG activities to members and partners
- Grow the number of FIG contributors and promote the productiveness of Commissions
- Ensure equitable and adequate participation at FIG meetings and within the Commissions
- Enhance the representation of member associations, the private sector and young surveyors
- Obtain positive economical results where choice of venue of FIG Working Week is of most importance.
- Identify how the FIG will be a long term active partner in the developing world.

As a consequence of submissions to the General Assembly, the remit of the Task Force was to initially review:

- the current structure of the FIG,
- the FIG's terms of reference,
- the mission of the FIG Commissions
- the current processes involved with assessing and selecting qualified candidates to Commission Chairs
- make recommendations regarding the above, as well as provide a definition of the challenge, the level of adaptation/change required, and suggest ideas on how to improve the capability of FIG and the Commissions to accomplish the work plans.

3. Drivers for Change

The role and contribution of the surveyors has transformed heavily if we consider societal, economic, environmental and technological changes over time. FIG has tried to adapt to these changes however the rate at which change has occurred has been more rapid over the last few decades. During this period, surveyors have truly undergone a massive progression, and FIG as an organisation must progress alongside the profession.

Technologically, the profession has been impacted in both the way we work, and the way we communicate and organise. Social media influences the rapidity with which knowledge spreads, and the reach of the audience. Similar technological advancements have enabled the survey profession to change the way information is collected, stored, integrated and distributed. Information is now gathered in huge quantities, is becoming more accessible, exchangeable, and on platforms or via media that were not even considered when the current Commission structure was decided. It is important that we manage and acknowledge these advancements and their impact on FIG's modes of operation.

Growing from the growth and accessibility of technology, FIG is further seeing an increasing role to play in advising on the social, environmental and economic challenges faced by decision makers from both developed and emerging countries. For examples addressing global issues and emerging "mega trends" related to gender equity for women's access to land and education; poverty, sustainable land development; climate change; and urbanisation. These mega trends are in part driving the linkages FIG is forging with multinational organisations such as the United Nations, the scientific and academic community and the operational professional surveyor.

To manage these social, economic and technological advances, changes and challenges, FIG must be a more efficient and effective organisation in the future. FIG must be proactive in identifying the mega trends that

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

society is presently facing and likely to face in the future, and thus decide how FIG should be challenging these mega trends. FIG needs to be aware of its role on the international stage, whilst still supporting the core of the profession. Questions on the responsibilities of the FIG should be considered not only by the FIG Council but also to the Commissions themselves and our member associations:

- Can these roles and others be actively dealt with relation to the internal and Commission structure of FIG?
- What role does FIG want to play in the future?
- What is our vision?

These questions go to the heart of the structure of the Commissions, which provide the structure to enable the FIG to face future changes and challenges. They go above and beyond the role of this Task Force, but provide an important foundation. Therefore, this Task Force examines the internal structure of the organisation and suggest changes if there is a need to restructure the Commissions to support our surveyors.

4. Working Method

As previously mentioned, the Task Force was officially formed at the General Assembly convened in Sofia, May 2015 during the FIG Working Week. Since then, the Task Force has held physical meetings, internet based ones (e.g. through Skype) and also many email discussions. From these interactions, the Task Force has determined that it will be responsible for:

- Recommending changes to the Commission structure which may also include the number, type, composition and work of Commissions.
- Suggesting alterations with Commissions with respect to the allocation of work, FIG leadership, member association participation and general achievement.
- Identifying possible strategies to optimize FIG Council, Commission Chair and member activities without significant change to FIG processes.
- Providing a broad range of recommendations for further review

At this stage the Task Force has decided that it will not address:

- Changes to the Definition of the Functions of the Surveyor
- Review of official strategies or documents

We consider that, although the Vision and Work Plan of the FIG / FIG Council could be more specific and provide direction to and harmonization across the Commissions, in their current forms they are flexible enough to provide guidance but to ultimately allow Commission Chairs the necessary freedom to develop their own work plans. We suggest a future review could consider the FIG Vision in the context of this review and identified challenges, and/or the needs of the Commission Chairs and FIG members with relation to the FIG Vision and Council Work Plan.

Hence, the Task Force will not suggest changes to the present FIG Vision, role, function and definition of the Surveyor, however if deemed necessary alterations to these statements will be recommended to support any structural modifications to the Commissions. In the same manner the Task Force will not discuss current FIG strategies or work plan documents, unless they affect structural change.

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

The Task Force members are as follows: Mikael Lilje (chair), Brian Coutts (New Zealand), Stephen Djaba (Ghana), Henning Elmström (Denmark), Kate Fairlie (Australia), Brent Jones (USA), Jürg Kaufmann (Switzerland), Hansjörg Kutterer (Germany), Robert Sarib (Australia), Winnie Shiu (China), Rudolf Staiger (Germany), Karl-Friedrich Thöne (Germany). The Task Force will also utilize other selected FIG members as a reference group to gather invaluable feedback and critical analysis.

5. Summary of the Review of FIG Commission structure

The Task Force has reviewed the current situation and has formulated the following matrix. In some cases the analysis covers more than just Commissions structure due to the nature of Commission work and its roles in the FIG organisation. Consequently, to have an efficient Commission demands that the environment under which they operate justifies this.

Area of challenge	Problem	Recommendation
Commission	<ul style="list-style-type: none"> - Lack of interaction between Commissions - Varying size of Commissions - Achievement levels of Commissions 	<ul style="list-style-type: none"> - Streamline Commissions - Create more flexible Task Force structure (enable 2- and 4- year engagements?) - Election changes, determined by Commissions - ACCO rep to come from VP instead of Commissions?
Communication	<ul style="list-style-type: none"> - Social media - Overlap/communication with other fields/organisations 	<ul style="list-style-type: none"> - Develop communication strategy for FIG - Review databases (resources)
Member Associations	<ul style="list-style-type: none"> - Justifying membership - Promoting visibility of surveying (declining membership) 	<ul style="list-style-type: none"> - Identify value adds in addition to meetings
Private sector	<ul style="list-style-type: none"> - Struggles to see value in FIG 	<ul style="list-style-type: none"> - Strategy to directly address private sector - Closer ties between private sector and Commissions - Single cooperate sponsor payment, rather than per event
Events	<ul style="list-style-type: none"> - Cost of attending - Inclusion of Asia Pacific/Africa/Americas - Catering to existing vs. 'potential' members 	-
Engagement vs. participation	<ul style="list-style-type: none"> - Eg. FIG YSN has reached 5000+ BUT struggles with participation, how to make this easy? - Focus on voting for individuals vs. agenda 	-

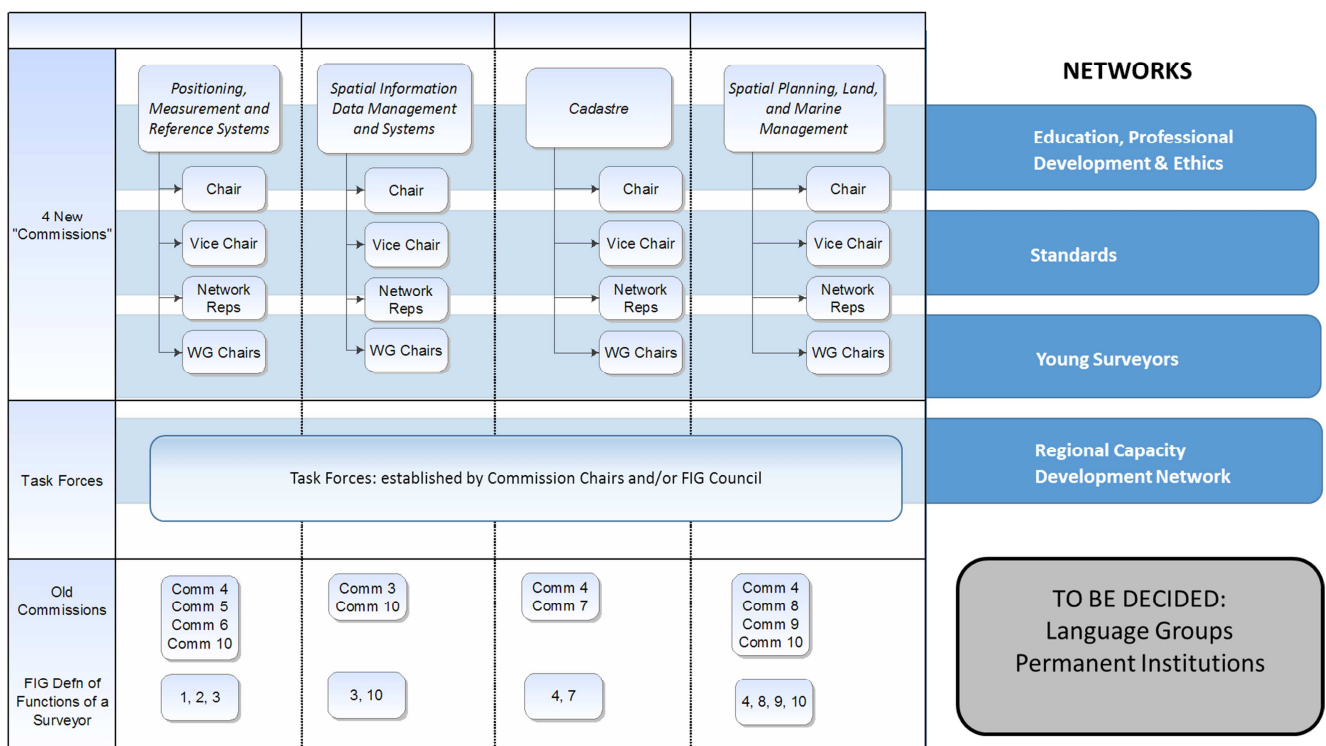
FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

6. Proposal for new Commission Structure including Task Forces and Networks

Given the possibility to suggest changes and given the discussions the Task Force has had regarding the number of current commissions and the mega trends we suggest rationalising the number of Commissions and encourage FIG to be more flexible regarding Task Forces as well as raise the awareness and profile of Networks. We believe by doing this, FIG would become more suitably organised to address the major challenges that we are noticing, improve the internal communication and be a more flexible and effective organisation. We believe also that it would be easier to recruit officers to the positions since there is a fewer number, and more importantly facilitate innovation through a mixed team environment.



The suggestion from the Task Force is to organise the structure in the following four (4) commissions;

- Commission on *Spatial Information Data Management and Systems* (Basically Commission 3 and Commission 10 but needs to be more focused than current Commission 3)
- Commission on *Cadastre*: Legal basics of land and water, property, administration, valuation and management (Basically current commission 7 but also Commission 4)
- Commission on *Positioning, Measurement and Reference Systems*: Location techniques and instruments for all sorts of spatial objects (Basically Commission 5 and 6 but also part of Commission 4 and 10)
- Commission on *Spatial Planning, Land and Marine Management*: (Basically Commission 4, 8, 9 and 10)

We have also noted the importance that our FIG Networks do have and suggest that their role and importance are highlighted within the FIG organisation. We also noted that the current Commission 1 and 2 are dealing with our profession and that they do cover more or less all current commissions. In our view, they are an established Network rather than a focused Commission. We suggest the following four FIG Networks be implemented;

- Education, Professional development and Ethics
- Standards
- Young Surveyors
- Regional Capacity Development

Professional Task Forces are to deal with contemporary and interesting issues established by the Council at the request of the ACCO. Professional Task Forces take care of emerging issues of the societies, e.g.:

- Energy transition
- Climate change
- Land grabbing
- Rapid urbanisation
- Poverty reduction
- Regional Development
- Other

With this arrangement, the Commissions can focus on the development of the core skills of the profession and ensure that the associated behaviour and the necessary education is concentrated on a good and sound professional expertise. Commission Chairs are no longer compelled to take superficial or otherwise ambiguous topics into their work plan, but to rather provide advice to the Council and the members to prepare the professional surveyor for the future.

The Professional Task Forces shall carry out fundamental studies about emerging issues and should exist for a limited time. The outcomes determined by these Task Forces can deliver their findings to the Commissions who can then assess the impacts on the professional expertise and the professional development. Greater emphasis on the TF will best enable cross-Commission work, will help to build a solid base of expertise for future FIG leadership and will enable more flexible approaches to mega trends. Critically, they will address a current gap in FIG, which is the lack of short-term and mid-level leadership positions which particularly limit young surveyor contributions.

The profile of the Networks should be larger within FIG and they should work across the Commission structure. There should also be a direct link through personal resources between the Networks and the Commissions. Again, this acknowledged partnership should foster additional mid-level leadership roles to promote a pathway to greater engagement within FIG.

The formal process of recruiting Commission chairs and officers will be less onerous under the above approach. It is our suggestion that the Steering Committee of each Commission should include (at least) the Chair, the Vice Chair of Administration, the Working Group Chairs as well as one young surveyor, to ensure that the large workload of the FIG does not simply fall on fewer shoulders – and further work will be necessary to address this. Fewer Commissions will additionally contribute to a small reduction in FIG running

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

costs. The risk to have inappropriate Commission officers is reduced. Risk of overlapping work plan issues is minimized. However, FIG must still be aware of these issues and work accordingly to avoid implications in the future.

Improve the selection process for Commission Chairs

Regarding the process of identifying new Commission Chairs, the internal rules 11.4 state that *“a nominee shall preferably have played an active part in the activities of the commission for which he or she is being nominated as chair, and shall have demonstrated possession of the personal and professional capabilities needed to lead the work of the commission. In addition, the Council shall assure itself as to the nominees’ practical availability for service and that they have sufficient financial and administrative support.”*

The Task Force suggests that for the Commission Chairs Elect, the existing Commission officers should also be involved in the assessment of the candidate. The Commission has the possibility to actively suggest candidates as Commission Chairs but the candidate’s Member Association must always support the nomination. The Commission (and Member Associations) should also evaluate the candidates to make sure that she/he is able to fulfill the job, and has the required experience of FIG to understand the position. The Commissions are one of the key “bodies” that have sufficient knowledge of their members and who are able to judge their FIG eligibility, subsequently Commissions should have the ability to also negotiate with the Member Association of the candidate they wish to nominate. The Task Force also suggests that more than one Commission should not be chaired by two representatives from the same Member Association.

The Task Force, also recommend that when there is more than one candidate for the position of Commission Chair, then a “selection panel” may be established (comprising of ACCO and / or the Council representatives and Commission Chairs) and be given the option and opportunity to indicate to the General Assembly who may be a more suitable Commission Chair.

7. In Depth Analysis and Evaluation of FIG Commission Structure

7.1 Vision, Role, Theme and Organisation of FIG

According to website (www.fig.net), the FIG Vision is as follows;

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

During the deliberations of the Task Force it became apparent that the FIG Vision does not suggest or foresee what the future composition of the Commissions should be. After consideration, this finding has both a positive and a negative side. The positive aspect is that the present vision does not mention “internal structural requirements” thus this provides flexibility for FIG to create an internal structure to achieve the vision and objectives. The negative side however is that the vision does not accommodate “mega trends” and specifically the role that surveyors can play.

In other words - The Task Force recommends consideration be given to altering the FIG Vision to include words relating to “mega trends” and that surveyors have a role to play.

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

According to the webpage the present role and theme of FIG is;

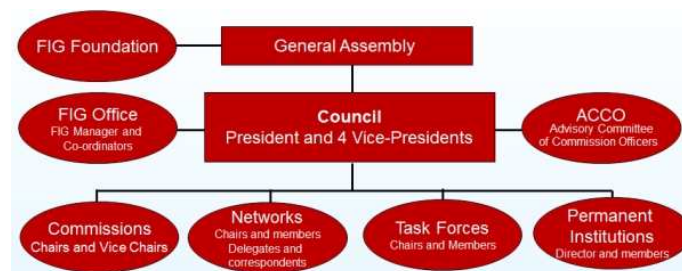
FIG's activities are governed by a work plan, which is approved by the General Assembly and reviewed by Council as its tenure progresses. The current work plan with the motto "Ensuring the Rapid Response to Change Ensuring the Surveyor of Tomorrow" guides Council, Commissions, Networks and Task Force in their activities.

FIG supports the role of a prosperous and sustainable profession of surveyors to provide solution functionality, reliably, affordably for a complex and rapidly changing world that cannot wait, and to translate a sustainable development agenda into action. FIG supports international collaboration among its members for the progress of surveying in all its fields and applications. FIG has a close cooperation with United Nations relevant bodies, World Bank, and its sister associations and has been globally recognized as the leading international non-governmental organization on geospatial information and the management of "land", the "sea" and the "built" environment. It is within the surveyors' task to determine the size and shape of the earth, to map its surface and to manage it in a sustainable way.

This statement about the role of FIG is appropriate. To be successful in the future, FIG must remain an active important player on the international scene, ready to interact, ready to collaborative, ready to deliver and ready to contribute.

7.2 Organization of FIG

The position of the Commissions within the FIG Organization is defined in the organizational chart published on the FIG homepage:



In view of Commissions the FIG homepage states:

FIG's technical work is led by ten Commissions. The responsibilities and work plans of Commissions are approved by the General Assembly during the FIG Congress. The work of each Commission is led by the Chairperson – elected for four-year term of office by the General Assembly at the Congress. The Chair is assisted by the Commission Vice-Chairpersons also appointed by the General Assembly. The Chair-Elect is elected by the General Assembly two years before the Congress. The Commission Chair is also assisted by a Vice-Chair of Administration who is in charge for the administration of the Commission. Every Commission has established at least three working groups on special topics. All member associations have the right to nominate a national delegate to each of the ten Commissions. The affiliates, academic members and corporate members have a right to nominate a correspondent to each Commission. The responsibilities and privileges of national delegates are published in the Internal Rules.

The statutory regulations create the organizational framework for the Commissions and their work. There are no official documents or rules that define or specify neither the number nor the Terms of Reference (ToR) of the Commissions. Decisions relating to such matters are approved by the General Assembly. It ap-

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

pears the only rule concerning the content of the Commission work is given in item 11.1 of the Internal Rules:

Commissions shall be established to further the technical and professional work of the Federation. Between them they shall cover all the activities listed in the definition of a surveyor.

Note - the FIG definition of the “surveyor” can be found in Appendix C.

In other words - The Task Force recommends that the FIG Council need to ensure that all activities (as listed in the definition of s surveyor) are addressed by the Commission work plans.

7.3 Internal Rules

Chapter 11 of the FIG Internal Rules deals with Commissions, and an extract of the relevant internal rules can be found in Appendix A.

7.4 The Relevance of Commissions

According to the Internal Rules, FIG establishes Commissions to further the technical and professional work of the Federation. It is also stated that their work plans shall be decided by a vote of the General Assembly. It is not stated, and should not be stated either, how FIG ensure that the Commissions anticipate and respond to market trends and client demands.

Overall there appears to be very little information on the webpage and within FIG documents on the benefits, relevance, and opportunities to the members regarding the Commissions and their work. For those who have been involved in FIG for many years use the Commissions as a forum to meet other persons working in the same field or discipline. This interaction allows the exchange of ideas, thoughts and best practice. It is also a vehicle to build and expand one’s personal and professional network.

