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



## International Federation of Surveyors

# **General Assembly**

## AGENDA AND APPENDICES

17 and 21 May 2015

## National Palace of Culture – Congress Centre Sofia

Sofia, Bulgaria

## **INTERNATIONAL FEDERATION OF SURVEYORS**

## FIG 38<sup>th</sup> GENERAL ASSEMBLY 17 and 21 May 2015 National Palace of Culture – Congress Centre Sofia - Sofia, Bulgaria

## PROGRAMME

Sunday, 17 Ma	•	Centre Sofia – Sofia, Bulgaria			
Sunday	09:00-12:30	General Assembly, First Session			
17 May	13:30-16:00	General Association, I not Session			
	Hall 3, 7 <sup>th</sup> floor				
Monday, 18 Ma	ay – Wednesday, 20 May 20	015			
FIG 2015 Wor					
	8	Centre Sofia - Sofia, Bulgaria			
www.fig.net/fig	<u>g2015</u>	, C			
Monday, 18 Ma	ay – Wednesday, 20 May 20	015			
FIG 2015 Wor	king Week Exhibition				
National Palace	e of Culture – Congress Cen	tre Sofia			
www.fig.net/fig	<u>g2015</u>				
Monday-	To be announced later	Annual Meetings of FIG Commissions and Networks			
Tuesday	(See programme for				
18-19 May	individual rooms)				
Tbc	To be announced later,	FIG Member Associations Forum			
	CCS, Sofia	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.			
XX7 1 1	11.00.10.00 1.10.00	By invitation only			
Wednesday	11:00-12:30 and 13:30- 15:00	Director/Surveyor General Forum			
20 May					
	Congress Center Sofia				
Tbc	Congress Center Sofia	Academic Members Forum			
Tbc	Congress Center Sofia	Corporate Members Forum			
Thursday, 21 M	•				
Congress Center Sofia, Bulgaria					
Thursday	Presidents' Meeting	FIG Presidents' Meeting			
21 May	08:30 - 10:30	This event is convened by the FIG President and is			
	Tbc	reserved for Presidents or Heads of delegation of			
		Member Associations (or their representatives)			
		By invitation only			

Thursday	11:00-12:30	General Assembly, Second Session including
21 May	13:30-15:00	Closing Ceremony.
	Hall 3, 7 <sup>th</sup> floor	Closing ceremony will start immediately after the
	CCS	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 38<sup>th</sup> GENERAL ASSEMBLY

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## FIG 38<sup>th</sup> GENERAL ASSEMBLY

#### AGENDA

for the meetings to be 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 to open the 38th 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 and affiliate members only. Delegates representing 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 **12 April 2015** 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/1cadnqGyWVECt806NSfextw42JhK2uQ6NKvZDVkBmmU/viewform?usp=send\_form

Since only member associations that have paid all their membership fees to the end of 2014 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 **15** April 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. To be posted 15 April 2015.

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 member association that hosted the preceding (PEJUTA, Malaysia) and the host of the proceeding following General Assembly (NZIS, New Zealand).

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

**Decision**:

## 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:

## 5 ADOPTION OF THE MINUTES OF THE 37<sup>h</sup> 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:

## 6 MEMBERSHIP

## 6.1. <u>Member Associations</u>

#### 6.1.1 <u>New Member Associations</u>

There have been no new member association applications since 37<sup>th</sup> General Assembly in 2014.

**Motion**: That the General Assembly notes that there has not been any new member association applications.

#### **Decision**:

## 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 reinstalled 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:**

## 6.1.3 <u>Geodetic Engineers of the Philippines, Inc. (MA-10107)</u>

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**:

## 6.2 <u>Expulsion of member associations</u>

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**:

## 6.3 <u>Suspended status 2015</u>

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**:

## 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

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 41 from 38 countries.

## 6.4.2. <u>Corporate members</u>

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)

Following corporate members have resigned from their membership from 1.1.2014:

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. <u>Academic members</u>

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

- a) Technical University of Civil Engineering Faculty of Geodesy, Bucharest, Romania (AC-40134)
- b) Sabaragamuwa University of Sri Lanka, Faculty of Geomatics (AC-40135)

The following academic members has terminated their 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) Dublin Institute of Technology, Ireland (AC-40036) (has promised to pay)
- b) Istanbul Technical University Dept. Geodesy & Photogrammetry, Turkey (AC-40071) (has promised to pay)
- c) Neapolis University, Cyprus (AC-40114) (has promised to pay)
- d) IAV, Institut Agronomique et Vétérinaire Hassan II, Morocco (AC-40118)

The number of Academic Members after these changes is 89/86 from 56/53 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**:

## 7 APPOINTMENT OF HONORARY MEMBER

## a. Christiaan Lemmen

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.

## b. Other potential nominations

Other potential nominations for Honorary Member might be considered by the Council.

Appendix to item 7: The nomination letter from Geo-Informatie Nederland GIN

**Motion**: That the General Assembly appoints Christiaan Lemmen as Honorary Member of FIG and appoints other potential nominations if brought forward by FIG Council.

**Decision**:

## 8 PRESIDENT'S REPORT

President Chryssy Potsiou has prepared 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.

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

**Decision**:

## 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**:

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

## 10.1 <u>International Office of Cadastre and Land Records (Office International du</u> <u>Cadastre et du Régime Foncier) OICRF</u>

Mr. 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 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**:

## 10.2 <u>International Institution for the History of Surveying and Measurement,</u> <u>Permanent Institution of FIG</u>

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 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**:

## 10.3 <u>Standards Network</u>

Mr David Martin, Chair of the FIG Standards Network has prepared a report on the Standards Network activities since the General Assembly in Kuala Lumpur. Standards Network will make a short report to the General Assembly Appendix to item 10.3: Report from the Standards Network. To be added

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

## Decision:

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

Mr. John Hohol, President of the FIG Foundation has prepared a report on the FIG Foundation activities from June 2014 to March 2015. He will make a short report 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**:

## 12 FIG COUNCIL WORK PLAN 2015-2018

The Council has prepared the FIG Council Work Plan for 20151-2018. 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 is 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 will present 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

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

Decision:

## 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 are presented for the General Assembly for its approval in Sofia in May 2015.

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

## Appendices to 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

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

## **Decision**:

## 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.

**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:

## **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.

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

**Motion**: That the General Assembly records the Council's decision of establishment of the Task Force on Real Property Markets, appointment of Pekka Halme to chair the Task Force and its terms of reference for information.

## **Decision**:

## 15.2 <u>Task Force on Commission Structure</u>

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 Jordskiftekandidatforening, 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.

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

**Motion**: That the General Assembly records the Council's decision of establishment of the Task Force on Commission Structure and the appointment of Mikael Lilje to chair the Task Force and its terms of reference for information.

## **Decision**:

## 15.3 <u>Task Force on Corporate Members</u>

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.

**Motion**: That the General Assembly records the Council's decision of establishment of 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 for information.

## **Decision**:

## 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 review 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.

Appendix to item 15.3: Terms of Reference for the Task Force on Scientific Journal

**Motion**: That the General Assembly records the Council's decision of establishment of the Task Force on Scientific Journal, appointment of Yerach Doytsher to chair the Task Force and its terms of reference for information.

## **Decision**:

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

Vice President Rudolf Staiger will present the 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)

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:

## **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		20 members or €50	5,500 members
	maximum of 5,500 members	(whichever is greater)	(€24,640)
	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.		

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

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 show 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		20 members or €50	5,500 members
	maximum of 5,500 members	(whichever is greater)	(€24,640)
	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.		

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**:

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

## 18.1 <u>Meetings and conferences</u>

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

FIG will be represented at the World Bank Conference March 2015 by President Chryssy Potsiou. There will be a special side activity on the FIG Work Plan.

## 18.2 <u>Global Geodetic Reference Frame for Sustainable Development resolution</u>

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**:

## **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:

## 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 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 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.

**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**:

## THURSDAY 21 MAY 2015

## Thursday, 21 May, 08:30-10:30

#### Room to be announced, National Palace of Culture - Congress Centre Sofia

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

## 21 FIG PRESIDENT'S MEETING

Separate invitation to Presidents of the Member Associations.

#### Thursday, 21 May, 11:00–12:30 and 13:30-15:00

## Hall 3, 7<sup>th</sup> floor, National Palace of Culture - Congress Centre Sofia 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 and affiliate members only. Delegates representing 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 12 April 2015 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. Since only member associations that have paid all their membership fees to the end of 2014 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 15 April 2015.

To be noted that the General Assembly has appointed a representative from PEJUTA, Malaysia and from NZIS, New Zealand as tellers to this session of the General Assembly.

#### 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 – will be posted 15 April 2014.

Motion: Those members present are recorded in the minutes.

#### Decision:

## 23 MEMBERSHIP

The Council will decide on other membership issues, if any, considered in Sofia 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 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**:

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

Commission Officers (ACCO), Commissions, Networks and Task forces will have their annual and other administrative meetings in Sofia. 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**:

## 26 REPORTS FROM PERMANENT INSTITUTIONS (IF ANY)

The permanent institutions will have various activities during the congress. They may report back to the General Assembly on any matters of general interest.

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

**Decision**:

## 27 REPORT FROM FIG FOUNDATION (IF ANY)

A meeting for FIG Foundation is organised in Kuala Lumpur and various activities are taking place during the Congress. They may report back to the General Assembly on any matters of general interest.

Motion: That the General Assembly records the report.

**Decision**:

## 28 DECISION ON THE VENUE FOR 2019 FIG WORKING WEEK

Candidates for FIG 2019 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:

- 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 will take place by blind votes following the FIG statutes and internal rules. If there will be no absolute majority in the first round of voting, a second vote will 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**:

## 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.

Motion: That the General Assembly records the report

**Decision**:

## 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.

Motion: That the General Assembly records the report.

**Decision**:

# 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.

Motion: That the General Assembly records the report.

**Decision:** 

## **32 PRESENTATION OF CERTIFICATES OF APPRECIATION**

## **CLOSING CEREMONY**

Appendix to items 2 & 22

## 38<sup>th</sup> General Assembly Sofia 17 and 21 May 2015

## **Roll Call**

	MEMBER ASSOCIATIONS	v	17 May	21May
		ot e		
1.	Algeria, People's Democratic Republic of Order of Land Surveyors Expert. (O.G.E.F), MA-10001	1		
2.	Australia Surveying and Spatial Sciences Institute SSSI, MA- 10004	2		
3.	Austria Austrian Society for Surveying and Geoinformation OVG, MA-10005	1		
4.	<b>Bahamas</b> Bahamas Association of Land Surveyors, BALS, MA-10006	1		
5.	Belarus Land Reform Association, MA-10007	1		
6.	<b>Belgium</b> Union Belge des Géomètres-Experts Immobiliers, MA-10008	1		
7.	Benin Ordre des Géomètres Experts du Benin, MA-10113			
8.	<b>Bosnia-Herzegovina</b> Geodetic Association of Herceg-Bosnia, MA-10112	1		
9.	<b>Botswana surveying and mapping organization</b> MA-10010	1		
10.	<b>Brazil</b> Sociedade Brasileira de Cartografia, Geodésia, Fotogrametria e Sensoriamento Remoto, MA-10011			
11.	<b>Brunei Darussalam</b> Brunei Institution of Geomatics, BIC, MA-10012			
12.	<b>Bulgaria</b> Union of Surveyors and Land Managers in Bulgaria, MA-10013			
13.	Bulgaria Chamber of Graduate Surveyors, MA-10108	1		
14.	<b>Burkina Faso</b> Association des Géomètres et Topographes du Burkina AGT-B, MA-10014			
15.	*) <b>Cameroon</b> Ordre National des Geometres du Cameroun OGEC			
1(	(National Order of Cameroon Surveyors NOCS), MA-10015	1		
16. 17.	Canada Canadian Institute of Geomatics CIG, MA-10016         China P.R. Chinese Society of Survey, Mapping &         Control of Survey, Mapping &	1		
18.	Geoinformation, MA-10017China P. R. China Institute of Real Estate Appraisers and	2		
	Agents CIREA, MA-10102	2		
19.	China P. R. China Land Science Society CLSS, MA-10120	2		
20.	<b>Costa Rica</b> Colegio de Ingenieros Topógrafos de Costa Rica CFIA, MA-10019			
21.	Croatia Croatian Geodetic Society HGD, MA-10020			
22.	Congo, Democratic Republic of Federation of Geometers and			

	Surveyors – Congo, MA-10101	1	
23.	Cyprus Association of Rural Surveying Engineers of Cyprus,		
	MA-10022		
24.	Cyprus Cyprus Association of Property Valuers, MA-10111		
25.	Czech Republic Czech Association of Certified Property		
	Appraisers CSCOM, MA-10023	1	
26.	Czech Republic Czech Union of Surveyors and Cartographers	1	
27	CSVTS, MA-10024	1	
27.	<b>Denmark</b> Den danske Landinspektørforening DdL, MA-10025	2	
28.	<b>Egypt</b> Egyptian Committee of Surveying and Mapping ECSM, MA-10026		
29.	Estonia Eesti Geodeetide Ühing EGÜ		
29.	(Association of Estonian Surveyors), MA-10027	1	
30.	Ethiopia Ethiopian Surveying Professionals Association	1	
50.	(ESPA), MA-10115		
31.	<b>Fiji</b> Fiji Institute of Surveyors, MA-10028		
32.	<b>Finland</b> Suomen Maanmittausinsinöörien Liitto MIL		
	(The Finnish Association of Surveyors), MA-10029	1	
33.	Finland Maanmittausalan ammattikorkeakoulu- ja		
	opistoteknisten Liitto MAKLI ry, MA-10030	1	
34.	France Ordre des Géomètres-Experts OGE, MA-10031	2	
35.	France Association Française de Topographie AFT, MA-10032	1	
36.	Gabon Association des Professionels de l'Ingenierie		 
	Topographique du Gabon, APIT-Gabon, MA-10122		
37.	Georgia Society of Professionals of Land Information		
	Technologies SPLIT, MA-10099	1	
38.	Germany DVW – Deutscher Verein für Vermessungswesen –		
	Gesellschaft für Geodäsie, Geoinformation und	2	
39.	Landmanagement, MA-10033	3	
<b>39. 40.</b>	Ghana Ghana Institution of Surveyors GhIS, MA-10034 Greece Technical Chamber of Greece TEE, MA-10035	1 2	
40.	Hong Kong SAR, China The Hong Kong Institution of	2	
41.	Engineering Surveyors HKIES, MA-10100		
42.	Hungary Hungarian Society of Surveying, Mapping and		
	Remote Sensing MFTTT, MA-10038	1	
43.	Indonesia Ikatan Surveyor Indonesia ISI, MA-10039	1	
44.	***) Iran, Islamic Republic of Iranian Professional Society of		
	Surveying Engineers (ISS), MA-10040		
45.	Ireland The Irish Institution of Surveyors IIS, MA-10042	1	
46.	Israel Association of Licensed Surveyors in Israel ALSI, MA-		
	10043	1	
47.	Italy Consiglio Nazionale Geometri e Geometri Laureati		
	CNGeGL,MA-10044	3	
48.	Jamaica The Land Surveyors Association of Jamaica LSAJ,		
40	MA-10045	1	
49.	Japan Nippon Sokuryosha Renmei	-	
	(Japan Federation of Surveyors JFS), MA-10046	1	

50.	Kenya Institution of Surveyors of Kenya ISK, MA-10047	1	
51.	Korea, Republic of Korea Confederation of Surveyors, MA-	<u> </u>	
	10048	1	
52.	Kosovo Kosova Association of Surveyors, MA-10049	1	
53.	Latvia Latvian Associations of Surveyors LMB, MA-10050	1	
54.	<b>Lebanon</b> Ordre des Géomètres-Topographes du Liban, MA-	1	
	10051		
55.	Liberia Cadastral Surveyors Association of Liberia CASUAL,		
	MA-10119		
56.	Lithuania Lithuanian Association of Surveyors LMA, MA-	1	
	10053		
57.	Luxembourg Ordre Luxembourg des Géomètres OLG, MA-		
	10054	1	
58.	Malaysia Association of Authorised Land Surveyors Malaysia		
	AALSM, MA-10055	1	
59.	Mali Ordre des Geometres Experts du Mali OGE, MA-10117	1	
60.	Malta The Malta Institution of Surveyors, MA-10056	1	
61.	Mongolia Mongolian Association of Geodesy and Cartography		
	MAGaC, MA-10098	1	
62.	Morocco Ordre National des Ingénieurs Géometres-		
	Topographes ONIGT, MA-10059	1	
63.	Nepal Nepal Institution of Chartered Surveyors, MA-10110	1	
64.	Netherlands, The Geo-Information Netherlands, MA-10060	2	
65.	New Zealand New Zealand Institute of Surveyors NZIS, MA-		
	10061	1	
<u>66.</u>	Nigeria Nigerian Institution of Surveyors NIS, MA-10062	2	
67.	<b>Nigeria</b> The Nigerian Institute of Quantity Surveyors NIQS,	1	
(0	MA-10063		
68.	Nigeria Nigerian Institution of Estate Surveyors and Valuers		
69.	NIESV, MA-10118 Norway Norges Jordskiftekandidatforening NJKF, faglig		
09.	gruppe af Tekna and GeoForum, MA-10064	2	
70.	Palestinian Authority Licensed Surveyors Association in	2	
70.	Palestine,		
	MA-10065		
71.	Papua New Guinea Association of Surveyors of Papua New		
	Guinea ASPGN, MA-10066	1	
72.	<b>Philippines,</b> Geodetic Engineers of the Philippines, Inc., MA-	1	
	10107		
73.	Poland Stowarzyszenie Geodetow Polskich SGP		
	Association of Polish Surveyors, MA-10067	1	
74.	Portugal Order of Engineers - College of Geographical		
	Engineering, MA-10068	1	
75.	Puerto Rico, USA Colegio de Ingenieros y Agrimensores de	1	
	Puerto Rico CIAPR College of Engineers and Land Surveyors		
	of Puerto Rico, MA-10069		
76.	Romania Union of Romanian Geodesy, MA-10070	1	

77.	<b>Romania</b> Romanian Association of Private Surveyors APCGCR,	1	
	MA-10105		
78.	Russian Federation Federal Service of State Registration,		
	Cadastre and Cartography (Rosreestr), MA-10071	2	
79.	Russian Federation None commercial partnership "Self-		
	regulated organization of activity of cadastral engineers", MA- 10121	1	
80.	<b>Senegal</b> Ordre National des Geomètrés Experts du Senegal (ONGES), MA-10116	1	
81.	<b>Serbia, Republic of</b> Union of Surveying Engineers of Serbia, MA-10072		
82.	Slovak Republic Slovak Union of Surveyors and		
	Cartographers,	1	
	MA-10074		
83.	Slovak Republic Chamber of Surveyors and Cartographers	1	
	KGK, MA-10075	1	
84.	Slovenia Association of Surveyors of Slovenia ZGS, MA-10076		
85.	South Africa, Republic of South African Council for		
0	Professional and Technical Surveyors PLATO, MA-10077	1	
86.	Spain Colegio Oficial de Ingenieros Técnicos en Topografía,		
	MA-10078		
87.	Sri Lanka Surveyors' Institute of Sri Lanka, MA-10079	1	
88.	<b>St. Lucia</b> The Institute of Surveyors, St. Lucia, Inc. ISSL (MA-10123)	1	
89.	<b>Sweden</b> Swedish professionals for the built environment, MA-10080	2	
90.	Switzerland geosuisse - Swiss Society of Geomatics and		
	Landmanagement, MA-10081	1	
91.	***) <b>Syria</b> Order of Syrian Engineers and Architects OSEA,		
02	MA-10082 Togo Ordre des Géomètres du Togo OGT, MA-10084		
92. 93.	<b>Trinidad and Tobago</b> Institute of Surveyors of Trinidad and		
<i>93</i> .	Tobago, MA-10085		
94.	*) <b>Tunisia</b> Association Nationale des Ingenieurs Géomètres-		
	Experts Tunisiens ANIGET, MA-10086		
95.	<b>Turkey</b> TMMOB Chamber of Surveying Engineers of Turkey,		
	MA-10087	2	
96.	***) Ukraine Ukrainian Society of Geodesy and Cartography,		
07	MA-10088		
97.	United Kingdom Chartered Institution of Civil Engineering	1	
08	Surveyors ICES, MA-10090	1	
98.	<b>United Kingdom</b> The Royal Institution of Chartered Surveyors RICS, MA-10091	3	
99.	United States of America National Society of Professional	5	
	Surveyors (NSPS), MA-10092	2	

100.	Uruguay Asociacion de Agrimensores del Uruguay, MA-10094			
101.	Vietnam Association of Geodesy, Cartography and Remote	1		
	Sensing VGCR, MA-10095			
102.	Zimbabwe Survey Institute of Zimbabwe SIZ, MA-10097	1		
	*) to be expelled 16 June 2014			
	<b>**</b> ) membership to be approved 16 June 2014			
	***) suspended membership			
	Not able to vote			
	2 votes			
	3 votes		/102	/102
	AFFILIATES			
1.	Albania Central Office of Immovable Property Registration –			
	IPRO AF- 20049			
2.	Argentina (Consejo Federal De Catastro De La Republica			
	Argentina (C.F.C)), AF-20047			
3.	Azerbaijan, State Committee for Land and Cartography, State			
	Aerogeodesy Corporation, AF-20048			
4.	Australia and New Zealand (ANZLIC), AF-20001			
5.	Belgium (General Administration of the Patrimonial			
	Documentation),			
	AF-20002			
6.	Brunei Darussalam (Survey Department) AF-20003			
7.	Cambodia, Kingdom of (Ministry of Land Management, Urban			
0	Planning and Construction), AF-20004			
8.	<b>Chile</b> (Servicio Hidrográfico y Oceanográfico de la Armada de			
0	Chile), AF-20005			
9.	<b>China P. R.</b> (China Land Surveying and Planning Institute), AF-20043			
10.	<b>Colombia</b> (Instituto Geográfico Agustin Codazzi, IGAC), AF-			
10.	20006			
11.	Colombia (Alcaldia Mayor de Bogotá DC), AF-20046			
11.	<b>Croatia</b> (State Geodetic Administration of Republic of Croatia,			
14,	DGU), AF-20042			
13.	<b>Cyprus</b> (Lands and Surveys Department), AF-20045			
13.	<b>Denmark</b> (Danish Geodata Agency), AF-20026			
15.	<b>Fiji</b> (iTaukei Land Trust Board, Fiji) – AF-20051			
16.	<b>Fiji</b> (Ministry of Lands and Mineral Resources), AF-20039			
17.	<b>Finland</b> (National Land Survey of Finland), AF-20030			
18.	Guatemala (Guatemalan Registry of Cadastral Information			
	(Registro de Información Catastral de Guatemala – RIC), AF-			
	20053			
19.	Hungary (Institute of Geodesy, Cartography and Remote			
	Sensing, FÖMI), AF-20009			
20.	Iceland (The Land Registry of Iceland), AF-20010			
21.	***) Iran, Islamic Republic of (National Cartographic Center)			
	AF-20036			
22.	Iraq, Republic of (General Directorate for Surveying, Ministry			

	of Water Resources), AF-20031		
23.	Israel (Survey of Israel), AF-20040		
24.	<b>Italy</b> (Italian Society of Photogrammetry and Topography, SIFET), AF-20035		
25.	<b>Japan</b> (Geospatial Information Authority of Japan/Geodetic Department) – AF-20052		
26.	Jordan (Department of Lands & Survey), AF-20011		
27.	Lesotho (Land Administration Authority (LAA)) – AF-20054		
28.	Macedonia, FYROM (State Authority for Geodetic Works), AF-20019		
29.	<b>Moldova, Republic of</b> (Agency for Land Administration and Cadastre of Republic of Moldova), AF-20041		
30.	Mongolia (Administration of Land Affairs, Geodesy & Cartography), AF-20018		
31.	<b>Nepal</b> (Survey Department, Government of Nepal), AF-20021		
32.	<b>Netherlands, The</b> (Cadastre, Land Registry and Mapping Agency), AF-20025		
33.	<b>Norway</b> (Norwegian Mapping and Cadastre Authority), AF-20023		
34.	<b>Romania</b> (National Agency for Cadastre and Land Administration), AF-20020		
35.	<b>Russian Federation</b> (Siberian State Academy of Geodesy), AF-20029		
36.	<b>Saudi Arabia, Kingdom of</b> (Ministry of Municipal and Rural Affairs), AF-20017		
37.	Saudi Arabia General Commission for Survey (GCS), General		
	Director for General Directorate of Geodesy and Land Survey (GLS) AF-20050		
38.	Sri Lanka (Survey Department, Sri Lanka), AF-20044		
39.	Sweden (Lantmäteriet), AF-20027		
40.	Switzerland (Swiss Federal Office of Topography, swisstopo), AF-20033		
41.	USA (NOAA, National Geodetic Survey), AF-20024	(4.1	,
	CORRESPONDENTS	/41	/
1.	Tonga	/1	/
	ACADEMIC MEMBERS		
1.	Australia The University of Melbourne, AC-40002		
2.	Australia RMIT University, AC-40003		
3.	Australia University of New South Wales, AC-40004		
4.	Australia University of Southern Queensland, AC-40005		
5.	Australia University of Technology Sydney, AC-40006		
6.	Austria BOKU, Vienna, AC-40007		
7.	Belgium ECAM - Haute Ecole Leonard de Vinci, Département		

	Construction, AC-40093			
8.	Belgium University of Liege, Unit of Geomatics, AC-40096			
9.	Belgium Antwerp Maritime Academy, AC-40123			
10.	Botswana University of Botswana, AC-40010			
11.	Brazil UNISINOS, AC-40011			
12.	Canada University of Calgary, AC-40012			
13.	Canada University of New Brunswick, AC-40013			
14.	Canada Université Laval, AC-40092			
15.	China P. R. School of Public Administration, AC-40091			
16.				
	10126			
17.				
	40016			
18.				
	y Recursos Naturales, AC-40017			
<u>19.</u>	Colombia Universidad de los Andes, AC-40128			
20.	Croatia University of Zagreb, AC-40020			
21.	Cyprus Neapolis University Pafos, AC-40114 expelled but has			
	promised payment			
22.	Czech Republic Brno University of Technology, AC-40107			
23.	Denmark Aalborg University, AC-40021			
24.	<b>Ethiopia</b> Institute of Land Administration, Bahir Dar			
25	University, AC-40103			
25. 26.	Fiji/Oceania University of the South Pacific, AC-40053			
20.	<b>Finland</b> Aalto University School of Science and Technology,			
27.	AC-40022 7 Finland Halainki Matropolia University of Applied Sciences			
21.	7. Finland Helsinki Metropolia University of Applied Sciences, AC-20023			
28.	<b>Finland</b> Rovaniemi University of Applied Siences, AC-40129			
20.	France Ecole Supérieure des Géomètres et Topographes, AC-			
27.	40024			
30.	Gabon Ecole Nationale du Cadastre et des Sciences			
0.00	Geographique, ENCSG AC-40132			
31.	Germany Technische Universität München, AC-40026			
32.	Germany Anhalt University of Applied Sciences, AC-40025			
33.	Germany Technische Universität Berlin, AC-40027			
34.	Germany University of Stuttgart, AC-10127			
35.	Ghana University of Mines and Technology (UMaT), AC-			
	40030			
36.	Greece School of Rural and Surveying Engineering, AC-40031			
37.	Hong Kong SAR, China The Hong Kong Polytechnic			
	University, AC-40033			
38.	Hungary University of West Hungary, AC-40034			
<b>39.</b>	Ireland Dublin Institute of Technology, AC-40031- expelled			
	but promised payment			
40.	Israel Technion – Israel Institute of Technology, AC-40104			
41.	Jamaica University of Technology Jamaica, AC-40037			

40				
42.	Kazakhstan East Kazakhstan State Technical University, AC-			
	40112			
43.	Kazakhstan Kazakh National Technical University after K. I.			
	Satpaev, AC-40125			
44.	Kosovo University of Prishtina, AC-40116			
45.	Latvia Riga Technical University, AC-40090			
46.	Lebanon Lebanese Canadian University, AC-40124			
47.	Lebanon Lebanese International University, ILU, AC-40130			
48.	Malaysia Universiti Teknologi Malaysia, Department of			
40.				
40	Geomatics Engineering, AC-40041			
<b>49.</b>	Mexico Universidad Autónoma de Nuevo León, AC-40101			
50.	Nepal Land Management Training Centre, AC-40089			
51.				
	Information Science and Earth Observation, AC-40046			
52.	New Zealand University of Otago, AC-40047			
53.	Nigeria University of Lagos, AC-40049			
54.	Nigeria Nnamdi Azikiwe University, AC-40050			
55.	Nigeria     Abia State Polytechnic, AC-40121			
56.	Norway Norwegian University of Life Sciences, Department of			
	Mathematical Sciences and Technology, AC-40052			
57.	Norway Bergen University College, AC-40113			
58.	***) Palestine Authority Palestine Polytechnic University,			
	AC40099			
59.				
	Poland Agricultural University of Krakow, AC-40054			
60.	Puerto Rico, USA Universidad de Puerto Rico, AC-40055			
61.	Puerto Rico, USA Polytechnic University of Puerto Rico, AC-			
	40056			
62.	Romania 1 Decembrie 1918 University of Alba Iulia, AC-			
	40058			
63.	Romania Technical University of Civil Engineering - Faculty of			
	Geodesy, Bucharest, Romania (AC-40134)			
64.	Russian Federation Moscow State University of Geodesy and			
	Cartography, Economic and Land Management, AC-40060			
65.	Russian Federation State University of Land Use Planning,			
	AC-40094			
66.	Rwanda, Republic of INES-Ruhengeri, AC-40131			
67.	Senegal, University of Thies, UFR Science of engineering AC-			
0/.	40133			
<u> </u>		<u>                                      </u>		
68.	Serbia, Republic of University of Novi Sad, Faculty of			
	Technical Sciences, AC-40097			
<b>69.</b>	Slovenia University of Ljubljana, AC-40062			
70.	South Africa, Republic of University of Cape Town, AC-			
	40063			
71.	Spain Universidad Politécnica de Madrid, AC-40064			
72.	Spain Universidad de Jaen, AC-40122			
73.	Sri Lanka Sabaragamuwa University of Sri Lanka, Faculty			
	of Geomatics (AC-40135)			
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74.	Sweden Lund University LTH, AC-40068			
75.	Sweden Royal Institute of Technology, AC-40067			
76.	Switzerland University of Applied Sciences Northwestern			
	Switzerland, AC-40069			
77.	Trinidad and Tobago University of the West Indies, AC-40085			
78.	<b>Turkey</b> Istanbul Technical University, AC-40071 expelled but			
	has promised payment			
79.	Uganda Makerere University, AC-40119			
80.	United Kingdom Kingston University, AC-40073			
81.	United Kingdom The University of Nottingham, AC-40078			
82.	United Kingdom Oxford Brookes University, AC-40074			
83.	United Kingdom Reading University, AC-40110			
84.	United Kingdom Sheffield Hallam University, AC-40076			
85.	United Kingdom University of the West of England, AC-40079			
86.	USA New Mexico State University, AC-40081			
87.	USA Texas A&M University – Corpus Christi, AC-40084			
88.	USA University of Houston, AC-40108			
89.	Multinational UNIGIS International Association, AC-40120			
		/89(86)	/	
	CORPORATE MEMBERS			
	Category A - Platinum level			
1.	Bentley Systems, CM-30035			
2.	Environmental Systems Research Institute, Inc. (ESRI), CM-			
	30001			
3.	Leica Geosystems AG, CM-30002			
4.	Trimble Navigation Ltd., CM-30005			
	Category C - Silver level			
5.	COWI A/S, CM-30011			
6.	Geoweb S.p.A., CM-30043			
7.	Meridian+, CM-30049			
8.	The State Enterprise "State Land Cadastre Centre", Ukraine			
0	CM-30054			
9.	Thomson-Reuters, CM-30024			
10	Category D - Bronze level			
10. 11.	GIM International – Geomares Publishing, CM-30012 KQ Geo Technologies, CM-30050			
11.	Ripro Corporation, Japan – CM-30057			
12.	Category E - Basic level			
13.	Derinsu Underwater Engineering Ltd., CM-30038			
13.	NEH Engineering survey and mapping limited company,			
17,	Vietnam – CM-30056			
	Category F - Regional level			
15.	Branco Etera Ltd, Kazakhstan – CM-30055			
16.	Concord Surveying Works Co., CM-30048			
17.	Coordinates Magazines, CM-30042			
18.	Geo:connexion, CM-30018			
19.	ISQ Portugal, CM-30051			
L		1		

20.	JKO Surveyors & Consultants (Pvt) Ltd, Sri Lanka CM-30053		
21.	ORBITS Engineering Firm, CM-30036		
		/21	/
	HONORARY PRESIDENTS		
	HONORARY MEMBERS		
	COMMISSION CHAIRS 2015-2018		
	Commission 1 – Brian Coutts		
	Commission 2 – Liza Groenendijk		
	Commission 3 – Enrico Rispolo		
	Commission 4 – Angela Kesiena Etuonovbe		
	Commission 5 – Volker Schwieger		
	Commission 6 – Ivo Milev		
	Commission 7 – Gerda Schennach		
	Commission 8 – Kwame Tenadu		
	Commission 9 – Liao Jinping		
	Commission 10 – See Lian ONG		
	Young Surveyors Network		
	Standards Network		
	PERMANENT INSTITUTIONS		
	International Office of Cadastre and Land Records (OICRF)		
	International Institution for the History of Surveying and		
	Measurement, Permanent Institution of FIG		
	FIG FOUNDATION – President John Hohol		
	FIG COUNCIL		
	President Chryssy Potsiou		
	Vice President Dr. Pengfei Cheng		
	Vice President Bruno Razza		
	Vice President Diane Dumashie		
	Vice President Rudolf Staiger		

## **INTERNATIONAL FEDERATION OF SURVEYORS**

## FIG 37<sup>th</sup> GENERAL ASSEMBLY 16 and 21 June 2014 Kuala Lumpur Convention Centre - Kuala Lumpur, Malaysia

#### PROGRAMME

Monday, 16 Jun	ne 2014		
Kuala Lumpur Convention Centre (KLCC) - Kuala Lumpur, Malaysia			
Monday	09:00-13:00	General Assembly, First Session	
16 June	14:00-17:00		
	Conference Hall 2		
• ·	ne – Friday, 20 June 2014		
	FIG 2014 Congress		
-	· · · · · · · · · · · · · · · · · · ·	piana Hotel), Kuala Lumpur, Malaysia	
www.fig.net/fig			
~	e – Thursday 19 June 2014		
	gress Exhibition		
1	Convention Centre, Kuala I	Lumpur, Malaysia	
www.fig.net/fig			
Tuesday–	08:00-09:00	Annual Meetings of FIG Commissions and Networks	
Wednesday	KLCC (See programme		
17-18 June	for individual rooms)		
Tuesday	09:00-10:45 and	FIG Member Associations Forum	
17 June	11:30 - 13:00	These two sessions were reserved for Presidents or	
	R402,	Heads of delegation (or their representatives) of	
	KLCC, Kuala Lumpur	member associations to discuss issue of their	
		common interest. President of PEJUTA chaired the	
		meeting.	
Wednesday	08:30-10:00	Attendance by invitation only Carbon Offset Programme – Let's Meet & Green	
18 June	Forest Research	Special	
11.00–14.00	Institute of Malaysia	This event was reserved for Presidents or Heads of	
(including	(FRIM), Kepong, Kuala	delegation (or their representative) to plant trees as	
lunch on site)	Lumpur.	part of the carbon offset program for the Congress.	
runen on site)	Meeting point was	Participation by invitation only and complimentary.	
	KLCC		
Friday	Presidents' Meeting	FIG Presidents' Meeting	
20 June	16:30-19:00	This event was convened by the FIG President and	
	R303	reserved for Presidents or Heads of delegation of	
		Member Associations (or their representatives)	
		Attendance by invitation only	
Saturday, 21 Jun	ne 2014		

KLCC, Kuala	a Lumpur, Malaysia	
Saturday	09:00-13:00	General Assembly, Second Session including
21 June	14:00-16:00	Closing Ceremony.
	Ballroom 1, KLCC	Closing ceremony commenced immediately after the conclusion of the General Assembly and was followed by the Farewell Reception hosted by the Chamber of Graduated Surveyors, Bulgaria, host of 2015 FIG Working Week.

### FIG 37<sup>th</sup> GENERAL ASSEMBLY

#### List of Agenda Items

#### Monday, 16 June, 09:00-13:00 and 14:00-17:00

- 1. OPENING PROCEEDINGS
- 2. ROLL CALL
- 3. APPOINTMENT OF TELLERS
- 4. ADOPTION OF THE AGENDA
- 5. ADOPTION OF THE MINUTES OF THE 36th GENERAL ASSEMBLY
- 6. MEMBERSHIP
- 7. APPOINTMENT OF HONORARY MEMBERS
- 8. PRESIDENT'S REPORT
- 9. FIG ACCOUNTS FOR 2013 AND AUDITOR'S REPORT AND BUDGETS 2014-2017
- 10. SUBSCRIPTION RATES FOR 2016
- 11. AMENDMENT TO STATUTES AND INTERNAL RULES
- 12. REPORTS FROM FIG COMMISSIONS AND FIG NETWORKS 2013-2014
- 13. REPORTS OF TASK FORCES 2013-2014
- 14. REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS 2013-2014
- 15. REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2013-2014
- 16. CO-OPERATION WITH THE UNITED NATIONS AND THE WORLD BANK
- 17. LIAISON WITH INTERNATIONAL PROFESSIONAL ORGANISATIONS
- 18. ELECTION OF PRESIDENT FOR 2015-2018 PRESENTATION BY CANDIDATE
- 19. ELECTION OF TWO VICE PRESIDENTS FOR 2015-2018 PRESENTATION BY CANDIDATES
- 20. DECISION ON THE VENUE FOR 2017 FIG WORKING WEEK PRESENTATION BY CANDIDATES
- 21. DECISION ON THE VENUE FOR 2018 FIG CONGRESS PRESENTATION BY CANDIDATE

#### Friday, 20 June, 16:30-19:00

#### 22. FIG PRESIDENT'S' MEETING

#### Saturday, 21 June, 09:00–13:00 and 14:00-16:00

- 23. ROLL CALL
- 24. MEMBERSHIP
- 25. DECISION ON THE VENUE FOR 2017 FIG WORKING WEEK
- 26. DECISION ON THE VENUE FOR 2018 FIG CONGRESS
- 27. APPOINTMENTS OF COMMISSION CHAIRS 2015-2018
- 28. ELECTION OF TWO VICE PRESIDENTS FOR 2015-2018
- 29. ELECTION OF PRESIDENT 2015-2018

- 30. REPORTS FROM AFFILIATE, ACADEMIC AND CORPORATE MEMBERS FORUM (IF ANY)
- 31. REPORTS FROM COMMISSIONS, NETWORKS (by Chairs Elects), AND TASK FORCES (IF ANY)
- 32. REPORTS FROM PERMANENT INSTITUTIONS (IF ANY)
- 33. REPORT FROM FIG FOUNDATION (IF ANY)
- 34. REPORT ON THE WORKING WEEK 2016 IN CHRISTCHURCH, NEW ZEALAND
- 35. REPORT ON THE FIG WORKING WEEK 2015, SOFIA, BULGARIA
- 36. OTHER MATTERS (WITH PRIOR NOTICE GIVEN TO COUNCIL)
- 37. PRESENTATION OF CERTIFICATES OF APPRECIATION

CLOSING CEREMONY

## FIG 37<sup>th</sup> GENERAL ASSEMBLY

#### MINUTES

for the meetings held on Monday 16 June 2014 in Conference Hall 2 and on Saturday 21 June 2014 in Ballroom 1 at the Kuala Lumpur Convention Center, Kuala Lumpur, Malaysia

### MONDAY, 16 JUNE

#### Monday, 16 June, 09:00-13:00 and 14:00-17:00 Conference Hall 2, Kuala Lumpur Convention Center General Assembly, First Session

#### **1 OPENING PROCEEDINGS**

President CheeHai Teo opened the 37<sup>th</sup> General Assembly and welcomed all members to Kuala Lumpur, Malaysia to the current council's final General Assembly with a short address.

The President expressed his gratitude to members and delegates for their participation and acknowledged the efforts of AALSM, the local organising committee and FIG Office towards a successful Congress with over 2500 participants from almost 100 countries.

The President expressed condolences and the general assembly observed a moment of silence in memory of Honorary President Karl-Olof Ternryd, Sweden, who passed away July 2013.

The President welcomed three Honorary Presidents: Juha Talvitie, Robert Foster and Stig Enemark and two Honorary Members: Paul van der Molen and Helge Onsrud to the meeting.

#### 2 ROLL CALL

Vice President Rudolf Staiger took the roll call. The roll call was done only for member associations. Delegates representing affiliate members, academic members, corporate members and correspondents as well as honorary presidents and honorary members were entered based on their registrations and information given to the FIG Office.

Since only member associations that have paid all their membership fees to the end of 2013 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 May 2014**.

#### Appendix to items 2 & 23: Roll Call

**Appendix to items 2 & 23**: List of member associations that are not allowed to vote at the General Assembly due to unpaid membership fees for 2013 and earlier. Updated at 20 June 2014.

56 members out of 101 were present at the first session which is more than one third of the membership, the requirement for a quorum for the General Assembly. 53 member associations were allowed to vote.

Motion: Those members present are recorded in the minutes.

**Decision**: The motion was adopted.

## **3** APPOINTMENT OF TELLERS

The General Assembly shall appoint two persons as tellers for the entire General Assembly. The tellers will represent member association that hosted the preceding (Nigerian Institution of Surveyors, NIS, Nigeria) and the host of the proceeding following General Assembly (Chamber of Graduated Surveyors, CGS, Bulgaria).

**Motion**: That the General Assembly appointed Bern. Omo Akhigbe from NIS and Angel Yanakiev from CGS as tellers for this General Assembly.

**Decision**: The motion was adopted.

## 4 ADOPTION OF THE AGENDA

The Agenda for the General Assembly was issued as mandated, on 16 April 2014.

Motion: That the agenda be adopted.

**Decision**: The motion was adopted.

## 5 ADOPTION OF THE MINUTES OF THE 36<sup>th</sup> GENERAL ASSEMBLY

Minutes have been circulated previously.

**Appendix to item 5:** Minutes of the 36<sup>th</sup> General Assembly in Abuja, Nigeria, May 2013, without appendices.

Motion: That the minutes be adopted as recorded.

**Decision**: The motion was adopted.

## 6 MEMBERSHIP

## 6.1. Admittance of new member associations

6.1.1 The Institute of Surveyors, St. Lucia, Inc. ISSL (MA-10123)

The Institute of Surveyors (St. Lucia) Inc. ISSL has applied for membership. ISSL was established in 2003. Their total membership (all categories) is 85 and qualified and full members numbered 66. The application meets the criteria for membership in FIG as a member association. The Council has considered the application and believes that the association meets criteria for membership of FIG as a member association.

**Appendix to item 6.1.1**: Membership application from The Institute of Surveyors, St. Lucia, Inc. ISSL

**Motion:** That the General Assembly admits The Institute of Surveyors, St. Lucia, Inc. ISSL to become a member association of FIG.

**Decision**: The motion was adopted. Since ISSL was not present their membership certificate will be sent to the association

6.1.2 Botswana Surveying and Mapping Association

Botswana Surveying and Mapping Association was expelled in 2012. FIG office has received a new application from them since they are now ready to be included as FIG member again. They have paid both old arrears as well as 2014 fee. The application for renewal of membership is attached **as appendix to agenda item 4.1**.

**Motion:** That the General Assembly reinstate Botswana Surveying and Mapping Association as member association.

**Decision/Action:** The motion was adopted and the FIG President presented Mr Emmanuel Tembo, representative from Botswana Surveying and Mapping Association the membership certificate.

6.1.3 Ordre des Geometres et Experts Fonciers – Algeria

Ordre des Geometres et Experts Fonciers – Algeria was expelled from FIG at FIG General Assembly 2013. FIG Office has however been in closer contact with the association because they were keen on staying as member of FIG. For over a year they have worked on getting payment to FIG approved. FIG received their membership payment and arrears in June 2014. It was therefore proposed to restore Ordre des Geometres et Experts Fonciers. A new application form is not needed.

**Motion**: That FIG General Assembly noted the update on the membership of Ordre des Geometres et Experts Fonciers

**Decision/Action**: The motion was adopted.

## 6.2 <u>Resignation by member association</u>

6.2.1 Hong Kong Institute of Surveyors

Hong Kong Institute of Surveyors has regrettably decided to resign from FIG. FIG Council is thankful that HKIS has cleared all arrears and there are no outstanding dues. FIG looks forward to a time where HKIS will find it fit to rejoin our global community.

Motion: That the General Assembly noted the resignation of HKIS

**Decision**: The motion was adopted.

### 6.2.2 MA-10052 – The Lithuanian Association of Property Valuers

The Lithuanian Association of Property Valuers has sent a letter to inform that they want to terminate their membership.

**Motion:** That FIG General Assembly noted the termination of The Lithuanian Association of Property Valuers as a member of FIG.

**Decision/Action**: The motion was adopted.

6.2.3 HARSE, Greece

HARCE, Greece has informed that they want to terminate their membership but will continue their engagement through the other Greek member TCG.

**Motion:** That FIG General Assembly noted the termination of HARSE, Greece as a member of FIG.

**Decision/Action:** The motion was adopted.

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

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

- Federación Argentina de Agrimensores FADA, Argentina (MA-10002)
- Colegio de Ingenieros y Agrimensores de Puerto Rico (MA-10069)

Geodetic Engineers of the Philippines are also more than three years in arrears and should also be expelled. However the FIG Council has received a letter from Geodetic Engineers of the Philippines that they will pay their arrears within the following three months.

The General Assembly has powers 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 Kuala Lumpur.

In accordance with its administrative measures, FIG Council, has deferred 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 previous General Assembly, there remain existing sanctions on Iran and Denmark cannot receive payments from Iranian Professional Society of Surveying Engineers (ISS). Again in accordance with its administrative measures, FIG Council deem their membership to be in suspension. Council will reconsider the situation with these associations again in 2015.

After acceptance of new member associations and expulsions the number of FIG member associations is 101 from 88 countries.

Motion: That the General Assembly expels the

- Federación Argentina de Agrimensores FADA, Argentina (MA-10002)
- Colegio de Ingenieros y Agrimensores de Puerto Rico (MA-10069)

That the General Assembly allows Geodetic Engineers of the Philippines until 1 October to pay their arrears and if the arrears are not paid by then they will be expelled at the following council meeting.

**Decision**: The motion was adopted.

### 6.4 <u>Other membership issues</u>

### 6.4.1 <u>Affiliate members</u>

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

- State Committee for Land and Cartography, State Aerogeodesy Corporation, Azerbaijan
- Central Office of Immovable Property Registration IPRO Albania
- General Commission for Survey (GCS), General Directorate of Geodesy and Land Survey (GLS), Saudi Arabia.

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

• Afghan Land Consulting Org. (AF20034)

The council has received information of termination of membership from:

• National Geographic Department, Laos.

After these changes the number of affiliate members is now 42.

#### 6.4.2 <u>Corporate members</u>

The Council has admitted the following companies as Corporate Members of FIG after the General Assembly in 2013:

- MundoGEO, Brazil, (category F, regional level)
- The State Enterprise "State Land Cadastre Centre", Ukraine (Category C, silver level)
- JKO Surveyors & Consultants (Pvt) Ltd, Sri Lanka (category F, regional level)

Thomson Reuters has revised their membership category from category E – basic level to category C silver level.

Following corporate members have resigned from their membership from 1.1.2014:

- FARO, Germany (category C –silver level)
- ICGC Institut Cartographic i Geologic de Catalunya

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

## 6.4.3 <u>Academic members</u>

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

• University of Thies, UFR Science of engineering from Senegal

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

Zonguldak Karaelmas Univ. Turkey (AC-40111)

The following academic members have resigned their membership:

- Fachhochshule Trier, Germany
- National University of Singapore

The number of Academic Members after these changes is 90 from 57 countries.

## 6.4.4 <u>Correspondents</u>

Council has not made any changes in Correspondent members since General Assembly 2013 and the number of correspondents remains at 3.

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

**Decision**: The motion was adopted.

## 7 APPOINTMENT OF HONORARY MEMBERS

## Mr. John Hohol

NSPS (formerly ACSM) National Office, United States has sent a nomination letter in which it proposes that FIG appoints Mr. John Hohol as an Honorary Member of FIG.

## Mr. Iain Greenway

Chartered Institution of Civil Engineering Surveyors ICES, United Kingdom, has sent a nomination letter in which it proposes that FIG appoints Mr. Iain Greenway as an Honorary Member of FIG.

FIG Council has considered these nominations and considers that both applications fulfil the criteria (see criteria at: http://www.fig.net/pub/figpub/pub40/figpub40.htm#Criteria) for an Honorary Member and therefore proposed to the General Assembly that it appoints Mr John Hohol and Mr Iain Greenway as an Honorary Members of the Federation for the outstanding

services both have provided to the Federation. The two candidates were introduced respectively by NSPS and ICES.

Appendix to item 7: The nomination letter from NSPS National Office, United States and from ICES, United Kingdom

Motion: That the General Assembly appoints Mr. John Hohol and Mr. Iain Greenway as Honorary Members of FIG.

**Decision**: The General Assembly appointed Mr John Hohol and Mr Iain Greenway as Honorary Member of FIG by acclamation. Mr John Hohol was presented his badge with silver oak leaves and Certificate of Honorary Member. As Iain Greenway could not be present, his Certificate and Badge will be presented to him at the next General Assembly.

### 8 PRESIDENT'S REPORT

President CheeHai Teo has prepared the President's report on the activities of the Federation since the General Assembly in Abuja in May 2013.

#### Appendix to item 8:

- President's report
- Presentation hand-outs

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

**Decision**: The motion was adopted

## 9 FIG ACCOUNTS FOR 2013, AUDITOR'S REPORT AND BUDGETS 2014-2017

Vice President Bruno Razza, responsible for FIG Finances and Office was unfortunately not present. Therefore Vice President Chryssy Potsiou presented the financial report to the General Assembly. This report included the auditors report from 2013, official accounts (income statement 2013) and balance sheet 31 December 2013, a summary of 2013 accounts, an updated budget for 2014 and proposals for budgets 2015-2017 with notes and proposal for membership fees for member associations in 2016.

#### Appendix to item 09:

Report on Financial Issues (including 2013 accounts and budgets 2014-2017) Presentation by Vice President Chryssy Potsiou

Annexes:

- 9A Auditor's Report, Income Statement for 2013 and Balance Sheet at 31 December 20131.
- **9B** FIG Result 2013
- **9C** FIG Budgets 2014-2017
- 9D List of member associations whose membership fees are in arrears for 2013 and earlier and that are not allowed to vote published on the FIG web site 15 May 2014

Motion: That the General Assembly

- adopts the audited accounts for 2013,
- adopts the Finance Report, and
- adopts budgets for 2014–2017

**Decision**: The motion was adopted.

### **10 SUBSCRIPTION RATES FOR 2016**

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. Membership fee structure was changed in 2009. Membership fees have been discussed as part of the finance report, **appendix to item 9**.

The 2013 General Assembly approved membership fees for 2015 as follows:

Year	Per capita fee	Minimum fee	Maximum fee
2015	€4.48 per member up to a	20 members or €50	5,500 members
	maximum of 5,500 members	(whichever is greater)	(€24,640)
	Member associations from		
	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.		

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

Recognising that the level of the 2016 subscription fees is dependent on the strategies of the new council, this Council remains responsible to propose to the General Assembly the level of subscription for 2016. Council has considered that a small rise in subscription might be appropriate given FIG's financial challenges expected over the coming years. Council is however 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 believes that the incoming Council and FIG Office will continue to be prudent in its financial management. Council therefore proposes the level of subscription for member associations for 2016 be at the same level as 2015. However, the incoming Council may review its subscription fees strategies for other categories of membership, in the future.

**Motion**: That the General Assembly adopts following membership fees payable by member associations in 2016:

Year	Per cap	ita fe	e				Minimum fee	Maximum fee
2016	€4.48	per	member	up	to	a	20 members or €50	5,500 members

maximum of 5,500 members	(whichever is greater)	(€24,640)
Member associations from		
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.		

**Decision**: The motion was adopted.

### 11 AMENDMENT TO STATUTES AND INTERNAL RULES

#### Amendments proposed by FIG Council

FIG Council proposed three amendments to the Statutes and Internal Rules for the consideration of the General Assembly. General Assembly was to note that any decision at this first session of the General Assembly to the Statutes and Internal Rules, when adopted, will be implemented at the second session of the General Assembly

## FIG Statutes 6.6.

FIG Council proposed to amend item 6.6 of the statutes as follows:

Existing Provisions	Proposed Amendments	Rationale
6.6	6.6	The 2012 General Assembly in Rome
- · -		•
A member	A member association may:	unanimously adopted the recommendations
association		from the Working Group on Voting Rights
may only cast	a) cast one vote on each issue provided	that was convened by the 2011 General
one vote on	the member association had in the	Assembly in Marrakech that the voting
each issue.	most recent subscription period an	system be changed; that the right to vote
	individual membership of 999 or	remains with members associations; and that
	fewer;	a sliding scale of voting, relative to
		association's membership numbers, be
	b) cast up to three votes on each issue	adopted; and that Council prepare and table a
	provided the member association had	proposal (after consultation with the
	in the most recent subscription	members) to amend Article 6.6 of the FIG
	period an individual membership of	Statutes no later than at the 1 <sup>st</sup> session and to
	5,500 or more, and subjected to the	be implemented at the 2 <sup>nd</sup> session of the 2014
	maximum subscription for a member	General Assembly in Kuala Lumpur,
	association set by the General	Malaysia
	Assembly;	
	57	In early 2013, Council prepared and sent out
	c) otherwise cast up to two votes on	a one-page consultation paper that set out the
	each issue.	essentials of Council's recommendation that
		is reflected in the proposed amendment to
		Article 6.6 of FIG Statutes. The one-page
		consultation paper is attached.
		consultation paper is attached.

Motion: That FIG General Assembly agree to amend FIG Statutes item 6.6 to:

6.6 A member association may:

- a) cast one vote on each issue provided the member association had in the most recent subscription period an individual membership of 999 or fewer;
- b) cast up to three votes on each issue provided the member association had in the most recent subscription period an individual membership of 5,500 or more, and subjected to the maximum subscription for a member association set by the General Assembly;
- c) otherwise cast up to two votes on each issue.

and the decision is implemented at the 2<sup>nd</sup> Session of the 37<sup>th</sup> General Assembly.

**Decision:** The decision was by ballot and 52 votes were casted with 40 votes in favour and 12 votes against. The statute change was adopted and FIG Statutes 6.6 will be implemented at the  $2^{nd}$  Session of the  $37^{th}$  General Assembly.

#### FIG Statutes 8

FIG Council proposed to amend item 8 of the statutes as follows:

Existing Provisions	Proposed Amendments	Rationale
8 Force majeure	8 Force majeure	The General Assembly decides four years out the venue of FIG's future
8.1	8.1	General Assembly that is attached to
In the event of force	If the Council determines that	FIG's Working Week and Congress.
majeure rendering	circumstances at the designated venue	Council recognized that
liaison with the majority	do not allow the convening of a General	circumstances at the chosen venue
of members of the	Assembly in conformance with these	might be impacted by subsequent
Federation impossible,	Statutes, the Council will take the steps	events and occurrences that do not
the Council shall take all	it considers necessary to continue the	allow the convening of a General
measures necessary for	work of the Federation, including	Assembly in a safe and sure
the safety of the	communicating with the Federation's	circumstances.
Federation's funds and	members. This may include: using	
its archives and for the	postal voting for matters requiring	The new provision under Item 8.1
custodianship of the Federation; but	urgent decision (except that of election	allows Council to take the necessary
otherwise all activity of	to office); deferring the business of a General Assembly to the following	steps to continue the work of the Federation and may include postal
the Federation shall	year's General Assembly; or convening	voting, deferring the business to the
cease until conditions	a rearranged meeting of the General	following year or convening a
permit activities to be	Assembly. A rearranged meeting will	rearranged meeting of the General
resumed.	always be arranged if there is an	Assembly. Any election to office
lebumeu.	election to office to be determined. If	must be at a rearranged meeting of
	the Council decides to convene a	the General Assembly and not
	rearranged meeting of the General	deferred nor decided by postal vote.
	Assembly in these circumstances, the	
	timetabling provisions of Statutes 6.1	The existing Item 8.1 be renumbered
	and 6.2 may be waived.	as 8.2
	8.2	
	In the event of force majeure rendering	
	liaison with the majority of members of	

Existing Provisions	Proposed Amendments	Rationale
	the Federation impossible, the Council	
	shall take all measures necessary for the	
	safety of the Federation's funds and its	
	archives and for the custodianship of the	
	Federation; but otherwise all activity of	
	the Federation shall cease until	
	conditions permit activities to be	
	resumed.	

Motion: That FIG General assembly agree to amend FIG Statutes item 8 to:

### 8 Force majeure

## 8.1

If the Council determines that circumstances at the designated venue do not allow the convening of a General Assembly in conformance with these Statutes, the Council will take the steps it considers necessary to continue the work of the Federation, including communicating with the Federation's members. This may include: using postal voting for matters requiring urgent decision (except that of election to office); deferring the business of a General Assembly to the following year's General Assembly; or convening a rearranged meeting of the General Assembly. A rearranged meeting will always be arranged if there is an election to office to be determined. If the Council decides to convene a rearranged meeting of the General Assembly in these circumstances, the timetabling provisions of Statutes 6.1 and 6.2 may be waived.

## 8.2

In the event of force majeure rendering liaison with the majority of members of the Federation impossible, the Council shall take all measures necessary for the safety of the Federation's funds and its archives and for the custodianship of the Federation; but otherwise all activity of the Federation shall cease until conditions permit activities to be resumed.

**Decision**: The decision was by ballot and 52 votes were casted with 49 votes in favour, 2 votes against and 1 invalid vote. The statute change was adopted.

## FIG Internal Rules 13 and 14

FIG Council proposed to amend item 13 and 14 of Internal Rules as follows:

Existing Provisions	Proposed Amendments	Rationale
13 Ad Hoc Commissions	13 (Blank)	This amendment reflects the fact
		that recent and current task forces
13.1 In addition to the commissions,		were established to address
ad hoc commissions may be		matters that are more than just
established by a vote of the General		administrative or of a general
Assembly to carry out special		policy nature.
technical assignments, projects or		
studies, including cross-commission		Task forces have been established
activities. Ad hoc commissions will		to consider, research and report on

Existing Provisions	Proposed Amendments	Rationale
normally be established for a		matters that are technical, that are
specified period and disbanded		cross cutting as well as emerging
following the acceptance of their		issues that are of interest to the
reports by the General Assembly.		profession. They have therefore
Their composition, chairs, terms of		taken the place of ad hoc
reference and work plans shall be		commissions, and the proposed
approved by the Council.		deleting of internal rule 13 and
	14. Task Forces	amendment of internal rule 14
14 Task forces		reflects this.
	14.1	
14.1	Task Forces may be established by	
Task forces may be established by	the Council to carry out special	
the Council to research and to advise	technical assignments, projects or	
on matters of an administrative or of	studies, or to advise on matters of	
a general policy nature. They will	an administrative or general policy	
normally be of short duration and	nature. They will normally be	
will be concluded on the presentation	established for a specified period	
and acceptance of their reports by the	and disbanded following the	
Council and, where necessary, the	acceptance of their reports by the	
General Assembly. Their	Council and, where necessary, the	
composition, chairs, terms of	General Assembly. Their	
reference and work plans shall be	composition, chairs, terms of	
approved by the Council.	reference and work plans shall be	
	approved by the Council.	

Motion: That FIG General Assembly agree to amend FIG Internal Rule item no 13 and 14 to:

#### 13 (Blank)

#### 14. Task Forces

#### 14.1

Task Forces may be established by the Council to carry out special technical assignments, projects or studies, or to advise on matters of an administrative or general policy nature. They will normally be established for a specified period and disbanded following the 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.

**Decision:** The decision was by ballot and 52 votes were casted with 47 votes in favour and 4 votes against. The statute change was adopted.

FIG Council has received two suggestions to review and amend FIG Statutes and Internal Rules. The first is from Geosuisse and the second from DdL. The suggestions are as follows

a) <u>Geosuisse</u>, <u>Switzerland – change in the nomination process</u>:

That the nomination process be changed in the following sense:

- No longer the member associations nominate a candidate directly. They can propose candidates to a respective nominating body;
- For Vice-presidents a regional body formed by the regional associations will have the right to nominate candidates. This makes it necessary that a candidate is better known and that every region has a representative. The regional bodies have to check if a candidate is eligible and has sufficient support, also in financial terms;
- 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.

## b) <u>DdL - Denmark – Term of Office</u>

The term of office, as provided for under FIG Statutes 5.5, for all elected members of the Council is four years subject to the provisions of section 5.6. No individual may serve for more than two consecutive periods on the Council and the term of office of the president is limited to one period of four years. *The term of office for the President, Vice Presidents and the ACCO representative starts immediately following their election* instead of the current provision, that's on 1<sup>st</sup> January in the year following their election.

FIG Council sought guidance from the General Assembly and invited Geosuisse and DdL to present their suggestions to the General Assembly. FIG Council also presented their thoughts on the suggestions. Hereafter there was general discussion and deliberations with a number of members weighing in on the suggestions, some speaking for, others against, yet others elaborating and making further suggestions. DdL subsequently withdrew their suggestions and together with GeoSuisse content to allow Council to further consider these suggestions together with the comments from the General Assembly.

## Appendix to item 11:

Letter from Geosuisse, Switzerland and DdL, Denmark

- Presentation by DDL
- Council comments to the presentations

**Motion**: That General Assembly provides guidance to the FIG Council on the suggestions forwarded by GeoSuisse and DdL.

**Decision**: Council to further consider these suggestions together with the comments from the General Assembly and revert to the General Assembly.

## 12 REPORTS FROM FIG COMMISSIONS AND FIG NETWORKS 2013-2014

Commission Chairs, 2011-2014, were required to submit a written report on the Commission activities covering period from Working Week in Abuja to the General Assembly. These reports include reports of the Commission chair and Commission working groups. The reports include also the two FIG networks: Standards Network and Young Surveyors Network.

Each Commission and Network Chair gave a short report on Commission activities to the General Assembly.

Appendices to item 12: Commission reports:

- **12.01** Commission 1 hand-outs of presentation
- **12.02** Commission 2 hand-outs of presentation
- **12.03** Commission 3 hand-outs of presentation
- **12.04** Commission 4 hand-outs of presentation
- **12.05** Commission 5 hand-outs of presentation
- **12.06** Commission 6 hand-outs of presentation
- **12.07** Commission 7 hand-outs of presentation
- **12.08** Commission 8 hand-outs of presentation
- **12.09** Commission 9 hand-outs of presentation
- **12.10** Commission 10 hand-outs of presentation
- 12.11 Standards Network hand-outs of presentation
- **12.12** Young Surveyors Network hand-outs of presentation

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

**Decision**: The motion was adopted.

#### 13 REPORTS OF TASK FORCES 2013-2014

FIG has currently three Task Forces: 1) FIG Africa Task Force (2009 – 2014), chaired by Dr. Diane Dumashie (RICS); 2) Task Force on Surveyors and the Climate Change (2011-2014) chaired by Prof. John Hannah (NZIS); and 3) Task Force on Property and Housing (2011-2014) chaired by Prof. Chryssy Potsiou (TCG/HARSE).

Each Chair gave a short report on activities of the Task Force to the General Assembly.

#### Appendices to item 13: Task Force reports:

- **13.1** FIG Africa Task Force hand-outs of presentation
- 13.2 Task Force on Surveyors and the Climate Change hand-outs of presentation
- 13.3 Task Force on Property and Housing hand-outs of presentation

**Motion**: That the General Assembly adopts the tabled reports and records its thanks to the Chairs of the Task Forces and their members for their work and contributions.

**Decision**: The motion was adopted.

#### 14 REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS 2013-2014

14.1 <u>International Office of Cadastre and Land Records (Office International du Cadastre et du Régime Foncier) OICRF</u>

Mr. Christiaan Lemmen, Director of OICRF had prepared a report on the OICRF activities since the General Assembly in Abuja. He made a short report to the General Assembly.

**Appendix to item 14.1**: 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.

#### 14.2 <u>International Institution for the History of Surveying and Measurement, Permanent</u> <u>Institution of FIG</u>

Mr Jan de Graeve Director of the IIHSM had prepared a report on the IIHSM activities since the General Assembly in Marrakech. Mr John Brock made a short report to the General Assembly on his behalf.

**Appendix to item 14.2**: 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.

#### **15 REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2013-2014**

Mr. John Hohol, President of the FIG Foundation had prepared a report on the FIG Foundation activities from May 2013 to April 2014. He made a short report to the General Assembly.

Appendix to item 15: Report of the FIG Foundation activities 2013-2014

**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.

### 16 CO-OPERATION WITH THE UNITED NATIONS AND THE WORLD BANK

Since the 36<sup>th</sup> General Assembly, FIG has continued to collaborate with the World Bank and various agencies and structures within the United Nations. The activities with these bodies are in the President's report, **appendix to item 8**.

**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.

### 17 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 2013 was held in August 2013 on the sideline of the IAG Congress and VP Rudolf Staiger represented FIG. Prof. William Cartwright was retained as Chair for one further year. 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 a member of the International Council for Science (ICSU) and working together with ISO and International Valuation Standards Committee (IVSC) on standards. FIG also joined the IPMS (International Property Measurement Standards) Coalition.

Co-operation with international and regional organisations are in President's report, **appendix** to item 8.

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

**Decision**: The motion was adopted.

## 18 ELECTION OF PRESIDENT FOR 2015-2018 – PRESENTATION OF CANDIDATE

The Council has received one nomination for the post of FIG President: Chryssy Potsiou, Technical Chamber of Greece. The profile template of the candidate is attached to this agenda. In the first session of the General Assembly the candidate will be given time (not more than 5 minutes) to introduce herself and make a presentation focussing on her ideas, goals and agenda for furthering FIG's objects and global stature.

The election, notwithstanding that there is only one candidate, will take place at the second session of the General Assembly by blind votes on Saturday 21 June. 2014

**Appendices to item 18 and 29**: Nomination templates of candidate to FIG President 1.1.2015-31.12.2018: Ms Chryssy Potsiou, TCG, Greece

**Motion**: That the General Assembly notes the presentation of the candidate; make its careful consideration at the election during the second session of the General Assembly on the 21 June.

**Decision**: The motion was adopted.

## **19 ELECTION OF TWO VICE PRESIDENTS FOR 2015-2018 – PRESENTATION OF CANDIDATES**

The Council had received six nominations for the two posts of FIG Vice President:

a) Yerach Doytsher, The Association of Licensed Surveyors in Israel;
b)Diane Dumashie, RICS, United Kingdom;
c) Kate Fairlie, SSSI, Australia;
d)John Hannah, NZIS, New Zealand;
e) Mikael Lilje, Swedish Professionals for the Built Environment, Sweden; and
f) Rudolf Staiger, DVW, Germany

Council with deep regret accepted Yerach Doytsher's withdrawal of his candidacy. The profile templates of each candidate as well as presentation hand-outs are attached to these minutes. Each candidate introduced her/him and made 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 Saturday 21 June, one position at a time.

**Appendix to item 19 and 28**: Profiles of the candidates for FIG Vice President 1.1.2015-31.12.2018:

- Diane Dumashie, RICS, United Kingdom; handouts of presentation
- Kate Fairlie, SSSI, Australia; handouts of presentation
- John Hannah, NZIS, New Zealand; hand-outs of presentation
- Mikael Lilje, Swedish Professionals for the Built Environment, Sweden; hand-outs of presentation
- Rudolf Staiger, DVW, Germany

**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 21 June.

**Decision**: The motion was adopted.

## 20 DECISION OF THE VENUE FOR FIG WORKING WEEK 2017 – PRESENTATION OF CANDIDATES

The FIG Working Weeks are organised by FIG together with the 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 2017 Working Week.

The FIG Council has received three bids to host the FIG Working Week 2017:

- Finnish Association of Geodetic and Land Surveyors (MIL) and Finnish Association of Surveyors (MAKLI) with the National Land Survey of Finland (NLS) as partner in Helsinki
- Nepal Institution of Chartered Surveyors (NICS) in Kathmandu,
- Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR) in Hanoi

The Council had prepared a desktop summary on the bids and had also carried out an evaluation together with the FIG Office that was 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 decided to present all submitted bids to the General Assembly for its decision. The General Assembly was recommended to read the summaries and the bids carefully.

## Appendix to item 20 and 25:

Summary Report on the Bids for FIG 2017 Working Week Bidding documents for FIG 2017 Working Week:

- Finnish Association of Geodetic and Land Surveyors (MIL) and Finnish Association of Surveyors (MAKLI) with the National Land Survey of Finland (NLS) as partner in Helsinki
- Nepal Institution of Chartered Surveyors (NICS) in Kathmandu,
- Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR) in Hanoi

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 presented its evaluation and the impact on FIG on the various bids.

Decision on the venue of FIG 2017 Working Week was made at the second session of the General Assembly on 21 June. 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.

## Appendix:

- Presentation by Finnish Association of Geodetic and Land Surveyors (MIL) and Finnish Association of Surveyors (MAKLI) with the National Land Survey of Finland (NLS) as partner in Helsinki
- Presentation by Nepal Institution of Chartered Surveyors (NICS) in Kathmandu,
- Presentation by Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR) in Hanoi
- Presentation on FIG Council's evaluation

**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 June.

**Decision**: The motion was adopted

# 21 DECISION OF THE VENUE FOR FIG CONGRESS 2018 – PRESENTATION OF CANDIDATE

The FIG Congresses are organised by FIG together with the 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 funds. Therefore the Council has to ensure that any candidates are aware of the role of FIG and split of responsibilities for organising the Congress. This General Assembly will decide on the host for the 2018 Congress.

The FIG Council has received one bid to host the FIG 2018 Congress:

• Turkish Chamber of Survey and Cadastre Engineers in Istanbul, Turkey

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 considerations, as laid out in the invitation documentation, are described for comparison.

The summary report will not give a recommendation but it will provide useful information 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 Congress.

The Council has considered and decided to present this submitted bids to the General Assembly for its decision, notwithstanding that there is only one candidate. The General Assembly is recommended to read the summary and the bid carefully.

## Appendix to item 21 and 26:

Summary Report on the Bid for FIG 2018 Congress Bidding document for FIG 2018 Congress by the Turkish Chamber of Survey and Cadastre Engineers in Istanbul, Turkey Presentation by Turkish Chamber of Survey and Cadastre Engineers Video presentation Presentation on FIG Council's evaluation

The candidate was given not more than 10 minutes to make a presentation of their proposal and framework of the Congress and their bid. FIG Council will present its evaluation and the impact on FIG. Decision on the venue of FIG 2018 Congress will be made at the second session of the General Assembly on 21 June. FIG Council presented its evaluation of the bid.

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

**Decision**: The motion was adopted

## FRIDAY 20 JUNE, 2014

#### Friday, 20 June, 16:30-19:00 Tbc, Kuala Lumpur Convention Centre Presidents' Meeting (by invitation only)

### 22 FIG PRESIDENT'S MEETING

A memo of the Presidents Meeting will be distributed later to all presidents.

## SATURDAY 21 JUNE, 2014

### Saturday, 21 June, 09:00–13:00 and 14:00-16:00 Ballroom 1, Kuala Lumpur Convention Centre General Assembly, Second Session and Closing Ceremony

#### 23 ROLL CALL

Vice President Rudolf Staiger took the roll call. The roll call was 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 the staff of FIG Office. Since only member associations that have paid all their membership fees to the end of 2013 are allowed to vote at the meeting, a list of member associations that are not allowed to vote was published on the FIG web site **15 May 2014**. Members who paid their arrears at the General Assembly will also be allowed to vote.

## Appendix to items 2 & 23: Roll Call

Appendix to items 2 & 23: List of member associations that are not allowed to vote at the General Assembly because of unpaid membership fees for 2013

After the roll call, 58 members out of 101 members were present and 56 were allowed to vote with a total of 74 votes in accordance with the amendments to FIG Statutes Item 6.6.

Motion: Those members present are recorded in the minutes.

**Decision**: The motion was adopted.

## 24 MEMBERSHIP

There were no new membership issue to bring before the General Assembly.

**Motion**: That the General Assembly notes that Council has no new membership issue to bring before the General Assembly.

**Decision**: The motion was adopted.

## 25 DECISION ON THE VENUE FOR 2017 FIG WORKING WEEK

Candidates for FIG 2017 Congress have made their presentations in the first session of the General Assembly and FIG Council has presented its evaluation. The decision was made between:

- Finnish Association of Geodetic and Land Surveyors (MIL) and Finnish Association of Surveyors (MAKLI) with the National Land Survey of Finland (NLS) as partner in Helsinki;
- Nepal Institution of Chartered Surveyors (NICS) in Kathmandu,
- Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR) in Hanoi.

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

A total of 73 votes were cast and the results of the ballot was as follows -

- Candidate A (Finnish Association of Geodetic and Land Surveyors (MIL) and Finnish Association of Surveyors (MAKLI) with the National Land Survey of Finland (NLS) as partner in Helsinki): 50 votes
- Candidate B (Nepal Institution of Chartered Surveyors (NICS) in Kathmandu): 8 votes; and
- Candidate C (Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR) in Hanoi): 15 votes.

Motion: This General Assembly decides the host and venue for FIG 2017 Working Week.

**Decision**: General Assembly decided that the 2017 FIG Working Week would be coorganized together with the Finnish Association of Geodetic and Land Surveyors (MIL) and Finnish Association of Surveyors (MAKLI) with the National Land Survey of Finland (NLS) as partner in Helsinki.

### 26 DECISION ON THE VENUE FOR 2018 FIG CONGRESS

The sole candidate, Turkish Chamber of Survey and Cadastre Engineers, for hosting the FIG 2018 Congress in Istanbul, Turkey has made their presentation in the first session of the General Assembly. The General Assembly was to affirm the sole candidate by voting to host the FIG 2018 Congress in Istanbul, Turkey.

A total of 73 votes were cast and the result of the ballot was 72 votes in favour and 1 vote against.

Motion: That the General Assembly decides on the host and venue of FIG 2018 Congress

**Decision**: General Assembly decided that the 2018 FIG Congress would be co-organized with the Turkish Chamber of Survey and Cadastre Engineers in Istanbul, Turkey

#### 27 APPOINTMENTS OF COMMISSION CHAIRS 2015-2018

According to the FIG Statutes and Internal Rules the General Assembly elected Commission Chairs Elect at its General Assembly in 2012 in Rome, Italy. These Chairs Elect will then become Chairs of the Commissions for the next term of office, 2015-2018. Thus the General Assembly shall appoint at this meeting Commission Chairs for the term of office 1.1.2015-31.12.2018. Their respective nominating member associations have reconfirmed all nominated Chairs 2015-2018.

Appendix: Nomination form from 2012 and reconfirmation by association:

Commission 1:	Mr. Brian J. Coutts, NZIS, New Zealand
Commission 2:	Ms. Liza Groenendijk, GIN, Netherlands
Commission 3:	Mr. Enrico Rispoli, CNGeGL, Italy
Commission 4:	Ms. Angela Kesiena Etuonovbe, NIS, Nigeria
Commission 5:	Prof. Volker Schwieger, DVW, Germany
Commission 6:	Dr. Ivo Milev, USLMB, Bulgaria
Commission 7:	Ms. Gerda Schennach, OVG, Austria
Commission 8:	Mr. Kwame Tenadu, GhIS, Ghana
Commission 9:	Prof. Liao Jinping (Patrick), CIREA, China PR
Commission 10:	Mr See Lian Ong, RICS, United Kingdom

Young Surveyors Network: Ms. Eva-Maria Unger, OVG, Austria

**Motion**: That General Assembly unanimously appoints for term of office 1.1.2015-31.12.2018 as follows:

- Commission 1: Mr. Brian J. Coutts, NZIS, New Zealand
- Commission 2: Ms. Liza Groenendijk, GIN, Netherlands
- Commission 3: Mr. Enrico Rispoli, CNGeGL, Italy
- Commission 4: Ms. Angela Kesiena Etuonovbe, NIS, Nigeria
- Commission 5: Prof. Volker Schwieger, DVW, Germany
- Commission 6: Dr. Ivo Milev, USLMB, Bulgaria
- Commission 7: Ms. Gerda Schennach, OVG, Austria

Commission 8:	Mr. Kwame Tenadu, GhIS, Ghana
Commission 9:	Prof. Liao Jinping (Patrick), CIREA, China PR
Commission 10:	Mr See Lian Ong, RICS, United Kingdom
Young Surveyors Net	work: Ms. Eva-Maria Unger, OVG, Austria

**Decision**: The motion was adopted

### 28 ELECTION OF TWO VICE PRESIDENTS FOR 2015-2018

This General Assembly will elect two Vice Presidents for the term of office 1.1.2015-31.12.2018. The election took place between: Diane Dumashie, RICS, United Kingdom; Kate Fairlie, SSSI, Australia; John Hannah, NZIS, New Zealand; Mikael Lilje, Swedish Professionals for the Built Environment, Sweden; and Rudolf Staiger, DVW, Germany.

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

74 votes were cast and the results of the ballot were as follows:

1 <sup>st</sup> Vice President 1 <sup>st</sup> vote:	
<ul> <li>Candidate A (Diane Dumashie):</li> </ul>	19/74
<ul> <li>Candidate B (Kate Fairlie):</li> </ul>	7/74
<ul> <li>Candidate C (John Hannah):</li> </ul>	3/74
<ul> <li>Candidate D (Mikael Lilje):</li> </ul>	15/74
<ul> <li>Candidate E (Rudolf Staiger):</li> </ul>	30/74
1 <sup>st</sup> Vice President 2 <sup>nd</sup> vote:	
<ul> <li>Candidate 1 (Diane Dumashie):</li> </ul>	28/74
<ul> <li>Candidate 2 (Rudolf Staiger):</li> </ul>	46/74
2 <sup>nd</sup> Vice President 1 <sup>st</sup> vote:	
<ul> <li>Candidate 1 (Diane Dumashie):</li> </ul>	37/74
<ul> <li>Candidate 2 (Kate Fairlie):</li> </ul>	10/74
<ul> <li>Candidate 3 (John Hannah):</li> </ul>	1/74
<ul> <li>Candidate 4 (Mikael Lilje):</li> </ul>	24/74
<ul> <li>Invalid:</li> </ul>	2/74
2 <sup>nd</sup> Vice president 2 <sup>nd</sup> vote:	
<ul> <li>Candidate A (Diane Dumashie):</li> </ul>	39/74
• Condidate D (Mileal Lilia)	25/71

Candidate B (Mikael Lilje): 35/74

Motion: This General Assembly elects two Vice Presidents for the term 2015-2018.

**Decision**: The General Assembly elected Rudolf Staiger (DVW, Germany) and Diane Dumashie (RICS, United Kingdom) as Vice Presidents for FIG for the term 2015-2018.

#### 29 ELECTION OF PRESIDENT 2015-2018

General Assembly to affirm the sole candidate, Ms Chryssy Potsiou, nominated by TCG, Greece by ballot. 74 votes were casted and the result was 62 votes in favour, 11 votes against and 1 invalid vote.

Motion: This General Assembly elects a president for the term 2015 – 2018.

**Decision**: The General Assembly elected Prof. Chryssy Potsiou as President for FIG for the term 2015-2018.

# **30 REPORTS FROM ASSOCIATION, AFFILIATE, ACADEMIC AND CORPORATE MEMBERS FORUM (IF ANY)**

During the congress there was Member Association Forum, the Director General's/Affiliate Members Forum (in cooperation with UN-HABITAT/GLTN), Academic Members Forum (in cooperation with FAO) and Corporate Members Meeting. Brent Jones, ESRI, reported back to the General Assembly from the Corporate Members Meeting and FIG Commission 2 Chairelect, Ms Liza Groenendijk provided a verbal report for the Academic Members Forum.

In addition, at the Joint FIG/UN-GGIM-AP Technical Sessions on Global Geodetic Reference Frame, a joint Statement was adopted. The UN-GGIM-AP/FIG Statement on Global Geodetic Reference Frame recognized the growing need for an accurate and stable Global Geodetic Reference Frame to support, *inter alia*, earth observation, including sea level and climate change monitoring, natural hazard and disaster management and a wide range of other activities in public and private sectors throughout the World, contributing towards inclusive social progress, environmental sustainability and economic development.

The Statement was adopted by the UN-GGIM-AP Executive Board at its meeting on  $20^{\text{th}}$  June during the XXV FIG Congress and urges -

- member states and their representatives within UN-GGIM-AP together with all member states and their representatives at the fourth session of the Committee of Experts on Global Geospatial Information Management, to support the approval of a draft resolution on Global Geodetic Reference Frame for Sustainable Development, and to submit to the 2013-14 session of the UN General Assembly for final adoption; and
- FIG member associations and all other membership groups of FIG, to take appropriate initiatives to inform and encourage the representatives of their respective countries to the fourth session of the Committee of Experts on Global Geospatial Information Management, to support the approval of the draft resolution on Global Geodetic Reference Frame for Sustainable Development and its submission to the UN General Assembly.

#### **Appendix:**

- Report from Corporate Members Meeting Presentation by Brent Jones
- UN-GGIM-AP/FIG Statement on Global Geodetic Reference Frame

**Motion**: That the General Assembly records the report presented and adopts the Statement on Global Geodetic Reference Frame.

**Decision**: The reports presented were recorded and the General Assembly adopted the UN-GGIM-AP/FIG Statement on Global Geodetic Reference Frame by acclamation.

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

Commission Officers (ACCO), Commissions, Networks and Task forces had their annual and other administrative meetings in Kuala Lumpur. The incoming commission chairs reported back to the General Assembly on any issues that may need the endorsement of or are of general interest to the General Assembly.

Appendix: Reports from:

- Commission 3 Presentation by Enrico Rispoli
- Commission 5 Presentation by Prof. Volker Schwieger
- Commission 9 Presentation by Prof. JinPing Liao
- Young Surveyors Network Presentation by Eva-Maria Unger

Motion: That the General Assembly records the reports presented.

**Decision**: The General Assembly recorded the reports

## **32 REPORTS FROM PERMANENT INSTITUTIONS (IF ANY)**

The permanent institutions had various activities during the congress and may report back to the General Assembly on any matters of general interest. IIHSM reported back on its History Symposium that was held Friday 20 June as part of the Congress. IIHSM Director and FIG Honorary Member Jan de Graeve requested General Assembly's concurrence to support on-going effort to accord UNESCO recognition for William Light's Adelaide City Plan, the basis of the founding, development and growth of the city. He also handed over a copy of that plan to FIG.

**Motion**: That the General Assembly records the report presented and considers IIHSM's effort for UNESCO recognition for William Light's Adelaide City Plan.

**Decision**: The reports presented were recorded and the General Assembly supported IIHSM's request by acclamation

## **33 REPORT FROM FIG FOUNDATION (IF ANY)**

FIG Foundation board held their annual meeting during the Congress. The Foundation organized a special session on how to write a good grant application. FIG foundation had sponsored 8 young surveyors to the congress from various parts of the world. The candidates were selected from applications they had submitted. The participants were introduced to the General Assembly. Part of the support required each of them to present papers including on the future challenges for Young Surveyors at a special session.

**Motion**: That the General Assembly records the report including the 8 young surveyors sponsored by the Foundation

**Decision**: The motion was adopted and the General Assembly applauded the efforts of the FIG Foundation in encouraging and supporting young surveyors to be involved in FIG.

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

President Jeffrey Needham of NZIS and Simon Ironside, Chair of the Local Organising Committee gave a presentation on preparations of FIG Working Week 2016 that included a video.

### Appendix:

- Presentation by NZIS
- Video on 2016 FIG Working Week

Motion: That the General Assembly records the report.