In other words - The Task Force recommend that FIG create an official statement regarding the benefits and results of active participation in Commissions to members and FIG respectively.

7.5 Responsibilities of Commission Chairs

The roles and responsibilities of Commission Chairs are described in a special document endorsed by the General Assembly in 2008. A copy can also be found in Appendix B. The Task Force agree with the listed roles and responsibilities; however it should be a requirement that new Commission Chairs engage with each other to discuss and review their proposed work plans. This means, time needs to be set aside so that the new Chairs can identify possible collaboration on related issues / challenges and outcomes, and the sharing of resources before they are endorsed by the General Assembly. This will also display to the General Assembly synergy and harmonisation between Commissions with respect to achieving the FIG Vision.

In other words - The Task Force recommends that new Commission Chairs must discuss and review their proposed plans with each other so as to identify possible collaboration on related issues / challenges and outcomes and demonstrate synergy amongst their work plans with respect to achieving the FIG Vision.

7.6 FIG Task Forces

Besides the Commissions, FIG maintains a series of Task Forces to carry out special tasks. Item 13 of the Internal Rules state:

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

Task Forces may be established by the Council to research and to advice on matters of an administrative or of a general policy nature. They will normally be of short duration and will be concluded on the presentation and acceptance of their reports by the Council and, where necessary, the General Assembly. Their composition, chairs, terms of reference and work plans shall be approved by the Council.

The advantage of using Task Forces is that it provides FIG the flexibility to focus on a specific subject for a limited amount of time regardless of the time in relation to the 4 year term, FIG Congresses, the timeline for Commission works, its work plans and coming work plans. The Task Force believe that FIG is not using this opportunity as much as it should. For example FIG should be considering the use of Task Forces to discuss challenges in the context of digitalisation, mega cities, urbanisation and more.

In other words - The Task Force recommends that FIG Council should consider the use of more Task Forces to address significant challenges.

7.7 Functions of the current Commissions

Regarding the **role of the commissions**, FIG states that *“the commissions, under the guidance of their chairs, are responsible for pursuing FIG’s professional and technical objectives, through the implementation of work plans that are adopted by the General Assembly following the FIG Congress and culminate with the delivery of technical programmes at the following congress.”*

It is up to General Assembly to decide and approve changes to the FIG Commission structure. Going through the terms of reference as well as missions of the current Commissions it is not easy to find any Commission that actively looks into the future of FIG. The Commissions are very much focused on the current four year period and this is understandable, but it is obvious FIG is missing mechanisms that will allow the FIG to address the modern challenges of “the mega trends” and for its internal structure to act accordingly. As a consequence, the Task Force propose that there should be “structured and formalised” cross-Commission workshops during the period from when the Chair-Elects are elected (two years before a Congress) to when the new Commission work plans are approved (normally at the “first GA” after the new Commission Chairs are in place). These workshops should identify and monitor issues or topics relating to “mega trends”, and then make amendments to their proposed Commission work plans, mission and objectives. This process should be overseen by FIG Council and / or ACCO and this will also ensure that FIG’s vision or strategy is incorporated in Commission work plans.

Commissions 1 and 2 deal with the surveyor profession in general. The Task Force has called them Inter-Commissions since they are very much FIG internal and not having the outside-in focus. They are also interdisciplinary, as their mission or work should be influenced or based on the findings or outcomes from the more technical-oriented Commissions.

The other Commissions have topics of interest for a specific sector of the FIG members. For example - Commissions 3 to 5 treat mainly technical aspects and tools, Commissions 6, 7 and 8 are occupied with the application of these tools, and Commission 9 and 10 take care of the valuation and economic aspects of land and constructions. Generally, the Commissions have been stable for many years even though their terms of references and missions may have been developed. The Terms of References of some Commissions are heterogeneous and do not carry the same level of relevance. It is apparent that FIG needs to be more active in the preparation of Commission work plans so that objectives do not overlap or have a gap.

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

Potential synergies in work plans can be seen from their denominations:

Commission	Name
1	Professional Standards and Practice
2	Professional Education
3	Spatial Information Management
4	Hydrography
5	Positioning and Measurement
6	Engineering Surveys
7	Cadastral and Land Management
8	Spatial planning and development
9	Valuation and the Management of Real Estate
10	Construction Economics and Management

In other words - to avoid duplication of effort or to improve the use of resources, Commissions should harmonise their work plans. For example, Commission 1 and 2 should define their actions on developments outlined by the other Commissions and to formulate conclusions for the development of the profession and the education of the professionals.

7.8 Free choice of Commission topics

It appears the tradition within FIG is to give the Commission Chairs-elect the freedom to develop their own work plans. In most cases, they do their best but the drivers for the choice or content are often not well considered nor take into account the FIG Vision or Strategy. Normally, the work plan objectives are the result of the Commission Chair-elect's own focus areas and not the global professional surveyor challenges such as the "mega trends". The Commission Chair-elects tend to focus on 'burning issues' when preparing the work plans, and as a consequence the long term mission of FIG is not taken into account as much as it should. There should of course always be freedom for the Commissions to develop their own work plans but the FIG organisation should also have a stronger mechanism to ensure that work plans are homogenous and cover the entire FIG surveyor and are part of the Strategy and Vision.

FIG needs to have insights into the future developments of the profession as well as the mega trend. FIG needs to be focused and clear on the position that the organisation would like to have in the future. Because the work plans are not sufficiently future oriented, most results coming out of the work plans are dealing with short term problems. It is important that FIG ensure that the organisations visions and missions are also covered in the Commission work plans.

Besides the papers presented by members are mainly explaining the state of the art, the work plan results have the same quality. So FIG knows very well what is going on, but not what is important in the future. Normally the plenary speakers at our events are trying to look into the future for us but we need to ensure

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

that their thoughts and ideas are also taken care of in the technical program, in the FIG Vision and Mission and in the Commission works.

In other words – Commissions need to have results / outcomes that offer real solutions or have an impact and are visionary (look to the future) rather than just describe the current status or state of play?

7.9 Ensuring qualified Commission chairs

Regarding the process of identifying new Commission Chairs, the Internal Rule 11.4 state that “a *nominee shall preferably have played an active part in the activities of the commission for which he or she is being nominated as chair, and shall have demonstrated possession of the personal and professional capabilities needed to lead the work of the commission. In addition, the Council shall assure itself as to the nominees’ practical availability for service and that they have sufficient financial and administrative support.*”

Presently, the Member Association can propose a person who is not known to anybody else and such a person can be elected. As we know, to be a Commission Chair requires a long term commitment, as it generally entails, two years of “pre-selection” or “apprenticeship” and then four years of active participation as the Chair. As such the Task Force, strongly believe that the Commission Chair must be a well-known person within FIG, the Commission, and understand how FIG works before the election. Also, during this six year period much can happen and change, which can impact on their ability of the Commission Chair to be active. Therefore the process to encourage candidates, to evaluate candidates and to elect the Commission Chair is a very serious process that should be treated as such.

It is therefore very clear that the Council has an obligation to ensure that candidates meet the selection criteria’s before the nomination is accepted and then put forward to the General Assembly. A way to improve the current situation would be to create a Chair Selection Review Team that is made up of the ACCO-rep, one or two Vice Presidents and possibly existing Commission officers. This selection panel would play a vital role if there are multiple candidates and the purpose of this Committee would be to validate the candidates before they are presented to the General Assembly. Also, if required, this Committee could address the General Assembly about the preferred candidates.

In other words - a Chair Selection Review Team or Panel needs to be established to evaluate and validate a candidate’s capability against selection criteria for a Commission Chair.

7.10 Number of Commissions

The number of FIG Commissions has been growing over the time without changes to the structure. In parallel, the Council and General Assembly has the option to form Task Forces to deal with special issues at any time. Normally, a Task Force is created immediately after the new Council starts its work and lasts more or less over the four year period. As a consequence the increasing number of official FIG “bodies” results in the need for more human and operational resources. This problem could overburden FIG. In other words, FIG need to enforce or modify the present process to assess or evaluate the performance of Commissions and if required de-commission the non-performers.

The Task Force has evaluated the current FIG commission structure in terms of the number of commissions, their tasks, how they are linked to each other, size and more. The Task Force believed (early in the process) that we now have the chance to implement changes to the FIG Structure, and that if we do not do it now we

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

probably have to wait a long time for the next opportunity. The Task Force also believe that there are so many international initiatives, trends and changes going on that FIG needs to take action. Therefore to address these challenges the current number of Commissions needs to be rationalised. A summary of our discussion on reducing the number of Commissions can be found in the table below.

Pros	Cons
<ul style="list-style-type: none"> - Reset in terms of activity - Reset in terms of subject/content - Colocation of typically linked Commissions, e.g. 3/7, 4/5/6 - Fewer active chairs to find, simpler recruitment - Fewer competing events - May improve communication and linkages - More likely to create a critical mass of active people - Could create space for more Task Forces, and better allocation of funding - Could provide a mechanism to create more 'interim' positions (i.e.: greater structure) - Clarity over network and commissions hierarchy/structure 	<ul style="list-style-type: none"> - Current topics are all very relevant, and fewer commissions may lose the diversity - More work may fall on the shoulders of Commission Chairs, who may require more support - Such a change may not necessarily lead to efficiency - Such a structure may promote only managers, and not others - Only a few positions which may limit the visible pool from which to draw leaders, such as FIG VP etc. - Could mean less people are engaged and active - Does not directly address Task Force challenges - FIG culture (i.e.: euro-centric) still exists and may create barriers - Commissions give a home to members and this may lose some regular attendees - Doesn't address role of FIG with e.g. UN-GGIM etc. - Non-European commission chairs may find it more difficult to engage/be recognised.

It was agreed in the Task Force that we should suggest to the General Assembly that the number of Commissions should be reduced and the Task Force has prepared a suggestion on a new structure, see page 5. It was understood that this would likely increase the workload of the Commission Chairs, but that new positions could be created to support this structure, including potentially formal young professional roles to each Commission. However, we do believe that the advantages in reducing the number are so strong that this is the way that FIG should proceed.

In other words – FIG Commissions should be rationalised to four (4).

8. Our thoughts on keeping the structure as is

The Task Force has considered the “no-change” option to improve the efficiency and effectiveness of FIG operations. We believe that the current Commission structure was developed and adopted for the best intentions. However, considering where the profession is today and where it is going, the Task Force believe now is the right time for change, and we have the capability to ensure the proposed Commission structure

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

will meet future challenges. The Task Force strongly urge that the FIG General Assembly carefully consider the proposed changes to our FIG Commission structure.

APPENDIX A: Internal rules and Commissions

11.0 COMMISSIONS

11.1 *Commissions shall be established to further the technical and professional work of the Federation. Between them they shall cover all the activities listed in the definition of a surveyor. The terms of reference of the Commissions and the duration of their work shall be decided by a vote of the General Assembly so that together they shall be able to anticipate and respond to market trends and client demand.*

11.2 *A Commission shall be comprised of delegates appointed by the member associations and correspondents (non-voting delegates) appointed by other members. Each member association shall be entitled to appoint one delegate to each Commission, who will be expected to attend, as a minimum, at least one congress or a working week and, whenever possible, technical meetings organised by the Commission. It is, however, recognised that much of the work of a Commission will be conducted by correspondence.*

11.3 *Affiliates, corporate members and academic members shall be entitled to appoint one correspondent (non-voting delegate) to each Commission. Correspondents and other persons appointed by Commission chairs may contribute to the work of the Commissions but not to their administration.*

11.4 *Each Commission shall be presided over by a chair who shall take office at the start of the year following a congress and serve for a four year term. The election of chairs of Commissions shall be decided by a vote of the General Assembly. For each four year term, each member association may nominate one person for a position of a Commission Chair. Nominations shall normally be called for at least four months in advance of the General Assembly at which the elections are to be held to enable the Council to ensure that the nominees command the support of their member associations and the relevant Commissions. A nominee shall preferably have played an active part in the activities of the Commission for which he or she is being nominated as chair, and shall have demonstrated possession of the personal and professional capabilities needed to lead the work of the Commission. In addition, the Council shall assure itself as to the nominees' practical availability for service and that they have sufficient financial and administrative support. In the event of no nomination being received for the chair of a particular Commission, the Council shall take such action as may be needed to ensure that the position is filled. (Approved by General Assembly in Eilat 3 May 2009).*

11.5 *No one member association shall normally hold a chair of the same Commission for two consecutive terms.*

11.6 *Each Commission chair shall attend and submit a report to each meeting of the General Assembly, and may participate in debate but shall not have voting rights.*

11.7 *The Council shall promulgate guidance notes for Commission chairs.*

11.8 *The election of chair-elect shall be decided by a vote of the General Assembly at the meeting which takes place two years prior to the General Assembly at which chairs are elected. For each four year term, each member association may nominate one person for a position of chair-elect of a Commission. Nominations shall normally be called for at least four months in advance of the General Assembly at which the elections are to be held to enable the Council to ensure that the nominees command the support of their member associations and the relevant Commissions. A nominee shall preferably have played an active part in the activities of the Commission for which he or she is being nominated as chair, and shall have demonstrated possession of the personal and professional capabilities needed to lead the work of the Commission. In addition, the*

FIG Task Force on Structural Improvements

Draft Report for Discussion

9 March 2016

Council shall assure itself as to the nominees' practical availability for service and that they have sufficient financial and administrative support. In the event of no nomination being received for the chair of a particular Commission, the Council shall take such action as may be needed to ensure that the position is filled. (Approved by General Assembly in Eilat 3 May 2009)

11.9 The General Assembly shall vote for each candidate of their choice. The first vote shall be between all candidates for the post in question. If no single candidate for that post gains an absolute majority of the votes cast, a second vote will be held between the two candidates that have the most votes. In the event of a tie on that vote, the final decision shall be made by selecting a name by blind ballot.

11.10 The Commission chair-elect will appoint a minimum of three chairs of Working Groups prior to the General Assembly in which he or she will take over the chairmanship of the Commission. These Working Group chairs will be given the status of a Commission Vice Chair. In addition the chair-elect may also appoint a person to provide administrative and communication support to the work of the Commission. This person will also be given the status of a Commission vice chair.

11.11 The chair of each Commission shall prepare a work plan setting out the various activities of the Commission together with inter-Commission activities proposed for the four year term. The work plan shall be prepared and submitted to Council between the time of the General Assembly when the chair is elected and commencement of the term of office.

11.12 In the event that a chair, chair-elect or a vice-chair is unable to fulfil the responsibilities of the office the Council shall make such arrangements as it deems necessary to ensure the continuity of that Commission's work, including the appointment of a new chair, new chair-elect or new vice-chair if necessary.

11.13 All persons appointed to, or nominated for, the posts of chair, chair-elect or vice-chair of a Commission or Inter-Commission activity must be a member of and have the formal support of their Member Association.

APPENDIX B: **RESPONSIBILITIES OF COMMISSION CHAIRS**

Endorsed by the General Assembly 15 June 2008.

The particular responsibilities of each chair are as follows:

- *lead the Commission in seeking to achieve the overall objectives of the Federation*
- *prepare a work plan that helps to take forward FIG's strategic plan and advance the overall objectives of the Federation, appointing working groups as appropriate*
- *modify the work plan if asked to do so by the Council in order to meet the overall objectives of the Federation*
- *direct the affairs of the Commission so that it achieves the goals outlined in its current work plan*
- *consult with and involve the delegates, correspondents (non-voting delegates) and others involved in the work of the Commission in order to achieve these goals*
- *work with other Commission officers and chairs of Commission working groups (Commission vice chairs) in all matters relating to strategy and planning*
- *submit annual written reports to the General Assembly on progress in implementing the work plan*
- *attend all meetings of the Advisory Committee of Commission Officers*
- *if required, appoint a Commission secretary (Vice Chair of Administration) to assist with the work of the Commission*
- *organise seminars, workshops and Commission delegate meetings during congresses, FIG working weeks and regional conferences, if possible, or otherwise, on an annual basis*
- *seek opportunities for advancing the work of the Commission through the co-sponsorship of events with relevant outside bodies, member associations, etc*
- *participate as requested by the Council and the General Assembly in cross-Commission project activity as a means of advancing the overall objectives of the Federation and its current work plan*
- *prepare, in collaboration with the FIG Office and the congress director, a detailed programme for the congress, working weeks and regional conferences and call for papers*
- *select the required number of papers for discussion in the technical sessions (papers having an international relevance and a high professional, technical or scientific standard), leaving as poster session papers those of immediate relevance or those more appropriate for that form of presentation*
- *chair sessions at FIG events or select chairs and brief them to ensure that creative and informative discussions take place*
- *appoint rapporteurs for summarising discussions at technical sessions and for subsequent publication in appropriate Federation media*
- *maintain a Commission web page on the World Wide Web.*

Appendix C: FIG Definition of the Functions of the Surveyor

Summary

A surveyor is a professional person with the academic qualifications and technical expertise to conduct one, or more, of the following activities;

- *to determine, measure and represent land, three-dimensional objects, point-fields and trajectories;*
- *to assemble and interpret land and geographically related information,*
- *to use that information for the planning and efficient administration of the land, the sea and any structures thereon; and,*
- *to conduct research into the above practices and to develop them.*

Detailed Functions

The surveyor's professional tasks may involve one or more of the following activities which may occur either on, above or below the surface of the land or the sea and may be carried out in association with other professionals.

1. *The determination of the size and shape of the earth and the measurement of all data needed to define the size, position, shape and contour of any part of the earth and monitoring any change therein.*
2. *The positioning of objects in space and time as well as the positioning and monitoring of physical features, structures and engineering works on, above or below the surface of the earth.*
3. *The development, testing and calibration of sensors, instruments and systems for the above-mentioned purposes and for other surveying purposes.*
4. *The acquisition and use of spatial information from close range, aerial and satellite imagery and the automation of these processes.*
5. *The determination of the position of the boundaries of public or private land, including national and international boundaries, and the registration of those lands with the appropriate authorities.*
6. *The design, establishment and administration of geographic information systems (GIS) and the collection, storage, analysis, management, display and dissemination of data.*
7. *The analysis, interpretation and integration of spatial objects and phenomena in GIS, including the visualisation and communication of such data in maps, models and mobile digital devices.*
8. *The study of the natural and social environment, the measurement of land and marine resources and the use of such data in the planning of development in urban, rural and regional areas.*
9. *The planning, development and redevelopment of property, whether urban or rural and whether land or buildings.*
10. *The assessment of value and the management of property, whether urban or rural and whether land or buildings.*
11. *The planning, measurement and management of construction works, including the estimation of costs. In the application of the foregoing activities, surveyors take into account the relevant legal, economic, environmental and social aspects affecting each project.*

Michael Vejgaard Hansen

Carsten Johnsen

Poul Wisniewski

Erik Munk

The International Federation of Surveyors - FIG

Kalvebod Brygge 31-33

DK-1780 Copenhagen V

(Registration No. 21 33 60 76)

Financial Statements for 2015



Table of contents	<u>Page</u>
 Statements	
Statement of the Board of Directors and the Board of Executives.....	2
Independent Auditor's Report.....	3 - 4
 Report of the Board of Directors and the Board of Executives	
Federation Information.....	5
 Financial Statements for 1 January 2015 to 31 December 2015 for FIG	
Accounting policies.....	6 - 7
Income statement.....	8 - 9
Balance sheet.....	10
 Financial Statements for 1 January 2015 to 31 December 2015 for the FIG Foundation	
Income statement.....	11
Balance sheet.....	12

Statement of the Management and the Council

Today the management have discussed and approved the Financial Statements for 1 January - 31 December 2015.