**Decision**: The motion was adopted

#### 35 REPORT ON THE FIG WORKING WEEK 2015 IN SOFIA, BULGARIA

President Yanakiev Angel Krumov and Co-Conference Director Zlatan Zlatanov from the Chamber of Graduated Surveyors in Bulgaria gave a presentation on preparations of FIG Working Week 2015.

#### **Appendix:**

- Presentation by CGS, Bulgaria
- Video on 2015 FIG Working Week

Motion: That the General Assembly records the report.

**Decision:** The motion was adopted

## **36 OTHER MATTERS (WITH PRIOR NOTICE GIVEN TO COUNCIL)**

FIG Council had received a request to table matters that may be of general interest to the General Assembly.

Jean-Yves Pirlot and John Hohol, CLGE and NSPS submitted a request to discuss their joint proposal on an "International Day of the Surveyor". John Hohol introduced the matter and informed that it was changed to "International Week of the Surveyor". The hope is to make this a Week for surveyors globally. The request is for FIG member associations and/or regional structures within FIG to similarly adopt that week in March as the "Week of the Surveyor" and for FIG to work towards an "International Week (or Day) of the Surveyor".

Appendix: Presentation on Global Surveyors Week

**Motion**: That the General Assembly records the report and considers the request made by CLGE and NSPS.

**Decision:** The report presented was recorded and the General Assembly supported the request that FIG do work towards an "International Week (or Day) of the Surveyor by acclamation.

## 37 PRESENTATION OF CERTIFICATES OF APPRECIATION

The President acknowledged all involved in the preparation, organizing and delivery of the XXV FIG Congress including the 37th FIG General Assembly. Certificates of appreciation were handed out including to the Principal Supporters and the four Platinum Sponsors. AALSM President Mohammad Azmi and Co-Congress Director Hasan Jamil accepted certificates of appreciation on behalf of the LoC.

## **CLOSING CEREMONY**

The President presented his closing address that summarized the main outcomes of the XXV FIG Congress as well the four-year Council work plan. In his closing address, the President also announced that FIG has entered into a period of transition, from this current Council to the next, led by President-elect Chryssy Potsiou.

## Appendix:

Handouts of the President's Closing Address.

At the closing ceremony the FIG banner was handed over by Mr. Mohammad Azmi Mohd Zin president of AALSM to Mr. Yanakiev Angel Krumov, President of the Chamber of Graduated Surveyors in Bulgaria and Co-Conference Director Zlatan Zlatanov. The FIG Working Week 2015 will be held in Sofia on 17-21 May 2015.

President CheeHai TEO adjourned the 37th FIG General Assembly at the XXV FIG Congress closing ceremony.



**Geo-Informatie Nederland** Postbus 1058 3860 BB Nijkerk

> T 033-247 3415 F 033-246 0470 E info@geo-info.nl W www.geo-info.nl

President CheeHai Teo **FIG Office** Kalvebod Brygge 31-33 DK-1780 Copenhagen V Denmark

Nijkerk, November 4th 2014

Dear President CheeHai Teo,

On behalf of Geo-Information Netherlands (GIN), it is my great pleasure to nominate Christiaan Lemmen as an Honorary Member of FIG.

The federations' statutes define an Honorary Member as someone who has materially assisted the development and promotion of the surveying profession at an international level. I believe that Christiaan Lemmen has fulfilled this role admirably and professionally over a period of more than 20 years' involvement with FIG.

Since 2010, Christiaan has been the director of OICRF, a permanent Institution of FIG. In this task, he has built up an impressive digital Reference Centre for publications on Cadastre and Land Records, which holds more than 8000 documents and has more than 100 daily downloads of documents.

Also Christiaan has been the Chair of working group 7.1 of commission 7 (on pro poor land tools) for the last eight years. This has resulted in an impressive amount of publications, conferences, international events and an excellent profiling of FIG.

With his work on the Land Administration Domain Model (LADM) he has proven to be fully committed to the subject of Cadastre and land Administration. This work has resulted in a PhD Thesis on LADM and the certification of LADM as a world wide standard, known as ISO 19152.

Beyond FIG, Christiaan Lemmen received in the Netherlands the "Professor Tienstra prijs" of the Netherlands Commission of Geodesy (NCG) in 2012. His professional career at both Kadaster and ITC - TU Twente have brought him all over the world, providing advisory services on all continents with a special focus on pro poor land tool developments.

#### GIN



The Netherlands

GIN Geo-Informatie Nederland Postbus 1058 3860 BB Nijkerk

> T 033 – 247 3415 F 033 – 246 0470 E info@geo-info.nl W www.geo-info.nl

GIN believes that Christiaan has significantly furthered the work of FIG and of geodesy internationally, and hopes that this nomination will be received favourably by the Council and General Assembly.

Yours sincerely, Peter Hoogwerf MBA, LL.M **President GIN** 

IBAN: NL55 RABO 0395 2784 30 \* BIC: RABONL2U \* Btw nr.: NL8117.63.973.B01 \* KvK. Nr.: 30186871



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

## **OICRF Annual Report 2014**

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 comparatative 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 2014

OICRF maintains a digital library that contains 12.087 publications (December 31, 2014). The library has been further restructured and digitised in 2014. OICRF contents are available in different languages. At the moment there are 268 publications in Dutch, 557 publications in French, 552 publications in German, 64 publications in Italian, 22 publications in Russian, 269 publications in Spanish and 10.355 publications in English. All of the available documents and the most recent publications can be accessed electronically at **www.oicrf.org**. In 2014 the digital library got about 19.851 visitors. About 13.099 papers have been downloaded. This number is based on the application of Google Analytics; visits from search engines are excluded in this.

Initiatives started in relation to developments in keeping overview in different land rights worldwide. This will be discussed during the World Bank Conference on Land and Poverty 2015.

#### 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

Ms Pauline van Elsland

OICRF secretary

#### **OICRF** Comparatative Studies in 2014

Lemmen, C.H.J. and de Zeeuw, K. (2014) Issues related to land administration. In: Politiques foncières et bonne gouvernance, proceedings of an international symposium and training/ ed by C. Galpin. FIG/FGF, 21-25 October 2013, Yaounde, Cameroon.Paris: Fédération des Géomètres Francophones, 2013, pp. 15-20. French version Questions relatives à l'administration foncière, pp. 11–16.

Navarra, D.D. and van der Molen, P. (2014) A global perspective on cadastres & geo - ict for sustainable urban governance in view of climate change. In: ACE: Architecture, City and Environment = Arquitectura, Ciudad y Entorno: open access, 8(2014)24, February 2014, pp. 59-72.

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Nyamdorj, B., van der Molen, P. and Tuladhar, A.M. (2014) Land privatization in urban Mongolia: an observation. In: Survey Review, 46 (2014)335, March 2014, pp. 90-96.

Enemark, S., Bell, K.C., Lemmen, C.H.J. and McLaren, R. (2014) Fit-For-Purpose land administration: open access e-book. Copenhagen, International Federation of Surveyors (FIG), March 2014. FIG publication 60, ISBN: 978-87-92853-11-0.

Bennett, R.M., Alemie, B.K., Yimer, F.A., Zevenbergen, J.A. and Lemmen, C.H.J. (2014) Fit - for - purpose land administration and the post - 2015 agenda: Lessons from urban and rural Ethiopia + powerpoint. In: proceedings of Annual World Bank Conference on Land and Poverty 2014, 24-27 March 2014, Washington DC, United States of America. 16 p.

Lemmen, C.H.J. (interviewer) (2014) Bridge together: GIM international interviews Burak Keser, head of cadastral development in Turkey. In: GIM International, Volume 28, April 2014, pp. 16-19.

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Van der Molen, P. (2014) Cadastre 2014: a beacon in turbulent times. In: Cadastre 2014 and beyond / ed by D. Steudler. Copenhagen: International Federation of Surveyors (FIG), May 2014. FIG publication 61, pp. 5-9. ISBN: 978-87-92853-13-4.

Van der Molen, P. (2014) 'De Soto' revisited. In: GIM International, Volume 28, June 2014, pp. 6.

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Enemark, S., Bell, K., Lemmen, C.H.J. and McLaren, R. (2014) Building fit- for - purpose land administration systems. In: Engaging the challenges, enhancing the relevance: proceedings of XXV FIG Congress, 16-21 June 2014, Kuala Lumpur, Malaysia. FIG, 2014. ISBN: 978-87-92853-21-9. 16 p.

Van der Molen, P. and Mitchell, D. (2014) Engaging the challenge of climate change, enhancing the role of land surveyors in land use change and carbon credit markets. In: Engaging the challenges, enhancing the relevance: proceedings of XXV FIG Congress, 16-21 June 2014, Kuala Lumpur, Malaysia. FIG, 2014. ISBN: 978-87-92853-21-9. 18 p.

Van der Molen, P. (2014) Engaging the challenge of rapid urbanization and slum upgrading and enhancing the role of land surveyors. In: Engaging the challenges, enhancing the relevance: proceedings of XXV FIG Congress, 16-21 June 2014, Kuala Lumpur, Malaysia. FIG, 2014. ISBN: 978-87-92853-21-9. 25 p.

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Friis-Hansen, L. and Lemmen, C.H.J. (2014) Engaging the challenges, enhancing the relevance: the XXV FIG congress 2014, 16-21 June 2014, Kuala Lumpur, Malaysia. In: GIM International, Volume 28, August 2014, pp. 28-29.

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#### REPORT OF THE FIG INTERNATIONAL INSTITUTION FOR THE HISTORY OF SURVEYING & MEASUREMENT (IIHSM) 2014-2015

Since the general Assembly of Kuala Lumpur, where John Brock presented a fascinating paper on the history of surveying in early China, we then had a one week congress in Australia on Norfolk island which is in the middle of the Pacific Ocean. It is a remarkable historic place as it houses the descendants of the mutineers of the Bounty. Half of the papers were presented by local historians and political representatives and half by surveyors and visitors with an interest in the historical aspects of surveying,. Congratulations are expressed to John and his partner for the very fine organization.

Alan Wright (1934-2013) whose death was noted in the last Report, has left a big hole in the organization with the loss of his presence in our working group. The IIHSM has been able to find a home for his vast collection of Electronic Distance Measuring (EDMs) devices which have been presented by both his family and Malcolm Draper to the Ghent University in Belgium. This should be of interest to the present and future generation of student surveyors and hopefully also attract visitors to the University Museum. Jim Smith, Alan and I had for many years looked for a proper place to house this important collection. A selection of the collection was on show to the public during the 2014 summer conference of the ICA History of Cartography Section at the university premises. In due course there will be a permanent display when the building works at the University are complete. It has joined the display of angle measuring instruments we saved when it introduced the studies of surveying at Ghent University some 15 years ago.

Last summer the Group met the Struve Arc committee to help progress the project to enhance the Struve Arc by incorporating Central European countries and thence over the Mediterranean Sea and down the Arc of the 30<sup>th</sup> meridian to South Africa. The full Cape to Cape arc (North Cape to Cape Province) was the original dream of Sir David Gill and Struve's son Otto. That meeting had been planned originally to be in the Ukraïne but that had to be cancelled after Russian troops had invaded the country and annexed Crimea. Hence the re-scheduling of the meeting to Vilnius.

We continue to find and study documentation on the arc measurements and were pleased to find an original signed copy by Wilhelm Struve of his Report of 1867, dedicated to the Ambassador of Sweden Baron Wrede. The Struve arc is also being studied by other scholars: *The Struve Geodetic Arc: Pathway to Global recognition* has been published in both Russian and English by Vladimir Mkrtychan; and there could soon be a publication on Arc measurement in Spanish from scholars in Spain.

Further work continues on other possible publications on Arc measurements both internationally, historically and specifically in Africa. These would join the English translation of Struve's Reports on the Arc that bears his name that is now a World Heritage Monument. The IIHSM was instrumental in translating over 1000 pages!! from the French and publishing the two volumes several years ago.

We prepared the Sofia meeting and our History Group, which was created officially as IIHS&M in 1994, so in 2014 celebrated its 20<sup>th</sup> anniversary with the same Board, although unofficially created already in Sofia in 1983 under the Peevsky Presidency. Then it was

housed in Commission I and at that time we issued the first FIG publication of the definition of the Surveyor, der Vermessungsingenieur, le géomètre –Expert, in all three languages of FIG. We hope this will be reissued by this FIG Bureau.

With the loss of Alan Wright and other Board members getting older, we would welcome interested colleagues to come and join our team.

We wish the Bureau and our colleagues a very successful working week.

Jan De Graeve director IIHS&M

# Appendix to item xx

Report to the 38th General Assembly FIG Working Week, Sofia, May 2015

# FIG Foundation Report of Activities 2014



### 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 2014 was as follows:

- John Hohol, President of the FIG Foundation (USA)
- Prof. Michael Barry, Director (Canada)
- Prof. Steve Frank, Director (USA)
- Prof. Chryssy Potsiou, Director (Greece)
- 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 2014

The board held its official meeting in Kuala Lumpur, Malaysia during the 2014 Congress. Furthermore the board has been in frequent contact through email.

At the meeting Young Surveyors were represented by Chair Kate Fairlie and Chair Elect Eva-Maria Unger, who thanked FIG Foundation for the cooperation throughout the last years.

Eva Maria Unger informed that CNGeGL, the National Council of Italian Surveyors, has decided not to continue to offer the International Training Course on Topography for Young Surveyors. Everyone expressed gratitude to the Italians for having offered the course and agreed that it is very unfortunate that this great opportunity for young surveyors to meet and experience new knowledge is no longer available. There was a discussion of the funding of the Young Surveyors Meetings, if it is permanent. It was agreed that the funding should not become permanent and should not exclude others of being supported.

At the meeting in Kuala Lumpur the board expressed sincere thanks to Keith Hofgartner representing FIG Platinum Corporate Member Trimble Navigation for generous continued support of the foundation including sponsorship of the FIG Foundation Dinner.

John Hohol informed that Trimble had had several requests from a school in Burkina Faso about funding of equipment. Trimble asked FIG Foundation to cosponsor a donation. To make sure that funding will help to improve the learning environment it was decided that Trimble is to deliver an analysis of the state of the art of the school.

# 4. Grants 2014

In 2012 the FIG Foundation decided on two initiatives: the first being FIG Foundation Academic Research Grants which will provide for research grants of up to 20,000 euros spread over two years; the second initiative is the FIG Foundation PhD Scholarships which will provide scholarships of up to 4,000 euros to PhD students. In 2013 it was decided to reannounce the grants. Deadline for sending application was extended to 31 March 2014 for the Academic Research Grants and 1 February 2014 for the PhD Scholarships.

No applications were received and it was decided to re-publish the call for grants. Deadline for applications for the FIG Foundation Academic Research Grant is 31 March 2015. For the FIG Foundation PhD Scholarship it was 1 February 2015.

At the same time it was discussed how to attract applicants. Michael Barry had sent a proposal to tightening up the conditions. The proposal was discussed and implemented for the 2015 applications. The updated conditions are published on the FIG website. The FIG Academic Research Grant: http://www.fig.net/figfoundation/2015\_research\_grants.htm, the FIG Foundation PhD Scholarship is published on http://www.fig.net/figfoundation/2015\_phd\_scholarship.htm.

Further to attract applicants and to ensure the quality of the applications Michael Barry had a special session on "How to write an application" during the 2014 Congress in Kuala Lumpur.

In 2014 the FIG Foundation awarded eight **Young Surveyors Conference Fellowships** to provide funding for eight young surveyors from the six World regions plus two additional from developing countries to cover the costs to attend and participate in the FIG Congress in Kuala Lumpur. These were awarded to:

- Odil AKBAROV (Uzbekistan),
- Asmae AZZIOUI (Morocco),
- Chandan DAS (Nepal),
- Jonathan GUSTAFSON (USA)
- Odkhuu KHALZAN (Mongolia)
- Melissa ROBERT (Uruguay)
- Irena ROJKO (Slovenia)
- Emily TIDEY (New Zealand)

Irena Rojko, Asmae Azzioui, Odil Akbarov, Chandan Das and Melissa Robert also attended the FIG-UN-Habitat/GLTN Train the Trainers Workshop on Social Tenure Domain Model (STDM) that was held just prior the FIG Working Week.

**Simon Hull**, University of Cape Town, South Africa received a scholarship of 4000 EUR to conduct a research trip to the Netherlands and Germany during September and October 2014. The report is published at the FIG website http://www.fig.net/news/news\_2014/research\_trip\_2014.htm.

Jamal Browne, The UWI St. Augustine, Trinidad And Tobago was supported with USD1000 (approx. 730 EUR) to support his participation at the World Bank Land & Poverty, March 2014 Conference. The report is published at the FIG website http://www.fig.net/news/news\_2014/wb\_report\_browne.htm.

FIG Foundation also provided funding to support participation of the **FIG Young Surveyors Network by Eva-Maria** Unger to go to the World Bank Land & Poverty Conference, March 2014, in Washington, DC and the FIG Young Surveyors North American Meeting April 2014 in San Diego, California.

The **National Society of Professional Surveyors (NSPS)**, USA was supported with 2,500 USD to conduct the Young Surveyors meeting in North America. **CNGeGL**, Italy was supported with 2000 EUR to help Young Surveyors to attend the Commission 3 Workshop 4-7 November 2014 in Bologna, Italy.

The 2<sup>nd</sup> FIG Young Surveyors European Meeting in Berlin, Germany was support with 5,000 EUR. Six Young Surveyors were granted a scholarship:

- Xhemail ISLAMI (Macedonia)
- Eftychia KALOGIANNI (Greece)
- Ferah Pırlanta KÖKSAL (Turkey)
- Jakov MAGANIĆ (Croatia)
- Milos PANDZIC (Serbia)
- Eva Maria Unger (Austria)

In total 2,405 EUR of the 5000 EUR was used. Thus 2,595 EUR is transferred to the Young Surveyors for 2015.

In total 39.940 EUR was spent in 2014.

#### 5. Donations in 2014

Kuala Lumpur, Malaysia:	EUR
Voluntary donations	1,818.00
Foundation Dinner, registration fee and	
donation from Local Organisers	38,264.00
Total	40,082.00

Interest	
Interest 2014	<u>2,321</u>
Income FIG Foundation 2013	42,403

# International voluntary donations at FIG Congress 2014, Kuala Lumpur, Malaysia:

#### **Donations between 100-130 EUR**

Charles, Charlesye	Nigeria
Cheng, Bin Cheah	Malaysia
Ehiorobo Jacob, Odeh	Nigeria
Foster,Robert	United States
Hohol, John	United States
Mat Deris, Ismail	Malaysia
Schroth, Ralf	Germany

#### **Donations between 50-99 EUR**

Ab Wahab, Rosli	Malaysia
Brock, John	Australia
Curnow, Jim	Australia
Djaba, Stephen	Ghana
Hassan, Zulkifli	Malaysia
Hong, Yuen Ng	Malaysia
Jibril Ibrhim, Usman	Nigeria
Mohammed, ALEM	Algeria
Nwokoro, Vincent. Ezeani, Nwafor	Nigeria
Ofori Buadu, Jones	Ghana
Onsrud, Helge	Norway
Orimoloye, Tunde	Nigeria
Sinkner, Robert	Czech Republic
Talvitie, Juha	Finland
Van Der Molen, Paul	Netherlands

#### **Donations Between 1 – 49 EUR**

Akerele Rufus, Olugboyega	Nigeria
Cheong Heyan, Ong	Malaysia
Dabiri, Thomas	Nigeria
David, Taiwo	Nigeria
Davis, Dexter	Trinidad and Tobago
De Zeeuw, Kees	Netherlands
Gertrude Nnanjar, Njar	Nigeria
Hussain Mohamad, Husni	Malaysia
Kam Loong, Mok	Malaysia
Kaufmann, Juerg	Switzerland
Kopacik, Alojz	Slovakia (Slovak Republic)

Lemmen, Christiaan	Netherlands
Longchik, Azman	Malaysia
Marete, Julius	Kenya
Ming Kee, Chun	Malaysia
Mjoes Leiv, Bjarte	Norway
Newmarch, Peter	South Africa
Newnham, Leonie	Australia
Nilipovskiy, Vasily	<b>Russian Federation</b>
Oluwajuyitan, Adenike	Nigeria
Rudas, Gloriela	Panama
Smejkal, David	Czech Republic
Soni, Stella	Nigeria
Strande, Kari	Norway
Suárez Verdecia, Andrés	Cuba
Syed Abd.Rahman Syed, Mohammed	Malaysia
Tchuneva, Klara	Bulgaria
Tondu, John	Nigeria
Tosa, S.E Ninkov	Serbia
Wijayanti, Miim	Indonesia
Yanakiev, Alexander	Bulgaria
Yanakiev, Angel	Bulgaria

The list is sorted alphabetically.

#### 6. Grants 2015

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 31 March 2015.

The FIG Foundation PhD Scholarships will be provided of up to 4,000 EUR to PhD students. Successful applicants will qualify for a further grant of up to 3,000 EUR to attend and present a peer reviewed paper at a FIG conference. Conditions are that applicants shall be studying for a PhD degree and registered solely in a surveying/geomatics academic programme that teaches surveying in a country listed by the World Bank as a low-income, lower-middle or upper-middle income economy. Deadline 1 February 2015.

It was furthermore decided that for the FIG Working 2015 in Sofia, Bulgaria there will be FIG Foundation grants to young surveyors of up to 5,000 EUR plus 2,595 EUR transferred from 2014, in total 7,595 + 5 EUR = 7,600 EUR. There are three options of application

- apply for funds from the FIG Foundation to help cover travel costs to Sofia to attend the 3rd FIG Young Surveyors European Meeting (10 funds available with an average value of 200 Euro)
- apply for funds to cover the registration fees of the 3rd FIG Young Surveyors European Meeting and the FIG Working Week Sofia, including the Foundation dinner and FIG gala dinner (6 funds available with an average value of 400 Euro)
- apply for funds to help cover accommodation costs and registration fees for the 3rd FIG Young Surveyors European Meeting and FIG Working Week, including the FIG Foundation dinner and FIG gala dinner (4 funds available with an average value of 800 Euro)

Deadline 25 March 2015.

# 7. Accounts 2014

The income statement for 2014 and the balance sheet at 31 December 2014 are attached to this report.

The total income in 2014 was 42,403 EUR and expenses 39,940 EUR which gives the net result of 2,463 EUR.

The total assets are 231,840 EUR.

The FIG Foundation would like to sincerely thank all those who have generously donated in 2014 in support of the FIG Foundation.

The FIG Foundation would also like to sincerely thank Steven Frank and Chryssy Potsiou for their participation and support as members of the FIG Foundation Board of Directors 2011-2014. Also many thanks to Trimble Navigation/Keith Hofgartner for their generous contribution and support of the FIG Foundation.

**John Hohol** President of the FIG Foundation March 2015

Web page: www.fig.net/figfoundation

# Income Statement for 1 January - 31 December 2014 for the FIG Foundation

	<u>2014</u>	<u>2013</u>
	EURO	EURO
Donations		
Personal donations	1.818	1.032
Other donations	11.092	7.272
FIG Conferences	27.172	25.000
Financial income	2.321	1.863
Total Income	42.403	35.167
Expenses		
Grants	(39.940)	(21.981)
Total Expenses	(39.940)	(21.981)
- Final Result (Deficit)	2.463	13.186

# Balance Sheet at 31 December 2014 for The FIG Foundation

• •	<u>2014</u>	<u>2013</u>
Assets	EURO	EURO
Current assets:		
Receivables:		
Account receivable, FIG	225.117	222.758
Other receivables	1.156	1.156
Cash at hand and bankaccounts	5.567	5.463
Total current assets	231.840	229.377
Total assets	231.840	229.377
Equity and liabilities		
Equity:		
Equity at the beginning of the year	228.377	215.191
Retained earnings	2.463	13.186
Total equity	230.840	228.377
Liablities:		
Other debt	1.000	1.000
Total liabilities	1.000	1.000
Total equity and liabilities	231.840	229.377

# FIG COUNCIL WORK PLAN 2015-2018

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

#### 1. VISION

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

#### 2. INTRODUCTION

FIG supports international collaboration among its members for the progress of surveying in all its fields and applications.

FIG, through dedicated leaderships and the long and systematic work of its members, has established a close cooperation with the UN, the WB 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 build environment.

For the 2015-2018 time period FIG council agreed on an overall theme for the next period of office:

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

Through the years almost every incoming administration of FIG has acknowledged "*change*" as a reality of our world. Now the changes we face are more than technological; they are global and they are fast. Change is inevitable; as professionals we cannot manage change, we can only manage the way we respond to change. What we traditionally do, as professionals, is to seek the relevance of our profession and to improve our efficiency to respond to change.

Since the steel tape, the logarithms, the theodolite, the introduction of triangulation and the least squares adjustment theory, the cadastral maps, the revolution of photogrammetry, the electronic distance measurement, the use of telurometer, up to the satellite images and the GNSS revolution, the GIS and spatial information management, the UAVs and mobile devices, and our leading role in modern cadastres and marine information systems, our increased involvement in land governance, especially in land administration, land management, land and property valuation and quantity surveying, FIG and "the *surveying profession*" has continuously changed aiming to better serve a spatially enabled society.

The difference today lies in the fact that "*timing*" is introduced as the crucial factor in our theme. We are living in an era of constant and rapid change: changing technology that challenges us to

maintain our proficiency; changing markets that challenge us to adapt to international processes and standards; changing societal needs that challenge us to adapt our governance policies and tools.

Today we have reached the stage where there is an increased UN and WB recognition of how reliable geospatial information helps governments and citizens to underpin decision making; Being "geospatial" is a global "transformation". Geospatial information is recognized as the tool to address issues like:

- \* population growth and the need for food and water security and poverty eradication;
- the rapid urbanization of the world's cities and the need to respond fast and smart in terms of housing, mobility and transport, city and building modeling, energy saving, health care, water and waste management, and governance in general;
- \* the tendency of development to cluster within the coastal zones of the oceans, the seas and the major river deltas and the need for rapid response to natural disasters and to manage the impact of climate change ;
- \* the interconnectivity in all areas of our economies, cultures, governmental operations and private lives and the need for harmonization, compatibility and security of procedures;

the so called "mega-trends".

Our professional services and products are changing the perception of how governments seek growth. Good land administration, for example, has a direct effect on lending practices and national economies. Governments are seeking innovative ways to encourage universal parcels recordation as quickly as possible. Citizens also understand that innovation facilitates good decision-making for all people both in the public and private sectors. There is a fast growing civil demand and a changing culture for authoritative spatial information published on the web, a culture that changes the administrative concept. The question is how much change can governments afford? To satisfy such great demand the use of data derived from various providers may be supportive. Authoritative data can be provided and assured by government agencies but also by crowd sourcing and *the engagement of surveyors*.

Surveyors today are recognized for their provision of reliable geospatial data towards achieving the Millennium Development Goals (MDGs), enabling a real difference in people's lives. As the MDGs are to be concluded by the end of 2015, it is the purpose of government to build on the generated momentum and carry on with an ambitious post-2015 sustainable development agenda.

FIG and its Member Associations, Academic Members, Affiliate Members, as well as Corporate Members, through the work provided by the Council, the Commissions, Task Forces, Networks, and the Permanent Institutions, are in a strong position to interact with politicians, individual surveyors and citizens at regional, national and local level and further contribute the expansion of this progress in most of the world's countries. The post-2015 development agenda is expected to tackle many issues relevant to the surveying profession, including ending poverty and hunger, making cities more sustainable, combating climate change, protecting oceans and forests. FIG and its member surveyors are the specialists who contribute this change.

It is the role of surveyors to provide solution functionality, reliably, affordably for a complex and rapidly changing world that cannot wait. It is therefore urgent for the surveying profession to be customer oriented, to think ahead, to predict future changes, and to foresee the requirements of the next generation of the public and structure the way ahead. Therefore we must develop a prosperous

and sustainable profession which will translate the post 2015 sustainable development agenda into action and will direct benefits to member associations respective Nation States.

During the 2015-2018 time period FIG, its council and commissions, hand in hand with its member associations, affiliate members, academic members, and corporate members will strive to achieve the FIG Vision.

The key topics of the Council Work Plan include professional development, institutional development, capacity development, cooperation with global organizations and sister associations to respond to global needs.

# 3. PROMOTE AND ENHANCE THE ROLE OF FIG WITHIN THE GLOBAL, REGIONAL AND LOCAL ENVIRONMENT

FIG will continue to provide a global forum for discussion and exchange of experiences and new professional developments between members and individual professionals in the broad areas of surveying and mapping, spatial information management, and the management of land and the built environment. This relates to FIG annual conferences, regional conferences, the FIG Networks, the work of the ten commissions (ACCO) within their working groups and commission seminars and the work of the Task Forces (TFs).

The council will ensure that this global forum offers opportunities for all aspects of the surveying profession, its various disciplines and the total range of its professional areas and professional standards.

The council will also ensure that the performance according to the agreed work plan will be monitored and supported by the responsible council members. The council will work closely with the FIG family to agree upon the deliverables and upon *key performance indicators* for monitoring the performance during the next 4 years and will report annually.

# **3.1.** Global Environment

In order to further promote and enhance the role of FIG within the **global environment** actions will include:

# (a) organization of conferences and workshops

FIG will continue to promote professional development through its commission activities, conferences, the Young Surveyors Network, and the Regional Capacity Development Network. The organization of commission activities and conferences is an important global FIG effort. The FIG motto "*Ensuring the Rapid Response to change, Ensuring the Surveyor of Tomorrow*" should be applied to these activities. According to the situation, e.g., response to economic change (economies in transition), or response to disaster management (natural disasters), professional achievements should be identified and promoted.

(b) response to the post 2015 sustainable development agenda

FIG will support promotion of the "*post 2015 sustainable development agenda*" in cooperation with UN agencies such as UNGGIM, FAO, UNHABITAT/GLTN, UNECE, UNEP, UNDP, UNOOSA, UNECA, UNRCC, ECOSOC, PCIDEA, the World Bank, and sister organizations; when appropriate new MoUs or extension of existing MoUs will be developed. FIG will coordinate with International professional organizations in surveying disciplines such as IAG, ICA, IHO, ISPRS, GSDI, ISM, IFHS, ICSU through the Joint Board of Spatial Information Societies.

More specifically, there is a mutual interest between FIG and

- FAO to continue to cooperate within the framework of implementing the VGGT through a close cooperation between FIG member associations, the FIG Commissions and the FIG Academic Forum;
- GLTN to continue cooperation on issues related to cost and financing of land administration services, valuation of unregistered land and properties, capacity building on STDM and other topics of interest;
- > UNECE to continue cooperation and in-depth research on informal settlements formalization and upgrading, and other topics of interest.
- UN-GGIM to continue cooperation in Global Geospatial Information Management and in particular on the new item land administration and management to be tabled for discussion soon.

It is expected that raising awareness on the above global topics, within FIG, will enable FIG member associations to create more global surveyors.

# **3.2.** Regional Environment

In order to further promote and enhance the role of FIG within **regional environments** actions will include:

# (a) joint activities, conferences, publications, Task Force activity, Network activity, etc.

FIG will strengthen regional collaboration between FIG and other regional professional associations through joint activities, representation at conferences, workshops, establishment of Working Groups for joint research and publications on topics of major common interest, such as global/ regional cadastres, improving the property markets in certain regions, etc;

Within this concept FIG will continue promoting capacity building in the regions where most in need. A **Regional Capacity Development Network** is proposed to be established on this topic. This is the Task Force for Africa that the council has decided to transform into a Network and include other regions as well.

In addition, a **Task Force** is proposed to be established to generally *assess the progress of establishing the property markets in the countries with economies in transition* within the greater European continent. It is a common knowledge and experience that in most countries in transition privatization and property registrations projects have been implemented in order to support economic growth through the functioning of real estate markets. However, it is also understood that there are still regional weaknesses.

(b) **encouraging delegates from various regions to be active in FIG;** by assigning tasks and responsibilities within the Work Plan and the commissions' plans to delegates from various regions, to increase their visibility and recognition by the FIG General Assembly. This will encourage the greater nomination of candidates for future elections.

# **3.3.** Local Environment

In order to further promote and enhance the role of FIG within **local environments** actions will include:

- (a) promoting and enhancing the role of FIG through **initiating and enhancing a sustainable communication strategy** and support greater collaboration with member associations in order to strengthen their links with FIG in contributing solutions to 21<sup>st</sup> century challenges at national level and to engage surveyors in solving global issues; using social media channels to increase outreach.
- (b) **Clarifying and promoting FIG benefits** for the surveyor; addressing "change" and successfully communicate the associated benefits to FIG members; ensuring that member associations support their surveyors to understand the vision and strategy of FIG and to contribute to FIG activities. Increase membership direct involvement in FIG activities; enhancing the profile of surveyors locally; improving international networking among members; encouraging delegate appointment to the commissions activity; and sharing experience, knowledge and examples of good practice to **enhance capacity of and to support the changing role of the member associations**;
- (c) **increasing membership** in less represented regions (e.g., India, Caucasus area, Latin America, Asia); attention should be paid to the problems of members in paying their arrears.
- (d) capacity and institutional development through **guidelines and training** courses especially in regions most in need through the Regional capacity Development Network and the seeking to develop cooperation with sister associations, such as the cooperation with the GLTN.
- (e) Place specific focus on Young Surveyors.

# 4. ACCOMPLISH INTERNAL FIG STRUCTURAL IMPROVEMENTS

FIG will promote internal structural improvements in order to meet the need for a rapid response to change. Such improvements will include:

(a) **empowering ACCO and Commissions.** The work of the commissions is the heart of FIG activity; the council will support this work by all available means. The council will ensure that the ACCO is an empowered and innovative forum for professional development and strategic enhancement of FIG activities.

Some commissions have more active members than others and can achieve more; in addition there is an overlap in some of the commission topics of interest, which may require a better coordination. There is an interest in *assessing the efficiency of the Commissions structure* according to current professional trends in order to improve efficiency and facilitate more joint activity and also to assess their close collaboration with the Young Surveyors and to propose ways on how to improve the expected contribution and the

regular flow of experts from the YSs Network, the Capacity building Network and the Standards Network into the Commissions and their working groups.

For this purpose a **Task Force** is proposed to be established *to assess the Commissions and their operation, investigate if there is a need to revise their structure and provide a proposal on possible improvements.* Existing experience from large member associations which have recently proceeded into restructuring or improvements of the structure and operational models of similar schemes should be investigated.

## (b) engaging the corporate members and improving their participation within FIG.

Corporate members of FIG are among the leaders in achieving significant advancements and innovative developments in software, services, hardware, and other applications within a modern and competitive environment. Their contribution to the profession and their experience is of great value to FIG. There is a need to enlarge the number of FIG corporate members, especially in an era when many FIG member associations and academic members are having financial difficulty to fully fulfil their membership fees.

For this purpose a **Task Force** is proposed to be established to *strengthen the FIG relationship with corporate members* (investigate how to engage new corporate members in FIG, what the key topics would be, what is desired, what are the challenges, etc.)

- (c) promoting the collaboration with **academic members** and sharing experiences on the ways they address change in education; promote innovative scientific research of high level to enable a more focused collaboration. The FIG VP responsible for the Academic members forum is proposed to coordinate this activity. It is proposed that a **Task Force** will be established *to investigate the need and if justified, the steps forward in order to introduce an FIG peer review Journal* (*electronic or printed*).
- (d) Checking the efficiency, elaborating and continuously updating the new **FIG website** with news from the current activity; checking the efficiency of our **communication channels**; The Office, the Council and Young Surveyors Network will assist in developing and improving communication through related **social media**.
- (e) strengthen the collaboration and efficiency of the **Forum of Mapping Agencies**; organize the Directors General Forum meetings and the selection of the topics of interest.

#### (f) Ensuring the financial sustainability of FIG and general finances.

The council will ensure the functioning and sustainability of the Office. The council will continue to allocate appropriate resources to the FIG office to enable it to respond to the requirements set out in the Work Plan. The council will also ensure that the services provided by the office reflect the resources available. The office should also be evaluated through the FIG VP responsible for FIG office administration and finances in cooperation with the president and the office members.

Policies must be established for council and office staff travel assignments and expense allowances. Any unbudgeted expense increases should be offset by alternate sources of income. The council will formalize the budgeting process; the VP assigned to financial oversight will monitor the financial condition of the Federation and will prepare timely reports to the GA.

### 5. PROPOSED ROLES AND RESPONSIBILITIES FOR THE COUNCIL MEMBERS:

#### **President Chryssy Potsiou**

Provide the professional and strategic leadership. Take appropriate initiatives to ensure that FIG achieves its principal objectives. Supervise the implementation of the FIG statues and the work plan objectives. Clarify and communicate the vision. Promote FIG to external agencies and ensure the cooperation with those (UNGGIM, FAO, UNHABITAT/GLTN, UNECE, UNEP, UNDP, UNOOSA, UNECA, UNRCC, ECOSOC, PCIDEA, the World Bank, etc). Recommend and ensure the appointment of Task Forces to undertake specific tasks which are not within the commissions Work Plans or to assist the work of the Council. Cooperate and supervise the work of the Task Forces, Networks and Permanent Institutions, and contribute specifically to the Task Force on Real Property Market. Communicate with FIG members. Submit a report to GA. Have the general responsibility and work closely with the Vice President responsible for the FIG Office and financial issues, and with the other Vice Presidents and their responsibilities.

#### VP Pengfei Cheng

Responsible for the Young Surveyors Network, for the Academic Forum, for the FIG Foundation and for the Directors General Forum and ensure their good performance and report to the GA. Cooperate with the FIG Office, VP Rudolf Staiger and the Young Surveyors Network in developing and improving FIG communication through related social media. Co-operate with the Task Force for investigating the need for a peer reviewed journal and with the Task Force on Corporate members. Report to the GA. Cooperate with international sister associations in support of the President (UNGGIM, FAO, UNHABITAT/GLTN, UNECE, UNEP, UNDP, UNOOSA, UNECA, UNRCC, ECOSOC, PCIDEA, the World Bank, etc, and especially with Asian regional associations).

#### **VP Diane Dumashie**

Responsible for ACCO and FIG Commisions. Co-Chair ACCO together with the ACCO rep. Help the commission chairs to develop their plans, support (with the support of the Office) that they understand and implement their tasks for the WWs and Congress, and that they deliver high quality technical programmes and liaise as required between commission chairs. Chair and coordinate of the FIG Regional Capacity Development Network and report to GA. Cooperate/attend the Task Force on Commissions and the Task Force on Corporate members. Cooperate with international sister associations in support of the President (UNGGIM, FAO, UNHABITAT/GLTN, UNECE, UNEP, UNDP, UNOOSA, UNECA, UNRCC, ECOSOC, PCIDEA, the World Bank, etc, specifically GLTN/UNHABITAT).

#### VP Bruno Razza

Cooperate with the Young Surveyors Network (and FIG Commissions-if needed) on organizing focused workshops on capacity development. FIG ambassador to Regional and sister Professional Associations e.g., CLGE, EGoS, the Arab Union of Surveyors, Fédération des Géomètres

Francophones, FGF and the Mediterranean Union of Surveyors. Cooperate with international sister associations in support of the President (UNGGIM, FAO, UNHABITAT/GLTN, UNECE, UNEP, UNDP, UNOOSA, UNECA, UNRCC, ECOSOC, PCIDEA, the World Bank, etc).

# **VP Rudolf Staiger**

Responsible to update the financial strategy and for its implementation according to the guidelines by the Council. Advice the FIG Office and the President on financial issues. Report to the GA. Develop a fundraising policy. Cooperate with the FIG Office, VP Pengfei Cheng and the Young Surveyors Network in developing and improving FIG communication through related social media. Communicate with member associations on membership matters. Cooperate with the President on various tasks as appropriate e.g., agreements with conference and WW organizers. Cooperate/attend the Task Force on Commissions and the Task Force on Corporate members. Cooperate with international sister associations in support of the President (UNGGIM, FAO, UNHABITAT/GLTN, UNECE, UNEP, UNDP, UNOOSA, UNECA, UNRCC, ECOSOC, PCIDEA, the World Bank, etc).

# **FIG Commission 1 – Professional Standards and Practice**

# Work Plan 2015 - 2018

# 1. Title

Professional Standards and Practice.

# 2. Terms of Reference

- Professional practice, legal aspects and organisational structures;
- Codes of ethics and applications;
- Changes to society and ways of working and the corresponding impacts on professional practice;
- Community perceptions and understanding about the surveying profession;
- Participation in FIG Standards Network.

# 3. Mission Statement

The mission of Commission 1 is to:

- build the capacity of professionals to adapt to changing circumstances. Changes are affecting the operation of surveying practices, their management and their professional structures under the challenges of widening professional activities and a changing world;
- create a community of practice to share knowledge about professional standards and practice challenges and responses by surveying professions;
   build links to regional and world structures for surveying professionals that focus on issues around professional standards and practice;
- support professional surveyors by providing tools and approaches to dealing with common practice issues;
- develop individuals as professional surveyors and provide opportunities for them to continue to develop as part of the surveying community.

# 4. General

Commission 1 will continue the work begun in the previous quadrennial period as well as exploring new issues. In particular, it will continue the work on international boundaries and take up the issue of the standardisation of ethical standards in the international context. The Commission will further raise the question of gender issues in surveying and investigate whether there is a need and/or demand for a Women in Surveying Network, along similar lines to the Young Surveyors Network. If it is proved to be so, then similarly, a new Network may be a "spin off" from the Commission.

In order to ensure a sustained and appropriate balance in the attendance Working Weeks and Congresses at and contributions to the work of the International Federation, a forum will be established where professional surveyors in private practice can discuss matters particular to their roles in the societies to which they provide their professional services. With the increasing mobility of professional practitioners and the continuing growth of the globalised community, a forum also will be established in which discussion can take place with respect to the mutual recognition of professional qualifications among the international surveying community. This issue has been a topic previously, but the demands of a changing society suggests that it should be a topic of ongoing discussion.

The Commission will liaise with the Standards Network and the Young Surveyors Network as required in order to continue the work of those groups.