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 2015.

We recommend the Financial Statements to be approved at the annual general assembly.

Copenhagen, 8 February 2016

FIG Manager

Louise Friis-Hansen

Council

Chryssy A Potsiou
President

Rudolf Staiger
Vice President

Diane Dumashie
Vice President

Bruno Razza
Vice President

Cheng Pengfei
Vice President

The annual financial report is submitted for approval at the general assembly on / 2016

Chryssy A Potsiou

Independent Auditor's Report

To the members of The International Federation of Surveyors - FIG

We have audited the Financial Statements of The International Federation of Surveyors and the FIG Foundation for 1 January to 31 December 2015, which comprise summary of significant accounting policies, income statement and balance sheet. The Financial Statements are prepared in accordance with generally accepted accounting principles of associations.

The management and the Council's Responsibility for the Federation and the Foundation's Financial Statements

The Management and the Council are responsible for preparation of Financial Statements that give a true and fair view in accordance with generally accepted accounting principles of associations and for such internal control as the Management and the Council determines is necessary to enable the preparation of Financial Statement that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility and Basis of Opinion

Our responsibility is to express an opinion on the Financial Statements based on our audit. We conducted our audit in accordance with International Standards on Auditing and additional requirements under Danish Audit regulation. This requires that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Financial Statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Financial Statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatements of the Financial Statement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of Financial Statements that give a true and fair view 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Management and the Council, as well as the overall presentation of the Financial Statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

The audit has not resulted in any qualification.

CONTINUED ON THE NEXT PAGE

Independent Auditor's Report (fortsat)

Opinion

In our opinion, Financial Statements give a true and fair view of the Federation and Foundation's financial position at 31 December 2015 and of the results of the operations for the financial year 1 January to 31 December 2015 in accordance with accepted accounting principles of associations.

Roskilde, 8 February 2016

ERIK MUNK
Statsautoriseret Revisionsaktieselskab
Ringstedvej 71, DK-4000 Roskilde

Carsten Johnsen
State Authorized Public Accountant

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

E-mail: 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

Bruno Razza

Cheng Pengfei

FIG Manager

Louise Friis-Hansen

Auditor

Erik Munk, statsautoriseret revisionsaktieselskab

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.

In the Financial Statements for 2015 the Council have chosen to show the internal provisions, which the association internally has worked with the last years. In 2014 the event reserve represents T.EURO 25 and the IT reserve represents T.EURO 50. The transfer to these reserves are deducted directly in unrestricted equity. The transfer has reduced the equity by T.EURO 75 at 31 December 2014 and with T.EURO 75 at 31 December 2015.

The accounting policies applied for the Financial Statements are besides the above 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 2015 for The International Federation of Surveyors - FIG

	<u>2015</u>	<u>2014</u>
	<i>EURO</i>	<i>EURO</i>
Regular Income		
Member associations.....	253.998	259.444
Affiliate members.....	30.351	28.880
Corporate members.....	80.046	80.990
Academic members.....	11.593	11.000
Less bad debts.....	(25.611)	(38.041)
Less change in provision for doubtful debts.....	0	0
	350.377	342.273
Financial income/expenses.....	3.907	2.993
Less banking costs.....	(411)	(616)
Advertising income.....	(3.311)	0
Events, fees charged for services.....	44.549	81.910
Total Regular Income	395.111	426.560
Regular Expenditure		
<i>Administration</i>		
Office costs.....	(152.396)	(162.488)
Outsourced office costs.....	(41.128)	(42.466)
	(193.524)	(204.954)
Marketing and publications.....	(11.775)	(28.947)
Council and executive management.....	(145.998)	(153.161)
<i>Commission support</i>		
Regular grants.....	(30.011)	(30.000)
Regular grants, Young Surveyors Network.....	(3.004)	(3.000)
	(33.015)	(33.000)
Total Regular Expenditure	(384.312)	(420.062)
Regular income/Regular Expenditure	10.799	6.498

Income Statement for 1 January - 31 December 2015 for The International Federation of Surveyors - FIG

	<u>2015</u>	<u>2014</u>
	<i>EURO</i>	<i>EURO</i>
Result brought forward	10.799	6.498
Projects, events - funds recived by FIG		
Congress/Working Week.....	0	5.000
Other events.....	0	26.684
	0	31.684
Development spend		
IT and web development.....	(27.337)	(9.860)
Task Force support.....	(5.695)	(2.904)
Specific grants for Commissions.....	(2.248)	0
	(35.280)	(12.764)
Final Result (Deficit)	(24.481)	25.418
The Final Result is recommended distributed as follows		
Transferred to Event reserve.....	0	0
Transferred to IT reserve.....	(20.000)	25.000
Transferred to Equity.....	(4.481)	418
	(24.481)	25.418

Balance Sheet at 31 December 2015 for The International Federation of Surveyors - FIG

<u>Assets</u>	<u>2015</u> <i>EURO</i>	<u>2014</u> <i>EURO</i>
Current assets:		
Receivables:		
Receivables from members.....	86.937	80.942
Other receivables.....	193	9.524
Receivable VAT.....	13.449	5.506
Prepaid expenses.....	3.036	0
Projects in progress.....	18.437	0
Merchandise.....	1.424	1.825
Investments funds.....	209.121	216.178
Cash at hand and bankaccounts.....	493.811	549.004
Total current assets	826.408	862.979
Total assets	826.408	862.979
<u>Equity and liabilities</u>		
Equity:		
Equity at the beginning of the year.....	449.128	448.710
Retained earnings.....	-4.481	418
Total equity	444.647	449.128
Reserves:		
Event reserve.....	25.000	25.000
IT reserve.....	30.000	50.000
Total reserve	55.000	75.000
Liabilities:		
Deferred income.....	23.896	30.700
Account payable, The FIG Foundation.....	230.549	225.117
Other debt.....	72.316	83.034
Total liabilities	326.761	338.851
Total equity, reserves and liabilities	826.408	862.979

Income Statement for 1 January - 31 December 2015 for the FIG Foundation

	<u>2015</u>	<u>2014</u>
	<i>EURO</i>	<i>EURO</i>
Donations		
Personal donations.....	247	1.818
Other donations.....	10.002	11.092
FIG Conferences.....	9.298	27.172
Financial income.....	1.155	2.321
	20.702	42.403
Expenses		
Grants.....	(15.034)	(39.940)
	(15.034)	(39.940)
	5.668	2.463
Final Result (Deficit)	5.668	2.463

Balance Sheet at 31 December 2015 for The FIG Foundation

	<u>2015</u>	<u>2014</u>
	<i>EURO</i>	<i>EURO</i>
<u>Assets</u>		
Current assets:		
Receivables:		
Account receivable, FIG.....	230.549	225.117
Other receivables.....	1.153	1.156
Cash at hand and bankaccounts.....	<u>5.803</u>	<u>5.567</u>
Total current assets	<u>237.505</u>	<u>231.840</u>
Total assets	<u><u>237.505</u></u>	<u><u>231.840</u></u>
<u>Equity and liabilities</u>		
Equity:		
Equity at the beginning of the year.....	230.840	228.377
Retained earnings.....	<u>5.668</u>	<u>2.463</u>
Total equity	<u>236.508</u>	<u>230.840</u>
Liabilities:		
Other debt.....	<u>997</u>	<u>1.000</u>
Total liabilities	<u>997</u>	<u>1.000</u>
Total equity, reserves and liabilities	<u><u>237.505</u></u>	<u><u>231.840</u></u>

FIG FINANCIAL PROGRESS AT		31-Dec-15		31/12/2015		
		2014	2015	2015		
		Result	Budget	Result	Variance	Notes
			€	€	€	
REGULAR INCOME						
Subscriptions						
Member associations		259,443	260,000	253,998	-6,002	
Affiliate members		28,880	28,000	30,351	2,351	
Corporate members		80,990	78,000	80,046	2,046	
Academic members		11,000	11,000	11,593	593	
Less bad debts		38,041	14,750	25,611	10,861	
Less change in provision for doubtful debts			-		-	
		<u>342,271</u>	<u>362,250</u>	<u>350,377</u>	<u>-11,873</u>	
Financial income / expenses						
Financial income		2,993	5,000	3,907	-1,093	
Less banking costs		616	250	411	161	
Currency diff.				-3,311		New
Advertising income			-		-	
Events - fees charged for services		81,910	45,000	44,549	-451	
					-	
TOTAL REGULAR INCOME		<u>426,558</u>	<u>412,000</u>	<u>395,111</u>	<u>-16,889</u>	
					-	
REGULAR EXPENDITURE						
Administration						
Office costs		162,487	174,000	152,396	-21,604	
Outsourced office costs		42,466	44,000	41,128	-2,872	
					-	
Total administration		<u>204,953</u>	<u>218,000</u>	<u>193,524</u>	<u>-24,476</u>	
					-	
Marketing and publications		28,947	10,000	11,775	1,775	
					-	
Council and executive management		153,161	152,000	145,998	-6,002	
					-	
Commission support						
Regular grants		30,000	30,000	30,011	11	
Regular grants - Young Surveyors Network		3,000	3,000	3,004	4	
		<u>33,000</u>	<u>33,000</u>	<u>33,015</u>	<u>15</u>	
					-	
Total regular expenditure		<u>420,062</u>	<u>413,000</u>	<u>384,312</u>	<u>-28,688</u>	
					-	
Surplus/deficit of regular income over regular expenditure		6,496	-1,000	10,799	11,799	
[Key measure 1 - this to be positive]						
PROJECTS AND DEVELOPMENT						
Events - funds received by FIG						
Congress/Working Week		5,000	-	-	-	
Regional Conference		-	-	-	-	
Other events		26,684	-	-	-	
		<u>31,684</u>	<u>-</u>	<u>-</u>	<u>-</u>	
Development income						
Development spend						
Task Force support		2,904	5,000	5,695	-695	
IT and web - developmental activity		9,860	10,000	27,337	-17,337	
Support for poor Member Associations		-	2,000	-	2,000	
Specific grants for Commissions			5,000	2,248	2,752	
		<u>12,764</u>	<u>22,000</u>	<u>35,280</u>	<u>-13,280</u>	
Other projects						
Net result						
RESULT						
Overall surplus/deficit in the year - normal activities		<u>25,418</u>	<u>-23,000</u>	<u>-24,481</u>	<u>25,079</u>	
[Key measure 2 - this to be positive in total over the term of the 4 year budget period]						
Reserves at start of year		524,129				
Events Reserve		25,000				
IT Reserve		50,000				
General Reserve		449,129				
General Reserve as % of annual expenditure		107%				
Reserves at end of year - estimate				499,648		
Events Reserve				25,000		
IT Reserve				30,000		
General Reserve				444,648		
Overall general Reserve as % of annual expenditure				110%		
General Reserve as % of annual expenditure				116%		
Notes						

Exceptional items

Exceptional items																
Total reserves at year end	524,129	501,129	499,648	494,898	480,148	479,129	489,398		471,148	453,879	480,148		443,379	488,398	486,148	
General reserve	449,129	426,129	444,648	469,898	430,148	404,129	434,398		421,148	378,879	425,148		368,379	433,398	431,148	
Events reserve	25,000	25,000	25,000	25,000	25,000	25,000	25,000		25,000	25,000	25,000		25,000	25,000	25,000	
IT Development Reserve	50,000	50,000	30,000		25,000	50,000	30,000	n	25,000	50,000	30,000	n	50,000	30,000	30,000	
Total reserves as a % of regular	113%	119%	123%	115%	115%	112%	120%		113%	106%	117%		103%	119%	116%	
General reserve as a % of regul:	108%	101%	109%	109%	103%	94%	106%	l	101%	88%	104%	l	86%	106%	103%	
General reserve as a % of regul:	107%	103%	116%	109%	103%	95%	106%		100%	88%	103%		83%	101%	102%	
[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

**2016 GENERAL ASSEMBLY
FINANCIAL ISSUES (INCLUDING 2015 ACCOUNTS, 2016-19 BUDGETS AND 2018
SUBSCRIPTIONS)**

1. Introduction

This paper provides the General Assembly with an update on FIG's financial progress in 2015, the Council's amended proposed budgets for 2016-18 and an indicative budget for 2019, and other financial matters.

The General Assembly is asked to:

- Adopt the audited 2015 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 write down €20,000 of the IT reserve from €50,000 to €30,000 since €28,000 was spent in 2015 on IT system improvements
- Endorse the budgets for 2016-19, at Annex C to the General Assembly agenda, noting that xxxxx
- Approve member association subscription levels for 2018, set out in section 5 of this paper and final approval of the levels of the 2017 subscriptions which FIG Council at the 38th General Assembly promised to follow up on.

2. A commentary on FIG income and expenditure for 2015

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.

2015 was the first year for the new Council. Although 2015 was yet another challenging year with an unstable global economic situation Council and FIG Office continued prudent and cost containment measures. There was a budgeted deficit of €23,000, and the final result shows a deficit of €24,281 which will be explained in this paper.

Key measures 1 and 3 were held. Since it is the first year of the current council key measure 2 will not be included. There was a surplus of regular income over regular expenditure of €10,799 due to the fact that there was large attention to all expenditure. Key measure 3 was also kept in spite of the overall deficit. Key measure 3 was 116%.

Income

Income from membership subscriptions was €12,000 lower than budget but €8,000 higher than the 2014 result. Membership fees from Member Associations were €6,000 under budget, whereas the other categories were close to budgeted. In 2015 there were less write offs than in 2014 which gives the better result. Still, the write-off is quite high, €25,000 EUR which means that we have

had several expulsions and members who have not paid their membership fee in full. In the later years we have faced a decrease in the number of members per member association, and in general the total amount of subscription income is decreasing.

The provision for doubtful debt from subscriptions income that was introduced in 2012 has remained unchanged in 2015. This means that still a quite high amount is owed to FIG from subscription fees not yet paid.

Arrears at the end of 2015 are still remarkably high, in total €124,139.41. The positive aspect, however, is that the amount has decreased significantly compared to 2014 (€153,819.05 and 2013 (€135,987.65). Arrears solely for 2015 were 58,689.36 which are the lowest for a long time. As comparison to this, the arrears for 2014 were €109,147 last year, and 2013 were €74,546.30. The current size of the 2014 arrears is still too high, amounting to €50,447.94. Council again requests all members to pay their membership subscription promptly. The size of the arrears again meant that a significant portion of FIG's reserve holdings is being used to fund FIG cash flow.

Financial income was in 2015 as expected, however due to the prevailing low interest rate regime, which is expected to persist, most of the interests earned are absorbed in a loss due to depreciation. In previous years currency difference and alteration of course were covered under miscellaneous administration costs, and the fluctuation could be rather high. Last year FIG experienced a quite large change in exchange rate which had a positive impact on the 2014 result. This year the opposite happened, which had a negative impact on the accounts. From 2015 it has been decided to show this fluctuation directly under Financial income/expenses. Today several of the FIG accounts give 0 % interest.

Expenditure

Office costs were almost €25,000 below budget due to a careful handling of expenditure. On the other hand Marketing and publications are €2k above budget.

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 €6k below budget. This was realised 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.

Regular expenditure was more than €28k less than budgeted. Overall, the surplus of regular income over regular expenditure was almost €12,000 better than budgeted and showed a small surplus of € 10,796.

The final result 2015 shows a deficit of €24,281 which was almost as budgeted, however the deficit is ascribed to IT and not as budgeted on other posts.

FIG Office commenced an IT developmental process already in 2013, but had not managed to implement major changes. 2015 was finally the year where several of the IT plans were implemented (see later). In the previous years larger budgets were reserved for IT but not spent in full. Therefore Council decided in 2013 to establish an IT reserve of €25,000 and the General Assembly agreed in 2014 to increase this reserve with €25,000 to €50,000. This year € 27,337 was spent with €10,000 budgeted. Council will therefore suggest to the General Assembly that €20,000 of the IT reserve will be used to cover part of the overall deficit, because the deficit can be ascribed to the extra IT costs.

At the end of year, FIG's total reserve stood at €499,648, 110% of regular annual expenditure, and the general reserve after a deduction of the IT reserve was € 444,648, corresponding to 116% of regular annual expenses.

3. Budgets 2015-18

Annex C to this paper presents proposed revised budgets for 2016, 2017 and 2018 and a proposed budget for 2019. 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 show 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 2014 General Assembly are:

- Subscriptions are held close to the 2015 final result in light of resignations and 2016 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
- DdL's office rental support to FIG will progressively end in 2016 and thereafter, FIG will pay office rental in full, thus increasing the cost of office rental;
- Returns from events depends on the cost and financing model agreed with LoC and hence for the following years, it has been revised accordingly;
- Administrative costs have been further reduced wherever possible;
- 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.

Council is aware that key measure 3 is in the budget not met for the period 2016-2019. Council has decided not to increase membership fees in 2017 and 18, but will recommend that an adjustment will be made in 2019, and hope with the focus of the Task Force on Corporate members to attract more corporate members which will improve the result and also key measure 3. Administrative costs have furthermore been adjusted. The approach and the effect will be evaluated in 2016.

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 Development Manager (Claudia Stormoen) (full time)
- Finances and Administration (Maria Bargholz, part time) responsible for financial administration as well as general FIG and events administration.
- FIG Support (Tian Tian, China) internship in the FIG office for 6 months (see below)

Hanne Elster retired on 29 February 2015 after 5 years in FIG. FIG Council and office thanks her for her contribution during the 5 years in FIG.

In 2015 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 the current FIG Vice President Cheng Pengfei. 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 establishing 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, started in the office in February and will stay until August.

Organisation of events

The Council and FIG Office have over the last years worked on various concepts for conferences that will ensure 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, the website, and international exhibitors; and
- The local organisers will handle the contact with the venue; hotels; the local exhibition; local registrations; 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.

IT Development

Finally in 2015 several of the major projects were started and some also finalised:

- The new web site was launched in May 2015 based on a modern technology. Still improvements and developments have to be done
- FIG Membership database phase I. A database for all members has been established, incl. Commission officials and national delegates to commissions. Until now 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
- Conference App

Under development is 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

Since many IT development activities took place in 2015, the budget was exceeded, and FIG Council suggest to General Assembly to decrease the IT reserve with €20,000 to 30,000.

4. FIG Reserves

As is shown in Annex C, the FIG general reserve at the end of 2015 was 116% of regular annual expenditure. This is above the 90-100% agreed by the 2009 General Assembly. As a 4-year average the general reserve was 108% (the reserve percentage is calculated using an average of four years' regular annual expenditure, as agreed at the 2012 General Assembly).

Council has retained the €25,000 events reserve, for the reasons set out in detail in the Finance Paper to the 2012 General Assembly. In essence, this recognises the risk of organising events, particularly in the current economic climate. Council suggests that the reserve will be maintained at €25,000.

As mentioned earlier in 2013 Council introduced a new reserve for IT, recognizing that an effective IT Policy and Infrastructure is vital to FIG going forward and €25,000 was reserved in the 2013 accounting. IT can be large investments, and could be difficult to provision from normal yearly budget. In 2014 the reserve was increased with €25,000 to €50,000 since there was a surplus of the accounts. The general reserved is still over 100% of the annual expenses, but this is likely to decrease over the next years, and therefore FIG Council suggests to decrease the IT reserve with 20,000 to 30,000. These years the larger investments take place, there is still a significant amount reserved, and it is the plan to increase the reserve again when possible.

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 2017 and 2018

The 2015 General Assembly approved membership fees as follows:

Year	Per capita fee	Minimum fee	Maximum fee
2017	€4.48 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 €2.24 member up to a maximum of 5,500 members.	20 members or €50 (whichever is greater)	5,500 members (€24,640)

Under the condition that Council would re-consider at the end of 2015 whether it would be responsible too keep the fee stable.

Although the budget 2017 shows a deficit and 2018 only a small surplus, Council is also 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. Council therefore proposes after reconsidering that the level of subscription for member associations for 2017 and also for 2018 to remain at the same level as in the previous years. 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
2018	€4.48 per member up to a maximum of 5,500 members Member associations from	20 members or €50 (whichever is greater)	5,500 members (€24,640)

	countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay €2.24 member up to a maximum of 5,500 members.		
--	--	--	--

6. Conclusion

Council continues to monitor and manage its finances prudently and believes that the budget proposed is realistic. Council is aware that key measure 3 is not kept in the budget, but a more positive figure can be the result of a focus on corporate members. 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
Vice President
(2017-2020)

Nominee:	
Name:	Prof. Dr. Yerach Doytsher
Member Association:	The Association of Licensed Surveyors in Israel
Country:	ISRAEL
Contact address:	Mapping and Geo-Information Engineering Technion – Israel Institute of Technology Haifa 32000, ISRAEL
Email address:	doytsher@technion.ac.il +972-4-8293183 (O); +972-54-4690110 (M) +972-4-8295708 (Fax)
Age:	70
Educational background & Qualifications:	<ul style="list-style-type: none">▪ 1967, B.Sc., Civil Engineering (Geodetic Engineering major), Technion - Israel Institute of Technology▪ 1973, M.Sc., Geodetic Engineering, Technion - Israel Institute of Technology▪ 1979, D.Sc., Geodetic Engineering, Technion - Israel Institute of Technology
Field of surveying discipline	Surveying and Digital Mapping; Photogrammetry; Spatial Information; Geographical Information Systems; Cadastre and Land Information Systems.
History of Employment:	Professor Emeritus, Civil and Environmental Engineering, Technion - Israel Institute of Technology.
- Current position	
- Previous position(s)	<ul style="list-style-type: none">▪ 2012-2016, Head of the Technion's Master Program on Real-Estate Studies▪ 2012-2016, Head of the Technion's Master Program on Urban Engineering▪ 1999-2014, Head of the Geodesy and Mapping Research Center, Faculty of Civil and Environmental Engineering, Technion.▪ 2006-2010, Dean of the Faculty of Architecture and Town Planning at the Technion.▪ 1996-2006, Head of the Mapping and Geo-Information Engineering Program (as Head of Geodetic Engineering Division and as Head of the Transportation and Geo-



Nomination Template Vice President (2017-2020)

- Information Engineering Department) at the Technion.
- 1971-1996, Teaching at Tel-Aviv University, The Hebrew University of Jerusalem, Bar-Ilan University, and The Technion - as an adjunct teacher (lecturer / senior lecturer / associate professor).
 - 1975-1996, Self-employed Geodetic Engineer, professional consulting and geodetic guidance for many private and public bodies, among these several ministries, Survey of Israel, Israel Lands Administration, private companies in Israel and abroad and others.
 - 1967-1975, Governmental employee, Geodetic Engineer, Head of Computing Section and Head of Automation Division at the Survey of Israel.



Nomination Template
Vice President
(2017-2020)

Nominee:	
Position of Trust: - Current position(s) - Previous position(s)	<ul style="list-style-type: none"> ▪ 2011-2017, President, Association of Licensed Surveyors in Israel <hr/> Several positions, inter alia, <ul style="list-style-type: none"> ▪ 2011-2014, Chair, FIG Commission 3 on Spatial Information Management ▪ 2013-2014, ACCO Representative to the FIG Council ▪ 2005-present, Member of the Advisory Guiding Committee in Geodesy and Cadastre to the Director General of the Survey of Israel. ▪ 2003-2006, Member of the Appointment and Promotion Senate Committee, Technion - Israel Institute of Technology. ▪ 2002-2004, Member of the governmental steering committee, 3D Cadastre in Israel. ▪ 1995-1998, Member in a committee for renewing the Israeli surveying regulations.
FIG Positions/Responsibilities: - Current position(s)/responsibilities - Previous position(s)/responsibilities	<ul style="list-style-type: none"> ▪ 2015-2016, Chair, FIG Task Force on Establishing the FIG Scientific Journal <hr/> <ul style="list-style-type: none"> ▪ 2011-2014, Chair, FIG Commission 3 on Spatial Information Management ▪ 2013-2014, ACCO Representative to the FIG Council ▪ 2007-2014, Annual Commission 3 workshops, Chair of the Peer Review Committee. ▪ 2002-2006, Commission 3, Co-Chair, Working Group on 3D Cadastre, Inter-Commission activity of Commission 3 and Commission 7. ▪ 1998-2002, Commission 3, Co-Chair, Working Group 1 (Technical Aspects of SIM).
Other activities in FIG	During the last 20-25 years have participated in most of FIG congresses and annual working weeks, as well as in many other FIG workshops. Have delivered a large number of invited speeches and presentations on subjects of Surveying, Cadastre, Spatial information and GIS management in these events.

J.D.



Nomination Template Vice President (2017-2020)

Nominee's statement	
My motivation to be FIG Vice President:	<p>During more than 45 years of my professional career I have gained considerable experience both as a practitioner engineer as well as an academic professor - researcher and teacher. The experience I have gained in the fields of digital mapping and photogrammetry, GIS, Cadastre and LIS, is very relevant to FIG activity.</p> <p>Over the years I have accumulated significant managerial experience both in the private and in the public sectors as well as in the academia. Inter alia, I was head of a large government department, I was a professional manager of private geomatics firms, and I have served as head of a department and dean of a Faculty at the Technion. This managerial experience would be very useful for the position of FIG Vice President and member of the council.</p> <p>Relying on my past experience, capabilities and managerial background in various areas, all relevant to FIG activities, I intend to devote my time and efforts to developing FIG agenda for the benefits of the international surveying community.</p>
What I can offer in support of FIG's aims and objectives:	<p>I am extensively involved in FIG matters for many years now, and since the mid-1990s I am the Israeli national delegate to commission 3. As an active member in commission 3, I did my best to contribute to its activity, to share my knowledge and experience with my colleagues and delegates, and to actively participate in conferences and workshops. In the term 2011-2014, I was the chair of commission 3.</p> <p>Facing the challenges of our profession in the 21st century, I am confident that I can assist the president and the council in continuing its very successful and important work as leading internationally the surveying profession. I am ready to fulfil tasks and be responsible for topics that will be given to me by the president. I would like to encourage surveying and mapping associations and organizations in general and academic departments in particular to join FIG, to encourage delegates from all countries to participate and contribute to FIG; to help organizing annual workshops focusing on specific predefined topics within the FIG commissions agenda; and to motivate professionals from industry and academia to participate and contribute with their know-how for the benefit of our profession and our society.</p>

J.D.



Nomination Template Vice President (2017-2020)

My key skills for the Vice Presidency and FIG Council:	Rich background of practical professional activities and background as a researcher and professor; Managerial background and experience; Long history of activity within FIG in general and in Commission 3 in particular; Acquaintance with FIG goals and missions; Willingness to devote time and effort towards the prosperity of FIG.
Any other supporting information:	Have the capabilities, inter alia, to motivate people to professionally contribute, to initiate and organize professional conferences, to establish multi-disciplinary working groups - all that - to promoting the surveying and the mapping profession and community.




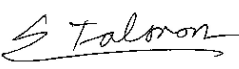
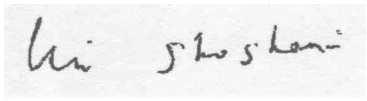
Nomination Template
Vice President
(2017-2020)

Nominator	
Name of Member Association:	The Association of Licensed Surveyors in Israel
Name of Proposer:	Mr. Eliyahu Talmon
Position in Association	Vice President and Treasurer
Contact address:	34 Itzhak Sadeh St., P.O. BOX 51668, Tel Aviv 67212, ISRAEL
Email address	alsi@alsi.org.il
Proposer's Statement	
Why the Association wants to propose the Nominee	<p>Professor Doytsher holds BSc, MSc and DSc degrees in Geodesy, and is an Emeritus Professor of Mapping and Geo-Information Engineering at the Technion. He has a long history of practical engineering and land surveying experience in the public and private sectors in Israel, and has significantly contributed to our profession. Throughout last decades he has developed new standards and ideas in order to face the new challenges of our profession. His extensive research experience in the different aspects of Cadastre, mapping and surveying, which are all relevant to FIG activity, is also worth mentioning.</p> <p>Since 2011, Professor Doytsher serves as the president of the Association of Licensed Surveyors in Israel, and is very successful in this position. Organizing professional courses to promote the professional level of the licensed surveyors in Israel, organizing annual fruitful conferences, and to move forward the level and quality of the surveying profession - all of which will constitute a significant asset in his role as FIG Vice President, once elected.</p> <p>Professor Doytsher is extensively involved in FIG matters. He is the Israeli national delegate to commission 3 for many years now, and had participated in many FIG conferences and workshops, sharing his experience by lecturing on his fields of expertise.</p> <p>In his positions in the last few years as chair of FIG commission 3 and the ACCO Representative to the FIG council, he had demonstrated his professionalism and skills, and contributed greatly to the success of FIG. The annual conferences/workshops he had organized with a large number of participants and high professional</p>



Nomination Template Vice President (2017-2020)

	standards are undoubtedly a significant contribution to FIG and its assets.
What support (financial, administrative and others) can the Association provide to the Nominee if elected Vice President	The Association of Licensed Surveyors in Israel will give full administrative, professional and financial support to Professor Doytsher in fulfillment of his task as FIG Vice President, once he will be elected.
Any other supporting information:	The Association of Licensed Surveyors in Israel will support Professor Doytsher with any additional required support in order to enable him to successfully fulfil the position as FIG Vice President, once elected.
Name of Seconder:	Mr. Uri Shoshany
Position in Association	Past President and Chair of the Honorary Tribunal
Contact address:	34 Itzhak Sadeh St., P.O. BOX 51668, Tel Aviv 67212, ISRAEL
Email address	alsi@alsi.org.il

Signed I hereby certify the above is true and correct	
Nominee	
Proposer:	
Seconder:	
Date:	January 19, 2016

* Nominee is required to cancel whichever is not appropriate; and
Nominee is requested to initial every page of the nomination template

Clarifying Notes:	<ul style="list-style-type: none">The Nominator (Proposer and Seconder) must be principal officers of the FIG Member Association (by principal officers, it is construed
-------------------	--





Nomination Template Vice President (2017-2020)

	<p>as President or Chairperson, Deputy or Vice President/Chairperson, Secretary General or Chief Executive Officer or equivalent position)</p> <ul style="list-style-type: none">• 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• Nominating FIG Member Association should ascertain the availability of the nominee over the duration of the term of office• Nominee should preferably have prior or current responsibilities within and working knowledge of FIG, its activities, aims and objectives• Nominee and Nominator are requested to pay attention to the Nominee's Statement and the Proposer's Statement
--	---



January 19, 2016

Ms. Louise Friis-Hansen
FIG Manager
International Federation of Surveyors, FIG
Kalvebod Brygge 31-33
DK-1780 Copenhagen V
DENMARK
E-mail: louise.friis-hansen@fig.net

Dear Ms. Friis-Hansen,

Re: Professor Dr. Yerach Doytsher – as a nominee to FIG Vice President

Professor Dr. Doytsher holds BSc, MSc and DSc degrees in Geodetic Engineering, and is a Emeritus Professor of Mapping and Geo-Information Engineering at the Technion – Israel Institute of Technology. He has a long history of practical engineering and land surveying experience in the public and private sectors in Israel and has significantly contributed to our profession. In the last decade he has developed new standards and ideas in order to face the new challenges of our profession. His extensive research experience in the different aspects of cadastre, mapping and surveying, all relevant to FIG activities, is also worth mentioning.

Since 2011 Professor Doytsher is the president of The Association of Licensed Surveyors in Israel; a position that exposes him to all aspects of our profession, as well as to the aspects of related disciplines, such as Town Planning, Land Management, and Real Estate Appraisal. All are contributing to a better understanding among the professionals involved in the various activities affiliated with FIG and sister organizations.

For more than 4 decades of a professional career, Professor Doytsher has gained considerable experience both as a practitioner engineer and an academic professor - researcher and teacher. He has accumulated managerial experience in the private and public sectors, as well as in the academia. He has served as head of a large government department at the Survey of Israel, was a professional manager of private firms, and served as head of departments and Faculty Dean at The Technion. This managerial experience would be very useful as a FIG Vice President.

Professor Doytsher has published more than 370 research papers and reports in international technical and scientific journals, and international and local symposia proceedings. He had participated in more than 130 conferences and congresses, and gave more than 150 presentations on various topics of geodesy, surveying, cadastre, cartography, photogrammetry, mapping and GIS, and geospatial processing. Since the 1990s, he had supervised (and continue to supervise) 65 graduate students (more than a third are PhD students).

Professor Doytsher is extensively involved in FIG issues. He is the Israeli national delegate to Commission 3 for many years now, and had participated in many FIG conferences and



workshops, sharing his experience by lecturing on his fields of expertise. During the 2011-2014 term he was the chair of FIG commission 3, and during the 2013-2014 term he was the ACCO Representative in the FIG council. During his activities over the years in FIG in general and during the past term as chair of commission 3 in particular, he has demonstrated his professionalism and managerial capabilities, contributing greatly to the success of FIG. The annual conferences/workshops he had organized with a large number of participants having high professional standards are undoubtedly a significant contribution to FIG and its assets.

We are hereby submitting his nominee to the position of FIG Vice President for the period 2017-2020. The nomination is based on Professor Doytsher's experience, knowledge and capabilities in the areas of surveying and geo-information. However, first and foremost it is based on his international profile and his commitment to developing FIG agenda for the benefit of the surveying and mapping community worldwide. Being elected would undoubtedly contribute immensely to the international community of surveyors in general and to FIG in particular.

The Association of Licensed Surveyors in Israel will give full administrative, professional and financial support to Professor Doytsher in fulfillment of this task, once he is elected.

Yours Sincerely,

Eliyahu Talmon
Vice President and Treasurer

Uri Shoshany
Past President and Chair of the
Honorary Tribunal

The Association of Licensed Surveyors in Israel

Encl. Professor Doytsher's Short Curriculum Vitae



Short Curriculum Vitae - Prof. Dr. Yerach Doytsher

Professor Yerach Doytsher was born in Russia (1945) and immigrated to Israel as a young child (1950). He studied at the Technion - Israel Institute of Technology, and obtained BSc in Civil Engineering - specializing in Surveying and Geodesy - Summa Cum Laude in 1967. In 1970 he was licensed for land surveying ("Israeli Licensed Surveyor"). Later, he obtained his MSc (1973) and DSc (1979) degrees in Geodetic Engineering, also from The Technion.

In 1967 he had started his professional activity in the public sector, and worked for 8 years at the Survey of Israel (the governmental agency responsible for geodesy, mapping, cadastre and GIS). As head of the automation and computation division, he was involved in developing automation methods and techniques for plane and geodetic surveying, and in developing automation applications and projects for cadastral survey.

During the next 20 years, he had worked in the private sector as a professional manager, mapping and GIS projects supervisor, and as a senior scientific consultant. He had handled topographic and cadastral engineering projects; developed geo-referenced urban databases and automated methods for town planning projects; implemented analytical and digital photogrammetry for cadastral mapping and land management, and digital terrain models for automated topographic and highway design; and, managed multi-layer wide range GIS projects. He had also acted during this period as a scientific and professional consultant to different domestic and international organizations in the fields of Geodesy, Photogrammetry, Computer Graphics, Automated Mapping, and Geographic Information Systems.

During his professional career, he had lectured since the 1970s as an Adjunct Associated Professor at several universities (Technion, Tel-Aviv University, Bar-Ilan University), tutoring mapping and geo-information engineers, surveyors and geodesics, civil engineers, and geographers.

The third period of Professor Doytsher's career had started at 1996, when he was appointed as a faculty member at the Technion, where he is today an Emeritus Professor of Mapping and Geo-Information at the Faculty of Civil and Environmental Engineering. He was responsible for updating and upgrading the previous geodetic curricula, with a significant transition from a limited geodetic program focusing mainly on geodetic aspects to a comprehensive and modern mapping and geo-information undergraduate and graduate programs. This transition was followed by a considerable increase in the number of undergraduate students, and a huge increase in the number of MSc and PhD students. In addition to teaching and research activities, he was appointed as head of the Geodetic Engineering Division (1996-2002), head of the Department of Transportation and Geo-Information Engineering (2002-2006) and Dean of the Faculty of Architecture and Town Planning (2006-2010). Nowadays, he is heading two prestigious Master programs at The Technion – Real Estate program and Urban Engineering program. During the 1999-2014 term, he was also heading the Geodesy and Mapping Research Center of The Technion.

Included within the research interests and expertise of Professor Doytsher are: Geographic Information Systems in general and graphical-digital conversions in particular; Using non-linear transformation (rubber sheeting) algorithms and techniques for maps and database conversion; Conflation and merging of digital 2D and 3D information (maps and databases); Land information and management systems in general and digital cadastre and 3-dimensional cadastre in particular; Digital terrain models (DTMs and DSMs); Digital photogrammetry and LiDAR; and, Crowdsourcing technology.