# 5. Working groups

# **Working Group 1.1 - International Ethics Standards**

## Policy issues

- To review the current FIG Ethical standards in the light of FIG being a member of the worldwide coalition being formed to develop International Standards in Ethics;
- To review the definitions of ethics in land, property and construction;
- To study ethics within the surveying profession and prepare proposals how to respond to the competition to market the profession as ethical for current & future generations;
- Surveying professionals practice in a variety of work environments increasingly internationally and are required to respond to constant changes ethically in how they deliver services. This creates challenges to them in how they practice and challenges on how to adapt to change. Identifying and sharing;
- new ethical ways of working from around the world will provide practical examples of ways others have successfully adapted and will build a set of case studies of change.

## Chair Gary Strong (UK)

# Specific project(s)

- To consider the current and future role of ethics in surveying;
- To review and revise the definition of ethics produced by FIG which will underpin and link to the International Standards being developed;
- Prepare proposals how to respond to the competition to market the profession as ethical for current & future generations;
- Participation on behalf of FIG as a Coalition member developing International Ethics Standards.

# Workshop(s)

• Participation in FIG Working Weeks and other major FIG events with dedicated technical sessions and/or workshops as appropriate.

# Publication(s)

- International Ethics Standards by coalition FIG accredited;
- Revised FIG Ethics.

# <u>Timetable</u>

- Final report at the FIG Working Week Sofia, Bulgaria 2016/17;
- Publication of International Ethics Standards 2016/17;
- Revised FIG Ethics 2018.

#### Working Group 1.2 Women in Surveying

#### Background

The WG plan for 2015 – 2018 is to continue the work of the Working group - Under represented groups in Surveying with a focus on gender issues. The proposal is to setup an international network of women in surveying to further investigate the issues and promote the participation of women in the surveying industry. Using the power of social networking and Internet communications the WG will endeavour to analyse the status of women in the surveying workforce across the FIG community. In Australia the SSSI Women in Spatial (WIS) group was created some years ago in an effort to raise the numbers of women in the spatial industry. This number was extremely low and remains low. Statistics have been gathered over the years to monitor the number of women in the Surveying and spatial industry in Australia and New Zealand. As we have heard during recent FIG working weeks presentations and workshops, the situation is similar across the international FIG community. The WG plans to apply the experiences gathered in the Australia and New Zealand studies to the international surveying community.

### Co-Chairs Robyn McCutcheon and Winnie Shiu

#### Policy issues

To reference the previous work focusing on women in surveying by the FIG underrepresented groups in surveying.

- To build an international group focusing on women's involvement in Surveying;
- To use social networking to build the WG and create effective communications amongst the group;
- To gather statistics on an international scale to illustrate women's involvement in surveying.

#### Outputs

• To publish and present annual reports on the activities and findings of the WG during each FIG WW.

# Working Group 1.3 International Boundary Settlement and Demarcation

# Background

Working Group 1.3 will continue the work of Working Group 1.4 in the 2011-14 Work Plan, led by Haim Srebo and Bill Robertson, which led to the comprehensive FIG Publication 59: "International Boundary Making".

#### Policy issues

- To deal with theoretical, methodological, legal aspects and analysis of practical cases in international and national boundaries;
- To investigate and report on the long-term definition, demarcation, maintenance, recovery & stability of international land and maritime boundaries;
- To liaise with FIG Commissions 4, 5 and 7 on matters of common interest.

# Chair Don Grant

<u>Activity</u>

Workshop in a dedicated technical session at the 2016 FIG Working Week in Christchurch, New Zealand.

**Publication** 

An FIG publication on the long-term definition, demarcation, maintenance, recovery & stability of international land and maritime boundaries.

<u>Timetable</u>

Final report at the FIG Congress 2018

# WG 1.4 Forum on Engagement of Private Practitioners

Policy Issues

Anecdotally there appears to be a decreasing number of private practitioners engaging with FIG. The emergence of large user group conferences (ESRI, Hexagon, Trimble, etc.) may affect attendance at FIG Working Weeks and Congresses, by private practitioners in particular, which in turn may make FIG less attractive to sponsors and exhibitors. FIG needs to attract a broad spectrum of professional surveyors as well as exhibitors and sponsors to be sustainable into the future.

Commission 1, being the Professional Standards and Practice commission, will address the needs of the private practitioner – what are the hot issues, what do they want from FIG, what is missing in FIG from a private practice point of view?

# Convenor Malcolm McCoy

Actions **Actions** 

- To test the hypothesis by collecting data on conference delegates government, academic, private;
- To monitor numbers and percentage numbers over a number of conferences / working weeks to ascertain if the private sector is under-represented in first world counties rather than emerging nations;
- To promote an active FIG private sector program attractive to practitioners;
- To review the mission of Commission 1 to ensure it is relevant to professional surveyors particularly in the private sector.

Goals

- To increase private sector involvement and make FIG an important part of professional surveyors life
- To constantly monitor Commission's Mission Statement and keep up to date and relevant in an ever changing world.

# WG 1.5 Forum on Mutual Recognition

# Policy Issues

A Task Force on the Mutual Recognition of Professional Qualifications was hosted by the FIG from 1998 – 2002 and resulted in FIG Publication No. 27 *Mutual Recognition of Professional Qualifications*. Since then there has been little formal reflection on the progress

made, in light of the European Community and other agreements, and there are further developments to be reviewed and supported, such as the ASEAN Mutual Recognition Framework Agreement on Surveying Services. Many barriers to the mutual recognition of surveying professionals remain, and new barriers are emerging.

This WG has the particular aim to review and revise the existing FIG Publication. Additional activities will include a review of the existing mutual recognition frameworks and agreements in place and the updating and promotion of the FIG Mutual Recognition webpage.

#### Convenor Kate Fairlie

Actions

- Workshop to coincide with the 2016 Working Week in Christchurch, New Zealand
- Update to FIG Mutual Recognition webpage

#### Publication

The former FIG Task Force on Mutual Recognition of Professional Qualifications published FIG Publication No. 27 *Mutual Recognition of Professional Qualifications* in 2002. This Working Group will look to revise and update this publication for 2018 with particular reference to new developments, new needs and current barriers to implementation.

#### 6. Commission Officers

**Commission Chair:** Brian J Coutts Senior Lecturer National School of Surveying University of Otago P O Box 56 Dunedin NEW ZEALAND Email: brian.coutts@ otago.ac.nz

#### Vice Chair (Administration and Communication): Winnie Shiu

Senior Land Surveyor Hong Kong Housing Authority 9/F Block 3 33 Fat Kwong Street Homantin Kowloon HONG KONG SAR, CHINA Tel: +852 2129 3188 Email: mswinnieshiu@gmail.com

#### WG 1.1 International Ethical Standards

WG Chair: Gary Strong Director of Practice and Standards Royal Institution of Chartered Surveyors Parliament Square London UNITED KINGDOM Tel + 44 20 7695 1522 Fax + 44 20 7334 3712 Email: gstrong@rics.org WG 1.2 Women in Surveying WG Co-chair: Robyn McCutcheon Information Services Division, Corporate Services Department of Environment and Primary Industry Level 9, 8 Nicholson Street East Melbourne, Victoria 3002 AUSTRALIA Tel. + 61 3 9637 9955 (work) Tel. + 61 411 401 759 Email: robyn.mccutcheon@gmail.com WG Co-chair: Winnie Shiu: For contact details see above

#### WG 1.3 International Boundary Settlement and Demarcation

WG Chair: Associate Professor Dr Don Grant School of Mathematical & Geospatial Sciences RMIT University, GPO Box 2476 Melbourne, VIC 3001 AUSTRALIA Phone: +61 3 9925 2424 e-mail: donald.grant@rmit.edu.au RMIT University

#### WG 1.4 Forum on the Engagement of Private Practitioners

WG Convenor: Malcolm McCoy AAM Ltd 90 Camberwell Road Hawthorn East VIC AUSTRALIA 3123 Phone: +61 3 9572 8720 (direct) Mobile: +61 425 771 388 m.mccoy@aamgroup.com www.aamgroup.com

#### WG 1.5 Forum on Mutual Recognition

WG Convenor: Kate Fairlie Land Equity International PO Box 798 Wollongong NSW 2520 AUSTRALIA E-mail: <u>kfairlie@landequity.com.au</u>

Brian J Coutts

Chair, FIG Commission 1 www.fig.net/commission1

FIG 38<sup>th</sup> General Assembly Sofia, Bulgaria 17-21 May 2015 FIG Commission 1 Work Plan 2015-2018

# www.surveying.otago.ac.nz January 2014

# FIG Commission 2 – Professional Education

# Work Plan 2015 – 2018

#### 1. Title

Professional education

### 2. Terms of Reference

- The domain of professional surveying education (vocational, higher and academic education, and continuing professional development)
- The role of professional education and its relation to the public sector, private sector and professional organizations.

# 3. Mission statement<sup>1</sup>

Promote good practices in professional surveying education by:

- Exploring the needs of society and endorsing universities and other educational organizations to develop mechanisms and processes that will help to meet those needs.
- Supporting and promoting advances in survey education through identification of core surveying knowledge
- Promoting cooperative ventures in surveying education and research
- Supporting the building of capacity for surveying education in the developing world
- Reinforcing contacts to educational commissions of related professions

# 4. General

FIG Commission 2 is the domain of professional surveying education. The traditional core areas for the commission are: 1) curriculum and core surveying body of knowledge, 2) teaching and learning methodology, 3) marketing and management of professional education and 4) accreditation and quality assurance.

During the last term Frank (2008, 2012) and Greenfeld (2010, 2012) centred on the understanding of the surveying core body of knowledge. Recent developments and discourse justify the broadening of the scope of FIG Commission 2 from surveying education to educating

<sup>&</sup>lt;sup>1</sup> <u>http://www.fig.net/commission2/index.htm</u> (assessed 15.01.2015)

the land professional (Enemark & Williamson, 2004; Enemark, 2008, 2009, 2010; Magel et al. 2009; Mitchel & Enemark, 2008).

Innovative learning and teaching has always received major attention in FIG and FIG Commission 2. This is reflected in the work of Enemark (2004, 2007, 2009; Enemark & Gallant, 2012) promoting innovative teaching and learning approaches in surveying education, in particular project- and problem-based learning. E-learning, open learning and knowledge management achieved major attention by Markus (2005, 2008, and 2010). The work on elearning resulted in the most recent publication by FIG Commission 2: FIG Publication No. 46. Enhancing Surveying Education through e-Learning. Markus (2010) mentioned the following two challenges for FIG Commission 2 that are still highly relevant to consider: ubiquitous learning and open education. For the new term these will be embraced and further explored.

There has been a noticeable trend in recent years, particularly in English speaking countries, of a declining population of surveyors and the need to attract promising young surveyors into surveying (Frank, 2010). Various approaches and recruiting tools have been developed and shared during recent FIG Commission 2 events.

Developing educational and skills qualifications of surveying professionals and technicians is one of the other main concerns for FIG Commission 2. For some countries this is of more concern than others. In the United States ABET is used to allow standard recognition of educational surveying qualifications (Frank, 2007, 2009, 2010). In the United Kingdom, RICS has developed educational criteria that allow universities to assess the suitability of their curricula to the professional needs (Plimmer, 2003; Frank, 2010). With the rapidly changing surveying profession it is a continuous challenge to maintain a system of standardization. The former chair of FIG Commission 2 has worked intensively on defining educational surveying qualifications and in relation to the core surveying body of knowledge and learning and teaching methodologies (Frank, 2012).

For its new term, 2015 -2018, FIG Commission 2 will continue to build on the work carried out by the former commission chairs. FIG Commission 2 has developed for the term 2015 - 2018 the following focus areas. These will be discussed and worked out in concrete actions during the first Commission 2 meeting in 2015:

#### Becoming an active Commission

- Attracting more contributing members and strengthening the working groups
- Increase visibility and impact

#### Professional education world-wide

- Stimulate world-wide participation and exchange
- Special attention to professional education in the countries/member associations less represented at FIG events,

The chain of professional surveying education

Supporting the education continuum in surveying education: vocational education, higher education and academic education. Towards inclusion of polytechnics and vocational training institutions in the work of FIG Commission 2 activities

Towards educating the land professional

- > Preparing for new challenges in the surveying profession
- > Bringing land administration and land management into the surveying education

One (or more) of the vision statements will be selected for an FIG Commission 2 publication.

In addition to the specific activities above, Commission 2 will support and contribute to FIG Task Forces, Permanent Institutions and Networks, in particular to the Young Surveyors Network, the OICRF and the FIG Foundation.

#### 5. Working groups

The work of FIG Commission 2 is organized in four working groups. Each of the working groups represents an area of focus in professional surveying education. During the four-year term of office workshops at least one Commission 2 workshop will be organized. Ideally, each planned event will focus on one or more themes from a working group.

#### Working group 2.1 – Towards educating the land professional

#### **Objectives**

- To share good practices in surveying curricula and programs across educational institutions and across countries
- To suggest changes in curricula and propose new educational programs to respond to the changing nature of the surveying profession
- To discuss and describe core competences (knowledge, skills and attitudes) for the education of the land professional

#### Chair

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

#### Co-chairs

Reshma Shresta, Nepal, (<u>shrestha19012@itc.nl</u>) and Gordon Waymuba, Kenya, (<u>gowayumba@gmail.com</u>)

#### Specific projects

The recent discussion in FIG Commission 1 on the definition of a surveyor (see the discussion on LinkedIn, FIG Commission 1) will guide the FIG Commission 2 and in particular Working Group 2.1 for its new term. The concept of the land professional, the land administration and/or land management professional and related curricula and core body of knowledge will a particular challenge for Working Group 2.1 during this term of office.

The working group will further be involved in developing initiatives to support professional education at other levels than the academic education, such as the level of polytechnics and vocational training institutions.

### <u>Workshops</u>

- From 25 27 of November 2015 the Workshop "Strengthening Education for Land Professionals and Opportunities for SDI Development" will take place in Kathmandu, Nepal. The workshop will be organized by the Nepal Institution of Chartered Surveyors (NICS) and the Nepal Remote Sensing and Photogrammetric Society (NRSPS); jointly with ISPRS Working Group IV/4. Website: www.workshopnepal2015.com.np
- 2. The intention is to organize a workshop on professional surveying education in Africa. The Eastern African Land Administration Network (ELAN) is interested to host such a workshop next to their annual meeting. Proposed time: 2016.
- 3. A combined international Commission 2/Commission 7 workshop on cadaster, land administration and land management education. The intention is to bring together the universities/institutions working in the land administration and land management domain. Relevant international bodies such as UN Habitat, GLTN, FAO and WB should be involved. Cooperation with ESRI, Thomson Reuters and other corporate members needs to be explored. The ITC University of Twente will be the host organization. Proposed time: 2018

#### **Publications**

- Technical papers at Working Weeks, Regional Conference and Commission 2 workshops.
- Workshop Proceedings
- FIG Publication: 'A framework for land administration and land management professional education' together with Commission 7.

## Time table

- Draft publications will be presented and discussed at the FIG Working Weeks
- Working group final report and publication will be presented at the dedicated session during the FIG Congress in 2018.

#### **Beneficiaries**

• Higher education institutions, national associations, governments, international governing bodies, cadaster and land registration organizations; chartered surveyors, private surveyors and FIG Corporate Members.

# Working Group 2.2 – Innovative learning and teaching

#### **Objectives**

• To exchange and promote good practices in teaching and learning methodologies in professional education of the surveying and land professional

- To make recommendations for learning methods and teaching formats under specific circumstances: distant learning, off-the-job-training, life-long learning and continuous professional education, and organizational learning.
- To promote ubiquitous learning and open learning approaches
- To promote organizational learning in FIG and its members
- To support the FIG in promoting innovative ways of organizing workshops, conferences and congresses.

### <u>Chair</u>

Dr. Audrey Martin (Ireland): audrey.martin@dit.ie

#### Specific projects

The new chair of this working group will continue to work on e-learning as an important aspect of innovative learning in surveying education. There is a tentatively plan for a workshop in Dublin for May/June 2016. The FIG Commission 2 Workshop could be linked to the annual DIT eLearning Summer School.

Strengthening knowledge management and organizational learning in FIG and its members will be a theme for this working group. The use of OICRF, Surveying Reference Library and Surveying Education database, as a knowledge and learning platform for FIG will be explored and further developed. This will be done together with the responsible members and the FIG Secretariat. The new FIG website is an important factor in this initiative.

FIG Commission 2 intends to support the FIG Council in designing dynamic technical sessions, use of innovative ways of reporting, organising challenging workshops and promote the online involvement and participation. This should be achieved by working together with Young Surveyors Network and the FIG Secretariat.

#### Workshop

• FIG Commission 2 Workshop in Dublin linked to the annual Dublin Institute of Technology eLearning Summer School. Proposed period: May/June 2016.

#### **Publications**

- Technical papers on e-learning and innovative approaches in teaching and learning during Working Weeks, Regional Conference and Commission 2 workshops.
- Workshop Proceedings
- FIG Learning Platform

#### Time table

- Special sessions during all FIG Working Weeks and Regional Conferences and during FIG Commission 2 Workshops and other relevant commission events to discuss the FIG Learning Platform
- Working group final report will be presented at the dedicated session during the FIG Congress in 2018.

### **Beneficiaries**

Higher education institutions, surveying professionals, Young Surveyors and potential surveyors, FIG Office and Secretariat and FIG Members; FIG Corporate Members; public in general (open access).

# Working Group 2.3 – Demand for and supply of Professional Education

### **Objectives**

- Promoting the interest by potential professionals in surveying education.
- Marketing of professional surveying education
- Increase opportunities to pursue surveying education all over the world.
- Explore how to strengthen the education continuum in surveying education: vocational education, higher education and academic education.
- Bridging the gap between the education sector and the labor market

# <u>Chair</u>

Dr. Nadezda Kamynina (Russia) (kamyninan@gmail.com)

## Special projects

In the European Union programs are going on to stimulate, raise awareness and increase student enrolment in surveying education. There are programs addressing the relation between surveying education and the labour market. It is foreseen that in the new term working group 2.3 will pay attention to these European developments and experiences from programs such as: GeoSkills Plus (Leonardo program), the Tempus GE-UZ and the LLL GI-N2K among other initiatives.

The Young Surveyors within FIG have a strong interest and can contribute much to this working group. Some Young Surveyors will join this group for the new term.

# <u>Workshop</u>

Workshop to share European experiences in the GeoSkills Plus (Leonardo program), the Tempus GE-UZ, the LLL GI-N2K program and other European initiatives related to the demand and supply of surveying professionals and education. Workshop proposed for 2017; could be combined with the workshop in Dublin by Working Group 2.2.

# Publication(s)

- Technical papers at Working Weeks, Regional Conference and Commission 2 workshops.
- Workshop Proceedings
- Publication(s): Conditions and principles of marketing professional survey education. <u>Time table</u>

- Draft publications will be presented at FIG Working Weeks according to the timetable to be developed by the Working Group Chair.
- Working group final report will be presented at the dedicated session during the FIG Congress in 2018.

#### **Beneficiaries**

Individuals, potential surveyors, higher education institutions, vocational schools, society, labor market, public and private sector; FIG's corporate members; young surveyors and potential surveyors.

#### Working Group 2.4 - Accreditation and Quality Assurance

**Objectives** 

- To compare and support academic accreditation of surveying education programs
- To explore and support the mutual recognition of surveying education degrees

#### <u>Chair</u>

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

#### Special projects

The globalization of surveying education poses questions concerning the rigor of survey programs and the appropriate depth and breadth of topics within the various programs (Frank, 2010). The mutual recognition of surveying education degrees in the world will continue to be a main issue for FIG Commission 2 and in particular Working Group 2.4. Cross-border professional education and internationalization (accreditation, standards) are two other related themes.

Workshop(s) To be decided

#### Time table

- Outcome of activities will be delivered according to the timetable to be developed by the Working Group Chair
- Working group final report will be presented at the dedicated session during the FIG Congress in 2018.

#### **Beneficiaries**

Higher education institutions, surveying professionals, licensed and chartered surveyors, employers and governments; national associations.

#### **Publications**

• Technical papers at Working Weeks, Regional Conference and Commission 2 workshops.

Workshop Proceedings

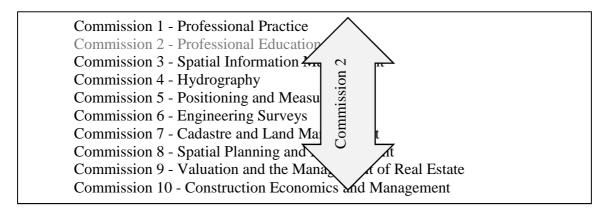
# 6. Academic Forum

The Academic Forum is the platform for FIG Academic Members. Traditionally Commission 2 has a leading role in the Academic Forum. During the FIG Congress 2014 in Kuala Lumpur the Forum discussed and prepared an initial statement on Academic responsibilities and the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT).

For its new term, FIG Commission 2 wishes to continue to play an instrumental part in the Academic Forum and working with the Council to explore partnership with FAO and FIG Academic Partnership program.

# 7. Relation to other Commissions and Task Forces

By its nature FIG Commission 2, Professional Education, has a relation to all the other technical commissions as is illustrated in figure 1. However, with some commissions it has a stronger relation than with others.



*Figure 1.* The position and function of FIG Commission 2 in relation to the other Commissions.

Commission 2 works closely together with Commission 1 and in particular with Working Group 1.1 - Changing Nature of Work and the Role of a Surveyor.

Commission 2 has a close connection to Commission 7 Cadastre and Land Management. The changing nature of the surveyor or land professional is best illustrated by the trends and developments in cadaster and land management.

FIG Commission 2 has a role in supporting the Young Surveyors Network, some of FIG Task Forces like Africa Task Force and the OICRF (The International Office for Cadastre and Land Records) (OICRF).

Traditionally the chair of FIG Commission 2 is a member of the FIG Foundation.

#### 8. Continuous Commission activities

- LinkedIn Group: <u>http://www.fig.net/commission2/index.htm</u>
- Newsletter
- FIG Surveying Education database: need for member to work on it!!
- Stimulate young surveyors involvement
- Improved communication and online involvement
- Engage with corporate members/associations/UN Bodies/WB/FAO
- Increase global reach and new membership.

#### 9. Commission Officers

#### **Commission Chair**

Ir. Liza Groenendijk (E.M.C) Lecturer Land Administration, School for Land Administration Studies Faculty for Geo-information Sciences and Earth Observation University of Twente, Enschede The Netherlands E-mail: <u>e.m.c.groenendijk@utwente.nl</u> Tel: 0031 534894528 Mobile: 0031 6 29435035

#### Vice-chair and Chair Working Group 2.1

Dr.-Ing. Fahria Masum Coordinator Admission and Research Chair of Land Management Technische Universitaet Muenchen (TUM) Germany Tel.: 0049/(0)89/28925790 E-mail: masum@landentwicklung-muenchen.de

#### **Co-chair Working Group 2.1**

Reshma Shresta Kathmandu University/PhD at School for Land Administration Studies Faculty for Geo-information Sciences and Earth Observation University of Twente, Enschede The Netherlands E-mail: <u>shrestha19012@itc.nl</u>

#### **Co-chair Working Group 2.1**

Dr. Gordon Wayumba Department of Geospatial Science and Engineering, Technical University of Kenya P.O. Box 52428 - 00200 Nairobi, Kenya Tel. +254 722775168 Email: gowayumba@gmail.com

### **Chair Working Group 2.2**

Dr. Audrey Martin FSCSI FRICS Chair of the MSc in Geospatial Engineering, Spatial Information Sciences Group College of Engineering & Built Environment Dublin Institute of Technology, Dublin Ireland T: +353 1 402 3736 E-mail: <u>audrey.martin@dit.ie</u> <u>http://www.dit.ie/geomatics/</u> **Chair Working Group 2.3** Dr. Nadezda Kamynina Head International Academic Programs Departments Moscow State University of Geodesy and Cartography (Miigaik) Moscow Russia E-mail: <u>kamyninan@gmail.com</u>

#### **Chair Working Group 2.4**

Prof. Alias Abdul Rahman Universiti Teknologi Malaysia (UTM) Jabatan Geoinformatik Fakulti Geoinformasi dan harta tanah Kuala Lumpur Malaysia E-mail: <u>alias.fksg@gmail.com</u>

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# FIG Commission 3 – Spatial Information Management

# Work Plan 2015–2018

# 1. Title

Spatial Information Management

# 2. Terms of Reference

- The use of Spatial Information Management (data, tools, procedures, regulations, standards);
- The support of Good governance (sustainable development, poverty reduction, social and economic growth, social security);
- Spatial data infrastructure;
- Research on the use of crowdsourced VGI data and derived information to geoscientific disciplines that make use of mapping, GIS, and Geo-SDI systems and procedures;
- The research of the methods for the sustainable development especially of mega cities and emerging countries with high index of development;
- The study and monitoring, as control of the fragility and vulnerability of the territory.

# 3. Mission statement

The mission of Commission 3 is to:

- Increase awareness about successful SIM approaches and achievements within the "e-Society" by showing good practice like availability, reliability, efficiency and accessibility of spatial information for better decision making and processes.
- Support the use of spatial information and SIM-tools by surveyors and by all participants in decision-making to serve the goals of good governance.
- Share good practice on managerial processes and infrastructure required for data handling, using information and distributing knowledge.
- Share good practice and develop high-level methods and techniques for merging and managing updated spatial information at various levels according to market requirements.
- Establish and maintain data and data-quality-standards relevant to SIM, while cooperating with international spatial data standard committees.
- Encourage the use of spatial information within e-government and e-commerce.
- Cooperate and coordinate with the related United Nations Committees and other geospatial information societies and organizations active in the field based on request from the Council, they key focus will be in co-operation with ISPRS (Commission IV

on Geodatabases and Digital Mapping), ICA (commission on Geospatial Data Standards), GSDI, EUROGI.

# 4. General

Most of the objectives, topics and scope of the previous term will be continued. Therefore the 3 previous working groups are confirmed in the new term and a new working group is established about crowdsourcing and VGI.

Commission 3 delegates have expressed their interest in continuing organizing Commission 3 annual meetings and workshops focused on the specific and identified current topics.

Commission 3 will continue to address the phenomena of rapid urbanization and its impact focusing on identifying new solutions for the survey of spatial data and general principles. As new projects, Commission 3 will:

- address the phenomena of Crowdsourcing and Volunteered Geographic Information. This neogeography revolution has started to fundamentally transform how geographic data are acquired, maintained, analysed, visualized and consequently used. SDI as well as SIM can benefit greatly from the use and integration of this type of data, all of which with the focus of contributing to the surveyor role;
- follow the management of the environment, monitoring and supporting the legalization process and progress of land, property registration, planning reforms;
- assist good governance, efficient operations of property markets, affordable planning, affordable housing, and appropriate environmental management by providing innovative and reliable land tools and spatial information solutions addressing to global challenges.
- address the research of the methods for the sustainable development especially of mega cities and emerging countries with high index of development (China, India, South America).
- address the research for the reuse of the built and the savings of the territory with the incentive of specialized crops;
- study and monitor (as control of the fragility and vulnerability of the territory, for the defense from natural phenomena and from the consequences of the human intervention dangerous for the wellbeing and for the goods of properties, and for the prevention of hydrological disasters that have interested in a strong way and with severe damages e many dead different parts of the world.
- participate in the organization of an International Summerschool for Young Surveyors following the model of the International Training Courses organized by Consiglio Nazionale Geometri e Geometri Laureati in the last years.

Summarizing, the topics of general interest of Commission 3 are:

- SIM Infrastructure;
- SDI and GSDI;
- 2D/3D/4D applications of SDI;
- Web services and metadata;
- SIM application for disaster monitoring and environmental prevention;
- Urbanization;
- Mega cities and emerging countries;

- Crowdsourcing and VGI;
- Low cost methods and tools for environmental monitoring;
- 3D cadaster.

## 5. Working Groups

### Working Group 3.1 – SIM Infrastructure

#### Policy Issues

SIM has the role of an integrator of components for a Spatial Information Infrastructure especially for urban areas within the information society. SIM is a facilitator for IT based services for planners, administration as well as for citizens.

#### <u>Chair</u>

Hartmut Müller (Germany), email: hartmut.mueller@hs-mainz.de

#### Specific topic(s)

- NSDI / GSDI: Spatial Data + Information Infrastructure.
- The "Open" trend: open source, open standards, open data.
- Volunteered and crowdsourced geospatial data and information.
- Integration of Volunteered Geographic Information VGI and geospatial authoritative government information.
- Semantic technologies.
- Public geo-participation and citizen empowerment.
- Share current experiences and technical visions of the future.
- Inform future decisions and implementations.
- Inform the big picture on drivers, trends and technologies.

#### Workshop(s)

Participations in FIG Working Weeks and other major Commission events with dedicated technical sessions and/or workshops as appropriate.

#### **Beneficiaries**

Surveyors, associations engaged with spatial data, local and regional municipalities and users of spatial data and spatial information.

### Working Group 3.2 – Technical aspects of SIM

#### Policy issues

The on-going development of tools, techniques and policies for spatial management of urban areas, in particular cities/megacities but also rural, forest and coastal areas leads to the need for collection, management and integration of various spatial data, such as: optical and SAR satellite and aerial images, images derived from various kinds of UAV, images derived from the Internet, orthophotos, point clouds derived from LiDAR and terrestrial laser scanners, global DTMs, etc. These data and the need for their management in real time or in a short time, in order to monitor growth and change across the urban environment and to forecast areas of risk, leads to the development of specific techniques for Big Data management. The on-going development of 3D and 4D spatial or city models, using photogrammetric or computer vision techniques, demands the development of interoperable formats and tools for the exchange of geometric and semantic 2D/3D data and information. The improvement and enrichment of data and spatial product quality control methods and techniques is an important issue as the variety of data collection sources and information management and integration procedures become wider.

# Chair

Ioannidis Charalabos (Greece), email: cioannid@survey.ntua.gr

# Specific topic(s)

- Data collection, recording and updating,
- Low-cost methods and tools for environmental monitoring,
- Standardization of information and metadata,
- 3D and 4D spatial data recording and management,
- Visualization of information in 2D/3D/4D,
- Big data management,
- Integration and update of spatial data-bases, 3D GIS and BIM,
- Content and 2D/3D semantic modelling,
- Quality control.

These technical aspects will be dealt in relation to legal, social, economic, educational, and policy implications.

### Workshop(s)

Participations in FIG Working Weeks and other major Commission events with dedicated technical sessions and/or workshops as appropriate.

#### Publication(s)

FIG-publication on "Management of big data" by the end of the 4-years period –to be published for the FIG Congress 2018.

### <u>Timetable</u>

Special sessions on Technical Aspects of SIM at the Annual Meetings of Commission 3 and FIG Working Weeks.

# **Beneficiaries**

Surveyors, private and public firms and associations engaged with spatial data, and users of spatial data and spatial information.

# Working Group 3.3 – 3D Cadastre (Joint Working Group with Commission 7)

# Policy issues

The results of the previous term (2010-2014) of the working group provide a solid basis for the next 4-year phase of the working group. The concept of 3D Cadastres is here to stay and the number of implementations is increasing, quite often with ambition to become LADM (ISO 19152:2012) compliant.

In 3D, it is even more important to connect land administration to other registrations via SDI: buildings, tunnels, cables/pipelines, terrain elevation, etc. (physical and legal 3D objects should be aligned). The main objective of the working group is to establish an operational framework for 3D-Cadastres. The operational aspect addresses the following issues:

- A common understanding of the terms and issues involved.
- Concepts should be refined and agreed based on the ISO 19152 Land Administration Domain Model.

A description of issues that have to be considered (and to what level) before whatever form of 3D-cadastres can be implemented. These will provide 'best practices' for the legal, institutional and technical aspects.

# <u>Chair</u>

Peter van Oosterom (The Netherlands), email: <u>P.J.M.vanOosterom@tudelft.nl</u>

# Special topic(s)

Topics to be dealt within the activity of the working group are:

- 3D-Cadastre: models, SDI and time
- 3D-Cadastre and the usability

Options for realization of a 3D cadastre model will include:

- Minimalistic 3D cadastre (no cables, pipelines etc.)
- Topographic 3D cadastre
- Polyhedral vs. Non-polyhedral Legal 3D cadastre
- <u>Topological Legal 3D cadastre</u>

Additional emphasis on the following topics:

1. Collect and exchange experiences of operational 3D Cadastral systems (law, organization, technology)

2. 3D Cadastre in mega-cities, often in Latin-America (Brazil, Mexico), Asia (China, Malaysia, Korea, Singapore) and Africa (Nigeria)

3. 3D Cadastre usability studies, web-dissemination and 3D cartography

4. 3D Cadastre as part the full life cycle of spatial development in 3D: spatial plan, zoning, register restrictions, design solutions, acquire space/land, request/provide permits, obtain financing, realize/develop, survey/ measure results, submit final RRRs/SUs, check/validate submitted RRRs/SUs, store/ analyse data, disseminate, visualize and use the 3D (cadastral) objects

5. Contribute to the upcoming revision of ISO19152:2017 or 2018 (LADM) by further developing the 3D aspects in this international standard; e.g. provide a more formal taxonomy of different types of 3D parcels (spatial units).

### Workshop(s)

Participations in FIG Working Weeks with 3D Cadastre sessions and other major Commission events above all with Commission 7.

### Publication(s)

Maintain the website and FIG publication on 3D-Cadastre

# <u>Timetable</u>

2015-2018: Maintain website and interest-group <u>www.gdmc.nl/3DCadastres</u> (inc. literature) 2015: Analyse and complete second questionnaire status 3D Cadastres 2014-2018 2015-2017: 3D Cadastres session at FIG working weeks 2016: Organiza 5th workshop on 2D Cadastres

2016: Organize 5th workshop on 3D-Cadastres

2017-18: FIG-publication on 3D-Cadastres

2018: Conduct third questionnaire status 3D Cadastres 2018-2022

2018: Presentation of the results FIG-congress

### **Beneficiaries**

Surveyors, land developers, national cadastral agencies, land registry administrations, local and regional municipalities.

# Working Group 3.4 – Crowdsourcing and VGI supporting SDI

### Policy issues

As of 2010, 90% of the data that existed in the world were created within the previous two years, while personal location data has been singled out as one of the five primary 'big data' streams in the 2011 McKinsey report. By 2020, the volume of existing data will increase by fifty-fold, where a large percentage of this volume will be associated with geospatial data. The term Volunteered Geographic Information (VGI) encapsulates the idea of using the internet to create, share, visualize, and analyse geographic information and knowledge, envisioned via the use of numerous computing devices and platforms. This neogeography revolution has started to fundamentally transform how geographic data are acquired, maintained, analysed, visualized, and consequently – used. Thus, it has the potential to influence common practices, since it captures a broad knowledge of the environment we live

in, in all aspects of life, encompassing new services to take place, applications and processes to be developed – all of which are location based. Spatial Data Infrastructure (SDI), as well as Spatial Information Management (SIM) can benefit greatly from the use and integration of this type of data. The diversity of research disciplines that explore the potential of VGI – data and working methodologies - arguments its current usability relevance: ranging from transportation network analysis, to air pollution and air quality and to natural disaster decision-making systems.

VGI is becoming more and more a legitimate and reliable spatial, environmental and sustainable infrastructure on local, as well as on global scales, thus it encompasses vast geospatial potential that can contribute significantly, and is highly relevant to various geoscience research areas.

Consequently, it transforms and changes the surveyor's role, as well as the established working methodologies and protocols; new ideas, concepts and practices are to be developed and envisioned.

The emphasis of Working Group 4 will be on the investigation and identification of processes and protocols aimed at handling 'big geodata', crowdsourced and contributed by the public, on collection, processing, interpretation, administrative, and analysis levels, all of which with the focus of contributing to the surveyors role. Working Group 4 will search and learn new means and technologies on how to exploit and make use of crowdsourced VG data and derived information to geoscientific disciplines that make use of mapping, GIS, and Geo-SDI systems and procedures.

Since VG data is relatively easy to acquire, and consequently simple to access and make use of, Working Group 4 will aspire to motivate and work with scholars and professionals from developing countries, where it is believed that this working methodology can contribute utmost. Also, Working Group 4 will aim to have joined and mutual interests with other FIG Commissions, specifically Commission 2 (on Professional Education) and Commission 8 (on Spatial Planning and Development), where it is believed that this neogeography revolution can bring new ideas and

# <u>Chair</u>

Sagi Daylot (Israel), e-mail: <u>dalyot@technion.ac.il</u>

### Specific topic(s)

- Utilization of VGI and crowdsourcing with SDI, SIM and environmental knowledge
- Working methodologies of VGI in developing countries
- VGI collection, dissemination, analysis, maintenance, and visualization
- Crowdsourced land management tools and innovative spatial information solutions addressing global and national challenges
- The significance of open source SDIs for managing authorities' services
- VGI interoperability standards, uncertainty, authenticity, validity
- Applications of VGI in managing the built environment, legalization monitoring, property registration, planning reforms
- Participatory mapping and citizens science case studies and processes

### Workshops

Participations in FIG Working Weeks and other major Commission events with dedicated technical sessions and/or workshops as appropriate.

# 6. Co-operation with Other Commissions and organisations

- Commission 2;
- Commission 7;
- Commission 8;
- Young Surveyors Network.

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

- FAO;
- UN-HABITAT;
- UNESCO;
- ISPRS Commission IV on Spatial Information Systems and Digital Mapping;
- ICA International Cartographical Association;
- International Geographical Union, Commission on geographical Information Science;
- GSDI Global Spatial Data Infrastructure Association.

# 8. Calendar of Events

May 2015 – Sofia (in conjunction with FIG WW 2015);

November 2015 – Malta (annual workshop in conjunction with Commission 7);

April – June 2016 – Christchurch, New Zealand (in conjunction with FIG WW 2016);

November 2016 – Hungary or Greece (annual workshop);

May/June 2017 – Finland, Helsinki (in conjunction with FIG WW 2017);

November 2017 – location TBD (annual workshop);

April/May 2018 – Istanbul, Turkey (in conjunction with FIG Congress 2018);

November 2018 - location TBD (annual workshop).

# 9. Workshops

Commission 3 is planning to organize, in addition to its activity during the annual FIG Working Weeks or Congress, also four annual Workshops during the 2015-2018 term.

# **10.** Commission Officers

# **Commission Chair**

Dr. Enrico Rispoli

Legal Expert and Surveyor Board Member Consiglio Nazionale Geometri e Geometri Laureati Piazza Colonna, 361 00187 - Roma ITALY Tel. +39 06 4203161 Fax. +39 06 48903894 Email: <u>e.rispoli@cng.it</u>; <u>m.scorza@cng.it</u>

#### Vice Chair of Administration

Dott.ssa Maria Grazia Scorza Head of the International Office Consiglio Nazionale Geometri e Geometri Laureati Piazza Colonna, 361 00187 - Roma ITALY Tel. +39 06 4203161 Mob. +39 336 921447 Fax. +39 06 48903894 Email: <u>m.scorza@cng.it</u>

#### Vice-Chair and Chair of Working Group 3.1

Prof. Dr. Hartmut Müller Lucy-Hillebrand-Str. 2 D-55128 Mainz GERMANY Tel. +49 (0) 6131 628 1438 Fax. +49 (0) 6131 628 91438 Email: hartmut.mueller@hs-mainz.de

### Vice-Chair and Chair of Working Group 3.2

Prof. Dr. Ioannidis Charalabos School of Rural & Surveying Engineering, National Technical University of Athens 9 Iroon Polytechniou St., Athens 15780 GREECE Tel. +30 210 7722686 Mob. +30 6942488497 Fax. +30 210 7722677 Email: <u>cioannid@survey.ntua.gr</u>

#### Vice-Chair and Chair of Working Group 3.3

Prof. Dr. Ir.Peter van Oosterom Professor and Head of section GISt technology, Faculty of Architecture and the Built Environment, TU Delft Julianalaan 134, 2628 BL Delft THE NETHERLANDS Tel. +31 15 2786950 Fax. +31 15 2784422 Email: <u>P.J.M.vanOosterom@tudelft.nl</u>

# Vice-Chair and Chair of Working Group 3.4

Dr. Sagi Daylot Transportation and Geo-Information Engineering Faculty of Civil and Environmental Engineering Rabin Bldg., Room 727 Technion – Israel Institute of Technology Haifa 32000 ISRAEL Tel. +972 4 8295991 Fax. +972 4 8295708 Email : dalyot@technion.ac.il

Enrico Rispoli Chair, FIG Commission 3 www.fig.net/commission3

December 2014

## Appendix to item 13

# Work Plan 2015-2018

# **Commission 4**

### **Commission Chair**



Angela Etuonovbe AnGene Surveys & Consultants Uti Street,Off P.T.I. Road Effurun 332101 Delta State NIGERIA Email: aetuonovbe@yahoo.com

#### **Terms of reference**

- Hydrographic surveying
- Offshore surveying in support of energy, environment, submarine telecommunications, ports and harbours
- Hydrographic education, training and Continual Professional Development (CPD)
- Marine Environment & Coastal Zone Management (CZM)
- Data processing and management of hydrographic data
- Nautical charting and bathymetric maps analogue and digital, includes ENCs (Electronic Navigational Charts)

#### **Mission Statement**

The mission of Commission 4 is to:

- Promote the aims and objectives of FIG to hydrographers through the active involvement of national delegates from member associations and other interested parties in the activities of the commission.
- Foster closer links with all sister organisations currently active within the global hydrographic community.
- Develop guidelines and standards that will assist hydrographers in the provision of their services.
- Disseminate information relevant to the profession through participation in international meetings, conferences and committees.

#### General

Commission 4 strategy is focussed on (for example):

• The development of best practice guides in Hydrography.

Active support and participation in FIG regional events.

#### Working Group 4.1 - Standards and Guidelines for Hydrography

#### **Policy issues**

Assist in the development and recognition of standards of competency; Assist in the development of technical standards and guidelines; Cooperation with sister organizations and other appropriate bodies;

#### Chair

#### Peter Barr (Australia): <a href="mailto:pb.barmarine@bigpond.com">pb.barmarine@bigpond.com</a>

#### Specific project(s)

Present and promote the use of standards and guidelines to the hydrographic surveying community, primarily IHO based Review Standards coming from alternate reputable sources for relevance to Hydrography. Assess the impact of international standards on current industry practice. Represent Commission 4 on the FIG Standards Network Promote recognition of professional pathways. Review IHO publication C13 (Manual on Hydrography) and other similar documents.

#### Workshops

Participation in FIG Standards Network meetings and other major Commission events

#### **Publication(s)**

FIG Working Weeks will include technical papers and/or reports to the FIG Standards Network on emerging standards, guidelines and specific issues. Ongoing contribution to the maintenance of the FIG Guide on Standardisation Timetable Ongoing work will be reported at FIG Working Weeks during the term of this plan and according to a timetable to be developed by the Working Group Chair. Working group to present a draft report at the relevant FIG Congress.

#### Beneficiaries

FIG Standards Network Sister organizations and relevant national and international GO and NGO's. FIG member associations, hydrographic surveyors in industry and government, academia All other relevant stakeholders.

#### Working Group 4.2 - Maritime and Marine Spatial Information Management

#### **Policy issues**

Assist in the development and promotion of marine and coastal spatial information management issues supported by hydrography and hydrographic data and information. Cooperation with sister organizations and other appropriate bodies. Cooperation with other FIG Commissions.

#### Chair

Jonathan Li, PhD, PEng, SMIEEE Professor of Geomatics Department of Geography & Environmental Management Faculty of Environment, University of Waterloo 200 University Avenue West, Waterloo, Ontario, Canada N2L 3G1 Office: EV1-111, E-mail: junli@uwaterloo.ca Tel: +1-519-888-4567, ext. 34504, Fax: +1-519-746-0658 http://environment.uwaterloo.ca/research/rsgtl/

#### Specific project(s)

Cooperate with, and represent the interests of FIG Commission 4 to, IMO in the development of an e-Navigation data framework (e.g., harmonization of data models among stakeholders).

Cooperate with IHO on the continuing development and expansion of S-100 to support hydrographic- and hydrographic-related spatial information management.

Cooperate with appropriate stakeholders (e.g., IHO-MSDIWG) on the development of concepts and principles that impact and are impacted upon by hydrography (e.g., MSDI, marine spatial planning and management, marine data models and applications, marine cadastre etc.).

Present and promote the above concepts, principles and outcomes to the international surveying community.

### Workshop(s)

Participation in / contribution to:

FIG Working Weeks, regional conference with dedicated technical sessions and/or Workshops as appropriate; International hydrography-related workshops and events.

#### **Publication(s)**

Possible publication(s) on MDSI, and marine spatial information management.

#### Timetable

Working Group Chair will make reports at FIG Working Weeks (2011-2013). Working group to present a final report at FIG Congress, 2014.

#### Beneficiaries

International maritime community; Sister organizations and other (national) agencies; FIG member associations, surveyors in industry and government, academe; Marine spatial information management community.

#### Working Group 4.3 – Blue Economy

Chair: Gordon Johnston



Mr. Gordon Johnston, MRICS 67 Devon Road Cheam Surrey SM2 7PE UNITED KINGDOM Tel. + 44 208 661 1650 Fax + 44 208 643 1890 Mob:+44 7966 937369 E-mail: gordon.johnston1@orange.net

WG 4.3 The Blue Economy

Work Plan for "The Blue Economy" 2015 until 2018 is based upon the continued work of Commission 4. The Blue Economy can be a diverse and wide ranging topic but for FIG Comm 4 it shall be primarily in developing and promoting the need to manage our oceans and seas in a sustainable manner based upon good data, good environmental principles and good management practices. In this way the WG shall seek to promote and engage with IGO's and other NGO's to increase the understanding and awareness of the importance of the marine and ocean areas. High on the agenda will be to engage with UN-FAO and World Bank to determine how these organisations perceive the importance and benefits of managing the marine and ocean areas.

Comm 4 WG will participate in seminars, conferences and Technical Sessions at FIG events. In addition it is planned that additional joint events shall be organised to further the work and to generate a short publication within the work period.

# **Co-operation with Sister Associations**

# FIG and IHO<sup>1</sup>

Commission 4 currently represents FIG on the FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC)<sup>2</sup> jointly with IHO and ICA. The commission will also support the IHO in its Capacity Building Initiatives with representation on the IHO Capacity Building Committee (CBC). Commission 4 will also support the IHO on any appropriate technical initiatives.

# FIG and the International Federation of Hydrographic Societies (IFHS)<sup>3</sup>

Commission 4 has begun to cooperate with the IFHS whereby the Federation has provided input into the 2006-2010 work plan and the commission will continue to lend its support towards sponsoring IFHS conferences and other initiatives. For example, the commission has provided financial support and resources for updating the IFHS special publication (SP-3) entitled Hydrographic Surveying as a Career. It is important for Commission 4 to maintain contact with all national Hydrographic Associations (whether members of the IFHS or not) to foster communications and cooperation for the betterment of the profession.

### Notes:

- 1. FIG and IHO cooperate under a Memorandum of Understanding (MOU) which was signed in Athens, May 2004. Our liaison is IHB Director, Hugo Gorziglia.
- 2. The role of the FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) is to develop and up-date international standards of competence for Hydrographic surveyors and to review the academic programme of educational institutions that are seeking IHO accreditation of their Hydrographic training courses. The IBSC is composed of 4 representatives from FIG, 4 from IHO and 2 from the ICA. Our liaison officer with the IBSC is Gordon Johnston.

3. FIG and the International Federation of Hydrographic Societies (IFHS) cooperate under a MoU which was signed in Cairo, April 2005. The task has been mandated to Commission 4. FIG liaison with the IFHS is Simon Ironside.

FIG and the International Federation of Hydrographic Societies (IFHS) cooperate under a MoU which was signed in Cairo, April 2005. Our liaison with the IFHS is their President, Paul Hornsby.

### Co-operation with the United Nations agencies

Commission 4 will participate in co-operation with the United Nations agencies on topics that are related to commission expertise (e.g. marine cadastre, data framework for e-Navigation etc.) and on guidance by FIG Council.

# **Cooperation with other FIG Commissions**

Commission 4 will, for example, collaborate with Commission 5 to review and revise (where required) FIG Publication 37, Vertical Reference Surface for Hydrography. Commission 4 will also collaborate with other FIG Commissions as appropriate.

# **Representation to FIG Networks and Task Forces**

Commission 4 will appoint representatives to the following FIG initiatives:

Standards Network Climate Change Task Force National and International Boundaries

### **Other Activities**

Commission 4 will maintain and develop the commission's web page, with linkages to other relevant home pages and new pages or other networks for special projects, to keep commission delegates, the Hydrographic community and the public involved in and informed about the work of the commission. Commission 4 will also contribute editorials, reports and articles to Hydrographic publications including but not restricted to the Hydrographic Journal, Hydro International, The Hydrographic Review, Sea Technology and Lighthouse. Commission 4 will publish a newsletter at least once a year.

### **Calendar of Events**

2015

Ocean Business 2015, 15-16 April, National Oceanography Centre, Southampton, UK. FIG Blue Economy seminar at Southampton 14<sup>th</sup> April.

U.S. Hydrographic Conference 2015, March 16-19 at Gaylord Hotel, national Harbour, Maryland, U.S.A.

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

2nd International Symposium on Computer Vision in Remote Sensing, 26-28 April 2015, Xiamen, China.

3rd International Summer School on Mobile Mapping Technology, 26-30 April 2015, Xiamen, China

Special session on mobile scanning and imaging systems at IGARSS 2015, 26-31 July 2015, Milan, Italy.

8th IHO-IAG Advisory Board on the Law of the Sea (ABLOS) Conference in Monaco from 20 - 22 October, 2015

Hydro 2015 international Conference Symposium at Cairns, Queensland, Australia from 03 - 07 November 2015. Theme: Harnessing the Blue Economy through

Joint Event of the 5th International Conference on Earth Observation for Global Change (EOGC 2015) and the 7th International Conference on Geo-information Technologies for Natural Disaster Management (GiT4NDM 2015), December 6-8, 2015, United Arab Emirates University, Al-Ain, United Arab Emirates.

9th International Symposium on Mobile Mapping Technology (MMT), December 10-12, 2015, Sydney, Australia.

# 2016

FIG Working Week, 2-6 May, Christchurch, New Zealand Canadian Hydrographic conference, 2016

#### 2017

FIG Working Week, May/June Helsinki, Finland U.S. Hydrographic conference

#### *2018*

FIG XXVI Congress, May/June, Istanbul, Turkey Canadian Hydrographic Conference.

#### **Other Activities**

Commission 4 will maintain and develop the commission's web page, with linkages to other relevant home pages and new pages or other networks for special projects, to keep commission delegates, the Hydrographic community and the public involved in and informed about the work of the commission. Commission 4 will also contribute editorials, reports and articles to

Hydrographic publications including but not restricted to the Hydrographic Journal, Hydro International, The Hydrographic Review, Sea Technology and Lighthouse. Commission 4 will publish a newsletter at least once a year.

#### **Commission Officers**



Angela Etuonovbe AnGene Surveys & Consultants Uti Street,Off P.T.I. Road Effurun 332101 Delta State NIGERIA Email: aetuonovbe@yahoo.com

# Vice Chair of Administration & Communication



Mr. Gordon Johnston, MRICS 67 Devon Road Cheam Surrey SM2 7PE UNITED KINGDOM Tel. + 44 208 661 1650 Fax + 44 208 643 1890 Mob:+44 7966 937369 E-mail: gordon.johnston1@orange.net

# FIG Commission 5 – Positioning and Measurement

# Work Plan 2015–2018

# 1. Title

Positioning and Measurement

### 2. Terms of Reference

- The science of measurement (instrumentation, methodology and guidelines)
- The acquisition of accurate and reliable survey data related to the position, size and shape of natural and artificial features of the earth and its environment and including variation with time.

### 3. Mission statement

The mission of Commission 5 is to:

- Focus on modern technologies, and technical developments and assist individual surveyors, engineers and GIS/LIS professionals through guidelines and recommendations, to choose and utilise those methods, technologies and instruments that are most appropriate to different applications.
- Follow technical developments through collaboration with other FIG Commissions and other international organisations; participation in appropriate meetings; and the preparation of appropriate publications.
- Support research and development and stimulate new ideas in the fields of expertise represented within the commission.
- Collaborate with manufacturers on the improvement of instrumentation and associated software.
- Present and promote the work of the Commission and its working groups on an ongoing basis at FIG Congresses, FIG Working Weeks, FIG Regional Conferences and other relevant technical meetings and in appropriate FIG and other media.

# 4. General

This work plan covers the development, use and integration of technologies for positioning and measurement and the associated standardisation, best practice and fundamental reference frame issues. Many of the issues are global in nature and Commission 5 along with many other Associations is well suited to tackle the technological challenges we face. There will be an ongoing cooperation with United Nations Agencies to address global problems such as sustainable development and humanitarian needs. The disciplines covered by Commission 5 will deliver solutions for the spatial aspects of these important global problems. Specific activities aimed at developing countries include examination of Low Cost Surveying Technologies, assistance with implementation of modern Geodetic Reference Frames (including Vertical Reference Frames) and associated infrastructure and contribution to appropriate Continuing Professional Development programs.

In addition to the specific activities above, the Commission will support and contribute to FIG Task Forces and the Standards Network. The Commission will also respond to the FIG Council to address new issues as they emerge.

# 5. Working Groups

# Working Group 5.1 – Standards, Quality Assurance and Calibration

Policy Issues

- Influence the development of standards affecting positioning and measurement instruments and methods, in collaboration with the FIG Standards Network and through participation in the relevant technical committees (TCs) of the International Standards Organisation (ISO) and other appropriate bodies.
- Acceptance controls, quality assurance and certification and their impact on the surveying profession.
- Testing and calibration of measuring instruments.
- Assist other Commission Working Groups to implement Standards from TC 172/SC 6 and ISO TC211 as appropriate.

### <u>Chair</u>

David Martin (France), e-mail: <u>david.martin@esrf.fr</u>

Specific project(s)

- Guide for the expression of uncertainty in measurements (GUM) for surveying
- Connection to ISO TC211

### Workshop(s)

- Participation in FIG Working Weeks and other major Commission events with dedicated Technical Sessions and/or Workshops as appropriate.
- Special Session on ISO TC211 at a FIG Working Week.

### Publication(s)

- A dedicated publication regarding the implementation of the "Guide for the expression of uncertainty in measurements" (GUM) for surveying

### Timetable

- Draft publications will be presented at FIG Working Weeks during the term of this plan and according to a timetable to be developed by the Working Group Chairs.
- Working group final report and outcomes will be presented at dedicated session, FIG Congress, 2018.

### Beneficiaries

FIG member associations, manufacturers and users of survey equipment, governments, standardisation organisations, decision makers, GIS developers and users, surveying businesses, individual surveyors

# Working Group 5.2 – 3D Reference Frames

Policy issues

- Work to bring together all organisations involved in defining or using reference frames to develop common approaches and avoid duplication. Such organisations include FIG, the International Association of Geodesy (IAG), ISO, groups of national mapping agencies, other influential national agencies.
- Continue the existing co-operation with IAG on the Regional Reference Frame Projects such as AFREF, APREF, EUREF, NAREF, and SIRGAS.
- Consider options for the development and implementation of 4 dimensional datums that incorporate the effects plate tectonic and regional effects such as those due to earthquakes or local effects such as landslides.
- Provide background technical information on relevant issues written in a way that is accessible to the surveying practitioners.
- Examine how surveying practitioners can access the reference frame, through less emphasis on networks of ground monuments and more emphasis on Global Navigation Satellite Systems (GNSS) base stations.
- Provide information on the maintenance of CORS networks to ensure long-term stability

### Chair

Nic Donnelly (New Zealand), e-mail: <a href="mailto:ndonnelly@linz.govt.nz">ndonnelly@linz.govt.nz</a>

#### Specific project(s)

- Review of Reference Frames in Practise Manual,
- Connection to ISO-TC211: Geodetic Registry Network.

### Workshop(s)

- Continuing Seminars on Reference Frames in Practise, 3D and vertical frames
- Participation in FIG Working Weeks and other major Commission events with dedicated Technical Sessions.

#### Publication(s)

- FIG Publication on ITRF
- Publication regarding national datums (different types)

#### **Timetable**

- Draft publications will be presented at FIG Working Weeks during the term of this plan and according to a timetable to be developed by the Working Group Chairs.
- Working group final report and outcomes will be presented at dedicated session, FIG Congress, 2018.

### **Working Group 5.3 – Vertical Reference Frames**

#### Policy issues

- Educate FIG member agencies on current and future status of regional and global vertical reference frames and height systems

- Educate FIG member agencies on practical aspects about the implementation of new geopotential datums including:
  - access using geoid height models and a geometric datum
  - o redefining heights on existing bench marks to serve as secondary control
  - ties between height systems and local and global mean sea level

#### <u>Chair</u>

Kevin Kelly (USA), e-mail: <u>kevin\_kelly@esri.com</u> <u>Co-Chair</u> Dan Roman (USA), e-mail: <u>dan.roman@noaa.gov</u>

#### Specific project(s)

- Solicit members for WG
- Inventory/catalogue of height systems and vertical datums in use by countries and/or FIG member agencies
- Capture planned changes and timelines for the evolution of height systems in countries and by FIG member agencies

#### Workshop(s)

- Special Sessions regarding vertical reference systems at FIG Working Weeks, other major FIG events and at related conferences including Reference Frame in Practice Seminars.
- Splinter meetings to coordinate activities at national and international meetings including UN-GGIM, IAG (Commission2 and IGFS), and UNOOSA

#### Publication(s)

- Chart of definitions of vertical datums (including tidal datums), height systems and their relationships
- Review paper on principles vertical reference frames and height system unification
- FIG publication on "Vertical Reference Frames in Practice" covering practical aspects of and procedures for using vertical reference frames and height systems
- Develop a series of papers on practical aspects of implementing new national vertical datums consistent with global and regional height systems

#### <u>Timetable</u>

- Working group final report and outcomes will be presented at dedicated session, FIG Congress, 2018.

#### **Beneficiaries**

FIG member associations, government agencies, decision makers, GIS developers and users, surveying businesses, individual surveyors.

### Working Group 5.4 – GNSS

#### Policy issues

- Examine the positioning services using CORS and automated positioning software via WWW.
- Support and disseminate emerging positioning techniques using GNSS

- Research and dissemination regarding real time networks
- Multi-GNSS products and advancements
- Provide FIG input during planning and implementation phases associated with programs of modernisation and development of all GNSS

<u>Chair</u> Neil D. Weston (USA), e-mail: <u>Neil.D.Weston@noaa.gov</u> <u>Co-Chair</u> Suelynn Choy (Australia), e-mail: <u>suelynn.choy@rmit.edu.au</u>

#### Specific project(s)

Research and Publications on "Precise Point Positioning, Network RTK, Processing Services, Low-Cost GNSS, Multi-GNSS"

#### <u>Workshops</u>

- Continuing Seminars on Reference Frames in Practise, 3D and vertical frames
- Special Session regarding these topics on FIG Working Weeks and Conferences.

#### **Publications**

- Publication on PPP misconceptions, challenges and opportunities
- Publication on Multi-GNSS advances including best-practise examples

#### <u>Timetable</u>

- Draft publications will be presented at FIG Working Weeks during the term of this plan and according to a timetable to be developed by the Working Group Chairs.
- Working group final report and outcomes will be presented at dedicated session, FIG Congress, 2018.

### **Beneficiaries**

FIG member associations, government agencies, decision makers, GIS developers and users, surveying businesses, individual surveyors.

### Working Group 5.5 – Multi-Sensor-Systems

(joint with IAG)

### Policy issues

This group 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.

<u>Chair</u> Allison Kealy (Australia), e-mail: <u>a.kealy@unimelb.edu.au</u> <u>Co-Chair</u> Guenther Retscher (Austria), e-mail: <u>Guenther.Retscher@geo.tuwien.ac.at</u>

Specific project(s)

- International field experiments and workshops on a range of multi sensor systems and technologies.
- Evaluation of UAV capabilities and the increasing role of multi-sensor systems in UAV navigation.
- Investigate the role of vision based measurements in improving the navigation performance of multi sensor systems.
- Development of shared resources to encourage rapid research and advancements internationally.

### Workshops

Special Sessions at Working Weeks and Supporting Special international conferences and symposia including: Mobile Mapping Symposium, ION GNSS, IGNSS Australia, IPIN, etc.

#### **Publications**

A number of papers will be submitted to relevant conferences and technical journals. A special journal edition of papers from the Mobile Mapping Symposium in 2015 will be supported.

#### <u>Timetable</u>

- Draft publications will be presented at FIG Working Weeks during the term of this plan and according to a timetable to be developed by the Working Group Chairs.
- Working group final report and outcomes will be presented at dedicated session, FIG Congress, 2018.

### **Beneficiaries**

FIG member associations, academic and research institutions, spatial data acquisition specialists, third party developers of LBS requiring mobile location information, GIS developers and users, surveying businesses, individual surveyors.

# Working Group 5.6 – Cost Effective Positioning

Policy issues

- Educate FIG member associations and individual surveyors on when to use which surveying instrument or evaluation software taking into account economic reasons
- Design fit-for-purpose surveying systems that are cost-effective
- Support decision makers for establishing cost-effective positioning solutions

<u>Chair</u> Leonid A. Lipatnikov (Russia) e-mail: <u>l.lipatnikov@ssga.ru</u>

Specific project(s)

Developing guidelines for cost-effective use and design of survey solutions including costs for labour and investment

<u>Workshops</u> FIG workshop with Commissions 3 and 7

**Publications** 

FIG Publication on cost effective surveying techniques

Timetable

- Working group final report and outcomes will be presented at dedicated session, FIG Congress, 2018.

# **Beneficiaries**

FIG member associations, academic and research institutions, spatial data acquisition specialists, GIS developers and users, surveying businesses, individual surveyors mianly dedicated to developing countries.

# 6. Co-operation with Other Commissions and organisations

- Commission 6 and ISPRS on Laser Scanning
- Commission 7 and 3 on Cost-Effective Positioning

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

- United Nations Office for Outer Space Affairs (UNOOSA) and ICG (International Committee on GNSS). FIG is co-chairing of the Task Force on Geodetic Reference Systems.
- UN GGIM is another field of cooperation between UN and FIG Commission 5.
- Strong Cooperation with International Association of Geodesy (IAG), with which FIG has a Memorandum of Understanding. Working group 5.5 is jointly organized with IAG.
- Good cooperation with International Society for Photogrammetry and Remote Sensing (ISPRS), the Permanent Committe on GIS Infrastructure Asia Pacific (PCGIAP) and the US based Institute of Navigation (ION).
- Contribution to International Standard Organizations, especially ISO.

# 8. Commission Officers

# **Commission Chair**

Prof. Volker Schwieger

University Stuttgart Institute of Engineering Geodesy Geschwister-Scholl-Strasse 24D D-70174 Stuttgart GERMANY Tel. + 49 711 685 84040 Fax + 49 711 685 84044 E-mail: volker.schwieger@ingeo.uni-stuttgart.de

### Vice Chair of Administration

Ms Li Zhang University Stuttgart Institute of Engineering Geodesy Geschwister-Scholl-Strasse 24D D-70174 Stuttgart GERMANY Tel. + 49 711 685 84049 Fax + 49 711 685 84044 E-mail: li.zhang@ingeo.uni-stuttgart.de

#### **Chair of Working Group 5.1**

Mr. David Martin Alignment and Geodesy Group ESRF 6 rue Jules Horowitz BP220 38043 Grenoble Cedex FRANCE Tel. + 33 4 76 88 22 45 Mobile: Fax + 33 4 76 88 23 13 E-mail: <u>david.martin@esrf.fr</u>

#### **Chair of Working Group 5.2**

Mr. Nic Donnelly National Geodetic Office Land Information New Zealand PO Box 5501 Wellington 6145 NEW ZEALAND Tel: +64 4 460 0191 Email: ndonnelly@linz.govt.nz

#### **Chair of Working Group 5.3**

Mr. Kevin M. Kelly Esri Inc. 380 New York Street Redlands CA 92373

FIG 38<sup>th</sup> General Assembly Sofia, Bulgaria, 17-21 May 2015 FIG Commission 5 – Work Plan 2015-2018 USA Tel. +1-909.793.2853, ext. 1162 E-mail: <u>kevin\_kelly@esri.com</u>

#### **Co-Chair of Working Group 5.3**

Dr. Dan Roman NOAA National Geodetic Survey National Oceanic& Atmospheric Administration 1315 East-West Highway Silver Spring, MD 20910 USA Tel.: +1-301-713-3202 ext. 161 E-mail: dan.roman@noaa.gov

#### **Chair of Working Group 5.4**

Dr. Neil Weston Deputy Director NOAA National Geodetic Survey SSMC3, Rm 8658 1315 East-West Highway Silver Spring, MD 20910 USA Tel.: +1-301-713-2847 ext.202 Fax: +1-301-713-4475 E-mail: Neil.D.Weston@noaa.gov

### **Co-Chair of Working Group 5.4**

Dr. Suelynn Choy School of Mathematics and Geospatial Science RMIT University GPO Box 2476 Melbourne Victoria 3001 AUSTRALIA Tel.: +61 3 9925 2650 Fax: +61 3 9663 2517 Email: <u>suelynn.choy@mit.edu.au</u>

### **Chair of Working Group 5.5**

Dr. Allison Kealy Graduate Coordinator (Masters of Geomatic Engineering) Department of Geomatics The University of Melbourne Victoria 3010 AUSTRALIA Tel +61 3 8344 6804 Mobile : Fax +61 3 9347 2916 Email <u>akealy@unimelb.edu.au</u>

# **Co-Chair of Working Group 5.5**

Prof. Günther Retscher Vienna University of Technology Department of Geodesy and Geoinformation Engineering Geodesy Gusshausstrasse 27-29 E120-5 1040 Vienna AUSTRIA Tel.: +43 1 58801 12847 Fax: +43 1 58801 12894 Email: guenther.retscher@tuwien.ac.at

# **Chair of Working Group 5.6**

Leonid A. Lipatnikov, Ph.D. Senior Lecturer Siberian State University of Geosystems and Technology Plakhotnogo st. 10, office 543 630082, Novosibirsk RUSSIA Tel.: +7 923 2278957 Email: <u>l.lipatnikov@ssga.ru</u>

Volker Schwieger Chair, FIG Commission 5 www.fig.net/commissionx

March 2015

# FIG Commission 6 – Engineering Surveys

# Work Plan 2015–2018

## 1. Title

Engineering Surveys

### 2. Terms of Reference

- Real-time deformation monitoring, analysis and interpretation, measurement of time series, measuring and analyzing the load caused the stress and strain response of the engineering structures.
- Data acquisition, pre- and post-processing. Optimization and control of the data management during the life cycle of a project, final data integration, and its accuracy reliability for wide range processes of the structural engineering.
- Integration of classical, scanning and radar, epoch-wise comparing systems for the structural monitoring of civil and industry objects as also MLS and Airborne (including UAV) systems for control and monitoring of the strategic national and trans-border engineering infrastructures.
- Support the data acquisition and management with engineering products used for the BIM development.

### 3. Mission statement

- Implementation of innovative technologies and modernization of the engineering surveys processes of data acquisition, processing, interpretation and quality control but also the epoch by epoch data management and analysis of the engineering object condition changes as important part of the maintenance and emergency situation alert.
- Developing and implementation of calculation algorithms for optimization of the surveying data pre-and post-processing.
- Further development of the process of design, construction and exploitation of engineering objects.
- Support all development and multidisciplinary expertise leading to integrated survey methods, using various instruments (geodetic, geotechnic, fast motion) and sensors and combining geometry with all other data relevant to each engineering problem (as example BIMS.
- Engagement in the West and Central Asia region and acquisition of an interest for joining the FIG.
- Cooperation with the ISM (International Society for Mine Surveying).
- Organize regional FIG events, and participates on events organized by sister organizations.

# 4. General

This working plan covers the implementation, integration and data fusion of the results from the new measurement technologies with the traditional survey methods in order to reach higher reliability and quality of the final results, to ensure safety operation.

Commission 6 will consist of 5 Working Groups where one of them is joint working group with Commission 10.

Commission 6 is divided into working groups profiled in specific areas of the engineering survey, data acquisition and analysis. Their work can be used for the FIG contribution to respond to the structural monitoring, predicting of deformations of natural and artificial structures and to prevent disaster.

# 5. Working Groups

# Working Group 6.1 – Deformation Monitoring and Analysis

# Policy Issues

Deformation studies in Engineering Surveying are based on a broad knowledge of suitable sensors and their potential, modern data storage and communication solutions and advanced processing and analysis methods. Additionally a thorough understanding of the behaviour of monitoring objects (large scale structure or landslide effected area), is essential to set-up and operate an optimum monitoring system. Nowadays deformation tasks are more and more oriented towards real-time systems, which require automation of data capture and new concepts in data processing, analysis and interpretation.

WG6.1's main goals will be to support specialists in deformation studies with state-of-the art solutions and provide latest developments and future oriented concepts:

- Support studies on the potential of existing and new sensors to determine geometric deformation quantities from surveying and adjacent fields (such as geotechnics).
- Support the development of concepts for automated data storage, data transfer and data pre-processing.
- Support the adaptation of numerical algorithms to derive relevant deformation quantities in real-time, including concepts from time series analysis.
- Support a multidisciplinary collaboration between surveying, structural and geotechnical engineers to understand the behaviour of structures and geotechnical objects.
- Study of most modern concepts for data analysis (e.g. artificial neural networks, fuzzy logics and generic algorithms).
- Initiate investigations to extend the range of deformation studies to higher frequencies, specifically in Structural Health Monitoring (study of oscillations and vibrations and their effects on critical structures).

# <u>Chair</u>

Prof. Dr. Wolfgang Niemeier (Germany) E-mail: <u>w.niemeier@tu-bs.de</u>

- Prepare reports on State-of-the-Art for typical deformation tasks (e.g. dams, bridges, high buildings, landslides, rock-fall, etc).
- Comparison of data acquired with different modern automated deformation measurement systems.

- Optimization and modernization of calculation algorithms and processes.
- Comparison of concepts from artificial intelligence for deformation analysis.
- Case studies: e.g. application analysis concepts and tools for definition of typical data set of continuous observation.

Workshops/Symposia

• Every 2<sup>nd</sup> year

Publications

Proceedings of the meetings

**Beneficiaries** 

- Surveying professionals dealing with all aspects of deformation studies.
- Surveyors interested in high-level automated instrumentation.
- Geologists, structural, geotechnical and mining engineers concerned with deformation tasks.

# **Outcome of the work**

Support to the specialists in deformation studies and providing information on state-of-the-art solutions and future oriented concepts.

# Working Group 6.2 – Engineering surveys for design, constructive works and exploitation of buildings and communication infrastructure

### Policy Issues

- Initiate a multidisciplinary collaboration between survey engineers, civil engineers, structural and mechanical engineers.
- Creating an awareness of surveyors through a task force "Geotechnical sensors" as the trend today is going for an integration of those sensors in the geodetic deformation analysis.
- Support the design and usage of real-time deformation monitoring solutions and their systems for awareness during the constructive and exploitation period of an infrastructure object.
- Support the integration of adapted techniques and methods for the targets of the engineering surveying. Combination of the "Smart technology solutions" with the objectives of the engineering surveying for optimization the processes of train and automobile control system, and traffic management.
- Interaction with the requirements of the common used CAD systems and final product delivery forms.

### <u>Chair</u>

Joel van Cranenbroeck (Belgium) E-mail: <u>cgeos2014@gmail.com</u>

- Precise methods and equipment for staking out during construction and structural works.
- QC and documentation for ,as build" compared to ,as designed".
- Precise methods and equipment for engineering surveys for visualization and photo match.

- Precise methods and equipment for remote surveys.
- Dynamic Monitoring of Buildings and Structures during and after construction
- Offshore construction surveys.
- Integration of sensors for engineering survey.
- Rail and road tracks construction setting out, final survey and documentation.
- Standardization and reliability of the process for monitoring of railway and land transportation networks.
- Preservation of evidence.

### **Workshops**

One Workshop

#### **Publications**

Proceedings of the working weeks and regional conferences

#### **Beneficiaries**

- Surveying profession becoming involved in this developing technology which will partly replace current network adjustment processes.
- Surveyors wanting to acquire information about geotechnical sensors as used in engineering structures such as dams.
- Engineers who has to decide about the best techniques to monitor civil engineering structures.
- Engineering surveyors and engineers involved with construction and setting out will benefit, as well as structural engineers, current buildings and future building designs.

#### **Outcome of the work**

Surveying profession becoming involved in developing new technologies, which will partly replace current state-of-the –art processes.

# Working Group 6.3 – Sensor fusion, data acquisition and processing techniques for moving measuring complexes

#### Policy Issues

The sensor integration and the combination of signals from a number of sensors.

- Developing of new processing algorithms, data filtering and optimization of calculation process.
- Understanding the principles and applying the multi-channel systems for areas with no permanent GNSS availability, for surface scanning and investigations.
- Increased understanding of the theory and practice of designed moving measuring complexes for real-time automatic analysis of determined physical features (structure pressure and temperature, settlements and etc.).

<u>Chair</u> Under discussion

- Data modeling and engineering features extraction.
- Clearance Analysis for the railway and automotive transportation network.
- Limit checks.

Monitoring of underground natural and artificial engineering structures.

# Workshops

Surrounding modelling and collision prevention for intelligent traffic systems, 2017

## **Publications**

Proceedings of the meetings

## Beneficiaries

- Automotive industry
- Railway industry
- Forest industry
- Precision framing

# **Outcome of the work**

Increased understanding and improved practical application of the theory of sensor fusion, data acquisition and processing techniques for moving measuring complexes.

# Working Group 6.4 –Wide Area Engineering Surveys for Monitoring, Features Determination and Environmental Management

### Policy Issues

- Support the integration of MLS and Airborne systems (manned or unmanned) for the railway and road sectors for fast and precise surveying, monitoring and inventory documentation.
- Power lines infrastructure inspection and documentation.
- Support the geophysical, hydrographic and engineering surveys and data interpretation for stable wind power offshore facilities planning. This includes the position planning, cable route planning, interaction with the shipping, oil and gas industries, assurance for safety exploitation and protecting of the environmental heritage.
- Oil and gas pipelines, new clear power plants. Integration of fixed and moving sensor systems for continuous real-time monitoring and diagnostics.
- Support the LiDAR systems for the purposes of the waterways management, for surveying and estimating the corridor (natural and artificial one) width for the purposes of the infrastructure and water vehicles and floods damage preventing.
- TerraSarX time series and maps primary used for settlements control.
- UAV, Helikopters and Copters systems as effective and rapid data acquisition tools for the needs of the rail and road industry, for the mining surveying and data management.
- LiDAR systems for monitoring of water reservoirs and mine basins, for creating of bathymetric and topographic models.

# Chair

Rémy Boudon (France) E-mail: remy.boudon@edf.fr

- Optimization and automation of the methods for features extraction.
- 3-D system applications and surveyed data integration in the GIS, in the damage control and early alert systems.

• Landslides control.

## Workshops

Yearly based symposia

# **Publications**

Proceedings of the meetings

## Beneficiaries

- Railway and automotive industry
- Electric-, gas- and oil companies
- Telecommunication companies
- Disaster management

# **Outcome of the work**

Support the integration of MLS and Airborne systems (manned or unmanned) for concerned industry sectors, as well as UAV, Helikopters, Copters systems as effective and rapid data acquisition tools for fast and precise surveying, monitoring.

# Working Group 6.5 – Impact of the Engineering Surveying for BIM modeling (joint working group with Commission 10)

Policy Issues

- Support BIM development with engineering surveying products for various areas of application of the structural engineering.
- Support the construction management process and interacts directly with the construction engineers and architects.
- Support the GIS development, infrastructure objects maintenance, buildings evacuation planning and etc.

### Chair

Under discussion Assoc.Prof.Dr.Muzaffer Kahveci (Turkey)

### Specific projects

Based on Commission 10 plans.

### <u>Workshops</u>

**Publications** 

Proceedings of the meetings

### Beneficiaries

- Constructor engineers and management
- Building service engineers
- GIS
- Financial bodies

#### 6. Co-operation with Other Commissions and organizations

 Joint Working Group with Commission 10 – Construction Economics and Management (Commission in lead is10)

#### 7. Co-operation with other partners

Cooperation with the ISM (International Society For Mine Surveying)

#### 8. Commission Officers

#### Chair

Dr.Ivo Milev CEO technet-rail 20110 GmbH technet-rail 2010 GmbH Geothestr.42 10625, Berlin GERMANY Tel. +49 (0)30 54 84 07 85 E-mail: <u>ivo.milev@technet-rail.de</u>

#### Vice Chair for Administration

Desislava Staykova technet-rail 2010 Gmbh Geothestr.42 10625, Berlin GERMANY Tel. +49 (0)30 89 65 03 90 E-mail: desi.staikova@technet-rail.de

#### **Chair of Working Group 6.1**

Prof. Dr. Wolfgang Niemeier Technische Universität Braunschweig Institute of Geodesy and Photogrammetry Pockelsstrasse, 3 38106, Braunschweig GERMANY Tel.+49-531-391-94574 E-mail: <u>w.niemeier@tu-bs.de</u>

#### **Chair of Working Group 6.2**

Joel van Cranenbroeck Creative Geosensing SPRL-S Rue du Tienne de Mont, 11 5530 Mont, Yvoir BELGIUM E-mail: cgeos2014@gmail.com

## **Chair of Working Group 6.3**

Under discussion Tel. E-mail:

# **Chair of Working Group 6.4**

Rémy Boudon Expert Topographie EDF – DPIH – DTG Département Surveillance 12,rue Saint Sidoine 69003 Lyon FRANCE Tel. +33(0)4 69 65 53 56 E-mail: <u>remy.boudon@edf.fr</u>

## **Chair of Working Group 6.5**

Under discussion Assoc.Prof.Dr.Muzaffer Kahveci TURKEY Tel. E-mail:

Dr.Ivo Milev Chair, FIG Commission 6 http://fig.net/commission6

January 2015

# FIG Commission 7 – Cadastre and Land Management

# Work Plan 2015–2018

# 1. Title

Cadastre and Land Management

# 2. Terms of Reference

Commission 7 deals with all issues of land rights and land administration, as well from a service provider as from a user and citizen perspective. A special focus is given to cadastre and land management infrastructures as being fundamental for sustainable development. Key topics of Commission 7 activities are:

- land tenure in diversity of cultures and society
- cadastre and land registration
- legislation / governance / e-governance / reforming cadastre
- security of land tenure, data and information / access to information for citizens
- public trust in land administration systems / fraud prevention
- Fit-For-Purpose and pro-poor land administration / low cost models
- new technologies for remote and in-situ data acquisition on land rights / social media and third party data capture / crowdsourcing / role of land owners
- land use and land policy
- valuation and taxation of land / land markets
- land consolidation and land readjustment for rural and urban areas
- multi-dimensional and multi-temporal cadastre
- impact of climate change and disasters on land rights
- standards in land administration
- capacity building in land administration

# 3. Mission statement

The Mission of Commission 7 is:

- to provide a global forum for enhancing and exchanging knowledge about cadastre, land administration and land management
- to encourage the development of pro-poor land management and land administration tools
- to promote the importance of sustainable land administration infrastructures as being essential for sustainable development and economic growth
- to underpin the use of innovative and advanced technology in cadastre and land administration;
- to raise awareness of the role of surveyors in land administration matters to the public and among stakeholders.

# 4. General

Commission 7 builds upon a long term expertise from national delegates, experts and partners with different professional background. Based on results from previous years, Commission 7 will continue to provide assistance and knowledge for the implementation of the overall FIG strategy as far as related to cadastre and land management.

There is a focus on

- providing visions for future cadastre and land management
- taking the role as a mastermind in developing effective land management
- thinking about new models of land administration for sustainable development
- initiating professional discussions on new business models as required by a changing society
- securing land tenure and advocating citizens' rights

but at the same time, Commission 7 aims at staying pragmatic about what is feasible in a surrounding of cultural and social diversity and how commitment among stakeholders can be created for the benefit of the society and for the reputation of the profession in providing sustainability and advocacy to citizens, land owners and stakeholders.

The Commission work is assigned to 4 Working Groups who will address the objectives of this Work Plan by various activities, such as

- contributing to FIG Conferences, FIG Working Weeks, workshops and seminars
- presenting papers in national, regional and international conferences
- reporting findings from FIG Commission 7 Annual Meetings
- organising platforms and discussion forums for communication
- producing reports and publications in cooperation with other interest groups
- preparing documentation of activities and results
- co-operating with other FIG Commissions and Task Forces and Networks
- organising annual meetings in various regions of the world
- co-operating with relevant regional and international organisations from outside FIG including UN, World Bank, NGOs, NPOs, CSOs, professional associations and networks such as GLTN
- encouraging national delegates and representatives from all FIG member associations to participate in the Commission 7 work and to disseminate information to national associations and professionals
- encouraging representatives from professional associations who are not yet members of FIG to participate in Commission 7 activities

# 5. Working Groups

# Working Group 7.1 – Fit-For-Purpose Land Administration

Policy Issues

- identify role of Fit-For-Purpose Land Administration in relation to sustainable land use, food security, climate change etc. in the post-2015 Development Agenda
- implementing the 'Continuum of Land Rights' and the STDM into operation at country level including innovative methodologies for fast and low cost recording of

land rights and appropriate land rights for future housing, including proposals for innovative land rights (new models of leasehold, tenure of public land etc.)

- identify the value of land consolidation and land readjustment for rural and urban areas in poverty prevention programmes
- develop the second edition of the Land Administration Domain Model with ISO on behalf of FIG by integrating partners from local-national, regional and international organisations, NGOs, NPOs, insurances, re-insurances, bank companies, bar associations
- promoting the development of innovative hard- and software solutions for land administration
- identify the needs for further development, quality improvement and system optimisation after Fit-For-Purpose Land Administration is implemented

# Chair

Dr. Ir. Christiaan Lemmen, The Netherlands, email: Chrit.Lemmen@kadaster.nl

# Specific project(s)

Working Group 7.1 aims at generating answers to the globally growing demands on land governance, the Continuum of Land Rights and on responsible tenure by continuing its work on developments of STDM, LADM and Fit-For-Purpose in cooperation with partners from UN FAO and UN Habitat/GTLN and others for the goals of the post-2015 Development Agenda. Cooperation on the implementation of Voluntary Guidelines with UN FAO will continue. Further activities will focus on providing appropriate models including innovative land rights and tools for improving global coverage of evidence. Aspects of land consolidation and readjustment of land will be investigated in cooperation with FIG Commission 8. Trainings will be developed in cooperation with the YSN.

# Workshop(s)

- presentation of results and findings in international and national workshops, conferences and particularly in events of the global community (UN FAO, UN Habitat, UN GGIM, World Bank)
- initiating panel discussions with experts from in- and outside the profession in highlevel conferences
- international FIG Commission 7 Workshop (planned for 2017 or 2018) on Fit-For-Purpose Land Administration
- international FIG Commission 7 Workshop on LADM/STDM with UN FAO and UN Habitat/GLTN and in cooperation with FIG Standards Network, Joint WG on 3D Cadastre, YSN and INTERLIS Switzerland (proposed for 2016 in Portugal)
- training courses at national and regional level for stakeholders, trainers and land owners together with YSN

# Publication(s)

- second edition of LADM in cooperation with ISO
- special issue of Land Use Policy on LADM in a high impact Scientific Journal
- study on STDM strategy for increasing global acquisition of land tenure information
- Proceedings of an international FIG Commission 7 Workshop
- papers about land tenure in scientific magazines and newsletters

# <u>Timetable</u>

- special issue of Land Use Policy in 2015
- analysis of approaches for bringing the 'Continuum of Land Rights' into operation at FIG Working Week 2016
- progress of work and draft publications will be presented at FIG Working Weeks during the term of this Work Plan
- organising special sessions in FIG events as well as in other specific events throughout the term of this Work Plan
- edition II of ISO 19152 LADM until 2018
- Guidelines STDM for presentation in FIG Congress 2018

# **Beneficiaries**

International and regional NGOs and NPOs (UN FAO, UN Habitat, UN GGIM, World Bank), national and regional governments, decision-makers, FIG member associations, producers of handheld tools, software and service providers, global society, citizens.