Professor Doytsher had published more than 370 research papers and reports in international scientific and technical journals, and international and local symposia proceedings. He had participated in more than 130 conferences and congresses, and gave more than 150 presentations on various topics of geodesy, surveying, cadastre, cartography, photogrammetry, mapping and GIS, and geospatial processing. Since the mid-1990s, he had received more than 30 substantial research grants (from Israeli governmental agencies as well as from Israeli and foreign research foundations), dealing with most innovative subjects of geodesy, cadastre, photogrammetry and GIS. Since the 1990s, he had supervised (and continue to supervise) about 25 PhD and 40 MSc graduate students.

Since the mid-1990s Professor Doytsher has been active in international professional organizations, inter alia, FIG, ISPRS and ICA. For the last 20 years, he is the Israeli national delegate to FIG commission 3 on Spatial Information Management and was the chair of this commission for the term 2011-2014. During the last 20 years, he has participated very actively in most of the annual FIG conferences and congresses, and in the annual commission 3 workshops, and his activity is expressed mainly in issues such as: land management, geospatial information, Cadastre in general and digital and 3-dimensional cadastre in particular, etc.

In addition to his academic work, Prof. Doytsher is also involved in the practical aspects of the geomatics profession as a consultant for the private and public sectors, and since 2011 he is the President of the Association of Licensed Surveyors in Israel.



TÜRK MÜHENDİS VE MİMAR ODALARI BİRLİĞİ
HARİTA ve KADASTRO MÜHENDİSLERİ ODASI

Union of Chambers of Turkish Engineers and Architects
CHAMBER OF SURVEY AND CADASTRE ENGINEERS

Sümer 1. Sokak 12/4, 06440 Yenışehir/ANKARA Tel: (0312) 232 57 77 Fax: (0312) 230 85 74
web: <http://www.hkmo.org.tr> e-mail: hkmo@hkmo.org.tr



Subject: Nominee Vice President
Reference: 2/A-6

January 05th, 2016

Dear,

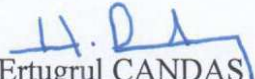
Ms. Louise Friis HANSEN

On behalf of the Chamber of Survey and Cadastre Engineers, we would like to express our interest to nomination for Vice President of the Federation for the period 2017-2020.

Our nominee as the Chamber is Dr. Orhan ERCAN who is also FIG2018 Deputy Congress Director.

Please find enclosed our proposal prepared in accordance with the guideline FIG Nomination Template.

With my regards


Ertugrul CANDAS
President

APPENDIX :

Appendix A: Nomination Template

Appendix B: Dr.Orhan ERCAN's CV



Nomination Template
Vice President
(2017-2020)

Nominee:	
Name:	Dr. Orhan ERCAN
Member Association:	Turkish Chamber of Survey and Cadastre Engineers (HKMO)
Country:	Turkey
Contact address:	TMMOB HARİTA VE KADASTRO MÜHENDİSLERİ ODASI SÜMER 1. SOKAK NO: 12/4 06440 KIZILAY / ANKARA TEL: +90 312 232 5777 (PBX) - FAX: +90 312 230 85 74 GSM: 0533 762 28 13
Email address:	drorhanercan@yahoo.com hkmo@hkmo.org.tr
Age:	56
Educational background & Qualifications:	<p>Institution: Yildiz Technical University / Istanbul - Geodesy and Photogrammetry Engineering Degree: PhD - Excellent Dates of obtainment: 1997</p> <p>Institution: Yildiz Technical University / Istanbul - Geodesy and Photogrammetry Engineering Degree: MSc Excellent Date of obtainment: 1988</p> <p>Institution: Karadeniz Technical University / Trabzon - Geodesy and Photogrammetry Engineering Degree: BSc - Good Date of obtainment: 1983</p> <p>Other Training Photogrammetry Postgraduate at ITC, the Netherlands (1988-1989).</p> <p>Expertise, Qualifications, Skills & Publications</p> <p>Expertise and Qualifications :</p> <ul style="list-style-type: none">• Cadastre and Land Management,• Photogrammetry,• Geodesy,• GIS Applications,• Project Planning & Management,• Experience on World Bank Projects.



Nomination Template Vice President (2017-2020)

	<p>Publications</p> <ul style="list-style-type: none"> • Many Technical and Administrative Reports about diverse Projects, • Lecture Notes on Fundamentals of Surveying (unpublished manuscripts), • Mapping Dictionary (Member of Dictionary Project Group), • Over 40 Articles/Papers in National Periodic (available upon request), • 9 Articles/Papers in International Conferences (available upon request), • Translation; Urban Rural Interrelation – FIG Publication. • Translation; Co-Author, Impact of EU Legislation on Cadastral Surveying <p>Academic Works (2001-2010) Atilim University; part time Academic Staff for the courses of</p> <ul style="list-style-type: none"> • Fundamentals of Surveying CE 209, • Principles of GIS CE 414 / 512, • Digital Mapping Techniques CE 511. <p>Cadastre Vocational School; part time Lecturer (1989-2004) for</p> <ul style="list-style-type: none"> • Surveying III, • Cartography. <p>Middle East Technical University (2000-2002)</p> <ul style="list-style-type: none"> • Jury member of GIS/GPS/RS related MSc Thesis at Geodetic and Geoinformatic Technologies Department at Middle East Technical University (4 theses in total). <p>MSc Thesis Supervisor;</p> <ul style="list-style-type: none"> • Change Detection in Densely Populated Urban Area And Rural Area Using High Resolution Satellite Image, Atilim University, (2005), • Design and Implementation of Earthquake Management Project, Case Study: Korfez Municipality, Atilim University, (2005).
Field of surveying discipline	Cadastre and Land Management, Photogrammetry and GIS
History of Employment:	Independent Consultant 2015- present
- Current position	
- Previous position(s)	LTIS Inc.Co, Partner, General Manager 2013-2014, Geotech Goup, Partner, General Manager 2007-2012,



**Nomination Template
Vice President
(2017-2020)**

General Directorate of Land Registry and Cadastre 1984-2007,
Atilim University (Part Time Lecturer) 2001-2010.

A handwritten signature in blue ink, appearing to be 'A. M.' or similar, located in the bottom right corner of the page.



**Nomination Template
Vice President
(2017-2020)**

Nominee:	
Position of Trust: - Current position(s) - Previous position(s)	Turkish Chamber of Surveying and Cadastre Engineers: <ul style="list-style-type: none">• Chair of International Affairs Commission (2012 - present),• Member of Cadastre Commission (2007 - present). Turkish Chamber of Surveying and Cadastre Engineers: <ul style="list-style-type: none">• Member of GIS Commission (2007 – 2011),• Chair of Commission II for Turkish National Union of Photogrammetry and Remote Sensing (TUFUAB) (1994-2007),• Scientific member of the European Organization for Experimental Photogrammetric Research Commission C – OEEPE (1992-1995),• Turkish Inter-ministerial Committee for the Coordination Mapping Issues:• Secretary General of Planning Commission (1990-2007),• Member of Scientific Commissions (1990-2007).
FIG Positions/Responsibilities: - Current position(s)/responsibilities - Previous position(s)/responsibilities	- Congress Director, FIG2018, - National Delegate, Turkey, - Member of Task Force on Real Estate Studies 2015-2018, - Member of Commission 7 as a Country Representative 2012-present. - Member of FIG Working Group 5.4, 2003-2004
Other activities in FIG	Participant to WW and Congresses, session chair, presenter etc.



Nomination Template Vice President (2017-2020)

Nominee's statement	
My motivation to be FIG Vice President:	<p>I have been involved in FIG activities for more than 20 years in the name of the Turkish Chamber of Survey and Cadastre Engineers (HKMO) and General Directorate of Land Registry and Cadastre of Turkey. I was a member of Commission 7.</p> <p>During my engagements with the FIG, I was deeply inspired with collaboration outputs which led me to further enthusiastic, innovative and creative engagements.</p> <p>I am conscious on the vision and solid on the mission of the FIG which make me believe that I can effectively contribute in worldwide activities and record a certain progress. My eagerness for progressive achievements as the Vice President of the FIG primarily confines on globalization of FIG activities. As a motto; "I am geared towards widening the world of the FIG by translating visionary intentions of the FIG to missionary actions of the FIG".</p> <p>Factually; I feel myself not merely as an official worker of FIG, but also a cordially bounded member. This reality tempts me to take a more active and efficient role within FIG structure. I am tenaciously committed by heart to contribute FIG with my willingness and energy, capability and know-how based on many years of experience.</p>
What I can offer in support of FIG's aims and objectives:	<p>I can offer all my knowledge and energy to support FIG vision and mission. I can support FIG in cadastre, land administration, real estate works, photogrammetric mapping and SDI at all levels. Besides, I can effectively contribute in international collaboration efforts of FIG; particularly, by establishing relations between FIG and the Turkish Speaking Countries along with some African countries which are not FIG members, yet.</p>
My key skills for the Vice Presidency and FIG Council:	<p>I have worked for the Turkish Government for more than 25 years and realized many cadastre and land administration works in Turkey. Besides, I have been involved in many geodetic and surveying infrastructure projects; namely, CORS-TR, NSDI, Land Information, etc. in Turkey.</p> <p>Parallel to my practitioner engagements, I was also active in academic and research institutions and a part-time lecturer at the university. After retiring from the Turkish General Directorate of Cadastre and Land Registry, I have been working in the private sector for several years. Thus, I gained my private sector experience as well and widened my professional spectrum. In course of my private sector engagements, I have realized numerous national and international surveying projects (<i>see</i></p>



**Nomination Template
Vice President
(2017-2020)**

	<p><i>attachment).</i></p> <p>Besides, I am also the Chair of the International Relations Commission of the Turkish Chamber of Survey and Cadastre Engineers (HKMO). I can therefore establish a long-term relation in Turkish Surveying sector with the FIG.</p> <p>As a result; I am ready to present my skills and to mobilize my potentialities for the benefit of FIG for further and progressive achievements.</p>
Any other supporting information:	<p>I am a people-oriented, a result-oriented, a share-based and a determined person. These are the 4 main characteristics of mine which lead me to success. Based on these characteristics, I look forward to achieve a proactive and engaged as well as a committed and dedicated leadership in FIG to reach to new horizons, collectively.</p>
Nominator	
Name of Member Association:	Turkish Chamber of Survey and Cadastre Engineers (HKMO)
Name of Proposer:	Ertugrul CANDAS
Position in Association	President of the Turkish Chamber of Survey and Cadastre Engineers (HKMO)
Contact address:	TMMOB HARİTA VE KADASTRO MÜHENDİSLERİ ODASI SÜMER 1. SOKAK NO: 12/4 06440 KIZILAY / ANKARA TEL: +90 312 232 5777 (PBX) - FAX: +90 312 230 85 74 GSM: 0533 762 28 13
Email address	candaser@gmail.com
Proposer's Statement	
Why the Association wants to propose the Nominee	<p>Dr. Orhan ERCAN has been an active member of HKMO since 1984. He has taken relevant responsibilities in various scientific and professional activities on behalf of the HKMO; details of which are given below. Furthermore, he is currently the Head of International Affairs Commission of the HKMO. Dr. Ercan is also the Congress Director for FIG2018 and with all personal endeavors he presently capitalizes on realization of a successful organization in Istanbul. Depending on his witnessed professional skills, leadership capabilities and background on geospatial business by our members, we strongly believe that he will be a very prolific Vice President at FIG, if elected.</p> <p>List of Activities of Dr. Ercan on behalf of HKMO:</p>






Nomination Template Vice President (2017-2020)

	<p>TECHNICAL COMMISSIONS</p> <ul style="list-style-type: none">• 3RD TERM CHAIR OF INTERNATIONAL RELATIONS COMMISSION• 4TH TERM MEMBER OF CADASTRE COMMISSION• 4TH TERM MEMBER OF GIS COMMISSION• 5TH TERM MEMBER OF CADASTRE COMMISSION• 6TH TERM MEMBER OF CADASTRE COMMISSION <p>OTHER COMMISSIONS</p> <ul style="list-style-type: none">• 40TH TERM INTERNATIONAL RELATIONS COMMISSION, 15.01.2007-30.07.2012• 43RD TERM INTERNATIONAL RELATIONS COMMISSION, 30.07.2012-PRESENT• 44TH TERM FIG COMMISSION 7 CONTACT PERSON, 11.11.2014-PRESENT <p>CONGRESS ACTIVITIES</p> <ul style="list-style-type: none">• 1ST CADASTRE CONGRESS, STEERING COMMITTEE MEMBER, 22.05.2006-24.05.2006• GIS congress 2007, ORGANIZING COMMITTEE MEMBER, 20.01.2007-23.01.2007• 2ND CADASTRE CONGRESS, STEERING COMMITTEE MEMBER, 21.05.2008-24.05.2008• 2ND CADASTRE CONGRESS, ORGANIZING COMMITTEE MEMBER, 21.05.2008-24.05.2008• GIS CONGRESS 2009, ORGANIZING COMMITTEE MEMBER, 02.11.2009-06.11.2009• 12TH TURKISH SURVEYING TECHNICAL AND SCIENTIFIC CONGRESS, SCIENCE COMMITTEE MEMBER, 11.05.2009-15.05.2009• GIS CONGRESS 2009, ADVISORY BOARD, 02.11.2009-06.11.2009• 14. TURKISH SURVEYING TECHNICAL AND SCIENTIFIC CONGRESS, ADVISORY BOARD MEMBER, 14.05.2013-17.05.2013• 14. TURKISH SURVEYING TECHNICAL AND SCIENTIFIC CONGRESS, SCIENCE COMMITTEE MEMBER, 14.05.2013-17.05.2013
What support (financial, administrative and others) can the Association provide to the Nominee if elected Vice President	If the Nominee is elected Vice President, HKMO can inter alia mobilize a certain financial support. The HKMO can play a key role and be an effective promoter of public and private partnerships and academic collaborations. The HKMO will be the catalyst to extend the activity scope of the FIG to and strengthen connections with the Turki Republics, the Middle East and the Caucasia. The election of the Nominee as the Vice Present will also be regarded by the HKMO as a challenge for extending and intensifying international cooperation platform more effectively.
Any other supporting information:	Orhan ERCAN is an in-depth experienced and a highly qualified person who is blended with a gorgeous willingness to be a FIG Vice President. As a Chamber, we are sure that he will be very successful in this post and will contribute FIG mission at all levels.
Name of Seconder:	Levent ÖZMÜŞ



Nomination Template Vice President (2017-2020)

Position in Association	General Secretary of the HKMO
Contact address:	TMMOB HARİTA VE KADASTRO MÜHENDİSLERİ ODASI SÜMER 1. SOKAK NO: 12/4 06440 KIZILAY / ANKARA TEL: +90 312 232 5777 (PBX) - FAX: +90 312 230 85 74 GSM: 0533 762 28 13
Email address	leventozmus@gmail.com

Signed I hereby certify the above is true and correct I am available/not available* for the election as Vice President for the remaining two year term (2015 – 2016) if vacancy arises.	
Nominee	Dr. Orhan ERCAN 
Proposer:	Ertugrul CANDAS, President 
Seconder:	Levent ÖZMÜŞ, Secretary General 
Date:	

* Nominee is required to cancel whichever is not appropriate; and
Nominee is requested to initial every page of the nomination template

Clarifying Notes:	<ul style="list-style-type: none">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)The Nomination Template must be accompanied by a letter of support from either the President or the Principal Officer of the nominating FIG Member AssociationNominating FIG Member Association should ascertain the availability of the nominee over the duration of the term of officeNominee should preferably have prior or current responsibilities within and working knowledge of FIG, its activities, aims and objectivesNominee and Nominator are requested to pay attention to the Nominee's Statement and the Proposer's Statement
-------------------	---

Dr. Orhan ERCAN

1. Short Summary

He was born in Turkey at 1959. He had his BSc at 1983, MSc at 1988 and PhD at 1997. He had worked at the Geodesy, Photogrammetry, Cadastre departments of General Directorate of Land Registry and Cadastre in Turkey.

He executed the World Bank's MEER/MERLIS/Cadastre sub component (Marmara Earthquake Emergency Reconstruction Project) and ARIP/Cadastre projects (Agricultural Reform Implementation Project). He worked as executive staff at `Turkish National Spatial Data Infrastructure Project phase I and II` and Land Registry and Cadastre Information System (TAKBIS). He worked at CORS-TR project group as a critical research staff. He had published more than 40 papers for various academic publications.

He has 25 years Land Registry and Cadastre and 7 years experience in World Bank projects in Turkey.

He worked at private sector since 8 years as company manager and freelance.

2. Nationality: Turkish

3. Education:

Institution: Yildiz Technical University / Istanbul - Geodesy and Photogrammetry Engineering
Degree: PhD - Excellent
Dates of obtainment: 1997

Institution: Yildiz Technical University / Istanbul - Geodesy and Photogrammetry Engineering
Degree: MSc Excellent
Dates of obtainment: 1988

Institution: Karadeniz Technical University / Trabzon - Geodesy and Photogrammetry Engineering
Degree: BSc - Good
Dates of obtainment: 1983

4. Membership of Professional Associations

- FIG – International Federation of Surveyors
 - Turkey's National Representative
 - FIG 2018 Congress Director and board member
 - Member of Commission III – Spatial Information Management
 - Member of Commission VII – Cadastre and Land Management
 - Congress Director, FIG2018,
 - Member of Task Force on Real Estate Studies 2015-2018,
 - Member of Commission 7 as a Country Representative 2012- present.
 - Member of FIG Working Group 5.4, Low Cost Surveying Techniques and Technologies for Developing Countries (2003-2005).



- Turkish Chamber of Surveying and Cadastre Engineers:
 - Chair of International Affairs Commission (2012 - present),
 - FIG2018 Congress Director (2014 -)
 - Member of Cadastre Commission (2007 - present),
 - Member of GIS Commission (2007 – 2011).
- Chair of Commission II for Turkish National Union of Photogrammetry and Remote Sensing (TUFUAB) (1994-2007).
- Scientific member of the European Organization for Experimental Photogrammetric Research Commission C – OEEPE (1992-1995).
- Turkish Interministerial Committee for the Coordination Mapping Issues:
 - Secretary General of Planning Commission (1990-2007)
 - Member of Scientific Commissions (1990-2007)

5. Other Training:

- Photogrammetry Postgraduate at ITC, the Netherlands (1988-1989).

6. Countries of Work Experience

- Turkey (1983-2007 worked at Turkish Cadastre Organization)
- Libya (2007-2011)
- Turkey and Libya (2011 - Present)

7. Languages:

Language	Reading	Speaking	Writing
English	Good	good	good
Turkish	Mother tongue		

8. Employment Record:

From: 2014 To: present
 Employer: LTIS Co., Inc Libyan Turkish Integrated Solutions as associated partner and General Manager

From: 2013 To: to present
 Freelance Consultant

From: month 2007 To: January 2013
 Employer: GEOTECH Group Geographical Information Technologies as associated partner and General Manager

From: month 2001 To: 2009
 Employer: Atilim University

Positions held: Civil Engineering Department - Part time lecturer

From: month 1984 To: 2007
Employer: General Directorate of Land Registry and Cadastre

Positions held: Surveying engineer at Department of Geodesy

- Surveying engineer at Department of Photogrammetry
- Surveying engineer at Besiktas Cadastre Office
- Section Manager at the Department of Geodesy and Photogrammetry
- Section Manager at the Department of Research Planning and Co-ordination

From: month 1977 To: 1980
Employer: General Directorate of Land Registry and Cadastre

Positions held: Technical Staff

9. Detailed Tasks Assigned

He worked as a department manager at Land Registry and Cadastre for many years. In content of this duty he worked on geodetic, photogrammetric, cadastre and GIS/LIS projects.