# Working Group 7.2 – Land Management in Climate Change and Pre- and Post-Disaster Areas

# Policy issues

- assessment of land tenure in post-disaster areas
- pre-disaster assessment / documentation of land tenure
- legal/institutional/technical Fit-For-Purpose methods to secure land rights in pre- and post-disaster areas
- impact of climate change on land tenure / loss of land, land use changes
- compensation for value changes, consolidation of agricultural land, adjustment of urban land in post disaster regions
- new technologies for data capture in pre-disaster areas / validation of third party data
- cooperation models with public authorities / voluntary guidelines in conflicts
- capacity building in disaster response bodies
- spatial data infrastructures for pre-, during and post-disaster response (link to FIG Commission 3)

# Co-Chairs

Daniel Páez (PhD), Colombia, email: <u>dpaez@uniandes.edu.co</u> n.n.

# Specific project(s)

Working Group 7.2 aims at building upon results of cooperation with UN FAO and at establishing links to the networks of professionals from land administration institutes and organisations and from international and national bodies who are in charge of disaster management in order to raise awareness about the need of appropriate documentation of land rights in disaster situation and to facilitate cooperation with the relevant institutions in terms of securing rights of land owners in areas of high risks (e.a. with SIDS Small Islands Developing States and others).

Climate change entails long-term impacts on land and land tenure which may effect citizens significantly in their economic situation. Working Group 7.2 will analyse about long-term strategies for compensating impacts on land owners.

WG 7.2 is also interested in supporting the development of better land information systems that reduce risk, optimise resources during response activities and help reconstruction efforts after a disaster has occurred. In this, it is proposed to incorporate new data collection technologies, such as by drones, as a core element of better land management for disaster response.

# Workshop(s)

- participation in regional and international workshops / conferences
- contact with global community (UN), NGOs and NPOs
- international FIG Workshop of Commission 7 on Security of Land Rights in PP disaster areas in 2017 (proposed venue – Bogota/Colombia)
- presentation of results and findings in international and national workshops, conferences and particularly in events of the global community (UN FAO, UN Habitat, World Bank)
- Working Group members meetings during main FIG events (Congress, WW, Commission 7 Annual Meetings)
- web-seminars on key topics and projects

# Publication(s)

- Proceedings of international Workshop on Security of Land Rights in PP disaster areas
- Guidelines for pre- and post-disaster management of land rights
- Whitepaper on the use of new technologies for spatial data collection for disaster prevention and management
- analysis of climate change impacts on land management
- Guidelines for spatial data infrastructures (SDI) development and sharing for disaster management
- papers in scientific magazines and newsletters

# <u>Timetable</u>

- consultation draft of the Whitepaper on new technologies will be presented in Commission 7 Annual Meeting 2015
- intermediate results of assessment study about impact of climate change and disasters on land tenure will be presented in FIG Working Week 2016
- analysis of approaches for pre- and post-disaster management in land administration will be prepared for FIG Working Week 2017 along with a first draft of the Guidelines for SDI in disaster management
- final assessment about impact of climate change and disasters on land tenure will be prepared for FIG Congress 2018
- progress of work and draft publications will be presented at FIG Working Weeks during the term of this Work Plan
- organising special sessions in FIG events as well as in other specific events throughout the term of this Work Plan
- Final Report and Guidelines on PP disaster management on land rights and SDI Guidelines will be presented in FIG Congress 2018

# **Beneficiaries**

International and regional NGOs and NPOs, disaster response and disaster risk management bodies, governments, citizens, FIG member associations, GIS developers and users, producers of survey equipment and software providers, insurances and re-insurances.

# Working Group 7.3 – Crowdsourcing of Land Rights

#### Policy issues

- family of mobile devices supporting remote and in-situ capture of evidence of land rights
- global platforms managing evidence of land rights and obligations
- service delivery models
- scalability and capacity building of trusted intermediaries and land owners
- role of social media / validation of third party data
- impact on perception of security of tenure
- managing unintended consequences and privacy
- cooperation with public authorities in recognition or conversion of informal rights
- link to Working Group 7.1 Fit-For-Purpose Land Administration
- impact on land professionals and associate curriculum

# Chair

Dr Robin McLaren, United Kingdom, email: robin.mclaren@KnowEdge.com

## Specific project(s)

Working Group 7.3 aims at establishing permanent links to interest groups and partners from outside FIG for providing a forum for linking technology, society and established stakeholders in order to develop a sustainable, citizen centric structure of services.

The statement on role of land professionals will be drafted in cooperation with Commission 1 of FIG.

# Workshop(s)

- participation in workshops / conferences
- international joint FIG Commission 3 and Commission 7 Seminar 2015 (proposed venue Malta/Europe)
- conference in 2016 (proposed venue Portugal/Europe)

# Publication(s)

- review and analysis of approaches for crowdsourcing of land rights, identifying pros and cons to regulated procedures
- Guidelines in managing unintended consequences and privacy
- Guidelines in migrating informal land rights to formal land rights
- statement on role of land professionals in the context of democratisation of land rights
- papers in scientific magazines and newsletters

# <u>Timetable</u>

- review and analysis of approaches will be presented latest at FIG Working Week 2017
- statement on role of land professionals will be prepared for FIG Congress 2018
- progress of work and draft publications will be presented at FIG Working Weeks during the term of this Work Plan
- organising special sessions in FIG events as well as in other specific events throughout the term of this Work Plan
- Final Report and Guidelines will be presented in FIG Congress 2018

# **Beneficiaries**

Citizens, FIG member associations, international and regional NGOs and NPOs, CSOs, governments, decision makers, GIS developers and users, producers of survey equipment and software providers.

# Working Group 7.4 – Citizen Cadastre

# Policy issues

- land tenure and culture and society needs
- multi-dimensional and multi-temporal cadastre
- security of land tenure
- alternative forms of land tenure in changing society (generation property, affordable land, temporary urban and agricultural land tenure) complementary to WG 7.1
- role of land owner as key stakeholder
- privacy issues / access to data for citizens
- responsibilities of public authorities / cooperation models / fraud prevention
- analysis of trust in different land administration models
- assessment models for performance of land administration systems
- training of land owners / capacity building in institutional bodies
- building codes and IPMS
- standards for data in land administration
- representation in Joint WG on 3D Cadastre of Commission 3 and 7

# <u>Chair</u>

Gyula Iván (M.Sc.), Hungary, email: ivan.gyula@fomi.hu

# Specific project(s)

Working Group 7.4 aims at investigating about quality criteria and benefits of involvement of stakeholders in all kind of land administration processes as well as about strengths and weaknesses of established land administration systems in a changing environment and from changing society requirements.

The role of the UN FAO Voluntary Guidelines and criteria to assess the performance of systems in order to optimise trust of citizens and land owners into systems will be a topic of interest on the agenda.

The recently launched web-service for maintenance of the Cadastral Template as a publicly accessible tool for information about Land Administration systems will be evaluated and maintained in a joint effort with the Cadastral Template 2.0 project.

# <u>Workshops</u>

- presentation of results and findings in international, regional and national workshops, conferences
- participation in and co-organising of 3D Cadastre Workshops
- international FIG Commission 7 Workshop on Role of Land Owner as key Stakeholder
- panel discussions with experts from in- and outside the profession in FIG Conferences and other events
- joint Workshop on professional education in land administration with FIG Commission 2 and YSN (tbd, proposed for 2017)

# **Publications**

- analysis of specific requirements related to culture and society needs
- implementing VG into models
- study about use of international standards
- FIG Publication on professional education for land administration in cooperation with FIG Commission 2 and YSN

# <u>Timetable</u>

- statement on role of land owner will be prepared for FIG Working Week 2016
- assessment of performance of land administration systems will be presented at FIG Working Week 2017
- Proceedings of FIG Commission 7 Workshop will be published not later than 6 months after the event
- organising special sessions in FIG events as well as in other specific events throughout the term of this Work Plan
- progress of work and draft publications will be presented at FIG Working Weeks during the term of this Work Plan
- study about alternative forms of land tenure will be prepared for FIG Working Week 2017 in cooperation with WG 7.1
- Final report and results will be presented in FIG Congress 2018

# **Beneficiaries**

Land owners, citizens, FIG member associations, governments, decision makers, real estate companies, economy.

# 6. Cooperation with Other Commissions and organisations

Commission 7 will continue with cooperation and establish new links where relevant to other Commissions of FIG, in particular with Commission 1 on aspects of land administration and state boundaries, with Commission 2 on capacity building and professional education, with Commission 3 on 3D Cadastre and on aspects of Big Data and Crowdsourcing in SDI, with Commission 9 on the role of cadastre for taxation and valuation and with Commission 10 on registration of buildings and condominium rights.

Cooperation on topics of joint interest will be supported by

- co-organizing and participating in FIG seminars and workshops (joint Workshop with Commission 3 in autumn 2015 in Malta/Europe, joint Workshop with Commission 2 on professional education in Land Administration, date tbd).
- cooperation with Commission 1 Working Group "International Boundaries Settlement and Demarcation"
- cooperation with Commission 2 on organizing a joint Workshop and preparing a FIG Publication on Professional Education in Land Administration
- cooperation with Commission 8 on land adjustment and land consolidation (WG 8.1/WG 7.2)
- participating actively in international events organized from partners of FIG and from related professional organisations
- co-organizing technical sessions and discussion forums on specific topics of interest thus linking with topics of interests of other Commissions within FIG
- co-operating on a regular basis in joint Working Groups within FIG

# particularly in

# Joint Working Group on 3D Cadastre of Commission 3 and 7

The results of the previous term (2010-2014) of the joint WG provide a solid basis for the next 4-year term of the WG. The concept of 3D Cadastre is here to stay and the number of implementations is increasing, quite often with ambition to become LADM (ISO 19152:2012) compliant.

In 3D, physical and legal 3D objects are aligned and land administration is connected to other registrations via SDI: buildings, tunnels, cables/pipelines, terrain elevation, etc.

Most of the objectives, topics and scope of the previous term will be continued, but with additional emphasis on the following topics:

- collect and exchange experiences of operational 3D Cadastral systems (law, organization, technology)
- 3D Cadastre in mega-cities, often in Latin-America (Brazil, Mexico), Asia (China, Malaysia, Korea, Singapore) and Africa (Nigeria)
- 3D Cadastre usability studies, web-dissemination and 3D cartography
- 3D Cadastre as part the full life cycle of spatial development in 3D spatial plan, zoning, register restrictions, design solutions, acquire space/land, request/provide permits, obtain financing, realize/develop, survey/ measure results, submit final RRRs/SUs, check/validate submitted RRRs/SUs, store/ analyse data, disseminate, visualize and use the 3D (cadastral) objects
- contribute to the upcoming revision of ISO19152:2017 or 2018 (LADM) by further developing the 3D aspects in this international standard; e.g. provide a more formal taxonomy of different types of 3D parcels (spatial units)

# Timetable:

2015-2018 maintain website incl. list of literature and interest-group	
http://www.gdmc.nl/3DCadastres	
2015 analyse and complete second questionnaire status 3D Cadas	tres 2014-2018
2015-2017 3D Cadastres session at FIG Working Weeks	

2016	organize 5 <sup>th</sup> workshop on 3D-Cadastres
2017-18	FIG-publication on 3D-Cadastres
2018	conduct third questionnaire status 3D Cadastres 2018-2022
2018	presentation of the results at FIG Congress

Chair:

Prof. Dr. Ir. Peter van Oosterom, Commission 3, The Netherlands, email: <u>P.J.M.vanOosterom@tudelft.nl</u>

# **Cadastral Template 2.0**

The Cadastral Template 2.0 project is a follow-up of the Cadastral Template, which was originally established under the UN mandate by Resolution 4 of the 16th UNRCC-AP in Okinawa, Japan in July 2003. In 2014, the 3<sup>rd</sup> Plenary of UN GGIM-AP 2014 adopted as Resolution 5(d) "to support the development of the Cadastral Template 2.0, the successor to the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) supported Cadastral Template and encourage Member States to contribute information to the Cadastral Template 2.0 towards promoting better knowledge dissemination and sharing and promoting better practices".

FIG Commission 7 in close cooperation with the Centre for SDIs and Land Administration, Department of Infrastructure Engineering of the University of Melbourne and swisstopo is strongly supporting this project and intends to increase the number of participating countries, to initiate regular updates of the content, to evaluate the indicators and information provided by the country delegates, and to further develop the structure according to user needs in cooperation with the FIG-HO and member associations and delegates.

Project leaders:

Daniel Steudler (PhD), Switzerland, email: <u>Daniel.Steudler@swisstopo.ch</u> and Prof. Abbas Rajabifard (PhD), email: <u>abbas.r@unimelb.edu.au</u>

# **FIG Standards Network**

The Network is continuing the work of a former FIG Task Force which was established in 1998 in response to concerns from the Commissions, the Council and the General Assembly that standards were becoming increasingly important in the work of surveyors and that the issue was not being addressed sufficiently by FIG.

Commission 7 is represented in the FIG Standards Network by Dr. Ir. Christiaan Lemmen (NL). All Working Groups are linked to the topics and co-operate as required.

# 7. Cooperation with United Nation Organisations, Sister Associations and other Partners

Commission 7 has a long-term history in cooperation with the World Bank, UN agencies, such as UN Habitat, UN FAO, UN ECE, UNESCO and others, which will be continued. Links to the recently launched UN GGIM initiative are likely to start in 2015.

#### 8. Commission Officers

#### **Commission Chair**

Dipl. Ing. Gerda Schennach Chair of FIG Commission 7 p.a. BEV Federal Office of Metrology and Surveying Buergerstrasse 34 6020 Innsbruck, Austria, Europe Tel ++43(0)512 588091-1301 Fax ++43(0)512 588091-1253 email: gerda.schennach@bev.gv.at web www.bev.gv.at

**Vice-Chair of Administration and Communication** n.n.

#### Vice-Chair and Chair of Working Group 7.1

Dr. Ir. Christiaan Lemmen Cadastre, Land Registry and Mapping Agency – Kadaster Hofstraat 110 7311 KZ Apeldoorn The Netherlands Tel: +31 88 183 3110 Mobile: +31 6 5248 1717 email: <u>Chrit.Lemmen@kadaster.nl</u> web: <u>www.kadaster.nl</u>

#### Vice-Chairs and Co-Chairs of Working Group 7.2

Daniel Páez (PhD) Professor Universidad de los Andes Mail Address: Cra 1E No 19A-40 of ML744 Tel: ++57 1 3394949 ext 3440 Cel and whatsapp: ++57 314-4829263 email: <u>dpaez@uniandes.edu.co</u> web: <u>http://lab.uniandes.edu.co</u> and <u>https://sur.uniandes.edu.co/</u>

n.n.

#### Vice-Chair and Chair of Working Group 7.3

Dr Robin McLaren (D.Sc. Honorary) Director Know Edge Ltd 33 Lockharton Ave Edinburgh EH14 1AY Scotland UK Tel: +44 (0) 131 443 1872 Mob: +44 (0) 7803 163137 email: <a href="mailto:robin.mclaren@KnowEdge.com">robin.mclaren@KnowEdge.com</a> web: <a href="mailto:www.KnowEdge.com">www.KnowEdge.com</a>

#### Vice-Chair and Chair of Working Group 7.4

Gyula IVÁN (M.Sc.) Chief Adviser FOMI Institute of Geodesy Cartography and Remote Sensing Directorate General Bosnyák tér 5 1149 Budapest, HUNGARY Tel: +36 1 460 4081 Mob: +36 30 237 5384 email: <u>ivan.gyula@fomi.hu</u> web: <u>www.fomi.hu</u>

Gerda Schennach Chair, FIG Commission 7 www.fig.net/commission7

March 2015

WorkPlan\_Com7\_2015-2018\_Final 17-Mar-15

# FIG Commission 8 – Spatial Planning and Development

# Work Plan 2015–2018

# 1. Title

Spatial planning and development

#### 2. Terms of Reference

- Regional and local planning structure
- Land use planning and implementation control
- Human settlement issues in spatial development
- Natural resources utilization and stewardship
- Strategy for environmentally sustainable development
- Public Private Partnerships
- Rural development and land governance
- Disaster risks management and resilience
- Inter-relationship between and amongst Commissions

#### 3. Mission statement

The mission of Commission 8 is to unpack linkages between planning, Sustainable Development, natural resources utilization for economic growth while advancing social equity and resilience.

#### 4. General Spatial Planning

Commission 8 continues to recognize spatial planning as a function for political decision makers, regional and sub-regional development organizations, technical Institutions, and Academic Institutions with active involvement of local communities with the prime objectives of investigating and setting out policies, as well as their implementation in order to attain sustained growth and prosperity.

These regional and sub-regional bodies, including FIG should ultimately provide leadership in strategies for formulation and implementation of spatial development planning and decision making at all levels of governance.

#### **Urban Development**

The World Urban Forum and its partners is contributing to guiding and enriching the policy work on equity and sustainable urbanization through an open dialogue.

Commission 8 will actively support this ongoing dialogue and align its goals in achieving sustainable urban development with those of the Forum and will actively pursue and support any political and technical debates on attaining a socially and ecologically equitable future. Expectedly, our support of their goals will ultimately feed into the global preparatory process of the Third United Nations Conference on Housing and Sustainable Urban Development (Habitat III). In the face of global challenges, Urban management systems and infrastructure to support sustainable, resilient urban development ought to be pursued.

## **Rural Development**

The development of rural area, to some extent, is always neglected by local governments and the gap between rural and urban becomes increasingly wide, pwhich leads to many social, economic as well as environmental problems, threatening sustainable development of the country. Arguably, rural development is a complex issue, and could refer to many aspects such as land governance, fiscal policy, agricultural, and even social welfare system.

## The World at Risk

#### Development and Risks

The world's population is projected to rise to 9.6 billion in 2050 and to have reached 10.9 billion by 2100 (UN, 2013). Already more than half the world's population live in urban areas and that percentage is estimated to rise to 68 per cent (6.3 billion people) by 2050 (Swiss Re, 2013). There has always been a dialectic between attraction and risk in the determination of human settlement patterns, a trade-off between soil, resources and location on the one hand, and hazards, such as volcanoes, earthquakes and floods, on the other.

Researchers argue that this rapidly changing built environment is the fast-growing, sprawling urban conglomerations located mainly in the high-growth markets of East Asia. These often coastal and riverine urban areas like the Pearl River Delta in China are frequently exposed to multiple hazards such as floods, typhoons and tsunami. Many, too, are also located in seismically active areas, such as Metro Manila in the Philippines. The sheer concentration of lives and assets exposes more people more often to more risk.

#### **Natural Resources Utilisation**

Undoubtedly, the global efforts to ensure sustainable management of resources such energy, water, forest, needs sustained support from professional Association's such as FIG. With the current world population statistics, humanity will certainly run out of forest and rivers. Global resource consumption trends must prompt us to adopt realistic forecasts as a planning tool.

Citing instances from publications, it is believed that freshwater only makes 2.5% of the total volume of the world's water, which is about 35 million km3. But considering 70% of that freshwater is in the form of ice and permanent snow cover and that we only have access to 200,000km3 of freshwater overall, it isn't surprising that demand for water could soon exceed

supply. The Food and Agriculture Organisation of the United Nations is predicting that by 2025, 1.8 billion people will be living in countries or regions with absolute water scarcity.

The key challenges in the new millennium have been summarized by experts as climate change, food shortage, energy scarcity, urban growth, environmental degradation, and natural disasters.

These challenges can only be managed when the professional roles of surveyors' are broadened to encompass principles that link planning and development.

Commission 8 will consider what constitutes humanities needs as enshrined in the human rights charter. The right to life meaning access to land, water and energy as resources.

In the period 2015-2018, our focus will be to;

- Consider World's population and the eventual futuristic scenario planning based on global statistics on land, water and energy as a resource
- To develop guidelines, methods and planning systems based on availability, accessibility, equitability, profitability, of natural resources utilization for inclusive growth
- Assert FIG's leadership role in developing guidelines that minimize vulnerability, improve sustainability to achieve resilience for global common good
- Give prominence in spatial & economic planning systems to South East Asia, Africa, South America & Caribbean for the following reasons:
  - Vast untapped natural resource
  - High predominance of environmental risks
- Adopt robust planning principles for sustainable resource use mindful of the key nexus of equity, inclusive growth and sustainable urban development through (voluntary guidelines) that could emerge as global standard by FIG
- Create a platform for "cross knowledge" sharing by the developed and the developing countries
- Establish a working group with special focus on water and energy
- Commission 8 will continue to and deepen the collaboration/consultation with all Commissions and YSN

# 5. Working Groups

• Working Group 8.1 – Disaster recovery, risk management and resilience planning

#### Policy Issues

- Establish principles and guidelines for surveyors in disaster risks management, disaster recovery and resilience planning
- To formalize partnerships and roles with global Institutions working in the areas of disaster management

#### <u>Chair</u>

 Mr Phil Rhodes, New Zealand Email: <u>prhodes@pcc.govt.nz</u> Specific project(s)

- Investigate key roles of surveyors in disaster risk management and resilience planning
- Investigate areas with high predominance of environmental risk for targeted actions Workshop(s)
  - To organise a round table discussion at Sofia, Bulgaria in May 2015
  - Develop special papers for FIG working week 2016

# Publication(s)

• Present report at the FIG working week 2017

<u>Timetable</u>

- 2015: roundtable and preparatory discussion
- 2016: reports and recommendation
- 2018: Publication

**Beneficiaries** 

- FIG member organizations, UN, Red Cross and humanity organizations, Professional bodies
- Working Group 8.2 Stewardship for water, land and forest as primary resources for ldevelopment

# Policy issues

- Consider and examine human rights principles/issues to food, water, energy and shelter and to establish linkages between planning and development
- Surveyors functional role in ensuring proper stewardship and effective utilization of resources to sustain prosperity at community, country, and global levels
- Scenario planning as a means to mitigate availability, accessibility, equity, and sustainability challenges for water, land and forest as resources for development

# Chairs

- Ms. Yvonne O. Sowah Ghana Institution of Surveyors (Gh.IS) – Ghana Email: <u>alproserv3@gmail.com</u>
- Bruce Keith -Chartered Institute of Water & Environmenta Management (CIWEM) – United Kingdom Email: <u>lbrucekeith@yahoo.co.uk</u>

# Specific project(s)

- Identify a planning framework which supports public private partnership and offers the best stewardship for natural resources for development
- Investigate key roles for surveyors that supports the PPP above

# Workshop(s)

- Develop series of working papers for FIG working weeks
- Plan and organise a joint (Com 8 & Com 4) workshop with identified key stakeholders for policy initiation and an action plan.

# Publication(s)

- Report on outcomes of the workshops at FIG regional conference <u>Timetable</u>
  - 2015: Round Table to develop proposals and action plan
  - 2016: Refining and adopting the Action plan
  - 2017 Workshop
  - 2018 Publication

**Beneficiaries** 

• UN, FIG Members associations, Governments and NGO'S,

Working Group 8.3 – Human settlement policies and implementation

## Policy issues

- The narratives in the informal settlement,
- The debate for the next decade

# <u>Chair</u>

 Professor Perter Laarakker, Dutch Kadaster, Netherlands Email: <u>Peter.laarrakker@kadaster.nl</u>

# Specific project(s)

- Develop appropriate level of surveyors contribution to the Human settlement debate
- Explore emerging narratives in the informal settlement Issues

# Workshop(s)

- To explore and assert FIG's leadership and key role in informal settlement arena.
- and to investigate further to enhance the knowledge base through which surveyors can actively provide expert advice in informal settlement issues for Institutional collaboration and support at all levels of governance

Publication(s)

• To produce a working document and a program of action as outcomes from the workshops above

<u>Timetable</u>

- 2015: Round table session at FIG working week 2015
- 2017: Final report and recommendation for FIG working week 2017

# **Beneficiaries**

- United Nations, World Bank, World Urban Forum, FIG professional Associations and member organizations, NGO'S, Researchers.
- Working Group 8.4 Resilient Urban Development

#### Policy issues

- Promoting sustainable urban development with the surveyors' variety of skills and knowledge (e.g. geoinformatics, land management and development)
- Strengthening urban resilience and adapting cities to the impacts of climate change
- Analysing the role of society and culture in urban sustainability
- Supporting the promotion of best practices in sustainable urban development
- Encouraging international collaboration and driving exchange on resilient urban development

## Chair

Dr. Frank Friesecke, Germany Email: frank.friesecke@steg.de

## Specific project(s)

- Analysing the role of the Surveyor in dealing with urban sustainability and climate change
- Exploring how cities can cope with the demands of building urban areas that are environmentally sustainable and support both economic and social development

## Workshop(s)

- Urban development in developing countries (intended for a regional FIG Conference in Africa, Asia or South America)
- Managing disaster risk and the impacts of climate change with resilient urban development (Christchurch 2016)

## Publication(s)

To produce a working document and a program of action as outcomes from the workshops above

# Timetable

- 2015: 1. Round table session at FIG Working Week 2015 in Sofia
- 2016: 2. Round table session at FIG Working Week 2016 in Christchurch
- 2017: Final report and recommendation for FIG Working Week 2017 in Helsinki

#### Beneficiaries

- United Nations, World Bank, World Urban Forum, FIG professional Associations and member organizations, NGO'S, Researchers.
- Working Group 8.5 Rural development and land governance

#### Policy issues

- Identify the important role of land governance in sustainable rural development
- Develop a practical land governance framework to facilitate rural development, focusing on the issues of land tenure, spatial planning, land consolidation and village renewal
- Establish partnerships and exchange platforms among various organizations and institutions working on the field of rural development

#### Chair

 Rosy Liao Rong, China Land Surveying and Planning Insititue, China Email: rosyliao@outlook.com

 Dr.-Ing. Michael Klaus, Regional Project China of Hanns Seidel Foundation & Technical University Munich Germany Email: <u>klaus@hss.de</u>

Specific project(s)

- Identify factors for rural development to minimize the gap between urban and rural areas
- Identify key roles for surveyors to contribute to policy advice
- Identify key factors for Land Governance in regard of rural areas
- Identification of Key Actors
- Develop a guideline of setting up a functional land governance framework to facilitate rural development, focusing on the issues of land tenure, spatial planning, land consolidation and village renewal

Workshop(s)

- Workshops in China and other Countries as well as FIG Working Weeks to prepare a Working Papers

-

Publication(s)

- working document(s) and a program of action for rural development as outcomes from the workshops above
- Draft for Guidelines

#### <u>Timetable</u>

- 2015: Round table session at FIG working week 2015
- 2015: Workshop in China with Case Studies
- 2016: Round table Sessions at FIG Working Week 2016
- 2016: International Symposium in China
- 2017:Round table Session at FIG Working Week 2017
- 2018: Final report/paper and recommendation for FIG conference week 2018
- Research on Case Studies Time Schedule to be agreed on first round table session

•

- <u>Beneficiaries</u>
   United Nations (GLTN), World Bank, FIG professional Associations and member organizations, Land Administrations, Civil Society Organizations, NGO'S, Researchers.
  - Vice Chair Administration and Coordinator Inter Commission relations

#### Policy issues

 Planning involves multi; Tasks, Roles, Professions, Functions, location specific and is everything from Archaeology to Zoology. The need to manage high level collaboration, consultation and coordination between and amongst the Commissions as a policy objective of FIG should be asserted.

∎ Chair

 Dr. Kweku Yeboah, Kwame Nkrumah University of Science & Technology (KNUST), Ghana Email:

#### Specific project(s)

- Create high level collaboration with YSN and Commissions of FIG
- Plan and implement collaborative technical programs and joint sessions with other Commissions

#### Workshops

• Organise round table discussions at each and every working week to determine synergies in inter commission activities and with the active participation and involvement of YSN

#### **Publications**

• Reports on round table meetings and outcomes

<u>Timetable</u>

- 2015: Introductory meeting and round table discussion at working 2015
- 2016: Round Table discussion and action planning
- 2017: Report on outcomes of inter Commission activities

#### **Beneficiaries**

FIG Member association and Commissions, Young Surveyors Network,

#### 6. Co-operation with Other Commissions and organisations

- Commission 8 intends to cooperate with Commissions 1, 2, 3, and 4 and with organizations that seeks to uphold human rights, justice and equity in resource utilization.
- Specific Countries and organizations with challenges and needs requiring focused attention from FIG's leadership as built environment professionals.

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

#### 8. Commission Officers

#### **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

#### Vice Chair Administration and Coordinator – Inter Commission relations

Dr. Kweku Yeboah, Faculty of planning and land Economy Kwame Nkrumah University of Science & Technology (KNUST), Ghana Email

#### **Chair of Working Group 8.1**

Mr. Phil Rhodes Porirua City Council, 16 Cobham Court Porirua 5022 New Zealand Email: <u>prhodes@pcc.govt.nz</u>

#### **Chairs of Working Group 8.2**

Ms. Yvonne O. Sowah – Ghana Institution of Surveyors (Gh.IS) – Ghana Email: <u>alproserv3@gmail.com</u>

Co-Chair Mr. Bruce Keith -Chartered Institute of Water & Environmenta Management (CIWEM) – United Kingdom Email: <u>lbrucekeith@yahoo.co.uk</u>

#### **Chair of Working Group 8.3**

Peter Laarrakker, (Professor) Dutch Kadaster The Netherlands Email: <u>Peter.laarrakker@kadaster.nl</u>

# **Chair of Working Group 8.4**

Dr Frank Friesecke

Die STEG Stadtentwicklung GmbH Olgastr. 54 D- 70182 Stuttgart GERMANY Tel: +49 71121068118 Email: <a href="mailto:frank.friesecke@steg.de">frank.friesecke@steg.de</a>

# **Chair of Working Group 8.5**

- 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
  - Dr.-Ing. Michael Klaus, Regional Project China of Hanns Seidel Foundation & Technical University Munich Germany Email: <u>klaus@hss.de</u>

Kwame Tenadu Chair, FIG Commission 8 www.fig.net/commission8

December 2014

# FIG Commission 10 – Construction Economics and Management

# Work Plan 2015–2018

#### 1. Title

#### **Construction Economics and Management**

(including quantity surveying, building surveying, cost engineering and management; estimating and tendering; commercial management including procurement, risk management and contracts; project, construction and programme management including planning and scheduling)

#### 2. Terms of Reference

#### 2.1. Cost Engineering (CE) and Quantity Surveying (QS)

Functions:

- To provide independent, objective, accurate, and reliable capital and operating cost assessments usable for investment funding and project control; and
- To analyze investment and development for the guidance of owners, financiers and contractors.

CE and QS duties and responsibilities include:

- estimates of capital or asset costs including development costs;
- estimates of operating and manufacturing costs through an asset's life cycle;
- risk assessment and analysis;
- trending of scope and cost changes;
- decision analysis;
- financial analysis (eg, net present value, rate of return, etc);
- project cost control;
- appraisals of existing assets;
- project analyses, databases, and benchmarking;
- planning and scheduling;
- siting studies, etc.;
- productive and investment needs assessment;
- facility management needs assessment;
- project feasibility and budget assessment;
- cost management;
- procurement management;
- contract administration;
- whole-life appraisals;

- quality audits;
- value management; and
- dispute resolution.

These are typical functions of the CE or QS but not all practitioners in the field perform all of these functions. Many specialize in a limited number of these functions.

## 2.2. Project and Construction Management (PM/CM)

Function: To set project objectives in line with the purpose(s) set up by general management and to manage the resources necessary to meet the project objectives.

#### PM/CM should:

- ensure that a realistic reference (scope, cost, time) is set up for further control and is in line with the objectives;
- ensure that appropriate management tools are set up to help the team control the project;
- create a cost-minded atmosphere within the team;
- make decisions on what should be done in case of variance; and
- ensure that the project objectives remain in line with business needs.

## PM/CM delivers the project by:

- managing resources;
- delegating tasks;
- making decisions;
- receiving information;
- setting goals;
- motivating people;
- understanding cost engineering and quantity surveying;
- managing the schedule and make decisions in case of variance;
- managing quality and work methodology.

#### 3. Mission statement

The mission of Commission 10 is:

- The promotion of the practice of QS/CE and PM/CM globally.
- The promotion of "best practice" for QS/CE and PM/CM globally.
- The promotion of dialogue between member organizations engaged in QS/CE, and PM/CM.
- Fostering of research appropriate to the better understanding of building practice around the world.
- The promotion of cooperation among FIG Members organisations involving QS/CE and PM/CM for their mutual well-being and that of their individual members.

- The advancement of QS/CE, PM/CM, by education and research and continuing professional development
- To secure uniformity in education, standards and methodology by QS/CE, PM/CM throughout the world
- To facilitate and assist in development of formal education framework and competencies in the profession of QS/CE or PM/CM among member organisations that may not have a formal education or professional development in QS/CE or PM/CM
- To achieve the above mission objectives, FIG Commission 10 will collaborate with other international or regional organisations such as RICS, ICEC, PAQS, CEEC, AAQS, PMI and other similar organisations.

# 4. General

This work plan covers the development of the profession of QS/CE and PM/CM and framework for best practices and standards. Commission 10 intends to leverage on FIG's network of members organisations to promote the profession of QS/CE and PM/CM which are either non-existent or lacking in many countries especially the under-developed and developing countries. There are also developed countries that do not the profession of QS/CE or PM/CM. Specific activities aimed at these countries include development of standards for construction and cost management and contribution to appropriate Continuing Professional Development programmes.

# 5. Working Groups

# Working Group 10.1 – International Construction Measurement Standards

# Policy Issues

At present, construction measurement standards differ markedly around the world, making it difficult to accurately measure construction activities and processes, as well as the resulting performance and environmental impacts. The different sets of standards are often inconsistent or conflicting, making difficult for professionals, clients and investors to assess with certainly the value and risks attached to the project. In view of increasing mobility of construction professionals and also increased activities on cross border investments it is necessary for an international standard for consistency and transparency.

The establishment of International Construction Measurement Standards (ICMS) will be an international collaborative effort by international, regional or national professional organisations involving quantity surveying, cost engineering, project management and construction management.

The creation of such standards would eliminate current inconsistencies and improve the ability to assess, compare and reduce impacts related to environmental, social and economic impacts of the construction industry. Through accurate measurement standards, risks will be

reduced for businesses and investors and sustainable development can take place with greater accountability in both established and emerging markets.

The establishment of ICMS has the support of United Nations Global Compact. As the world's largest corporate sustainability initiative, the United Nations Global Compact works to advance collective action in support of sustainable development and to strengthen accountability. ICMS has the potential to increase transparency in the construction sector through the development of internationally-accepted standards in measurement.

<u>Chair</u>

See Lian Ong (slong1951@gmail.com)

## Specific project(s)

To be formulated by the ICMS Coalition. Essentially the formulation of the ICMS will be directed by the Coalition partners. Working Groups will be established to draft the various components of the standard.

## Workshop(s)

We propose an ICMS Workshop in the Spring of 2016 in London in collaboration with the members of the ICMS Coalition.

#### Publication(s)

International Construction Measurement Standard (ICMS)

#### **Timetable**

The timetable has not yet been set up yet. It is anticipated that the first draft of the ICMS will be ready for international consultation within 2 years from the setting up of the ICMS Coalition expected to be in January 2015.

#### **Beneficiaries**

FIG member associations, governments, standardisation organisations, decision makers, surveying businesses, individual surveyors, contractors, consultants, financial institutions, aids agencies.

# Working Group 10.2 – Building Information Modelling

#### Policy issues

BIM is on the cusp of becoming a common project requirement, but what is the position of the surveying profession in this new order?

QSs and PMs rely on the effective use, management and reuse of shared information. A BIM model allows this for asset information. Clearly, BIM presents a great opportunity for surveyors to improve their own efficiency and to add value through a better use of information on behalf of clients. Although there is an increasing awareness and usage of BIM, recent survey by RICS indicates that awareness of BIM issues within the surveying profession is still relatively low. The time for action is rapidly approaching. Tools that enable surveyors to use and add value to BIM models are now available, and are becoming increasingly powerful. So how should surveyors contribute to the development of the BIM capability? Key elements of the BIM Strategy point to some opportunities:

- government's focus on asset information 'data drops' provide opportunities for value added services, particularly associated with occupation and facilities management (FM)
- progressive adoption government's mandate for Level 2 BIM means that initial barriers to entry for surveyors will be low, particularly for value-added information exchange
- client pull, industry push surveyors have the opportunity to collaborate with the wider industry to define appropriate standards to drive efficiency and manage risk
- use of project intelligence to support project gateways with 'should cost', programme and operating cost information. This links closely to other Construction Strategy work streams dealing with benchmarking.

<u>Chair</u> To be appointed

Specific project(s) To be developed

Workshop(s) To be developed

<u>Publication(s)</u> International BIM Guidance for Surveyors

<u>Timetable</u>

#### **Beneficiaries**

FIG member associations, governments, academicians, developers/builders, decision makers, surveying businesses, individual surveyors, contractors, consultants, financial institutions.

# Working Group 10.3 – Education and Research

#### Policy issues

The profession of QS/CE is new or non-existent in some countries, both developed and developing countries. Commission 10 hopes to use its network and platform to influence policy makes to consider the use of QS/CE for developmental projects and as such the need to build competencies and human capital in this specialised field.

The new Chair of Commission 10 has had hands-on experience in bringing formal education of QS/CE to China about 10 years ago and hope to use the same model to develop the skills either through conversion programme or through developing course curriculum for undergraduate students.

Engagement with institution of higher learning within each of the relevant countries is essential to ensure the success and sustainability of this initiative.

<u>Chair</u> To be appointed.

Specific project(s) To be developed

Workshop(s)

<u>Publication(s)</u> Core competency standards for the Quantity Surveyors/Cost Engineers

Timetable

**Beneficiaries** 

FIG member associations, governments, institutions of higher education , decision makers, surveying businesses, individual surveyors, contractors, consultants, financial institutions.

# 6. Co-operation with Other Commissions and organisations

Commission 10 intends to co-operate with Commission 1 on Professional Practice and Commission 2 on Professional Education. Further Commission 10 intends to collaborate with other professional organisations involved in QS/CE, PM/CM, such as RICS, ICEC, PAQS, CEEC, AAQS, PMI and other similar organisations.

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

Through its involvement in ICMS, Commission 10 will work closely with the United Nations Global Compact, world's largest corporate sustainability initiative. The ICMS

Coalition will also be engaging with the World Bank and IMF to seek their support and adoption of ICMS.

In addition, Commission 10 also intends to collaborate with other professional organisations to seek ISO standard for "Cost Management" and to seek WTO for recognition of the QS/CE profession in the CPC code.

# 8. Commission Officers

- Commission Chair See Lian Ong 28 Jalan PJU 7/26, Mutiara Damansara, 447810 Petaling Jaya, Selangor, MALAYSIA Mobile: +60 12 2787103 Email: slong1951@gmail.com
- Vice Chair of Administration (TBA)
- Chair of Working Group 10.1 See Lian Ong (slong1951@gmail.com)
- Chair of Working Group 10.2 TBA
- Chair of Working Group 10.3 TBA

See Lian ONG Chair, FIG Commission 10 www.fig.net/commission10

December 2014





# FIG YOUNG SURVEYORS NETWORK





# **GENERAL INFORMATION**

The FIG Young Surveyors Network was established as Commission 1 'Working Group - 1.2 Working Group Young Surveyors' at the FIG Congress in Munich in 2006. The reason that this working group was started in the first place was to bring more Young Surveyors into FIG.

Since 2006 we have come quite a long way and in 2009 the Working Group was upgraded to the level of the FIG commissions and was from then on named 'FIG Young Surveyors Network'. The experience and input as a Working Group contributed to the establishment of the YSN within FIG.

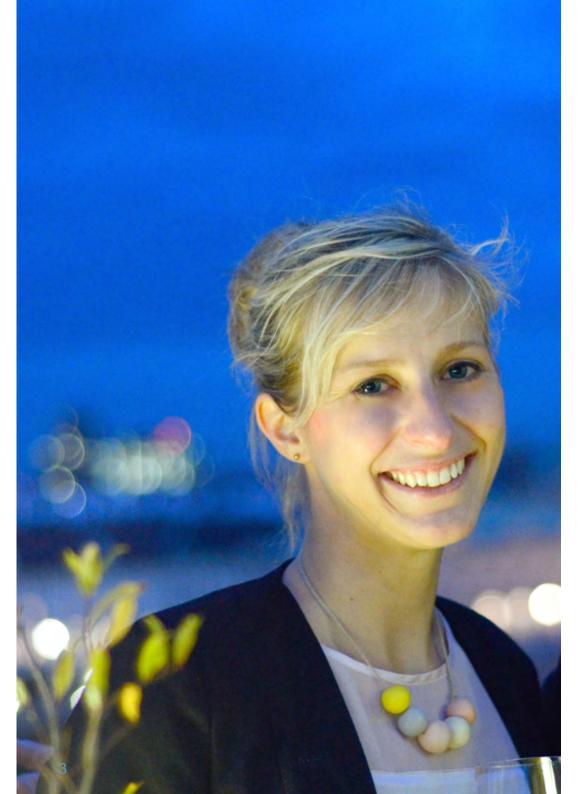
The contribution to the work of FIG and its commissions is the core of the network. Ensuring that Young Surveyors are well represented and active in the FIG Commissions is imperative. (http://www.fig.net/comm/index.htm) The YSN organised various events like meetings, workshops and trainings all over the world.

These events got recognized by and organised in cooperation with leading association like UN-Habitat, World Bank, FAO, CLGE etc.

The network also published various articles, statements and comments in magazines.

So far so good - and now it's time to go further.

Based on the theme of Chryssy Potsiou, FIG president 2015 - 2018, the FIG Young Surveyors Network will contribute to ensure 'the Rapid Response to Change will be done by the Surveyor of To-morrow'.



"Young people should be at the forefront of global change and innovation. Empowered, they can be key agents for development and peace. If, however, they are left on society's margins, all of us will be impoverished. Let us ensure that all young people have every opportunity to participate fully in the lives of their societies." — Kofi Annan

#### Griaß di - G'day - Salam - Hola - Ciao - Ekaaro - Selamat\*

I am Eva-Maria Unger the chair of the FIG Young Surveyors Network. Born and raised in Austria I would describe myself as a nature-loving wanderer. Thanks to the support of the Austrian national association (OVG) and my working place the Austrian Federal Office of Metrology and Surveying (BEV) I got the chance to participate in this inspiring international community of surveying experts and professionals. Looking back now when I started in being active in Sydney 2009 feels like a decade and I still can't believe on how many friends I made, how much I learned and how much it broaden my horizon.