At the same time, he worked as a secretary general of Interministerial Board for the Coordination Mapping Issues.

He was the coordinator of Marmara Emergency Reconstruction Project-Marmara Earthquake Region Land Information System (MEER/MERLIS) sub component Cadastre and Agricultural Reform Implementation Project (ARIP) projects between the years 2000-2007 which were financed by World Bank.

10. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

a) Name of assignment or project: Land Registry and Cadastre Information System – TAKBİS-I

Year: 2000-2001

Location: Ankara- Turkey

Client: General Directorate of Land Registry and Cadastre

Main project features: Establishment of Land Registry and Cadastre Information System

Positions held: Project team leader

Activities performed; Determination of the problems by analyzing the land registry and cadastral services under the content of GIS/LIS, Creating solutions under the content of existing legislations through improving of work process, Establishment of Land registry and Cadastral services electronically. Pilot project consists of 1.000.000 cadastral parcel.

b) Name of assignment or project: Land Registry and Cadastre Information System – TAKBİS-II

Year: 2005

Location: Ankara- Turkey

Client: General Directorate of Land Registry and Cadastre

Main project features: Establishment of Land Registry and Cadastre Information System

Positions held: Project team member

Activities performed; Bidding document preparation, bidding procedure, automation of land registration transaction in the concept of land related information system

c) Name of assignment or project: Marmara Earthquake Emergency Reconstruction Project (MEER/MERLIS)

Year: 2001 - 2004

Location: Marmara Earthquake region - Turkey

Client: General Directorate of Land Registry and Cadastre

Main project features: Marmara earthquake region land information system

Positions held: Project Coordinator

Activities performed; initial cadastre and cadastre renovation process of conversion and integration of existing analogue and digital cadastre, land registry and related topographic data into consistent and standardized files of TAKBIS input data.

This may involve map digitizing, mapping, staking out the existing legal map to the field and appropriate legal actions.

d) Name of assignment or project: Marmara Earthquake Emergency Reconstruction Project (MEER)

Year: 2003 - 2004

Location: Marmara Earthquake region - Turkey

Client: General Directorate of Land Registry and Cadastre

Main project features: Marmara earthquake region geodetic network densification

Positions held: Project Manager

Activities performed; Establishment of 373 geodetic ground control points in different accuracy levels, adjustment of them on GRS80 ellipsoid and ITRF 96 datum were completed. GPS leveling method was used on determining helmert orthometric heights. For this purpose 586 new height points was established and precise leveling is performed on 97 points.

e) Name of assignment or project: Agricultural Reform Implementation Project, Sub Component A-2

Year: 2004 - 2006

Location: Turkey

Client: General Directorate of Land Registry and Cadastre

Main project features: Initial cadastre works in 11,000 villages

Positions held: Project Coordinator

Activities performed; in the concept of 560 tenders the 13 million parcels produced.

f) Name of assignment or project: Continuously Operating Reference Stations CORS-TR

Year: 2005 - 2006

Location: Turkey

Client: General Directorate of Land Registry and Cadastre – General Command of Mapping

Main project features: CORS

Positions held: Project team member

Activities performed; CORS are geodetic quality GPS receivers and antennas that are permanently installed. These stations collect GPS data continuously, and transmit data via internet to a central server. At the server, the data is archived for future use, and made available for download by any user. The incoming data is also processed at the server to generate corrections which are made available over the internet users in real-time. The Turkish Network has been named CORS – TR (Transmission of Real-time corrections) to emphasize the expanded range of products available. Real-Time Kinematic GPS (RTK) is a method of surveying with GPS that provides positioning accuracy at a level of 1–3 cm. The CORS stations will serve as permanent bases.

g) Name of assignment or project: 3rd Generation Planning Program - Libya

Year: 2007 – 2011

Location: Benghazi Region / Libya

Client: Urban Planning Authority - Libya

Main project features: Urban planning

Positions held: Technical adviser

Activities performed; 1/250,000 and 1/25,000 scale development plans at national, regional and sub-regional levels; 1/10,000 and 1/5,000 scale urban plans along with 1/1,000 scale implementation projects at local levels, respectively.

h) Name of assignment or project: Initial Cadastre Projects

Year: 2007 – 2009

Location: 1) Ayvacık/Samsun, 2) Kavak 3) Beyşehir and 4) Sinop

Client: General Directorate of Land Registry and Cadastre

Main project features: Implementation of initial cadastre works

Positions held: Project Manager

Activities performed; Initial cadastral surveying of app. 53,000 cadastral parcels.

l) Name of assignment or project: Istanbul Photogrammetric Mapping Project

Year: 2007 – 2008

Location: Istanbul

Client: Istanbul Municipality

Main project features: 1/1,000 scale photogrammetric map production both vector and raster based 491 map sheets.

Positions held: Project Manager

Activities performed; Geodetic works, aerial triangulation, plotting, editing, field verification, conversion to GIS

j) Name of assignment or project: E-transformation Turkey

Year: 2004

Location: Turkey

Client: State Planning Organization

Main project features: Preliminary Study on establishment of Turkish National Geographic Information System

Positions held: Coordinator

Activities performed; Evaluation of GIS projects, preparing future plans

k) Name of assignment or project: E-transformation Turkey

Year: 2005

Location: Turkey

Client: State Planning Organization

Main project features: Preparatory works on constitution of Turkish National Spatial Data Infrastructure

Positions held: Coordinator

Activities performed; Preliminary study on National Spatial Data Infrastructure

l) Name of assignment or project: Libyan National Mapping and Geodatabase Project

Year: 2009 – 2011

Location: Tripoli - Libya

Client: Surveying Department of Libya

Main project features: Main project features: Digital Mapping (CORS establishment, geoid determination, map production [aerial photography, aerial triangulation, orthophoto and line mapping of entire Libya with 50 cm gsd], Geodatabase and Portal GIS, Institutional Strengthening and Capacity Building

Positions held: Project Manager

Activities performed; preparation of technical specifications and RFP, bidding procedures, institutional development and capacity building

i.m)

Name of assignment or

project: Land Registry and Cadastre Information System – TAKBİS - III

Year: 2011

Location: Ankara- Turkey

Client: General Directorate of Land Registry and Cadastre

Main project features: Establishment of Land Registry and Cadastre Information System

Positions held: Individual Consultant (worked for Turkish National Science Counsel)

Activities performed; Evaluation of TAKBİS

n) Name of assignment or project: Designing a macro framework for Agricultural Land Use Planning

Year: 2013

Location: Edirne, Kirklareli and Tekirdag Provinces - Turkey

Client: General Directorate of Agricultural Reform

Main project features: spatial and land use plans,

Positions held: Project Management

Activities performed; preparation of the planning methodology, elaborations in the pilot vicinities, and scheduling of the planning program.

o) Name of assignment or project: Turkish Market Survey

Year: 2012

Location: Ankara Turkey

Client: Leica Switzerland

Main project features: It has requested to make a market study in the field of surveying equipment market by the client. The focus of the Market Study was to get a clear answer of the followings;

- Quantities & prices of key products
- The market volume
- Market positions by brand
- Market prices + margins
- Market trends (growth rate)
- Market opportunities

Detailed Market Survey about the Surveying Market (investments per year)

Positions held: Project Coordination

Activities performed; The Market Study comprised the following activities:

- Contacts/investigations/preliminary work planning

- Instruction of Contractor, clarification of task
- Work planning/arrangements
- Development/translation of questionnaire
- Collection/scanning Address material
- Distribution of questionnaires
- Collection of answers incl. contacts for reminder and clarification
- Interpretation of answers
- Elaboration report market assessment and recommendations
- Presentation and discussion of result

p) Name of assignment or project: Orthophoto production with 5cm GSD and the underlying DTM data using by Unmanned Air Vehicles.

Year: 2013

Location: Antalya - Turkey

Client: NZ Aerial Mapping Limited – New Zealand

Main project features: 5cm Aerial Imagery collection in Golf Course by UAV, DTM and Orthophoto production

Activities performed; project implementation

q) Name of assignment or project: Development of Agricultural Land Use Planning and Soil Database

Year: 2013 - 2014

Location: Turkey

Client: General Directorate of Agricultural Reform

Main project features: spatial and land use plans,

Positions held: Project Developer, Adviser to Director General

Activities performed; Developing RFP and ToR

r) Name of assignment or project: Software Development on Cadastral Applications Using by OpenSource Technology

Year: 2013-2014

Location: Turkey

Client: General Directorate of Land Registry and Cadastre

Main project features: analysis, design and software development

Positions held: Project Manager

Activities performed; Software development

t) Others ; involved several projects in Turkey

- Surveying projects (urban line map productions)
- Engineering survey projects (road surveying projects)
- Geodetic projects (geodetic networks)
- Software development (esri-open source)
- Consultancy etc.

11. Expertise, Qualifications, Skills & Publications

Expertise	: Cadastre expert and Photogrammetrists
Qualifications	Land administration, Photogrammetry, Geodesy, GIS Applications, Personnel, Budget and Project Planning & Management
Publications	<ul style="list-style-type: none"> • Many Technical and Administrative Reports about the Projects • 1 Lecture Notes on Fundamentals of Surveying (Drafted, but not published yet) • 1 Mapping Dictionary (Membership of Dictionary Project Group) • Over 30 Articles/Papers in National Periodic (available upon request) • 9 Articles/Papers in International Conferences (available upon request) • Thesis Management and Advisory in Geodesy-Photog. Engineering

12. Academic Works

Atilim University; part time Academic Staff for the courses of

- Fundamentals of Surveying CE 209,
- Principles of GIS CE 414 / 512,
- Digital Mapping Techniques CE 511, (2001-2009)

Jury member of GIS/GPS/RS related MSc Thesis at Geodetic and Geoinformatic Technologies Department at Middle East Technical University (2000-2002)

MSc Thesis Supervisor;

Cadastre Vocational School; part time Lecturer for

- Surveying III,
- Cartography
- Change Detection in Densely Populated Urban Area And Rural Area Using High Resolution Satellite Image, Atilim University, (2005)
- Design and Implementation of Earthquake Management Project, Case Study: Korfez Municipality, Atilim University, (2005)

13. Certification

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience.



Date: 04/01/2016

Dr.Orhan ERCAN



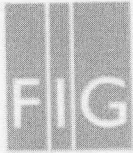
**Nomination Template
Vice President
(2017-2020)**

Nominee:	
Name:	DR. SUNIL LALLOO
Member Association:	THE INSTITUTE OF SURVEYORS OF TRINIDAD AND TOBAGO
Country:	TRINIDAD AND TOBAGO
Contact address:	EMROND HOUSE, 111 OXFORD STREET, PORT-OF-SPAIN, TRINIDAD W.I.
Email address:	sunil.laloo@gmail.com
Age:	31
Educational background & Qualifications:	B.Sc. (first class honours) Surveying and Land Information LLB (hons) Pg.Dip Land Management and informal settlements regularisation PhD Surveying and Land Information MISTT
Field of surveying discipline	Geomatics and Valuation
History of Employment:	Surveyor (valuation) – Raymond and Pierre Limited
- Current position	
- Previous position(s)	Asst. Lecturer – The University of the West Indies Consultant – OECS/UWI/UN-HABITAT Consultant – Chaplan Ltd Lecturer – The University of Trinidad and Tobago Surveyor – Voltec Engineering and Surveying Services Ltd.



Nomination Template
Vice President
(2017-2020)

Nominee:	
Position of Trust: - Current position(s)	Member – management committee – The Institute of Surveyors of Trinidad and Tobago
- Previous position(s)	-
FIG Positions/Responsibilities: - Current position(s)/ responsibilities	-
- Previous position(s)/ responsibilities	-
Other activities in FIG	Working week 2015 – Sofia, Bulgaria Review team – Fit for purpose guide for Land Administration



Nomination Template
Vice President
(2017-2020)

Nominee's statement	
My motivation to be FIG Vice President:	I have been following the FIG's activities since I was an undergraduate student in Surveying. For me, the FIG represents the global association responsible for the progression and evolution of Surveying theory and practice. Its overarching themes form an umbrella for other surveying institutions such as the RICS, CASLE and the ISTT, of which I am a part. Given my background, I think the role of Vice-President of the FIG will give me the advancement that I need to provide leadership in the FIG and in the surveying profession in the Caribbean and Latin America.
What I can offer in support of FIG's aims and objectives:	Given the global context of the FIG, I intend on pushing an agenda for the reform of land policy toward sustainable development internationally. This reform should focus on the developing countries, particularly in West Africa and East Asia where land policy reform would have the greatest impact on development and the alleviation of poverty.
My key skills for the Vice Presidency and FIG Council:	Being qualified in both valuation surveying and geomatics, I can work with both fraternities to develop best practice tools to advance the profession. As an academic and practitioner, I can also assist in bridging the gap between advances in surveying theory and practice. My background in law can also prove useful in the Council in developing rules and guide notes for the Council and the member associations.
Any other supporting information:	-



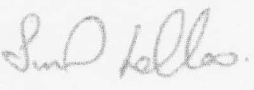



Nomination Template Vice President (2017-2020)

Nominator	
Name of Member Association:	Institute of Surveyors of Trinidad and Tobago
Name of Proposer:	Marcia Prince-Assam
Position in Association	President
Contact address:	The Professional Centre 11-13 Fitzblackman Drive Woodbrook, Port of Spain Trinidad and Tobago
Email address	marciaprinceassam@gmail.com : info@instituteofsurveyors.com
Proposer's Statement	
Why the Association wants to propose the Nominee	The ISTT's executive decided to nominate Dr. Laloo as we believe his combination of qualifications in Geomatics, Valuation and Law as well as his consultancy experience in Land Administration and Land Management would make him an asset to the FIG Council. We are also confident that Dr. Laloo would adequately represent the issues faced by the Region (Caribbean and the Americas) in the context of sustainable development.
What support (financial, administrative and others) can the Association provide to the Nominee if elected Vice President	The ISTT is willing to support Dr. Laloo in terms of his administrative and technical needs as they relate to the goals of the FIG. This is also consistent with the existing support that the ISTT provides to the FIG.
Any other supporting information:	
Name of Seconder:	Michael Samms
Position in Association	Vice President
Contact address:	18 Picton Street Newtown, Port of Spain



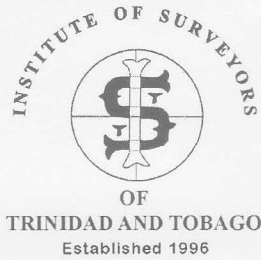
Nomination Template
Vice President
(2017-2020)

Email address	mikesamms@yahoo.com
---------------	---------------------

Signed	
I hereby certify the above is true and correct	
I am available/not available* for the election as Vice President for the remaining two year term (2015 – 2016) if vacancy arises.	
Nominee	
Proposer:	
Seconder:	
Date:	

* Nominee is required to cancel whichever is not appropriate; and
Nominee is requested to initial every page of the nomination template

Clarifying Notes:	<ul style="list-style-type: none">• 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)• 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• Nominating FIG Member Association should ascertain the availability of the nominee over the duration of the term of office• Nominee should preferably have prior or current responsibilities within and working knowledge of FIG, its activities, aims and objectives• Nominee and Nominator are requested to pay attention to the Nominee's Statement and the Proposer's Statement
-------------------	---



INSTITUTE OF SURVEYORS
The Professional Centre, 11-13, Fitzblackman Drive, Woodbrook,
Port of Spain, Republic of Trinidad & Tobago
Email info@instituteofsurveyors.com Web www.instituteofsurveyors.com
Telephone No: 468-3356

January 20, 2016

Ms. Louise Friis-Hansen
FIG Manager
International Federation of Surveyors
Kalvebod Brygge 31-33
DK-1780 Copenhagen V

Dear Sir/Madam,

Re: ISTT Nomination for Dr. Sunil Lalloo to the position of Vice President (FIG)

This letter serves as our confirmation of our support of the nomination of Dr Sunil Lalloo to the position of Vice President of the International Federation of Surveyors (FIG).

Dr Lalloo currently serves on the Management Committee of the Institute of Surveyors (ISTT) and is the holder of a PhD in Surveying and Land Information. He also has considerable experience in the tertiary education sector having lectured at both the University of the West Indies and the University of Trinidad and Tobago. Additionally, he has served as a Consultant to the OECS/UWI/UN-HABITAT.

We therefore submit our nomination in support of Dr Lalloo.

Yours sincerely

INSTITUTE OF SURVEYORS OF TRINIDAD AND TOBAGO

Marcia Prince-Assam
PRESIDENT



**Nomination Template
Vice President
(2017-2020)**

Nominee:	
Name:	Mikael Lilje
Member Association:	Swedish Professionals for the Built Environment (Samhällsbyggarna)
Country:	SWEDEN
Contact address:	Geodetic Infrastructure Division, Lantmäteriet, SE-801 82 GÄVLE, Sweden
Email address:	mikael.lilje@lm.se
Age:	48
Educational background & Qualifications:	1990 – 1993: Master of Science in Civil Engineering, Geodesy and Photogrammetry, Royal Institute of Technology, Stockholm
Field of surveying discipline	Geodesy, Surveying, Spatial Data, Photogrammetry
History of Employment:	<p>Since 2009 Manager of the Geodetic infrastructure Division, Lantmäteriet (the Swedish mapping, cadastre and land registration authority),</p> <p>Since 1994: Employed at Lantmäteriet 1994-2001: Research Geodesist at the Geodetic Research Division 2001-2009: Manager of the Reference Frame and Coordinate System Section 2009 - : Manager of the Geodetic Research Division</p>



Nomination Template Vice President (2017-2020)

Nominee:	
Position of Trust: - Current position(s)	<p>Since 2010: Secretary of the Presidium of the Nordic Commission of Geodesy</p> <p>Since 2011: FIG Liaison to UNOOSA. Representing FIG at the annual ICG-meetings.</p> <p>Since 2013: Lantmäteriets representative and Member of EuroSDR Management Board</p> <p>Since 2015: Lantmäteriets contact persons to EuroGeographics</p> <p>Since 2015: Lantmäteriets representative in the Nordic NMCA coordination group.</p>
- Previous position(s)	<p>1998 - 2008: Board Member of the Swedish Mapping and Surveying Techniques Society (SKMF) and was responsible for the Technical Program of the SKMF Annual Conference.</p> <p>1998-2004: Secretary of SKMF</p> <p>2004-2008: Chairman of SKMF.</p> <p>Since 1996: Active within the Nordic Commission of Geodesy (NKG) in various working groups and positions. I have e.g. been member of the working groups of Height Determination, Geoid, and Reference Frame. I was also member of the NGOS (Nordic Geodetic Observing System) task force. Since 2010 member of the NKG Presidium.</p> <p>Appointed Expert to the European Vertical Reference System workshop in Frankfurt, Germany 2004"</p> <p>Involved in several Swedesurvey projects as expert on site, organising visits at Lantmäteriet, holding presentations and more.</p>
FIG Positions/Responsibilities: - Current position(s)/responsibilities	<p>Currently: Chair of Task Force on Commission Structure</p> <p>2011-4: Chair of FIG Commission 5</p> <p>Since 2011: FIG Liaison to United Nations Office of Outer Space Affairs (UNOOSA). Representing FIG at the annual ICG-meetings.</p>
- Previous position(s)/responsibilities	<p>Since 1998: Actively involved in FIG Commission 5</p> <p>Since 1998: Member of FIG Commission 5 Steering Committee.</p> <p>1998-2002: Vice Chair of Administration for FIG Commission 5.</p> <p>2002-2006: Co-Chair of Commission 5 Working Group 5.2</p>



Nomination Template Vice President (2017-2020)

	<p>“Reference Frame in Practice” 2006-2010: Chair of Commission 5 Working Group 5.2 “Reference Frame in Practice”. 2008-2009: Incoming chair of FIG Commission 5 Since 2011: Chair of FIG Commission 5</p>
Other activities in FIG	<p>Initiated and responsible for the FIG Technical Seminars on Reference Frame in Practice. We have, together with IAG, UN-GGIM-AP WG 1 and UNOOSA, organised three workshops during 2012 and 2013.</p> <p>Responsible for the technical programs of FIG Commission 5 for Working Weeks and Regional Conferences since many years. Assisted also previous FIG Commission 5 Chairs with the development of technical programs for FIG Working Weeks and Congresses.</p> <p>Responsible for FIG Commission 5 Newsletter 1998-2002 and since 2010. I have also assisted with preparation of numerous Commission 5 reports, newsletters, notices, documents since 1998.</p> <p>Authored numerous technical papers and have presented at various FIG events or symposiums. I have missed only very few FIG events since 1998 and presented at most of them.</p> <p>Chaired numerous technical sessions or open forums at FIG events or symposiums</p> <p>The FIG Liaison to United Nations Office for Outer Space Affairs since 2010. Representing FIG at the annual ICG-meetings since 2011.</p> <p>Invited speaker at some occasions as IGS workshop and DVW seminar.</p>



Nomination Template Vice President (2017-2020)

Nominee's statement

My motivation to be FIG Vice President:

FIG has made tremendous progress over last decades by augmenting its global profile in both the established and emerging countries involved with FIG. FIG has become a very important and respected organisation at different levels within survey and mapping agencies, ranging from the decision makers or managers to the operational or field surveyor. FIG is recognized as a significant international organisation to UN based groups such as UN-GGIM, UN-Habitat and UN-OOSA as we assist with the implementation of the technical survey aspects of UN humanitarian initiatives. FIG is known by other technical or similar international associations such as e.g. the International Association of Geodesy, as an integral link between the scientific or theoretical community and the surveyor. Subsequently, FIG plays a vital role in the professional development of surveyors and their networks.

To achieve this modern day profile, the existing cooperative arrangements between FIG and the above mentioned bodies must continue to be productive and successful; consequently I very much would like to enhance these relationships even more. Our role in these affiliations can and should also be developed. The trust and respect that has been established between FIG and our sister agencies are values that I can sustain and improve. Although, it is important that we continue to liaise with our sister organisations, we also need to be aware of what is achievable, have a clear objective, and ensure we use our resources wisely to obtain maximum results.

I would very much like to be involved in the next FIG journey as I am certain that I can contribute to its ongoing success. I strongly believe that FIG has an important role to play at the 'grass root' and operational level for the surveyor, especially in the emerging countries of the world. FIG has an important role and a responsibility to reach out to surveyors so as to facilitate the sharing of knowledge, the education and promotion of the surveying discipline. This can be achieved in many different ways such as meeting and discussing issues 'face to face', producing technical guidelines/fact sheets/documents, facilitating forums or utilising digital technology and communications to disseminate information. I am confident that I am capable of leading and/or facilitating the delivery of such services as well as encouraging and supporting fellow colleagues.

Also, I want the FIG-logo or badge to be more visual to our



Nomination Template Vice President (2017-2020)

	<p>members, surveyors and the spatial industry. We should never undervalue the presence of the FIG logo thus we should endeavour to be more involved in regional/national/local events either by ourselves or in co-operation within other global/regional /national survey associations.</p> <p>Over the years, FIG Commission 5 (and others) has established good support from Sponsors on all levels. The Sponsors have allowed us to achieve what we want to achieve. At the same time we have tried to include them in our initiatives to create a win-win-situation. I am of the opinion that FIG has to improve its relationship with our Corporate Members so as to motivate them to continue the provision of e.g. financial support, which will ultimately benefit FIG and themselves.</p>
What I can offer in support of FIG's aims and objectives:	<p>Even though I have been involved with FIG for over 17 years, I still have the motivation and a lot more to offer to FIG. Being a member of Council would be the next logical step and is a main driver for me to continue my involvement.</p> <p>I have a long and "active" history within FIG Commission 5. I have a very good reputation within the technical Commissions and other associations within this field. I am well known and I am considered as a "doer" amongst my peers.</p> <p>I have a reputation within the Commission and FIG as a trustful, strategic, reliable, and active member. I also have extensive knowledge and practical experience with Commissions' field of interest, aware of emerging issues, and also the workings of ACCO.</p> <p>Basically, I can offer myself to FIG, meaning that I would dedicate time and effort to fulfil the aims and objectives of FIG. I believe that the network of people that I have built up over the years, within and outside FIG will enable me to fulfil my hopes with FIG as well as help FIG as an entity.</p> <p>I have very strong support from my employer, Lantmäteriet, who has agreed to provide me with time and financial assistance to perform the role and duties of FIG Vice President if I was to be successful.</p>
My key skills for the Vice Presidency and FIG Council:	Organised, Strategic, Reliable, Engaging and social able personality
Any other supporting	



**Nomination Template
Vice President
(2017-2020)**

information:	
--------------	--



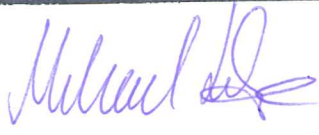
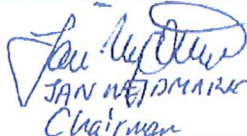
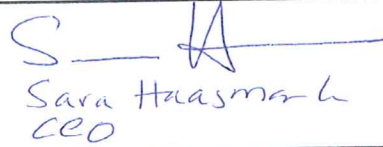
Nomination Template Vice President (2017-2020)

Nominator	
Name of Member Association:	The Swedish professionals for the built environment (Samhällsbyggarna)
Name of Proposer:	Jan Wejdmark
Position in Association	President
Contact address:	Samhällsbyggarna Box 16132, 10323 Stockholm
Email address	jan.wejdmark@newsec.se
Proposer's Statement	
Why the Association wants to propose the Nominee	Mikael Lilje is a well-known professional with a very good reputation, in Sweden as well as internationally, for his skills. His personal qualities are such that we want to see in a leader. These characteristics make him a role model in our society. Together with his international experience and his work in FIG, Commission 5, this makes him extremely suitable as vice president in FIG. He will contribute with strategic thinking as well as good communication with members and other organizations. Mikael is known as a doer so he will be a guarantor of an active Council.
What support (financial, administrative and others) can the Association provide to the Nominee if elected Vice President	The Swedish professionals of the built environment (Samhällsbyggarna) can provide Mikael with some administrative support from our council. More significant is the support he will get through an agreement between our association and his employer, Lantmäteriet. According to the attached letter from Lantmäteriet they will cover all his expenses and working time for serving as Vice President.
Any other supporting information:	See attached letter from Lantmäteriet.
Name of Seconder:	Sara Haasmark
Position in Association	Executive Director



Nomination Template
Vice President
(2017-2020)

Contact address:	Samhällsbyggarna Box 16132, 10323 Stockholm
Email address	sara.haasmark@samhallsbyggarna.org

Signed I hereby certify the above is true and correct I am available/not available* for the election as Vice President for the remaining two year term (2015 – 2016) if vacancy arises.	
Nominee	
Proposer:	 JAN NEJDMARK Chairman
Seconder:	 Sara Haasmark CEO
Date:	

* Nominee is required to cancel whichever is not appropriate; and
Nominee is requested to initial every page of the nomination template

Clarifying Notes:	<ul style="list-style-type: none">• 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)• 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• Nominating FIG Member Association should ascertain the availability of the nominee over the duration of the term of office• Nominee should preferably have prior or current responsibilities within and working knowledge of FIG, its activities, aims and objectives• Nominee and Nominator are requested to pay attention to the Nominee's Statement and the Proposer's Statement
-------------------	---



**Nomination Template
Vice President
(2017-2020)**



International Federation of
Surveyors, FIG
Kalvebod Brygge 31-33
DK- 1780 Copenhagen V
Denmark

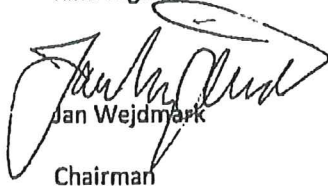
Mikael Lilje for Vice President in FIG

Mikael Lilje is a member of The Swedish Professionals for the Built Environment (Samhällsbyggarna). Among his many assignments is currently chair of the FIG Task Force on Commission Structure but he has a long history within FIG that includes being Chair of FIG Commission 5 during 2011-14. Mikael has now expressed his ambition to candidate to vice president of FIG. Samhällsbyggarna strongly supports this and nominates him for vice president of FIG.

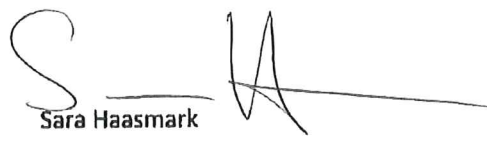
Mikael is a well-known professional with a very good reputation, in Sweden as well as internationally, for his skills. His personal qualities are such that we want to see in a leader. These characteristics make him a role model in our society. Together with his national work experiences, other international experience as well as his work in FIG since 1998 makes him extremely suitable as vice president in FIG. He will contribute with strategic thinking as well as good communication with members and other organizations. Mikael is known as a doer so he will be a guarantor of an active Council. Because of this The Swedish Professionals for the Built Society (Samhällsbyggarna) nominates him for Vice President in FIG and we would strongly support him in that work.

Our association can give Mikael administrative and professional support but more important is probably that his employer, Lantmäteriet, will provide him with all the time and financial assistance he needs to perform his FIG duties.

Kind regards



Jan Wejdmark
Chairman



Sara Haasmark
Executive Director

2016-01-05

Dnr 100-2016/63

International Federation of
Surveyors, FIG
Kalvebod Brygge 31-33
DK- 1780 Copenhagen V
Denmark

Mikael Lilje for Vice President in FIG

Mikael Lilje is employed at Lantmäteriet as Manager of the Geodetic infrastructure Division. As part of his work he is also very much involved in several activities nationally and internationally. Among them is being involved in FIG which he has been since 1998 with the support of Lantmäteriet. He was chair of FIG Commission 5 for the period 2011-14 and is currently the chair of the Task Force on Commission Structure.

Mikael has expressed his ambition to be part of the FIG Council by being a candidate for Vice President. Lantmäteriet strongly support his candidacy because we see the importance of FIG and appreciate the work FIG is doing for the Profession all around the world. We know that Mikael, as a member of the FIG Council, will be a guarantor of continued good work.

Mikael is nominated for Vice President by The Swedish Professionals for the Built Environment (Samhällsbyggarna). In agreement with this association, Lantmäteriet hereby guarantee that we will give Mikael all the support he needs to carry out the assignment as Vice President. Thus, we will cover the costs and time he will have for the FIG duties.

Best regards



Bengt Kjellson

Director General & Chief Executive

Bengt Kjellson

Lantmäteriet 801 82 Gävle Sweden

Besök: Lantmaterigatan 2 Tel. växel: 0771-63 63 63

E-post: bengt.kjellson@lm.se Internet: www.lantmateriet.se

Summary of the bids for 2020

The following clarification is based on information given by the bid documents. Below is a summarized comparison from given bids. All variables were submitted in the original bid for proposals. This document is a summary of each country's bid in spreadsheet format for easier comparison and is meant to be a fact based document.

The second document attached is my subjective evaluation of the below variables with a numerical subjective scoring using a 5 point score. The scores are based on how well each bid fulfills each variable criteria mentioned in the left column.

ITEM and criteria	The Netherlands, Amsterdam, Geo-Informatie Netherlands	Switzerland, Interlaken, geosuisse
1. Rotation of the conference - Previous and planned conferences:	Europe (2017, 2015, 2012, 2008)	Europe (2017, 2015, 2012, 2008)
	<p>Congresses: 2014: Asia and the Pacific (Malaysia); 2010: Asia and the Pacific (Australia); 2006: Europe (Germany), 2002: North America (USA); 1998: Europe (United Kingdom); 1994: Asia and the Pacific (Australia)</p> <p>Working Weeks: 2019: Asia (Vietnam) 2017: Europe (Finland) 2016: Asia and the Pacific (New Zealand); 2015: Europe (Bulgaria); 2013: Africa (Nigeria); 2012: Europe (Italy); 2011: Africa/Arab countries (Morocco); 2009: Asia/Middle East (Israel); 2008: Europe (Sweden); 2007: Asia (Hong Kong SAR, China); 2005 Africa/Arab countries (Egypt); 2004: Europe (Greece); 2003: Europe (France); 2001: Asia (Republic of Korea); 2000. Europe: Czech Republic.</p>	
2. Country hosting of earlier FIG events and general experience	<p>The last time a FIG conference was held in the Netherlands was: 49th FIG Permanent Committee Meeting 1982 21 - 24 June 1982, Haag, The Netherlands. Prior to this IX International FIG Congress 1958 27 Aug. - 4 Sep. 1958 was held in Scheveningen and Delft, The Netherlands. The conference has never been held in Amsterdam.</p> <p>GIN has a long proven track record in organising national and international events.</p>	<p>The last time a FIG conference was held in Switzerland was XVI International FIG Congress 1981, 9 - 18 August 1981, Montreaux, Switzerland. Prior to this it has been in Bern 1961, Lausanne 1949, Geneve 1931, Zurich 1930 and Zurich 1929. The conference has never been held in Interlaken.</p> <p>Geosuisse has hosted many international and national events. Switzerland is the host country of many international and UN agencies and organizations.</p>
3. Member association Its activeness, Commitment to FIG and to FIG 2020 Execution ability for local association	<p>GIN (Geo Information Netherlands) is a member association of FIG since the early days and is a member in good standing.</p> <p>The Netherlands has (and has had for a long time) an active role within the International Federation of Surveyors. Currently, Dutch experts are represented in the boards of the Commissions 2, 7 and 8 and actively involved in the FIG Young Surveyors Network. Four have been appointed as FIG Honorary member. The 'Land Administration Domain Model (LADM)' is approved as an official International ISO Standard. The proposal for this standard was submitted by FIG to ISO. This initiative originated in the Netherlands –as well as the editorial team. The LADM and the Social Tenure Domain Model are well known and contribute to the development of land administration worldwide.</p>	<p>Geosuisse is one of the founding members of FIG in 1878, and is a member in good standing.</p> <p>Geosuisse has been a very active member of FIG through all the years and has hosted the FIG Bureau several times. Geosuisse has been very active at earlier conferences and hosts more honorary members of FIG. The Working Week will be organized in close cooperation the Swiss Federal Office of Topography swisstopo and the Swiss Land Management foundation.</p> <p>Geosuisse and Swisstopo have contributed to many various activities within FIG, hereunder the much-referred publication Cadaster 2014, and the work on Spatially Enabled Society. Members have been closely involved in several commissions; especially within the FIG Commission 7 over the last 20 years.</p>
4. Supporting organisations Local support to the Working Week	<p>The bid is submitted by GIN together with the other Dutch members of FIG, Kadaster, ITC and GIM International. All four organisations are actively involved in the events and activities of</p>	<p>The bid is submitted by Swiss Association for Geomatics and Land Management, geosuisse together with the "Swiss Federal Office of Topography swisstopo" and the "Swiss Land Management foundation" as</p>

ITEM and criteria	The Netherlands, Amsterdam, Geo-Informatie Netherlands	Switzerland, Interlaken, geosuisse
Governmental support Financial support General support	<p>FIG and share a long history of cooperation. All partners will provide general support with their staff, facilities and services. The proposal is supported by the Ministry of Infrastructure and the Environment, the municipality of Amsterdam and GeoBusiness Nederland, the business and trade association for companies working with geo-information.</p> <p>Letters of support from: Kadaster, GIM International, ITC, Geobusiness NL, NCG, SA GEO, TU Delft, Ministry of Infrastructure and the Environment, The Mayor of Amsterdam, The Netherlands Board of Tourism and Conventions, Amsterdam Marketing</p> <p>The Netherlands Board of Tourism & Conventions (NBTC) supports with a Pre-financing and Guarantee Fund (VGF) that provides if necessary an interest-free loan and a guarantee scheme that allows the conference organisation to guarantee that the event will take place, in spite of possible disappointing numbers of attendees. Sponsorship offered, but not confirmed, by the Municipality of Amsterdam. e.g. sponsoring the Welcome Reception.</p>	<p>partners. Swisstopo is affiliate member of FIG.</p> <p>Letters of support from: Interlaken municipality, Swiss Federal Office of Topography swisstopo, Economic support by Canton of Berne (Standortförderung Kanton Bern).</p> <p>The Working Week will be supported by the Bernese Cantonal Office of Tourism and Regional Development.</p> <p>Berner Canton has offered the Working Week a support up to 150,000 CHF to cover costs for the conference center.</p> <p>The Mayor of Interlaken expresses his support for the event.</p>
5. Host city Characteristics and interest from congress programme point of view Host city attractiveness Host city offerings	<p>Amsterdam is listed among the world's top ten conference destinations. The city has 800,000 inhabitants (2.3 mio. incl surroundings) The city has an excellent track record of hosting prestigious international conferences. Amsterdam and the Netherlands have many areas of interest for surveying professionals. Amsterdam is a compact city which makes exploring the city by foot easy. Easy public transportation in Amsterdam.</p>	<p>The proposed host city is Interlaken with its Congress Centre Kursaal, which is ideally located in close proximity of several hotels and public transport stations. Interlaken is a relatively small city (5,200 inhabitants), but with a big international tourist reputation and with considerable tourist visits.</p> <p>All facilities are within walking distance, and because of the size of the city the FIG Working Week can be a true networking event. There are several similar sized events held in Interlaken every year, among them the Swiss Economic Forum, which is held annually in Interlaken since 2011. Interlaken has many restaurants covering the full price range. It is the hub of a dense public transportation network- Interlaken is a major centre for outdoors activities including hiking.</p>
6. 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	<p>The proposed conference venue is RAI Amsterdam Convention Centre. RAI Amsterdam is the biggest congress centre in the Netherlands hosting around 1.000 national and international conferences and cultural functions each year. Amsterdam convention centre is situated in one of Amsterdam's green areas, only few kilometers from the historic city centre and thirteen kilometers from Amsterdam Airport Schiphol. The conference center has 70 conference and meeting rooms and 108.300 m2 of exhibition space, and is large to the Working Week needs. There might therefore be other conferences parallel to FIG Working Week. The suggested auditorium accommodates 1262 participants.</p>	<p>The proposed venue in Interlaken is the Congress Centre Kursaal. All in the city is in walking distance. The congress centre is suitable for 1500-2000 delegates and has 19 different rooms. A total event area of 5'000 m² (54'000 sq ft)</p> <p>FIG room requirements fit to the congress center. Technical assistance is available.</p> <p>For the FIG Working Week the Congress Center offers the Business WiFi for free instead of CHF 3'000.00: For up to 100% of all participants parallel utilisation of devices is possible. Max. total available bandwidth in the Congress Centre Kursaal Interlaken: 50MB (Download) - 50MB (Upload). Wifi can handle "Need for speed": checking and sending e-</p>