The most vital elements of a Young Surveyors Network are... all of you! Enthusiasm, Energy, and an Open Mind for new ideas is all I am asking for. Let us be these agents of change and lift our profession to the next level through co-operation and friendship.

I am honored and grateful in being the chair of the FIG Young Surveyors Network for the next 4 years and I can't wait in being inspired by all of you!

**Eva-Maria Unger** FIG Young Surveyors Network Chair

\*means 'hello' in all the languages I've been to FIG Working Weeks and Congresses

"Let us make our future now, and let us make our dreams tomorrow's reality." — Malala Yousafzai

#### Dear all,

My name is Paula Dijkstra, born and raised in the Netherlands. During my first Young Surveyors Network Conference in Rome I learned about the added value of the national associations and being part of a global network. From that moment on I have contributed to the network.

By being an active member of the Network I got the opportunity to organise meetings, discuss about the next steps of the network, travel to places like Lisbon, Marbella, Zagreb and Kuala Lumpur. But also the opportunity to learn about how to organise international events, be a host of an event, write articles for the newsletter and to enhance my professional network.

But what I like the most is the friendship with the Young Surveyors I met and worked together with since my first encounter with the network.

As vice chair of Administration of the FIG Young Surveyors Network I am looking forward to work with you and other active Young Surveyors. Together we can contribute to the future of the network.

# Paula Dijkstra

FIG Young Surveyors Network Vice-Chair of Administration





# TERMS OF REFERENCE

FIG is the International Federation of Surveyors (Fédération Internationale des Géomètres). It is an international, non-government organisation whose purpose is to support international collaboration for the progress of surveying in all fields and applications. The FIG Young Surveyors Network is established under its umbrella to addresses the need of Young Surveyors worldwide.

The definition of a Surveyor can be found on the FIG Webpage: <a href="http://www.fig.net/general/definition.htm">http://www.fig.net/general/definition.htm</a>

Based on this definition Young Surveyors and Young Surveying Professionals are defined as:

Young Surveyors (YS)

- :: Surveyors aged 35 years or under
- :: Students of surveying and all related studies

Young Surveying Professionals (YSP)

:: Young Professionals of surveying and all related studies within 10 years of graduation from a Bachelor or Masters degree

## HOW TO BECOME ACTIVE

There are two ways to be an active FIG YS:

- 1. Get in contact with your national surveying association (http://www.fig.net/members/memassociations.htm) and tell them that you want to be an active member of the network.
- 2. Just by being active! Join all or one of our social media channels, write an e-mail to fig.youngsurveyors@gmail.com with your ideas and let us know who you are.

## http://fig.net/ys **FIG** Young Surveyors Fig\_young

Being active in such a worldwide network has multiple benefits:

- :: the Network as we are continuously growing and can ensure that we are meeting all the various professional interests
- :: the FIG commissions as we are bringing them 'fresh blood'
- :: the National Associations as through supporting you and you gathering international experience, you are well prepared to become one of the future leaders
- :: You there is nothing better than having a worldwide network in your professional career especially in the beginning. Through experiencing personal contact with world leading surveying professionals you will learn more than you could ever possibly by study alone.





"Yesterday is gone. Tomorrow has not yet come. We have only today. Let us begin." — Mother Teresa

### WORKING GROUPS

The FIG Young Surveyors Network will perform through its Working Groups on developing capacity and relevant tools in the key area defined through the Mission Statements and current FIG presidents theme:

'Ensuring the Rapid Response to Change, Ensuring the Surveyor of Tomorrow' - through developing a suite of toolkits for Young Surveyors world wide. So ways for Young Surveyors and Young Professionals are outlined to engage with FIG, FIG commissions, FIG members and partners.

The mission statements will be achieved through 5 Working Groups who are developing toolkits for each. Those toolkits should encourage and facilitate resilience in our profession through collecting ideas and suggestion for the use and further development by Young Surveyors world wide. The toolkits can be seen as an interactive checklist and as a solid basis to start from. The toolkits can be seen as 'work in progress' as they should be developed further and adapted to the regional context. With the toolkits developed over the 4 year term period we would like to inspire, encourage and sustain the work all Young Surveyors are doing.



## **MISSION STATEMENT**

- :: Explore the needs of Young Surveyors worldwide
- :: Inspire and Empower Young Surveyors to be the Surveyor of Tomorrow
- :: *Lift* the Young Surveyors Network to the next level that fits the needs and the purpose of the network
- :: Ensure the involvement of YS in each of the 10 FIG commissions
- :: *Ensure* that Young Surveyors are well represented at national and international platforms

"If you think you are too small to make a difference, try sleeping with a mosquito." — Dalai Lama

- :: *Link* Young Surveyors with their national surveying associations and FIG commissions
- :: *Work* in partnerships and *Organise* events, workshops, trainings and meetings together with all FIG members
- *The Prepare* Young Surveyors for their future roles through mentoring and trainings
- :: *Increase* the awareness of FIG and the FIG YSN through social media
- :: *Facilitate* a worldwide YSN through *Fostering* and *Supporting* the establishment of regional YSN

"I want to put a ding in the universe." — Steve Jobs

## WORKING GROUP - SOCIAL MEDIA

Our 'ding' is to give you the tools and knowledge on how you can pimp up your professional life through networking and using social media as a powerful source of inspiration and communication. It's about being inspired and inspire others through sharing. The FIG Young Surveyors Network is already well represented on various social media platforms as you can see below:



FIG Young Surveyors

FIG Young Surveyors Network

Those platforms and the Young Surveyors participating are increasing rapidly. With more than 5000 members in the Facebook group, 750 followers on Twitter and 1100 professionals following the LinkedIn group its becoming more lively and vibrant.

- :: Coordination of the various platforms, Collect and Share relevant information
- *Raise* awareness on 'How to Use Social Media for Your Professional Development' during Young Surveyor events
- :: *Collect* the input gained from those events and *Develop* a toolkit on 'How to pimp up your professional career through using Social Media'



"Coming together is a beginning. Keeping together is progress. Working together is success." — Henry Ford

## **WORKING GROUP - EVENTS**

Working together that's what we are doing and that's what we are aiming for. One of the most important part of all the activities is the lively presence of Young Surveyors during FIG and FIG partner events. Young Surveyor Meetings, conferences and activities during these events are mostly organised by Young Surveyors in cooperation with the hosting association or partner.

For each of the FIG events there is one local Young Surveyor responsible, provided through the national member association, to be the link between the local organising committee and the FIG Young Surveyors Network.

- :: Develop a toolkit on 'how to organise events'
- :: *Extend* co-operation with national associations, other host associations and FIG commissions
- " *Organise* events in cooperation with FIG commissions and FIG member associations
- :: Work together with national and international sponsors





## ::FIG WORKING WEEK 2015, 17 - 21 May 2015 Sofia, Bulgaria

#### 'From the wisdom of the ages to the challenges of modern world'

Pre-event: 3rd FIG Young Surveyors European Meeting During the FIG WW: YS Sessions and activities YS Representative: Georgi Zlatanov

## :: FIG WORKING WEEK 2016, 02 - 06 May 2016 Christchurch, New Zealand 'Recovery from disaster'

*3rd FIG Young Surveyors Network Conference Disaster Relief and Charity activities YS Representatives: Melissa O'Brien & Matt Ryder* 

## ::FIG WORKING WEEK 2017, 28 May - 1 June 2017 Helsinki, Finland

4th FIG Young Surveyors European Meeting YS Representative: Tuomas Jylhae

## ::FIG XXVI CONGRESS, 05 - 11 May 2018 Istanbul, Turkey

4th FIG Young Surveyors Network Conference YS Representative: Pinar Demirci "We cannot always build the future for our youth, but we can build our youth for the future." — Franklin D. Roosevelt

## WORKING GROUP - MENTORING

Since our start in 2006 we have worked in close cooperation with passionate Surveyors. They helped us to establish the network of today. To continue tomorrow we would like to strengthen the bridge between the professionals and the 'rookies' of the profession.

Mentoring is one way to ensure that knowledge is passed on to the next generation of Surveyors. There is one sustainable way in inspiring young people through remembering what we love about our profession as well as showing opportunities and giving them responsibilities. Challenges everybody has to face in a career can be guided through the help of a colleague, good friend and mentor.

Therefore the aim is to create a database of people who would like to be a mentor and Young Surveyors who would like to be a Mentee. The next step is to link the experienced professionals with the 'rookies'. The benefit of being mentored is that everybody is responsible for itself but the FIG Young Surveyors Network can provide the base and the first step.

- :: *Identify* mentors and mentee at international, regional, national and FIG commission level
- :: Organise mentor sessions during the Young Surveyors Event
- :: Develop a toolkit with careers tips and tricks



"Our children are the rock on which our future will be built, our greatest asset as a nation. They will be the leaders of our country, the creators of our national wealth, those who care for and protect our people."

— Nelson Mandela

## WORKING GROUP - PARTNERSHIPS

The FIG YSN worked in close co-operation with FIG commissions to organize workshops, trainings and meetings. We are also working closely with other FIG members and partners. As in the past there has been events organised with UN-Habitat GLTN, UN GGIM, CLGE etc. The aim is to enlarge and expand those partnerships and co-operations with other NGOs as well as universities and so create an international platform of exchange.

The events provide valuable knowledge, skills and expertise to the young professionals within the network. Within this working group the cooperation with these partners will be further strengthened.

- :: Strengthen YS representative positions in partner organisations
- :: Work together with FIG Commissions and FIG Foundation
- Work together with FIG Members (UN-Habitat Global Land Tool Network, UN GGIM, World Bank, FAO, CLGE, ...)
- :: Work together with Sponsors on upcoming projects
- :: *Work* together with universities to organise trainings, events, workshops, summer schools
- *Develop* a toolkit with an overview of existing links with FIG Members and partners and ways to co-operate



"Intelligence is the ability to adapt to change." — Stephen Hawking

## WORKING GROUP - POLICY ISSUES

Our Network is quite 'young' and in having the 3rd term of a FIG Young Surveyors chair it is our duty to introduce some policy issues. We would like to review the election process and the terms for the 4th and future chairs of the FIG YSN together with the FIG Council and all FIG members.

Our proposal is to establish equal and fair election processes, starting in the FIG Working Week 2016 in Christchurch, New Zealand. The chair-elect will take over the position of the Vice-chair of Administration for a 2 year term. So it is ensured that the Network can continue its valuable and sustainable work with the best prepared future chair.

The aim of this Working Group is also to have a look at general policy issues and terms used as e.g. is the definition of a 'Young Surveyor' and 'Young Surveying Professional' still valid. It will also investigate if there are ways to improve the link with each commission.

- :: *Work* on a proposal for an election process for the upcoming chair position
- :: Review the terms of the FIG YSN
- *Tropose* ways to firmly strengthen the link between the YSN and the commissions
- *Develop* a toolkit based on the projects above





"Ensuring the Rapid Response to Change, Ensuring the Surveyor of Tomorrow" — Chryssy Potsiou

### FIG COMMISSIONS

Ten commissions lead FIG's technical work. Each member association appoints a delegate to each of the commissions. And that's also where your place is! Based on your own personal professional interest we are supporting all of you in becoming active in the commission of your choice. They are keen to meet you! You can find detailed information of the commissions, their work plans, working groups, seminars, newsletters and publications at: <a href="https://www.fig.net/comm">www.fig.net/comm</a>.

Commission 1: Professional Standards and Practice	Commission 6: Engineering Surveys
Commission 2: Professional Education	Commission 7: Cadastre and Land Management
Commission 3: Spatial Information Management	Commission 8: Spatial Planning and Development
Commission 4: Hydrography	Commission 9: Valuation and the Management of Real Estate
Commission 5: Position and Measurement	Commission 10: Construction Economics and Management



FIG YOUNG SURVEYORS AFRICAN NETWORK



"If you want to walk fast, walk alone. If you want to walk far, walk with others." — African Proverb

## FIG YOUNG SURVEYORS AFRICAN NETWORK

During the FIG Working Week 2013 in Abuja, Nigeria the Young Surveyors African Network showed their passion and engagement in organising themselves as a Network and Young Surveyors activities during the events. As a pre-event and highlight to the WW 2013 a STDM Training for Trainers was organised.

The peak in the establishment of the Young Surveyors African Network was their activities during the AfricaGEO 2014 in Cape Town, South Africa. During this event they were responsible in organising 2 Workshops. The Workshop on education reflected the education requirements of the current curriculums. The other Workshop 'Ask the Experts' invited international surveying and surveying related experts in participating in a lively podium discussion.

It is overwhelming how many Young Surveyors in Africa are active and are searching for opportunities to express themselves. Many African countries are already well represented in the African Network but there are still countries missing which we would like to connect to the Network.



## FIG YOUNG SURVEYORS ASIA PACIFIC NETWORK



"You must be the change you wish to see in the world." — Mahatma Gandhi

### FIG YOUNG SURVEYORS ASIAN PACIFIC NETWORK

During the XXV FIG Congress the FIG Young Surveyors Asian Pacific Network (YSNAP) was established. 18 countries were represented during this event and after the country reports and a forum discussion the goals for the Asian Pacific network were identified.

- :: A network strengthening program
- :: Identify opportunities for collaborative events in the region
- :: Establish a regional social media platform on Facebook <u>https://www.facebook.com/groups/ysnap/</u>.
- Capacity development of Young Surveyors focussing on challenges in the Asia Pacific Region

:: Exploring funding opportunities to support the events organised by the YSNAP

The Asian Pacific Network is a very active, lively and vibrant Network. There are a lot of meetings and activities already planned for the upcoming years. So stay tuned and involved!



## FIG YOUNG SURVEYORS EUROPEAN NETWORK



"It is young people who represent the future of our economy and society. Our collective future depends on young people's skills, ideas and abilities, and on whether they get an opportunity to apply and develop them in the labour market. Investing in young people is therefore a moral imperative, a social necessity and simple economic sense." — László ANDOR (EU Commission)

### FIG YOUNG SURVEYORS EUROPEAN NETWORK

The FIG Young Surveyors European Network (YSEN) is supported and working closely together with CLGE (The Council of European Geodetic Surveyors). The YSEN is represented on the executive board of CLGE through an elected representative. Through this co-operation the activities of the YSEN can be coordinated all over Europe. To strengthen the European Network co-operation with European leading Young Surveyors organisations as e.g. IGSO (International Geodetic Student Organisation) and KonGeoS (Conference of Geodesy Students) got established just recently and will benefit all.

In 2013 the first YSEN meeting took place in Lisbon, Portugal. In 2014 the European Young Surveyors travelled to Berlin, Germany to also attend INTERGEO. The goal is to have a meeting each year in one of the European countries. Those meetings will be organised in close cooperation with the national associations and focus on European challenges and opportunities.





"A change is brought about because ordinary people do extraordinary things." — Barack Obama

### FIG YOUNG SURVEYORS NORTH AMERICAN NETWORK

The FIG Young Surveyors North American Network is also called NSPS Young Surveyors Network as it is under the umbrella and working closely together with NSPS (National Society of Professional Surveyors). In 2014 the 1st FIG Young Surveyors North American Meeting took place in San Diego, California. 25 enthusiastic surveyors from 15 states had a lively discussion on how to establish a Young Surveyors presence and program within North America.

The Meeting was just the starting point and the Network continued their hard work and published this toolkit:

http://www.nsps.us.com/document/docWindow.cfm?fuseaction=document.viewDocument&documentid=1173&documentFormatId=1194

There you can find the Mission and Vision Statement as well as how they organise themselves. It's the first toolkit and therefor it is a huge and important step not just for the American Network, this can be used and adapted all around the world.





"When you are enthusiastic about what you do, you feel this positive energy. It's very simple." — Paulo Coelho

### FIG YOUNG SURVEYORS SOUTH AMERICAN NETWORK

The 8th FIG Regional Conference 2012 was held in Montevideo, Uruguay. Two dedicated sessions were held, hosted jointly by the FIG Young Surveyors Network and the UN-HABITAT Global Land Tools Network on "Youth Responsiveness in the Land Sector".

The Regional Conference was a huge success and a lot of Young Surveyors learned about the Network but there is still a lot to do in this region. We would like to be better represented and connected to FIG member associations in South America as well as we would like to enlarge the representation of South American Young Surveyors in our Network

## THESE ACTIVE YOUNG SURVEYORS MADE OUR EVENTS HAPPEN IN 2014

#### **1st FIG YSNAM**

Amanda Askren, USA Alysen Kohlnhofer, USA Adam Schleicher, USA Marcus Hampton, USA

# STDM Training for Trainers & 2nd YSC&

#### 1st YSAPM

Nur Zurairah Abdul Halim, Malaysia Kelvin Tang, Malaysia Faz Haron, Malaysia Yusniman Che Hassan, Malaysia Yuhasle Yusof, Malaysia Wan Amirul, Malaysia Shah Kasahias, Malaysia Fitz Ptok, Malaysia Zareena Ariffin, Malaysia Nurul Izzati, Malaysia Rhea Lyn Dealca, The Philippines Rizgi Abdulharis, Indonesia Melissa Robert, Uruguay Yusuf Aro-Lambo, Nigeria Paul Giesen, The Netherlands Gora Diagne, Senegal Jon Gustafson, USA Tom Champion, Australia Benedicta Ugwulebo, Nigeria Asmae Azzioui, Morocco Emily Tidey, New Zealand Odil Akbarov, Uzbekistan Chandan Das, Nepal Donmarl Camua, The Philippines Celine Roux, Australia

Irena Rojko, Slovenia Pamela Ibukunle, Nigeria Malakai Vakautwale, Fiji Kazuaki Fujii, Japan Odil Akbarov, Uzbekistan Fenika Oloapu, Fiji Matt Ryder, New Zealand Melissa O'Brien, New Zealand Nabin Paudel, Nepal

#### AfricaGEO 2014

Kevin Musungu, South Africa Eric Yeboah, Ghana

#### 2nd YSEM

Annette Hadler, Germany Luise Uhlig, Germany Diana Becerevic, Croatia

Ruben Martinez, Spain

Dave Bruyning, The Netherlands

Christelle van den Berg, The Netherlands

#### Tuomas Jylha, Finland

Edgar Barreira, Portugal

Eike Barnefske, Germany

Ferah Pirlanta Koksal, Turkey

#### **STDM Training for Trainers**

Eric Yeboah, Ghana

All these events were co-organised together with: Kate Fairlie, Australia Paula Dijkstra, The Netherlands and Eva-Maria Unger, Austria

Also we would like to thank the Sponsors and Supporters of all the events.



We hope to count on you and many other Young Surveyors in the coming years!

#### **Regional Capacity Development Network 2015-18: Africa**

#### **Terms of Reference**

(To be approved by the General Assembly, May 2015)

#### 1. BACKGROUND - AFRICA TASK FORCE 2009-14 OUTCOMES:

Under the FIG term 2009-14 the ATF was asked to deliver a clear direction for African members Associations to actively increase their presence in FIG, and raise the profile of both African land professionals as well as the wider FIG land community on the international stage.

The FIG Africa Task Force was asked and did successfully deliver its mandate. It was established to address the challenges that sub- Saharan African FIG Member Associations face in addressing their capacity issues specifically emphasised the importance of good land governance and the role of the African Surveying Profession in contributing to meeting the key challenges of poverty alleviation, economic growth, and environmental sustainability.

The ATF achieved this mandate, guided through participatory workshops the African Land Professional community considered, presented new and creative tools to revitalise and strengthen members and their organisations within Sub Saharan Africa. The focus has been be on building the capacity of the surveying organisations and individual surveyors to act as agents of positive change and encourage the process of development and growth for the benefit of Africa and its people. Importantly, for a task force, there was unprecedented engagement over 4 years, it involved a significant number of professionals drawn from across the continent, with over 140 attendees from 12 Member Associations, in addition to Academic and Corporate Members- the outreach was wide both across the continent and also at four FIG annual working weeks roundtables, two FIG Congress' and Key pan-African communication platforms (including AU).

Driven by this significant momentum a strong African network has been created and traction for more to be done has begun to take hold, notably, the participants have increasingly become more engaged within the FIG community, and taken on key roles of leadership.

The next step is this for land professional's African regional network to actually engage with the key drivers and challenges that the continent faces with land governance institutions, and it is proposed a further platform is required to support them to achieve this in the African region. Importantly, such a regional network may be adopted by other regions. Supported by an appropriate business case agreed to be agreed at FIG Council, the overarching mandate of each region will be "to develop workshops to build the capacity of land professionals to enable them to effectively embrace current global trends in their respective region"

#### 2. PROPOSAL

Due to the success, it is considered that this approach could be rolled out across the Regions, if additional funding could be secured. Given the previous 4 year lead in time, the African

region will lead this new initiative, building upon the clear direction emerging from the ATF (2009-14) and from these deliberations it is proposed to continue the philosophical and methodological approach of the Africa Task Force in the wider sense as the Regional Capacity development Network, and led by the Region. Such a further 4 year term platform has the following advantages:

- The concept can readily be seen as a template and adopted by Land professional's groupings in other World Regions.
- It becomes an identifiable entity in the minds of public and civic institutions and can more clearly be engaged
- It will deliver a high profile activity that contributes to the FIG corporate brand by maintaining meaningful links into strategic donor partner's work activities and their associated international African Regional mandates
- It should aim to continue and increase the presence and involvement of the Young Surveyors, drawing upon the Young Surveyors Network as key partners

The next four years is the period for consolidating what has been achieved, and for the partner member associations to take on the responsibility to continue, and to engage with regional and international organisations. It is a critical step to build upon the originating mandate that land professionals must act as change agents and to engage at high levels.

Ultimately, the Task Force activity should be seen as a capacity development process, the intention was to build capacity, and indeed this has occurred as outlined (see ATF publication #63), and has resolved a consensual view and clearly articulated recommendations providing a focused way forward for the ATF Vision 2030, that,

## By 2030 Africa land professionals will provide global thought leadership and promote professional leadership qualities amongst its members and within their Associations

The co-leadership will be agreed a the FIG working week in Sofia, Bulgaria by way of nominations, the chair is to maintain development of the program over the term, in partnership with three separate champions (for each theme).

**It is therefore recommended** that the work of Task Force continues as a Network that enables capacity development for land professionals within the Terms of Reference (TOR's). In the following section 3 to 6, these TORs broadly outline a focus, themes, a work program and outcomes that will make a difference.

#### **3. AFRICA REGIONAL FOCUS**

ATF is a robust platform but one that needs to evolve. In short, the Africa Task Force process of participatory capacity development has enthused the workshop participants and enabled them to facilitate the process of further empowering the surveying profession in Sub-Sahara Africa to cope with their professional and social responsibilities, so much so the momentum to continue the work is significant. It is important that such momentum does not reinvent the wheel.

A clear direction emerged from the ATF and from these deliberations key recommendations have been devised that could easily apply to any world region. The focus in Africa is to continue the network and so mandated to build members and their associations capacity to engage and interface at all institutional political levels including the African Union oversight level to grassroots community involvement.

The recommendations resolved that land professionals in Sub-Saharan Arica should build upon the previous ATF to continue now to apply their collective knowledge and build their capacity to address the emerging UN Post-2015 agenda that will supersede the current UN Millennium Development Goals that are in place over the period (2000- 2015).

It is imperative that Land Professionals across the world remain engaged in initiatives that will enable them to make a difference. Renewed commitment to continuing this initiative is crucial. For the first time, through the post 2015 development goals, targets specifically relating to land and societal development will be drafted; thus providing an excellent opportunity to optimise and continue the Task Force deliberations in Africa encapsulated in the Vision.

#### 4. THEMES

The ATF Roundtable held in KL June 2014, agreed that the next step should be a platform that has a mainstreaming strategy to ensure that our strategic stakeholder groups are fully involved. These include Young Professionals, Franco-phone land professionals as well as the main cohort of Membership Associations to ensure diversity in our audience. Such diversity will provide a lead champion each year.

Drawing from and adopting the recommended approaches identified by the Task Force members, (see ATF Publication #63) the network will work towards gaining support in its outputs by actively Communicating to influence, purposefully Collaborating, and in so doing building Connectivity to ensure that skills are developed that will reach out to all stakeholder's community networks

The Network envisages a number of outreach events to be organised and subsequent discussion at the FIG Regional/ Working Weeks. The events include but are not necessarily limited to "giving a voice" to themes around the Land professionals contributing to

- Youth and Diversity in an equitable economy that will address the post 2015 MDGs (2015/16),
- Good Land Governance and alliance to FAO/VGGTs and AU Guidelines (2016/17),
- Large Scale Land Based Investments OR other (2017/18).

Each themed event will be championed by three nominated co- eads, one for each year, and it is proposed to open discussion with FIG key stakeholders, specifically FGF and YSN who in turn will work with a Member Association/ Academic to deliver the proposed event. A network chair will ensure continuity over the term, and be responsible to steer delivery, for the overall coordination and available

Finally, all activity will link back to integrating cross-cutting themes into the activities and projects at key stages of the term, and be monitored and evaluated at the mid-term point.

#### 5. PROPOSED WORK PROGRAMME

With this aim, the Network, during its first meeting at the FIG Working Week (Sofia, Bulgaria) will agree on a working programme aiming to meet eight times before submitting its recommendations.

- 2015 Inaugural meeting, agree themes and leadership Sofia.
- 2015 Regional Youth and Diversity in Land Professionals and MDGs +2015 agenda
- 2016 Open forum discussion New Zealand.
- 2016- Regional: Good land governance assessing the VGGTs
- 2017 Open forum discussion Finland.
- 2017- Regional tbc (possibly Large Scale Land Based Investments), and
- 2017 Regional discussion to pulling together.
- 2018 Open Forum discussion and final agreement Turkey.
- 2018 Submission of report.

#### 6. OUTCOME

In its final report the Network will present a new look at how Professionals will continue to support Africa's own efforts to meet the challenges of today and tomorrow including the on the one hand recognition of Africa's diversity, and on the other working towards fulfilling the Global challenges (+2015 MDG a VGGT's).

The report will contain recommendations on how to promote ownership of the emerging African network and if this process can articulate an approach for other Regions to follow.

In drawing up its conclusions, the network force will build on linkages with strategic allies across the continent including education and professional networks, a continuous dialogue with high level African and international experts and drawing upon the development of frameworks and principles embodied in existing and new FIG declarations, codes of conduct etc).

When the conclusions have been presented, they will contribute to the framework for FIG development co-operation with Africa in the years to come.

Participants will be drawn from young surveyors network and the strong existing network across Africa as listed in ATF previous publications (ATF 2009- 14 publication #63)

Above all, the Network will provide an adaptive template for land professional's regional groupings to pursue their own Regional agendas to support Land professionals in their quest to become influential agents of change.

#### 7. COMPOSITION OF THE NETWORK

Chair: FIG Vice President Diane Dumashie

Members: to be decided

#### Drafted by Dr D Dumashie with support from the Africa Regional Membership

27<sup>th</sup> February 2015

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

#### **Terms of Reference**

(To be approved by the General Assembly, May 2015)

#### 1. RATIONALE

It would be good for Surveyors to increase their knowledge and activity in real estate markets on the current challenges etc. Therefore it would be helpful to establish a FIG Task Force on this topic.

It is suggested to focus on the ECE region. There are several countries in this region struggling to improve their property markets.

#### 2. AIM OF THE TASK FORCE

Carry out a study on the real property markets in the UNECE region.

#### 3. FOCUS/THEMES

Topics related to the theme or the real estate market:

- legislation
- relevant recent legislation and involved governmental agencies for regulation and permitting procedures
- existing registers/databases, information services
- taxation, fees transparency
- players/actors
- investigation of the investors' needs
- processes
- time and costs required
- government guarantees to register information
- security of ownership/tenure

#### 4. COMPOSITION OF TASK FORCE

Suggested members of the task force and people involved: to be decided at the Working Week 2015.

Also other experts, not only surveyors, will be needed. They can be found in collaboration with UNECE.

#### 5. PROPOSED WORK PROGRAMME

2015-2018

#### 6. OUTCOME

Report on the current situation in the real property market in the region, its challenges, and main lines of development.

#### 7. CHAIR

Pekka Halme, Director of Strategic Development, NLS Finland

#### FIG Task Force on FIG Commission Structure

#### **Terms of Reference**

(To be approved by the General Assembly, May 2015)

#### 1. BACKGROUND

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

The structure of the FIG Commissions has been the same for many years, and has enabled FIG to achieve global outcomes and support our international membership. The role of the surveyors has transformed since 1878, however the rate at which technology has changed has been more rapid over the last few decades. FIG has truly undergone a massive technological advancement, in particular from an analogue to digital world and from terrestrial world to space based environment. From a surveying perspective we have changed 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 thought of when the current Commission structure was decided.

#### 2. AIM OF THE TASK FORCE

To respond to the changes and manage these technological advances and challenges it may be good to ask whether the FIG Commissions today are reflecting this change or whether there might be a need to restructure our Commissions to support our surveyors appropriately in the future?

The world is dealing with major challenges caused by global changes such as rapid urbanisation and the effects of climate change. As a consequence, FIG is becoming a major link and partner with multinational organisations such as the United Nations, the scientific and academic community and the operational professional surveyor. With this comes an added expectation that FIG surveyors will provide technical solutions or provide professional advice to address sustainable development and humanitarian needs. This responsibility is not only a FIG Council responsibility, but reaches out to the Commissions and to our members and their roles in the FIG Commissions. Can these roles and others be actively dealt with relation to the current Commission structure of FIG?

#### 3. FOCUS

A first step will be to evaluate the current structure and function of the commission and hereafter conclude whether any changes are needed. If it turns out that it might be advantageous to change the structure of the Commissions the Task Force will identify possible changes.

Some questions to ask in this process are:

- Do we have the right Commissions?
- Do the Commissions have the right focus?
- Do we have a mechanism for the Commissions to interact more actively with each other, FIG members or working groups from other organisations?
- What do we need to change and why?
- How do we manage and implement structural change?

#### 4. OUTCOME

This Task Force has been set up to secure the internal structure of FIG into the future. The Task Force will not necessarily suggest a new structure with new Commissions but will need to review the current structure, its terms of reference, the Commission's missions and suggest ideas on how to improve the capability of FIG and the Commissions to accomplish the work plans and most importantly how FIG will be a long term partner in the developing world.

The Task Force must undertake this via a unified, collaborative and consultative approach with all of its members. This means we need to identify the challenges and potential changes for FIG, have a discussion on whether the current Commission structure is the correct one to meet the future challenges. We need also to have a discussion on the mission and the work of the Commissions. We need also to have a discussion on how to have the Commissions to use the full FIG structure, corporate members included when accomplishing their work plan. We need to discuss how we implement change to accept and engender ownership amongst our membership.

#### 5. PROPOSED WORK PLAN

It is highly recommended, the Task Force start as soon as possible. There should be an endorsed plan at the latest at the next FIG Congress. The main work load will be done through e.g. email but face to face meetings will be set up when appropriate and coincide with FIG events. The Task Force will consist of a selected "core group" but also invite others to be part through a reference group.

#### 6. COMPOSITION OF TASK FORCE

To be decided

#### 7. CHAIR OF TASK FORCE

Chair: Mikael Lilje, Swedish professionals for the built environment.

#### FIG Task Force on FIG Corporate Members

#### **Terms of Reference**

(To be approved by the General Assembly, May 2015)

#### 1. RATIONALE

FIG needs to increase income stream. FIG has a vibrant membership community however there are minimal opportunities to increase income from Member Associations, Affiliate Members or Academic Members. The one significant area of opportunity is Corporate Members. Currently FIG has 23 corporate members whose dues contribute approximately 22% of the FIG budget but have little opportunity to truly interact, collaborate, communicate and participate with FIG Council and the FIG community.

While there has been a few instances of collaborative working successes (e.g. with Trimble, Leica & ESRI) theses occasions tend to be ad-hoc, with little on-going leverage. A stronger collaborative platform could aim to disseminate and facilitate two-way beneficial activities.

#### 2. AIM OF THE TASK FORCE

Cashiered by John Hohol, supported by Diane Dumashie as Co-chair, the aims are to:

- solicit input/support of current corporate members to explore how they can participate more fully in FIG community.
- Discuss with them what is important in their relationship/membership in FIG
- Explore benefit package for corporate members.
- •

#### 3. FOCUS/THEMES

Primary focus is the increase in number of corporate members while providing better communication with FIG Council and interaction between the wider FIG organisation and ultimately member associations.

#### 4. COMPOSITION OF TASK FORCE

Suggested members of the task force and people involved: Diane Dumashie (FIG Council), John Hohol (FIG Foundation), Bryn Fosburgh (Executive VP, Trimble Navigation), Brent Jones (Global Manager Cadastre/Land Records, Esri).

#### 5. PROPOSED WORK PROGRAMME

- A) 2015 Redefine and update corporate member benefits and dues structure
- B) 2015/16 Research potential new corporate members based on industry focus
- C) 2015/ Ongoing Solicit potential corporate members via direct communication and contact at industry events (Intergeo, etc.).
- D) 2015/16/17 Add new corporate members
- E) Hold update meetings with Council representative (DD) at each working week, Sofia, Christchurch and Helsinki

#### 6. OUTCOME

Increased FIG Corporate Membership

#### 7. CHAIR

Co-chairs: John Hohol; Bryn Fosburgh, supported by D Dumashie VP and reporting to Council

#### FIG Task Force on Scientific Journal

#### **Terms of Reference**

(To be approved by the General Assembly, May 2015)

Task Force to evaluate the establishment of a FIG peer-review scientific Journal

#### 1. RATIONALE

In recent years, there is a growing activity of academics in FIG (e.g. – FIG academic members). One of the parameters in which the achievements of the academics is examined is the number and quality of their published articles, especially those that are indexed in abstracts and citation databases of peer-reviewed literature (e.g. Scopus, ISI). This issue is particularly important for scholars in their early stages of academic career.

8 years ago, FIG initiated the full peer-review channel for papers submitted to the annual FIGWW conferences and Congresses. Still, a concern was made (by numerous delegates and members) that the level of review is not sufficient, and perhaps more important, that these articles do not appear in the scholar databases, such as Scopus and ISI.

To overcome such problems, many international professional organizations have established peer-review journals designed to advance the knowledge in their field on the one hand, and allow professionals in general and academics in particular to publish peer-reviewed articles on the other hand. These journals initiated by the international professional organizations, are in spite the relatively large number of existing journals. Several examples are:

- "*ISPRS International Journal of Geo-Information*" *ISPRS International Journal of Geo-Information* (ISSN 2220-9964) is an international, open access journal on geo-information. It is a journal of the ISPRS (International Society for Photogrammetry and Remote Sensing) and is published quarterly online by MDPI.
- "Cartography and Geographic Information Science" Published on behalf of the American Cartography and Geographic Information Society (ISSN 1523-0406 Print, 1545-0465 Online).
- "International Journal of Spatial Data Infrastructure Research (IJSDIR)" & "Journal of Spatial Information Science (JOSIS)" – The two journals are official journals of the Spatial Data Infrastructure Association.

FIG, as the international Federation of Surveyors, should take its leading position, and establish its own high level peer-review professional and scientific journal.

Moreover, our academic members so far see not much benefit from FIG and therefore we need to activate them through this activity. Coordination with VP Pengfei Cheng who chairs the

academic forum will enable us to activate several members, in order to cover all fields of surveying even the emerging ones.

#### 2. AIM OF TASK FORCE

The aim of the Task Force is to evaluate all aspects of establishing a journal under FIG umbrella. Inter alia, the issues to be assessed are:

- Is there a need for a new Scientific/professional journal under the umbrella of FIG while taking into account the other existing professional journals?
- Will it have a negative effect on the current channel of full peer-review submission of papers to the annual FIG event? Alternatively, will it have a positive affect by improving the quality of the submitted papers to the annual symposia?
- How can we compete with other existing journals?
- How we will get enough high-quality papers for the journal?
- How we will be able to motivate our academic and professional members to submit their research/papers to the new journal?
- An e-journal vs. printed journal what are the implications of each one of the two alternatives?
- Open-access?
- What international impact such a move will have?
- Will it motivate delegates/members with poor-means that cannot participate in events to contribute and be heard?
- What is the procedure and how long will it take for the journal to be indexed in citation databases (Scopus, ISI)?
- What are the financial implications if any -of establishing the journal?

#### 3. FOCUS/THEMES

To discuss and analyze the issues listed in the previous chapter, and structure the way ahead and to bring recommendations to the GA in FIGWW' 2016 in Christchurch, NZ.

#### 4. COMPOSITION OF TASK FORCE

6 members: Prof. Dr. Yerach Doytsher; VP Prof. Dr. Pengfei Cheng; VP Prof. Dr. Rudolf Staiger; Prof. Dr. Charalabos Ioannidis; 2 more TBD

#### 5. PROPOSED WORK PROGRAMME

- 03/2015 FIG council decision; Task Force is established
- 05/2015 the TF will be presented in the FIGWW'2015 GA
- 06-12/2015 relevant data to be collected, discussions among the TF members via emails

- 01-02/2016 optional face to face meeting of the TF members (probably at a council meeting)
- 02-03/2016 preparing of final report and recommendations
- 03/2016 FIG council decision on the report
- 05/2016 the report and recommendations to be presented at the GA in Christchurch for acceptance

#### 6. OUTCOME

A summarized report and recommendations on the following:

- Report on the proven necessity
- Procedures to be followed for the establishment of the journal
- Necessary costs (for the establishment and annually in future)
- Times (time schedules of all steps and expected achievements)
- Responsibilities
- Action plan for the speeding of the procedure and the increased participation e.g., engagement of potential authors, FIG members, etc.

#### 7. CHAIR

Prof. Dr. Yerach Doytsher

#### 2015 GENERAL ASSEMBLY FINANCIAL ISSUES (INCLUDING 2014 ACCOUNTS, 2015-18 BUDGETS AND 2017 SUBSCRIPTIONS)

### 1. Introduction

This paper provides the General Assembly with an update on FIG's financial progress in 2014, the Council's amended proposed budgets for 2015-17 and an indicative budget for 2018, and other financial matters.

The General Assembly is asked to:

- Adopt the audited 2014 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)
- Approve an increase of the IT reserve with €25,000 to €50,000
- Endorse the budgets for 2015-18, at Annex C to the General Assembly agenda, noting that there is budgeted a General Reserve that over the following 4 years will be below the agreed 90-100% of regular annual expenditure and therefore not following the otherwise agreed key measure 3
- Approve member association subscription levels for 2017, set out in section 5 of this paper.

#### 2. A commentary on FIG income and expenditure for 2014

#### **Income**

Although 2014 was yet another challenging year with an unstable global economic situation Council and FIG Office continued prudent and cost containment measures resulting in a  $\leq 25,418$  surplus against a budgeted deficit of  $\leq 19,750$ ; a result around  $\leq 45,000$  higher than budgeted.

Income from membership subscriptions was largely in line with budget. It must be taken into consideration that the budget was based on the result 2013 which showed a larger decrease from earlier years. This is mainly due to the fact that several member associations are struggling nationally and are experiencing declining individual membership numbers. The General Assembly is to note that general subscription revenue has declined in recent years, in particular for member associations and corporate members. In 2014 the subscription revenue for Corporate Members is however slightly higher than budgeted. The income for Academic Members is lower, however as budgeted, because of a change in the subscription fee for Academic Members. In stead of paying a yearly fee of €250 the Academic Members got the possibility to pay €500 for a 4 year period counting for 2014-2017 (50% discount). This means that the next time the Academic Members will be invoiced will be in 2018. The income is spread equally over the four years. Expulsions from membership, a step only taken as a last resort, after repeated attempts to contact the member and recover arrears, and members who resigned were unfortunately higher than budgeted in 2014. Some members were also given the new suspended status, introduced in 2014, which is given for one year at a time to members who are facing internal civil strife and instability or external economic sanctions.

In 2012 a new accounting provision for doubtful debt from subscriptions income was introduced. This was implemented on the recommendation of the auditors, and in line with good financial management practices. FIG Council decided in 2014 to continue this new and more prudent (or conservative) approach but in line with the amount from 2013. The approach should render FIG's finances in the future less vulnerable. This current approach will be maintained going forward.

Arrears at the end of 2014 were remarkably higher than the previous year. In 2013 subscription arrears amounted to  $\leq 135,987.65$  and in 2014  $\leq 153,819.05$  which is far too high (and back to the level in earlier years. Arrears solely for the current year (2014) were  $\leq 109,147.15$  which is much higher than the 2013 amount  $\leq 74,546.30$ . Part of this can be explained by the changed invoicing method to Academic Members. An interesting thing is that the 2014 arrears are higher than normally, but the older arrears (2011, 2012 and 2013) are in total much lower than otherwise seen in the later years. 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 2014 lower than 2013 primarily caused by the prevailing low interest rate regime, which is expected to persist. Today several of the FIG accounts give 0 % interest. One so called high interest account (giving only 0.4%) where money is bound in a fixed period (1-3 years) expired during the year and FIG Council decided that this amount should not be reinvested, both due to the cash flow and also due to the fact that FIG savings should not be invested in financial instruments if there would be any risk to FIG's funds. Therefore the amount has stayed on our daily account at 0% interest (currently the Danish National Bank has negative interest rates).

Income from the services provided to FIG events was slightly higher than budget. This year the Local Organisers for the Congress 2014 agreed with FIG office to defray a sizeable amount of expenses incurred by FIG Office in relation to the Congress which enabled the result to exceed the budgeted amount.

Overall, income was almost €19k below budget.

#### **Expenditure**

Office costs were below budget due to a careful handling of expenditure. Even a move of the FIG Office to other rooms was handled with no extra costs. Last year there was an unfavourable exchange US\$/ $\notin$  rate and also that of US\$/DKK which had a negative impact on the 2013 result. This year the opposite happened, which had a positive impact on the accounts. FIG Office will continue its careful cost management. In total there was a savings on administration amounting to  $\notin$ 10,5k towards the budget.