ITEM and criteria	The Netherlands, Amsterdam, Geo-Informatie Netherlands	Switzerland, Interlaken, geosuisse
	It has to be checked if there is a suitable room for the General Assembly. Apart from the large auditorium, the largest room can accommodate 310 by theater style which is not enough for the General Assembly. Solution has to be investigated There is free public WiFi in the congress centre. Extra bandwidth for the use of app is needed.	mails, surfing, HD-Videos, streaming, communication in sound and vision
7. Accessibility Flight connections Several access possibilities Security Visa issues Air fare to destination	The award-winning Amsterdam Airport Schiphol is one of the world's most efficient airports. Getting to Schiphol is easy as it is an international hub and serves more than 300 destinations. Amsterdam city centre can be reached by a direct train within 15 minutes. There are also Express train connections to many European cities. KLM and its partners offer to support the conference as the official carrier.	Interlaken is connected to the international airports Zurich, Basel and Geneva. There are frequent and direct train connections to and from these airports with a travel time of approx. 1.5 to 2h. For supporting the attendees, there will be organized a support and information service at the major airports and a voucher system to travel to Interlaken. Interlaken has direct train connections from e.g. Berlin, Frankfurt, Hamburg, Munich and Paris. Once the conference participants are in Interlaken, all facilities are within walking distance. Swiss air and its partners would be happy to support this conference as the official carrier. Swiss is also a member of the Star Alliance Group.
8. Safety and security Political stability Airport safety City safety – is it safe to move around? Political stability in country (rating must be 3 or higher)	Amsterdam is a safe city, violent crime is rare. There is no reason to feel anxious if you take the normal precautions when visiting any big city in the Netherlands.	Switzerland is a very safe and politically stable country. Interlaken is a tourist city and has high safety. Especially many tourists from Asia and the Middle East visit Interlaken. Interlaken is a very safe town due to its size and they are used to and prepared for many international guests.
9. Proposed dates Must meet FIG requirements Following FIG statutes Practical dates Availability of venue Other conferences at same time	Preferred date: May 9 – 15, 2020 Alternative dates: May 2 – 9, 2020 May 17 -22, 2020 Conference center is reserved	8-15 May / 15-22 May / 19-26 June. Conference center is reserved
10. Technical programme Coverage of all FIG Commissions, Potential partners Originality Special ideas	The integration of geodesy and Geoinformation applications will be an important topic and also attract young people. The Dutch approach of 'Lifelong Learning', as organized by the Foundation for Geo Market Employment (SA GEO), can be an important input for the Dutch community. The Dutch approach of 'Lifelong Learning', as organized by the Foundation for Geo Market Employment (SA GEO), can be an important input. The country is	The technical program will be planned in close cooperation with the FIG Commissions, but also a close cooperation with the international organizations and agencies based in Switzerland, as well as with the local geoinformation and surveying community. Current initiatives and activities in Switzerland would be advantageous to cooperate with or even integrate into the programme: - GeoLab: is a project to bring our surveying profession closer to high

ITEM and criteria	The Netherlands, Amsterdam, Geo-Informatie Netherlands	Switzerland, Interlaken, geosuisse
	<p>small sized, densely populated, partly below sea level. Every square meter has been mapped, registered and documented.</p>	<p>school students in order to attract the younger generation;</p> <ul style="list-style-type: none"> - GEOWave program by SOGI: for a young, strong and innovative Geoinformation community - FIG Young Surveyors Network: will discuss potential activities in coordination with them; - Cadastral projects: Think Tank “Dimension Cadastre”, establishing the new Cadastre on Public-Law Restriction, investigating the accommodation of 3D into the cadastre; - Very long railway tunnels; - BIM as an integral part in land and building management.
<p>11. Technical tours</p> <p>Coverage of all FIG Commissions Originality Ideas proposed</p>	<p>The Netherlands has almost 200 years of experience with mapping and more than 100 years of land consolidation. A proposed technical tour is ‘GeoFort’, (www.geofort.nl) the most intensive measured spot in the Netherlands, and perhaps in the world. It is also a good example of how young people can be entertained with the help of geodesy.</p> <p>Further tours</p> <ul style="list-style-type: none"> - TU Delft - Kadaster Museum - The smartest port in the world: Rotterdam 	<p>Interlaken is in itself a major tourist destination with plenty of possibilities for social activities and technical tours. With the topographically challenging alpine environment around Interlaken, there were and still are many technical problems to be solved, requiring the expertise of surveyors.</p> <p>Possibilities for technical tours:</p> <ul style="list-style-type: none"> - engineering projects (dams, monitoring of movements, water power generation at Grimsel, extra-long railway tunnel at Lötschberg); - impact of climate change (recession of glaciers, areas of accelerated landslides, other environmental impacts); - water management (Aare river between Thun and Berne, remote regulation of rivers and lakes, water power stations, potential of water as power battery); - land management and consolidation projects; - avalanche protection, protective forests; - use rights and restrictions (alpine corporation rights, forest rights, common property rights).
<p>12. Social programme</p> <p>Attractiveness and variety Proposals for dinners Attractiveness of offered dinners Proposals for tours Is the program following the overall FIG concept</p>	<p>The gala dinner or welcome reception can be organised in the Grote Zaal of the Beurs vanBerlage. The Open Courtyard of the Maritime Museum is suggested as the central place for the cultural evening. Both good options and well thought through.</p> <p>Various proposals for ½ and 1 day tours</p> <p>½ day tours:</p> <p>“Hidden Inner Courtyards” City sightseeing – Amsterdam Amsterdam bike tour The Zaanse Schans windmill village and Edam</p>	<p>Interlaken is situated in the Jungfrau Region. For the dinners there are in Interlaken a lot of opportunities. There are historic premises in Interlaken, a stylish lounge evening at the lake, real mountain cabin magic on a lonely alpine pasture or a party on a boat. Interlaken is surrounded by mountains and two lakes plus other unique locations (Jungfraujoch – Top of Europe, Schilthorn – Piz Gloria etc.).</p> <p>Possibilities for social tours:</p> <ul style="list-style-type: none"> - sightseeing of old medieval city centres in Berne and Thun; - vineries along lake of Thun; - boat trips on the alpine lakes;

ITEM and criteria	The Netherlands, Amsterdam, Geo-Informatie Netherlands	Switzerland, Interlaken, geosuisse
	Rotterdam 1 day tours: The Hague and Delft Polder Tour (Reclaimed land) Dutch windmills and workshops	- train trip to highest train station in Europe (Jungfrauoch); - several historic sites with cosy restaurants and coffees.
13. Attendance Expectation of international, regional and local attendance Realistic number of international and national participants	1000 (1200, 1500) – realistic	Expected 1200-1500 - realistic
14. Accommodation Hotel costs Value for money Variation in hotel offers Closeness to proposed venue Transportation to venue	Amsterdam has almost 400 hotels with approximately 36.000 rooms in all categories and more to come. The city is a popular location for well-known international and Dutch hotel chains as well as for individual hotels. Over 2.600 of the hotel rooms are situated in the immediate vicinity of RA I Amsterdam. A large variety of hotels is available: 2 star hotels (including hostels), apartments as well as 3, 4 or 5 star hotels. Rates will be carefully negotiated for the Working Week. The current level of rates around conference center and within 10 min walking distance: 5* deluxe - >425 EUR 5* 275 – 425 EUR 4* 175 – 275 EUR 3* 125 – 185 EUR 2* 35 – 135 EUR	Interlaken offers the full scope of accommodation, from 5-star-hotels to backpacker hostels. The majority of hotels are in the 3- to 4-star range, with a total of available bedrooms of approx. 3000. For the conference a free-of-charge web-based booking platform can be created with which the participants can directly book their accommodation. Hotels in the region: 5* deluxe 291.00 – 327.00 EUR 5* 222.00 – 335.00 EUR 4* 144.00 – 195.00 3* 109.00 – 157.00 2* 68.00 – 125.00 There are accommodation opportunities from EUR 29.00. Prices are per room and per night and include breakfast and VAT. The city tax per person and night is not included.
15. 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	Draft budget is made according to FIG requirements and seems realistic. Budgeted income and expenditure is somewhat realistic and shows a surplus. A possible support of local and national authorities is not included in the budget. There may be a possibility to get an interest free loan for pre-payments. There might be the possibility of the sponsoring of e.g. (parts of) a welcome reception. During events there is always a strong support from companies. GIN organises member events on a yearly basis that attract over 1.000 participants. In 2015 over 70 companies participated in the exhibition. Delegate fees:	Draft budget is made according to FIG requirements, and seems realistic. The estimate for sponsorship/exhibition (apart from governmental support) is quite low. Could realistically be higher. Budgeted income and expenditure is realistic and shows a surplus. The Local Government of the Canton of Berne is sponsoring the rental costs for the congress centre, in total 136,000 EUR The Conference center will provide complimentary Wifi Delegate fees: Early bird/Normal/Late: 600/700/800 Students: 50 Daily: 250 Accompanying persons: 200

ITEM and criteria	The Netherlands, Amsterdam, Geo-Informatie Netherlands	Switzerland, Interlaken, geosuisse
	<p>Early bird/Normal/Late: 950/1200/1450 EUR Young Surveyors/Students/Accompanying: 50 EUR (200 students, 250 acc. pers) Healthy budget, but high registration fees.</p>	<p>Switzerland has low VAT rate (8%) Healthy budget. No concerns about the finances.</p>
<p>16. Sponsorship</p> <p>Estimate sponsorship and exhibition income Proposed income How realistic is proposed income Local sponsor offerings Sponsor interest to conference</p>	<p>Sponsor/exhibition income – realistic Potential local sponsor offerings: not included in bid At local events there are up to 70 exhibitors. There is a large local and regional potential.</p>	<p>Sponsor/exhibition income is estimated quite low in budget. At local events there are quite many exhibitors. Sponsor/exhibition income could be higher than estimated. There is a large local and regional potential. The canton of Bern is sponsoring the rental costs for the congress centre in Interlaken (136,000 EUR).</p>
<p>17. Why host</p> <p>Reason for hosting</p>	<p>Main reason to organise this event is the excellent opportunity it offers to exchange professional developments in an international context. Many colleagues from different countries feel at home in the Netherlands. They know country very well - ITC and Delft University being international. Knowledge development and - sharing by those institutions has contributed to developments in mapping agencies and cadastres worldwide. ‘Lifelong Learning’ learning, through education and international events for the profession. This exchange is strongly linked with the mission of GIN: ‘to promote the development of knowledge on geo-information and to stimulate its use’. In this decade 200 years topography, 100 years land consolidation, and almost 200 years cadastre is celebrated. Want to share developments and new techniques for data collection, but also to link geo-information for land, water and air management. The integration of geodesy and geo-information applications will also attract young people</p>	<p>Switzerland is one of the founding members and feels a responsibility towards FIG. Swiss representatives have throughout the years committed to many FIG activities. There are many projects and challenges in Switzerland at the moment and therefore International representation through the Working Week might help to get a focus in general on these areas. The potential benefit to promote the profession and attract the young generation. Switzerland has many challenges that they are working with and they would like to share these with the international community.</p>
<p>18. Objectives and outcomes</p> <p>Thought through why conference should be held at destination Difference to other destinations Short term outcome Long term outcome</p>	<p>The sector is acknowledged for an environment where new, innovative approaches are developed in support to the needs of society. This involves developments – such as 3D cadastres, automatic map generalisation and generation of re-allotment plans. The Dutch gaming industry uses geo-information, as many data sets are in the public, open domain.</p>	<p>The potential benefit especially to promote the profession and attract the young generation in Switzerland.</p>

ITEM and criteria	The Netherlands, Amsterdam, Geo-Informatie Netherlands	Switzerland, Interlaken, geosuisse
<p>19. Suggested theme</p> <p>Thought of possible theme that fits to local/regional situation</p>	<p>'Smart surveyors for land and water management'.</p>	<p>"Sustainability through Stability"</p> <p>Motivation: with this theme, we would like to reflect the FIG and international developments affecting our profession and where the challenges and opportunities are. At the same time, we also would like to make a link to the situation of Switzerland and Interlaken where the Working Week will take place, a country which has a stable economy and a strong education system and a city located in a challenging topography.</p>
<p>20. Events organized in the past three years</p> <p>How experienced is the host in organising events</p>	<p>The organising committee for the Working Week 2020 will consist of representatives of the four Dutch members of FIG: GIN, Kadaster, ITC and GIM International. All partners will provide general support with their staff, facilities and services. GIN and Kadaster will share the financial responsibility. All four partners are experienced in organising national and international events. The staff of Kadaster is well aware of the FIG conference concepts during FIG commission meetings, working weeks and conferences. This experience will be a solid strength in the organising team. ITC is actively involved in organising and participating in FIG events, too. GIM International, as media-sponsor and longtime supporter of FIG, completes the team with experience of participating and reporting about international events in our profession.</p>	<p>Local Organising Committee:</p> <p>In a first preparatory phase, the committee consists of the following members:</p> <ul style="list-style-type: none"> - Peter Dütschler, Geo-Thun, Swiss delegate to FIG Commission 6 - Jürg Kaufmann, past president geosuisse, Honorary Member FIG - Christian Kaul, head of Department for Geoinformation, Office for Spatial Development, Canton of Zurich - Dr. Alexander Kohli, BSB + Partner, Swiss delegate to FIG Commission 8 - Dr. Jürg Lüthy, SWR Geomatik AG, Swiss delegate to FIG Commission 3 - Prof. Bertrand Merminod, EPF Lausanne, ENAC INTER TOPO, Swiss delegate to FIG Commission 2 - Dr. Daniel Steudler, swisstopo, Swiss delegate to FIG Commission 7 (chair) - Prof. Andreas Wieser ETH Zürich, IGP, Swiss delegate to FIG Commission 5 <p>All well known to FIG and how to organise a FIG event</p>
<p>21. Major events planned in the proposed city in 2017</p> <p>Many events might affect the price level</p>	<p>Not known. If large events hotel prices are affected. There can be more and large events in the city center as well as in the proposed conference center parallel to the Working Week.</p>	<p>Not known. If FIG event there is not much possibility for other events at the same time</p>
<p>22. Initiatives for sustainable conference environment</p> <p>Is host city paying attention to environmental issues</p> <p>Is venue paying attention to environmental issues</p> <p>Is host paying attention to</p>	<p>RAI Amsterdam works on sustainability within many themes such as energy and climate, mobility and water. RAI also support organizations organize events in a sustainable manner. The 'Creating a great environment to meet' approach comprises many relevant focus areas. The conference center has sustainability in focus and has several objectives to meet.</p>	<p>Interlaken as a host city and the proposed Congress Centre Kursaal is a somewhat different setting for an FIG Working Week. It is not a congress centre in a large capital city, but it rather is a venue with all hotels, public transport and other facilities within walking distance, therefore once in the city there is no need for transportation. The conference center has sustainability in focus.</p>

ITEM and criteria	The Netherlands, Amsterdam, Geo-Informatie Netherlands	Switzerland, Interlaken, geosuisse
environmental issues		
<p>23. New initiatives or activities</p> <p>Originality – but within the overall FIG concept</p>	<p>Focus on young people. The Dutch approach of ‘Lifelong Learning’, as organized by the Foundation for Geo Market Employment (SA GEO), can be an important input for the community. Many countries deal with gaps between the supply and demand of well qualified surveyors and geo information experts. During the FIG Working Week educational institutes will work with the FIG Commissions to discuss what is needed to ensure skilled smart surveyors for land and water management for the 21st Century .</p>	<p>Focus on young people, cadaster innovation in which Switzerland has paid a big role.</p> <p>Futher initiatives:</p> <ul style="list-style-type: none"> - GeoLab: is a project to bring our surveying profession closer to high school students in order to attract the younger generation; - GEOWave program by SOGI: for a young, strong and innovative Geoinformation community - FIG Young Surveyors Network: will discuss potential activities in coordination with them; - Cadastral projects: Think Tank “Dimension Cadastre”, establishing the new Cadastre on Public-Law Restriction, investigating the accommodation of 3D into the cadastre; - Very long railway tunnels; - BIM as an integral part in land and building management
<p>24. What legacy to leave locally from the Working week</p> <p>With host Hosting city For the surveying community</p>	<p>For the participants and next generation by providing them the opportunity to learn about the latest developments from the Netherlands and abroad.</p>	<p>The international elaboration and discussions on the specific themes that are listed above, together with national delegates in order to learn and improve the Swiss systems.</p>
VALUATION		
<p>Issues supporting destination – subjective rating for Council</p>	<ul style="list-style-type: none"> - The FIG conference has not been held in the Netherlands for many years - Strong organising team - Strong supporters - Good exhibition possibilities in the region - Attractive city - Accessibility 	<ul style="list-style-type: none"> - The FIG conference has not been held in Switzerland for many years - Strong organising team - Strong supporters - Substantial financial support from Berner Municipality - Good exhibition possibilities in the region - Small attractive host city – “resort like” – participants will easily connect with each other - A different experience than the later years where FIG WW’s have been held in large cities - One of the seven founding members of FIG
<p>Issues against destination - rating</p>	<ul style="list-style-type: none"> - Large conference center - Most likely several other conferences taking place at the same time 	<ul style="list-style-type: none"> - Travel time from airport (but good train connections and service staff provided at airports) -

ITEM and criteria	The Netherlands, Amsterdam, Geo-Informatie Netherlands	Switzerland, Interlaken, geosuisse
	- Proposed registration fees are high	