Marketing and publications shows a savings of  $\in 6k$  towards the budget although FIG could present 7 new FIG publications during 2014 as well as some other publications. The main reason for the savings was low printing costs in Finland and external support.

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 almost €8k below budget. This was realised through continuing care and control of travel and meeting costs. The President has been careful when travelling, covering a number of destinations and events in one trip and has accomplished many trips and visits. 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 or fully 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  $\notin$  24k less than budgeted. Overall, the surplus of regular income over regular expenditure was  $\notin$  5.7k better than budgeted and showed a small surplus of  $\notin$  6,498.

Developmental expenditure was carefully monitored against the overall financial position, with monthly updates being produced by the Office, and quarterly reports. There were also a substantial unbudgeted income from collaborative activities with partners. FIG Office commenced an IT developmental process in 2013 that continued in 2014.  $\in$ 15k was budgeted for IT/Web development of which 2/3 was spent mainly due to time constrains which resulted in a slower process. The work continues in 2015.

The final result 2014 was a surplus of €25,418 against a budgeted deficit of €19,750.

At the end of year, FIG's total reserve stood at €524,129, 113% of regular annual expenditure. The general reserve was 107%.

#### 3. Budgets 2015-18

Annex C to this paper presents proposed revised budgets for 2015, 2016 and 2017 and a proposed budget for 2018. 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 key, 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
- potential risks around the level of income from subscriptions in the on-going economic situation. Council has recognised this risk in the revised accounting approach for the provision of doubtful debt from subscriptions, but 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 2014 final result in light of resignations and 2015 invoiced figures although membership development is an important focus of the FIG office especially focusing on attracting new corporate members;
- FIG Council has a special focus on corporate members and how to sustain and attract corporate members in order to increase income and to mutually benefit from each other;
- 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;
- IT developmental activity budgets recognized the significant work that is required to upgrade and update FIG's IT infrastructure and systems.

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 2015-2018. Council has decided not to increase membership fees but hope with an increased effort to attract more corporate members which will improve the result and also key measure 3. The approach and the effect will be evaluated in 2016. Another reason is the increase of the IT reserve. Council has however decided that it is important to have a reserve for IT outside the general budget in case IT upgrading is necessary.

## <u>Staffing</u>

Current staffing of the FIG Office is:

- FIG Manager (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 Office and Events Coordinators (Claudia Stormoen (full time) Hanne Elster (80%) responsible for membership administration, website maintenance, communication tasks, detailed planning and organisation of FIG events, and Foundation administration etc
- FIG bookkeeper (Maria Bargholz, part time) responsible for financial administration.

#### **Organisation of events**

The Council and FIG Office have over the last couple of 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

FIG Council initiated an IT Development Project in 2013 and FIG Office has researched how to implement the IT Development Project.

The project has three phases:

- 1. Web site (IT platform and design)
- 2. Events software
- 3. FIG Database

Phase one will be finalised in first half of 2015, and phase two and three will be finalised in 2015/16.

A development sum is reserved in the budgets for the years 2015-2018, and the established IT reserve secures that if needed there is extra funds which will not affect the result of the years concerned.

#### 4. FIG Reserves

As is shown in Annex C, the FIG general reserve at the end of 2014 was 107% 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  $\notin 25,000$  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  $\notin 25,000$ .

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. Due to

the fact that the General Reserve is over 100% Council is proposing to increase the IT reserve with  $\notin 25,000$  to  $\notin 50,000$ . Still the current 4 year average is over 100%. In case larger IT investments are needed there will be the funds to cover this, and the yearly budget will not be affected.

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

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	20 members or €50	5,500 members
	maximum of 5,500 members	(whichever is greater)	(€24,640)
	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.		

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 show 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 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. 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.

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

#### 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



STATSAUTORISERET REVISIONSAKTIESELSKAB

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 2014** 



Ringstedvej 71 Postboks 192 4000 Roskilde Telefon 46 36 61 61 Telefax 46 36 60 61 CVR-nr. 28113374 mail@erikmunk.dk www.erikmunk.dk MEDLEM AF DANSKE REVISORER FSK\*

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Balance sheet.....

### Statement of the Management and the Council

Today the management have discussed and approved the Financial Statements for 1 January - 31 December 2014.

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 2014.

We recommend the Financial Statements to be approved at the annual general assembly.

Copenhagen, 11 February 2015

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 approvement at the general assembly on / 2015

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 2014, 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.

## 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 2014 and of the results of the operations for the financial year 1 January to 31 December 2014 in accordance with accepted accounting principles of associations.

Roskilde, 11 February 2015



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: Internet: E-mail:	+45 38 86 10 81 www.fig.net fig@fig.net						
	Registration No. Registered in: Financial year:	21 33 60 76 Copenhagen 1 January to 31 December						
Council	Chryssy A Potsiou Rudolf Staiger Diane Dumashie Bruno Razza Cheng Pengfei							
FIG Manager	Louise Friis-Hanser	n						
Auditor	Erik Munk, statsautoriseret revisionsaktieselskab State Authorized Public Accountant Ringstedvej 71 DK-4000 Roskilde Denmark							

### Accounting policies

This Annual Financial Statement has been prepared in accordance with generally accepted accounting principles of associations.

The accounting policies applied for the Financial Statements are consistent with those applied last year.

#### **Recognition and measurement overview**

Income is recognised in the income statement when earned, where as costs are recognised by the amounts attributable to this financial year. Value adjustments of financial assets and liabilities are recognised in the income statements as financial income or financial expenses. Also depreciations are recognised in the income statement.

Assets are recognised in the balance sheet when it is probable as a result of a prior event that future economic benefits will flow to the Federation, and the value of the asset can be measured reliably.

Liabilities are recognised in the balance sheet when it is probable that future economic benefits will flow out of the Federation, and the value of the liability can be measured reliably.

On initial recognition, assets and liabilities are measured at cost. Measurement subsequent to initial recognition is effected as described below for each financial statement item.

Anticipated risks and losses that arise before the time of presentation of the Financial Statements and that confirm or invalidate affairs and conditions existing at the balance sheet date are considered at recognition and measurement.

## **Income Statement**

#### **Income and expenses**

Items of income or expenses are stated within the period to which they relate irrespective of the payment date.

#### **Balance Sheet**

#### Deposits

Deposits are measured at nominal value.

#### 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.

## Accounting policies

#### **Investments funds**

Investment funds are measured at quoted market price.

#### **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 2014 for The International Federation of Surveyors - FIG

	<u>2014</u>	<u>2013</u>
	EURO	EURO
Regular Income		
Member associations	259.444	260.146
Affiliate members	28.880	25.460
Corporate members	80.990	77.893
Academic members	11.000	20.750
Less bad debts	(38.041)	(20.775)
Less change in provision for doubtful debts	0	(10.937)
	342.273	352.537
Financial income	2.993	4.399
Less banking costs	(616)	(763)
Events, fees charged for services	81.910	80.000
Total Regular Income	426.560	436.173
<b>Regular Expenditure</b> Administration		
Office costs	(162.488)	(159.757)
Outsourced office costs	(42.466)	(35.726)
	(204.954)	(195.483)
Marketing and publications	(28.947)	(19.930)
Council and executive management	(153.161)	(180.876)
Commission support		
Regular grants	(30.000)	(30.000)
Regular grants, Young Surveyors Network	(3.000)	(3.000)
	(33.000)	(33.000)
- Total Regular Expenditure	(420.062)	(429.289)
Deficit of Regular Income/Regular Expenditure	6.498	6.884

# Income Statement for 1 January - 31 December 2014 for The International Federation of Surveyors - FIG

	<u>2014</u>	<u>2013</u>
	EURO	EURO
Result brought forward	6.498	6.884
Projects, events - funds recived by FIG		
Congress/Working Week	5.000	5.902
Other events	26.684	14.144
	31.684	20.046
Development spend		
IT and web development	(9.860)	(15.440)
Task Force support	(2.904)	(547)
Support to poor member associations	0	(2.649)
Specific grants for Commissions	0	(2.556)
	(12.764)	(21.192)
Final Result (Deficit)	25.418	5.738

# **Balance Sheet at 31 December 2014 for The International Federation of Surveyors - FIG**

Other receivables.9.524Receivable VAT.5.506Merchandise1.825Investments funds.216.178Cash at hand and bankaccounts.549.004Stap.004533Total current assets862.979Requity and liabilities862.979Equity and liabilities498.710Equity at the beginning of the year.498.710Retained earnings.25.418	4.345 7.948 1.557 7.318 3.359 2.483 2.010 2.010
Receivables from members80.9428Other receivables9.524Receivable VAT5.506Merchandise1.825Investments funds216.178Cash at hand and bankaccounts549.004533549.004Total current assets862.979Equity and liabilities862.979Equity at the beginning of the year498.710Retained earnings25.418	7.948 1.557 7.318 3.359 2.483 2.010
Other receivables.9.524Receivable VAT.5.506Merchandise1.825Investments funds.216.178Cash at hand and bankaccounts.549.004Stap.004533Total current assets862.979Requity and liabilities862.979Equity and liabilities498.710Equity at the beginning of the year.498.710Retained earnings.25.418	7.948 1.557 7.318 3.359 2.483 2.010
Receivable VAT	1.557         7.318         3.359         2.483         2.010
Merchandise1.825Investments funds216.178Cash at hand and bankaccounts549.004533549.004Total current assets862.979853862.979Equity and liabilities862.979Equity: Equity at the beginning of the year498.710 25.418	7.318 3.359 2.483 2.010
Investments funds216.178217Cash at hand and bankaccounts549.004533Total current assets862.979853Total assets862.979853Equity and liabilities498.710493Equity at the beginning of the year498.710493Retained earnings25.418493	3.359 2.483 2.010
Cash at hand and bankaccounts.549.004533Total current assets862.979853Total assets862.979853Equity and liabilities498.710493Equity: Retained earnings.498.710493Equity at the beginning of the year.498.710493Equity at the beginning of the year.493.710493Equity at the beginning at the year.493.710493Equity at the year.493.710493.710Equity at the year.493.710493.710 <td>2.483 2.010</td>	2.483 2.010
Total current assets862.979852Total assets862.979852Equity and liabilities862.979852Equity: Equity at the beginning of the year	2.010
Total assets862.979852Equity and liabilities10001000Equity: Equity at the beginning of the year	
Equity and liabilities         Equity:         Equity at the beginning of the year	2.010
Equity and liabilities         Equity:         Equity at the beginning of the year	2.010
Equity:Equity at the beginning of the year	
Equity at the beginning of the year.498.710499Retained earnings.25.41825.418	
Retained earnings	
	2.972
Total equity         524.128         499	5.738
	8.710
Liablities:	
	5.170
Deferred income	0
	2.758
	5.372
Total liabilities   338.851   35.	3.300
Total equity and liabilities 862.979 85	

## Income Statement for 1 January - 31 December 2014 for the FIG Foundation

	2014	<u>2013</u>
	EURO	EURO
Donations		
Personal donations	1.818	1.032
Other donations	11.092	7.272
FIG Conferences	27.172	25.000
Financial income	2.321	1.863
Total Income	42.403	35.167
Expenses		
Grants	(39.940)	(21.981)
Total Expenses	(39.940)	(21.981)
- Final Result (Deficit)	2.463	13.186

## Balance Sheet at 31 December 2014 for The FIG Foundation

	<u>2014</u>	<u>2013</u>
Assets	EURO	EURO
Current assets:		
Receivables:		
Account receivable, FIG	225.117	222.758
Other receivables	1.156	1.156
Cash at hand and bankaccounts	5.567	5.463
Total current assets	231.840	229.377
Total assets	231.840	229.377
Equity and liabilities		
Equity:		
Equity at the beginning of the year	228.377	215.191
Retained earnings	2.463	13.186
Total equity	230.840	228.377
Liablities:		
Other debt	1.000	1.000
Total liabilities	1.000	1.000
Total equity and liabilities	231.840	229.377

#### FIG FINANCIAL RESULTS 2013 and 2014

#### version of

Result Budge Result Notes 2013 2014 2 014 REGULAR INCOME Subscriptions Member associations 260.145 260.000 259.444 Affiliate members 25.460 28.000 28.880 Corporate members Academic members 77.893 20.750 77.000 10.500 80.990 11.000 Less bad debts 20.775 15.000 38.041 b Less change in provision for doubtful debts 10.937 352.536 360.500 342.273 Financial income 4.399 5.000 2.993 d Less banking costs 763 250 616 e Advertising income Events - fees charged for services 80.000 80.000 81.910 f Total regular income 436.172 445.250 426.560 REGULAR EXPENDITURE Administration Office costs 159.756 173.500 162.488 g, h, i 35.726 195.482 Outsourced office costs 42,000 42 466 215.500 204.954 Marketing and publications 19.930 35.000 28.947 Council and executive management 153.161 k 180.876 161.000 Commission support Regular grants 30.000 30.000 30.000 Regular grants - Young Surveyors Network 3.000 3.000 3.000 33.000 33.000 33.000 Total regular expenditure 420.062 429.288 444.500 Surplus/deficit of regular income over regular expenditure 6.884 750 6.498 PROJECTS Events - funds received by FIG Congress/Working Week Regional Conference 5.902 5.000 5.000 f 14.144 26.684 5.000 Other events and projects 20.046 10.000 31.684 Development spend 547 15.440 6.000 15.000 2.904 9.860 Task Force support m IT and web - developmental activity m Support for poor Member Associations 2.649 2.000 m Specific grants for commissions 2.556 7.500 12.764 21.192 30.500 RESULT Overall surplus/deficit in the year - normal activities 5.738 -19.750 25.418 498.711 524 129 Reserves 25.000 25.000 Events reserve 25.000 50.000 General reserve General reserve as a % of regular annual expenditure 448.711 449.129

#### The office provides Member services Commission services Communication Event management

The Council provides Promotion of the profession Executive management Member support Event development

Notes

Lower than earlier due to changed fee structure for Academic Members a)

Total reserve as a % of regular annual expenditure

higher due to higher number of expelled members b)

C) In 2012 we introduced a provision for bad debt and continued this prudent provision at the same level as in 2013, therefore no change in 2014.

Council decision not to invest and to expose FIG to a financial risk. The normal accounts today give zero interest. d)

e)

Members are asked to cover banking fees when paying membership fee. FIG Office has decided to write off smaller banking arrears instead of having these small amounts on the arrears list, and therefore The Local Organisers for the Congress 2014 agreed with FIG Office has decided to write off smaller banking arrears instead of having these small amounts on the arrears list, and therefore The Local Organisers for the Congress 2014 agreed with FIG Office host decided a size able amount of expenses incurred by FIG Office in relation to the Congress which enabled the result to exceed the budgeted amount During 2014 FIG office moved to other premises within the same building. In the budgeting phase the final rent was not settled. Furthermore FIG has agreed with DdL over a 3 year period to increase the rent Prices for postal services have increased significantly, and there have been many shipments with publications. The minutes to members included several publications. f

107% 125%

g) h)

105% 116%

i) FIG office managed to move office rooms without any extra costs for equipment etc. Higher due to an extra unexpected visit by the external auditors

i

k) Council travel is much lower than budgeted. There are two reasons for this. First, the president has been very careful when travelling, both economically and wise, while still able to cover many destinations I) Unbudgeted incomes from other events are related to project handling fees received.

All requests have been met. m)

31-12-2014

ANNEX B

RESULTS 2013-2014 AND	BUDGETS	2015-2v	ersion of	20-jan-14															nex C	
	Final		GA 2012	GA2013	GA 2014	Final		GA 2012	GA 2013	GA 2014	proposed GA2015		GA 2013	GA 2014	proposed GA 2015		GA 2014	proposed GA 2015		Preliminary
	2013 result	Notes	Budget 2014	Budget 2014	Budget 2014	2014 result	Notes	Budget 2015	Budget 2015	Budget 2015	Budget 2015	Notes	Budget 2016	Budget 2016	Budget 2016	Notes	Budget 2017	Budget 2017	Notes	Budget 2018
REGULAR INCOME																				
Subscriptions			e	e	e	ŧ		e	ŧ	e	£									
Member associations	260.145		302.000	282.000	260.000	259.445		302.000	282.000	260.000	260.000		282.000	260.000	260.000		272.250	260.000		272.250
Affiliate members	25.460		25.000	25.000	28.000	28.880		25.000	25.000	28.000	28.000		25.000	28.000	28.000		28.000	28.000		28.000
Corporate members	77.893 20.750		91.000 20.000	78.000 21.000	77.000 10.500	80.990 11.000		91.000 20.000	78.000 21.000	78.000 11.000	78.000 11.000		78.000 21.000	78.000 12.000	83.000 12.000		78.000 12.000	90.000 12.000		78.000 12.000
Academic members Less debts written off	20.750	h	15.000	17.000	15.000	38.041	h	15.000	15.000	14.750	14,750	b	15.000	12.000	12.000	h	12.000	12.000	h	20.000
Less change in provision for doub	10.937	0	-	-	-	30.041	5	-	-	-	-	5	-	12.150	12.750	5	-	-	5	20.000
	352.536	a	423.000	389.000	360.500	342.274	a	423.000	391.000	362.250	362.250	a	391.000	365.250	370.250	a	380.250	380.000	а	370.250
Financial income	4.399	с	5.000	7.000	5.000	2.993	c	5.000	7.000	5.000	5.000	Ċ	7.000	5.000	5.000	с	5.000	5.000	c	5.000
Less banking costs	763		250	250	250	616		250	250	250	250	d	250	250	250	d	250	250	d	250
Advertising income			-	-	-			-	-		-									
Events - fees charged for services	80.000	е	75.000	80.000	80.000	81.910	е	40.000	45.000	45.000	45.000	е	45.000	50.000	50.000	e, g	50.000	45.000	e, g	80.000
Total regular income	436.172	-	502.750	475.750	445.250	426.561	-	467.750	442.750	412.000	412.000	-	442.750	420.000	425.000	_	435.000	429.750		455.000
REGULAR EXPENDITURE																				
Administration																				
Office costs	159.756		183.500	169.000	173.500	162.487		185.000	170.000	170.000	174.000		177.500	173.000	179.500	i	177.000	186.000		193.500
Outsourced office costs	35.726	-	45.000	43.000	42.000	42.466	-	44.000	47.000	44.000	44.000	· -	44.000	44.000	45.000		44.000	46.000		46.000
Total administration	195.482		228.500	212.000	215.500	204.953		229.000	217.000	214.000	218.000		221.500	217.000	224.500		221.000	232.000		239.500
		-					-					-				-				
Marketing and publications	19.930	-	35.000	30.000	35.000	28.947	-	10.000	10.000	10.000	10.000	-	10.000	10.000	10.000	-	10.000	10.000		10.000
Council and executive management	180.876	f_	202.000	171.000	161.000	153.162	f_	190.000	162.000	152.000	152.000	f_	165.000	157.500	157.500	f	158.000	158.000	f	161.000
Commission and other groups regular supp																				
Regular grants - commissions	30.000		30.000	30.000	30.000	30.000		30.000	30.000	30.000	30.000		30.000	30.000	30.000		30.000	30.000		30.000
Regular grants - Young Surveyors	3.000 33.000		3.000 33.000	3.000 33.000	3.000 33.000	3.000 33.000		3.000 33.000	3.000 33.000	3.000 33.000	3.000 33.000		3.000 33.000	3.000 33.000	3.000		3.000 33.000	3.000		3.000
-		-					-					-			33.000	-		33.000		33.000
Total regular expenditure	429.288	-	498.500	446.000	444.500	420.062	-	462.000	422.000	409.000	413.000	-	429.500	417.500	425.000	_	422.000	433.000		443.500
Surplus/deficit of regular income over regular expenditure	6.884		4.250	29.750	750	6.498		5.750	20.750	3.000	-1.000		13.250	2.500			13.000	-3.250		11.500
[Key measure 1 - this to be positive]	0.004		4.230	23.130	150	0.490		5.750	20.730	5.000	-1.000		13.230	2.500			13.000	-3.230		11.500

	GA 2014 Budget 2014	Notes	GA 2012 Budget 2014	GA 2013 Budget 2014	Revised Budget 2014	Final 2014 result	Notes	GA 2012 Budget 2015	GA 2013 Budget 2015	GA 2013 Budget 2015	GA 2013 Budget 2015	Notes	GA 2013 Budget 2016	GA 2013 Budget 2016	GA 2013 Budget 2016	Notes	GA 2013 Budget 2016	GA 2013 Budget 2016	Notes	GA 20 Budget 20
OJECTS AND DEVELOPMENT																				
ents - funds received by FIG	5 000		15 000		5.000	5.000		20.000												
Congress/Working Week - share Regional conference	5.902	e	45.000		5.000	5.000	e	20.000				e				e			e	
Other events	14,144				10.000	26.684						9				9			9	
Commission events	14.144	1			10.000	20.004	1					1				1			1	
	20.046	_	45.000	<u> </u>	15.000	31.684	-	20.000	<u> </u>	<u> </u>	<u> </u>	_	<u> </u>		-	-	<u> </u>	<u> </u>		
velopmental income																				
velopmental spend																				
Task Force support	547		12.000	6.000	6.000	2.904	k	12.000	6.000	5.000	5.000	k	6.000	5.000	5.000	k	5.000	5.000	k	5
IT and web - developmental activit	15.440	h	5.000	15.000	15.000	9.860	h	5.000	15.000	10.000	10.000	h	5.000	10.000	10.000	h	10.000	10.000	h	10
Support for poor Member Associat	2.649		2.000	2.000	2.000			2.000	2.000	2.000	2.000		2.000	2.000	2.000		2.000	2.000		
Specific grants for Commissions	2.556		7.500	7.500	7.500			5.000	5.000	5.000	5.000		5.000	5.000	5.000		5.000	5.000		
_	21.192	-	26.500	30.500	30.500	12.764	-	24.000	28.000	22.000	22.000	-	18.000	22.000	22.000	-	22.000	22.000		22
SULT																				
erall surplus/deficit in the year - norma	5.738	_	22.750	-750	-14.750	25.418	_	1.750	-7.250	-19.000	-23.000	_	-4.750	-19.500	-22.000	_	-9.000	-25.250		-10
ey measure 2 - this to be positive in total ov	ver the term of the	4 year bud	get period]																	
ceptional items																				
al reserves at vear end	498.711		515.802	497.961	483.961	524.129		517.552	490.711	464,961	460.961		485.961	445.461	438.961		436.461	413.711		403
General reserve	448.711		465.802	472.961	433.961	449.129		467.552	465.711	414.961	385.961		460.961	395.461	363.961		386.461	338.711		32
Events reserve	25.000	m	50.000	25.000	25.000	25.000	m	50.000	25.000	25.000	25.000	m	25.000	25.000	25.000	m	25.000	25.000	m	1 2
IT Development Reserve	25.000				25.000	50.000	n			25.000	50.000	n		25.000	50.000	n	25.000	50.000	n	5
Total reserves as a % of regular (4	117%		121%	101%	128%	113%		114%	114%	110%	107%		113%	105%	102%		103%	97%		
General reserve as a % of regular	105%	1	109%	95%	116%	108%	1	103%	108%	98%	90%	I	107%	93%	85%	1	91%	79%		
General reserve as a % of regular	105%		93%	91%	111%	107%		101%	110%	101%	93%		107%	95%	86%		92%	78%		

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## Summary of the bids for 2019 – Ireland, Dublin, Society of Chartered Surveyors Ireland/RICS

Criteria	Ireland, Dublin, Society of Chartered Surveyors Ireland/RICS
1. Rotation of the conference: Previous and planned conferences:	Europe (2017, 2015, 2012, 2008) 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) Working Weeks: 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.
<b>2. Country</b> hosting of earlier FIG events and general experience	There has not been a FIG Conference or General Assembly in Ireland in the past. The last FIG Conference in UK was the Congress 1998 in Brighton. Forbes 2011 named Ireland as the best country in Europe in which to do business.
<b>3. Member association</b> Its activeness, Commitment to FIG and to FIG 2019 Execution ability for local association	SCSI resigned from FIG in 2012 due to a merger with RICS and is today represented through RICS. SCSI is supported by RICS. Over 5,500 members Member not in arrears.
4. Supporting organisations Local support to the Working Week Governmental support Financial support General support	This bid is supported by the Department of the Taoiseach, Fáilte Ireland (the National Tourism Development Authority), the Lord Mayor of Dublin, Dublin Convention Bureau and the Irish industry suppliers, hereunder Commissioner of Valuation, Geological Survey of Ireland, Ordnance Survey of Ireland, RICS, Property Registration Authority. Fáilte Ireland, Ireland's National tourism Authority, will offer FIG Working Week financial support of €10 per international delegate for the first 999 delegates attending and €20 per international delegate for each delegate over 1000 pax.
5. Host city Characteristics and interest from congress programme point of view Host city attractiveness Host city offerings	Dublin is a unique capital that's steeped in tradition yet young at heart. In the historic, compact city centre there is lots to do and see, rich selection of galleries, national museums which have free entry, restaurants, pubs and shops, not to mention the traditionally warm welcome from Dubliners. Scoring high on essential criteria such as suitability, accessibility, facilities and service, Dublin delivers in its own inimitable way. Dublin Convention Bureau will support FIG through a number of direct services e.g. Discounted Dublin Pass – the official city sightseeing card, visitor maps, tourist information desk. Dublin city itself is small, compact and is easy to get around by foot. It also has a good transport system, which includes an urban rail system (DART), a stylish new tram network (LUAS) and an extensive city/countrywide national train and bus service. A universal public-transport access card is available allowing delegate's access to all parts of the city by bus, DART or Luas. Taxis are plentiful and reasonably priced by international standards. Examples of Destination Cost of Living • Coffee in a Typical Café: €2.50-€3.00 • 50cl bottle of mineral water: €1.20 • Sandwich: €3.50-€4.00

Criteria	Ireland, Dublin, Society of Chartered Surveyors Ireland/RICS
6. Venue	The Convention Centre Dublin (CCD). Built 2010. The CCD has won 25 major
Price/affordability	industry awards since opening in September 2010. The venue is suitable for a FIG
Location of venue Internet availability	Working Week in both number and size of conference rooms
Suitability of rooms, size of	6 Spacious foyer areas – with views of Dublin City, bay and mountains on upper
venue, structure and layout of	foyer levels,
the venue Catoring	New technology and wi-fi throughout
Catering Value for money	
Hotels nearby	Public Transportation to Convention Centre
Facilities for exhibition	
	Bus: Typical bus journey from city centre to Convention Centre - 70c.
	LUAS: Typical LUAS Journey Zone 1 - €1.80
	Integrated Ticket for bus, train & LUAS - €10.00 (includes €5 credit).
	Delegate discounts will be made available.
	Dublin City Bikes: 3 day ticket - €2.00
	Taxi: Typical taxi fare from city centre to Convention Centre - €8.00
7. Accessibility	Ireland, located on the edge of Europe, is less than an hour from London, less than
Flight connections Several access possibilities	two hours from Paris or Brussels and five hours from the east coast of the US by
Security	air. Dublin airport is the 11th largest in Europe in terms of international traffic,
Visa issues	which has more than 175 destinations served by 57 scheduled airlines. A new
Air fare to destination	terminal opened in 2010, increased its capacity to well over 30 million passengers
	a year. Dublin Airport is located 12km north of Dublin city centre. Dublin Port
	Tunnel cuts journey time from the airport to the city centre, to 12-15 minutes.
	Taxis are readily available for hire outside the airport (a taxi journey into the city
	centre from the airport should cost approximately €25).
	Visa applications are on-line using the AVATS on-line facility. Citizens of certain
	countries require a visa to travel to Ireland. Applicants should note that all non-EU
	citizens, whether a visa is required or not, will be subject to ordinary immigration
	controls at the port of entry. Dublin Convention Bureau will work closely with FIG,
	the local organising committee and the Department of Foreign Affairs to ensure
	that Visa applications are processed efficiently. Visas are not currently required by
	EU Nationals, EFTA Nationals or USA, Canadian or Australian nationals, visitors are
	required to have a valid passport. Information on nationalities requiring a VISA
	may be obtained from any Irish Embassy or Irish Tourist Office.
8. Safety and security	Political stability in the country. The Republic of Ireland is a parliamentary
Political stability	representative democratic republic. The present government is a coalition of Fine
Airport safety	Gael (a centre right to centrist party) and the Labour Party. The state operates
City safety – is it safe to move around?	under the Constitution of Ireland, which falls within the Liberal Democratic
Political stability in country	
(rating must be 3 or higher)	tradition.
	Diplomatic relations of Ireland are substantially influenced by its membership of
	the European Union, although bilateral relations with the US and the UK are also
	very important to Ireland. It is one of a group of smaller nations in the EU and has
	traditionally pursued a nonaligned foreign policy. Ireland tends towards
	independence in foreign policy, is not a member of NATO and has a long-standing
	policy on military neutrality. Ireland is consistently the most pro-European of
	EU member states, and is a founder member of the euro currency.
	Dublin is a safe and welcoming city.
Proposed dates	
Must meet FIG requirements	29 April - 3 May 2019
Following FIG statutes	17-24 May 2019
Practical dates	24-28 June 2019

Criteria	Ireland, Dublin, Society of Chartered Surveyors Ireland/RICS
Availability of venue Other conferences at same time	
<b>9. Technical programme</b> Coverage of all FIG Commissions, Potential partners Originality Special ideas	Nothing expressed in the bidding document.
<b>10. Technical tours</b> Coverage of all FIG Commissions Originality Ideas proposed	The Technical Tours will be organised to complement the FIG Working Week experience and will visit organisations and sites of particular interest to FIG delegates. Proposed tours: Ordnance Survey Ireland (OSi) is the National Mapping Agency (NMA) of Ireland, Birr Castle Demesne houses an interactive science centre which reveals the wonders of early photography, engineering and astronomy, Brú na Bóinne is a World Heritage Site and is dominated by three well-known large passage tombs, Knowth, Newgrange and Dowth with an additional ninety monuments built some 5,000 years ago. The Dublin Institute of Technology (DIT) is one of Ireland's largest and most innovative university-level institutions and the new DIT City Centre Campus – Grangegorman – which will unify DIT's multiple city centre campuses is currently under construction and will ultimately house all 20,000 students and 2000 members of staff
<b>11. Social programme</b> Attractiveness and variety Proposals for dinners Attractiveness of offered dinners Proposals for tours Is the program following the overall FIG concept	A variety of proposals for the social programme that gives a broad insight in the Irish culture, both old and new. Venue options are among others the Old Jameson Distillery, Trinity College Dublin, founded in 1592, is the oldest university in Ireland, The Guinness Storehouse and Dublin Castle. A broad range of social tours are offered including walking tours in the old Dublin centre, Sight Jogging Tour of Dublin, The Rebellion Walking Tour and The award winning Dublin Walking Tour, Gaelic Games Experience, Dublin Tasting Trail, delegates visit a range of bakeries, food halls, street markets, cheesemongers, delicatessens and other speciality shops. Also a range of pre and post tours are offered, incl Golfing
<b>12. Attendance</b> Expectation of international, regional and local attendance Realistic number of international and national participants	800-1200 conference delegates
<b>13. Accommodation</b> Hotel costs Value for money Variation in hotel offers Closeness to proposed venue Transportation to venue	Dublin offers over 160 hotels with just over 18,000 beds, all approved by Fáilte Ireland – The National Tourism Development Authority. Hotels range in price from the luxury 5 star experience to more affordable budget accommodation. Visitors can choose either city-centre hotels within walking distance or hotels in the leafy suburbs of Dublin which can be easily accessed by bus, tram, train or taxi. Quite many hotels near the conference venue. Price range (single room) 5* 310-360 EUR 4* 175-240 EUR 3* 170-215 EUR 3* in city centre €100-€140 EUR
<b>14. Finances</b> Estimate of surplus and financial risks	The budget seems realistic. Balance based on 800 part: 38,152 EUR, 1000 part: 110,479, 1200 part: 182,806

Criteria	Ireland, Dublin, Society of Chartered Surveyors Ireland/RICS
Realistic fees proposed Fees in an acceptable price range Difference between international and national fees Realistic budget Estimated review	Fees suggested: Early bird: 610 EUR, Normal: 710 EUR, Late: 770 EUR, Students: 225 EUR, Acc. pers: 165 EUR Dinner fees suggested: gala dinner: 120 EUR, Irish evening 95 EUR
Estimated revenue <b>15. Sponsorship</b> Estimate sponsorship and exhibition income Proposed income How realistic is proposed income Local sponsor offerings Sponsor interest to conference	There is a realistic budget for sponsorship and exhibition income and a quite large local engagement is expected.
<b>16. Why host</b> Reason for hosting	Long and notable history of surveying and measurement from the carefully aligned network of hill-top monuments constructed over 5,000 years ago, to the completion of the world's first large-scale national mapping in the mid nineteenth century and, in the last decade, the National Seabed Survey that ranks amongst the largest marine mapping programmes undertaken anywhere in the world. Meanwhile, Ireland has one of the most open economies in the world and most of the major international IT companies have established bases in Ireland. At the same time, young Irish graduates can be found bringing their skills and enthusiasm to all corners of the world and, in many cases, returning home enriched professionally and culturally by their time abroad.
17. Objectives and outcomes Thought through why conference should be held at destination Difference to other destinations Short term outcome Long term outcome	Ireland is at the forefront of innovation and technological advancement. The vision to host the FIG working week 2019 would enable SCSI to maximise the opportunity to go Beyond Borders – geographically, economically and professionally.
<b>18. Suggested theme</b> Thought of possible theme that fits to local/regional situation	'Beyond Borders' reflects an aspiration towards a more inclusive surveying world. - politically - socially - scientifically There is a proposed logo
<b>19. Events organized in</b> <b>the past three years</b> How experienced is the host in organising events	SCSI has co-ordinated the annual national and regional events for many years, incl Annual Dinner which was attended by in excess of 1200 in February this year; the Annual Conference which was attended by c. 500 delegates in October of this year as well as many other regional forums and events. SCSI has held events in many of the city's top venues, including the Dublin Convention Centre. The SCSI is a member of CEPI – the European Council of Real Estate Professions – SCSI is hosting its annual general assembly in Dublin, for which we have organised interpretative facilities and social activities, as well as hosting CEPI's working schedule. Events organisation in the society is a key element of our operations and is managed by the Innovation and Business Development Department.
20. Major event planned in the proposed city in 2017 Many events might affect the price level	Nothing expressed in the bidding document.
21. Initiatives for sustainable conference	Convention Centre Dublin was the world's first carbon neutral convention centre. CCD has developed an environmental management policy to positively impact on

Criteria	Ireland, Dublin, Society of Chartered Surveyors Ireland/RICS
environment Is host city paying attention to environmental issues Is venue paying attention to environmental issues Is host paying attention to environmental issues	<ul> <li>local, national and global environmental issues and is specifically working on a positive development on the environment such as minimizing waste, Ensuring that any paper and timber we use is obtained from sustainable forests and conserve energy as well as select renewable sources of energy and materials where possible. the local Destination Management Company (DMC) are currently in the process of seeking accreditation under the ISO 20121: Events Sustainability Management Systems. This is testament to Event Partners' environmentally friendly and sustainable approach in the services they provide to conferences as well as internally amongst their own staff.</li> <li>FIG delegates are encouraged to think in terms of their carbon footprint when organising travel to the conference including offering carbon offsetting and promoting the use of public transport throughout the event. Dublin is a compact, easily walkable city with the area around the CCD served by coastal train (DART), Dublin Bus and a light rail network (LUAS).</li> <li>Special CSR initiatives such as "Plant a tree for Life" and "build a bike for an Irish Charity.</li> </ul>
<b>22. New initiatives or</b> <b>activities</b> Originality – but within the overall FIG concept	Intergenerational initiatives Marine sector
23. What legacy to leave locally from the Working week With host Hosting city For the surveying community	Nothing expressed in the bidding document.
VALUATION Issues supporting	- Ireland is active within FIG and has participated actively in earlier events and
destination	<ul> <li>know the FIG Conference Concept</li> <li>There has not been a FIG event in Ireland in the past</li> <li>Proposed venue will work well for FIG purposes</li> <li>Safe destination</li> <li>Budget is realistic and surplus is estimated</li> </ul>
Issues against destination	- Price level on hotels around the conference venue is expensive

## Summary of the bids for 2019 - Kenya, Nairobi, Institution of Surveyors, Kenya

ITEM and criteria	Kenya, Nairobi, Institution of Surveyors, Kenya
1. Rotation of the	Africa (2013, 2011, 2005)
conference:	Sub Saharan Africa (2013) + Regional conferences
Previous and planned	<b>Congresses:</b> 2014: Asia and the Pacific (Malaysia); 2010: Asia and the Pacific (Australia); 2006: Europe
conferences:	(Germany), 2002: North America (USA); 1998: Europe (United Kingdom); 1994: Asia and the Pacific (Australia)
	Working Weeks: 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.
2. Country	Currently Kenya is ranked 2nd in Africa according to International Congess and
	Conventions Associations (ICCA)2013 statistics
hosting of earlier FIG	ISK hosted the International Conference on Spatial Information for Sustainable
events and general experience	development in collaboration with FIG and the United Nations Centre for Human Settlements (Habitat) held from 2nd to 5th October 2001.
	ISK also hosted the first FIG African Task Force Workshop on Peri-Urban Settlements:
	Tools & Techniques for Surveyors to ensure Environmental and Social Resilience in
	cooperation with Taskforce. The workshop with participants from Africa and beyond
	was held on 11th and 12th November 2010. in Mombasa, Kenya,
3. Member association	The Institution of Surveyors of Kenya is an active member of FIG and is well
	represented and active at FIG conferences. ISK is not in arrears.
Its activeness,	
Commitment to FIG and	
to FIG 2019	
Execution ability for local association	
4. Supporting organisations	The conference will be supported by the Government of Kenya through various bodies This includes;
	1. The Ministry of Land, Housing and Urban Development
Local support to the	2. Ministry of Foreign Affairs and International Trade
Working Week	3. Kenyatta International Convention Centre
Governmental support	4. University of Nairobi
Financial support General support	5. Technical University College
General support	Governmental financial support
5. Host city	Nairobi "Green City in the Sun" The city is one of the prominent cities in Africa
	politically and economically and home to many multinational companies
Characteristics and	The name "Nairobi" comes from the Maasai phrase Enkare Nyirobi, which translates to
interest from congress	"the place of cool waters". It is easy to get around and offers a variety of activities to
programme point of	keep anyone busy including shopping, visitor attractions, historical tours, theatre, as
view	well as some of the most exciting restaurants, bars, cafes and night clubs.

Host city attractiveness	It is established as a Hub for business and culture. Nairobi has prevailed in the recent
Host city offerings	years as the top meeting destination within the region and is included in the list of ICCA as top 100 of the most popular meeting destinations worldwide.
6. Venue	The Kenyatta International Convention Centre (KICC) is a State Corporation reestablished through a State Corporation under the Tourism Act 2011 with the primary mandate of promoting and marketing conference tourism both locally and
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	internationally. Located at the heart of the central business district of Kenya's Capital, KICC boasts of its proximity and easy accessibility to and from all major five-star hotels, most of which are ten minutes walk away and five minutes away by car. KICC has the capacity to hold both large and small events, both indoors and outdoors. The facility has excellent rooms, with good ambiance, clean and air conditioned. On Ground floor with an area of 2,444 m2 »» Sitting: Theatre: 5,000 Classroom: 2,500 Banquet: 2,500 The network which is supported on a fibr e optic backbone together with the necessary infrastructure has been laid across the entire KICC premises. Possibility for outdoor exhibition area
7. Accessibility Flight connections Several access possibilities Security Visa issues Air fare to destination	Nairobi is served primarily by Jomo Kenyatta International Airport. It is the largest airport in East and Central Africa. The airport is situated 17 km (10 miles) from Nairobi's Central Business District. The airport directly serves intercontinental passengers from Europe, the Middle East and Asia as well as internal flights. In addition to Kenyan Airlines, Jomo Kenyatta International Airport is serviced by a large number of international airlines. Wilson Airport is a smaller and busy general aviation airport located in a southcentral suburb of Nairobi West. It handles small air craft that generally operate within Kenya, although some offer services to other East, Central and North-east African destinations. Nationals of some countries are required to have a visa prior to their entry in Kenya. Although it's possible to obtain a visa on arrival at Jomo Kenyatta International Airport in Nairobi, it is advisable to obtain the visa from the Kenyan Embassy/ High Commission in your country prior to departure. The government of Kenya will make arrangements to expidite Visa issuance at JKIA by allocating dedicated desks for delegates coming from countries where there are no Kenyan missions.
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)	Conference tourism is very sensitive to security matters. KICC has therefore put in place firm measures to ensure delegates and visitors safety while in and around the centre. The Center is centrally and strategically located in the Central Business District and is surrounded by highly secured institutions like the Kenya Police Headquarters, High Court of Kenya, Office of the President, among other very highly secured buildings. Inside the centre, KICC enjoys a fully equipped police station to beef up the security of delegates. The Centre is also guarded by internationally acclaimed security firm known as the Bob Mor gan (BM). KICC prides itself in ha ving one of the latest ultra modern electronic security systems that covers all meeting rooms, entrances main gates and all the walking paths in the building.
Proposed dates Must meet FIG requirements Following FIG statutes Practical dates Availability of venue Other conferences at same time	17th – 24th May 2019 7th – 14th June 2014 or 14th to 21st June 2019.

9. Technical programme	Nothing expressed in the bidding document.
Coverage of all FIG Commissions, Potential partners Originality Special ideas	
<b>10. Technical tours</b> Coverage of all FIG Commissions Originality Ideas proposed	<ul> <li>The delegates attending the FIG working week will have a programme for technical tours relevant to all the FIG Commissions. This will include:</li> <li>The Great Rift Valley with varying features</li> <li>Kibera slums one of the biggest informal urban settlements in Africa</li> <li>Lake Bogoria is a saline, alkaline lake that lies in a volcanic region with hot springs</li> <li>The Olkaria Area renown source of geothermal clean electrical power generation</li> <li>Various large scale farms supplying the World with tea, coffee and horticulture</li> </ul>
<b>11. Social programme</b> Attractiveness and variety Proposals for dinners Attractiveness of offered dinners Proposals for tours Is the program following the overall FIG concept	<ul> <li>The Social tours programme will be expansive and will include visits to:</li> <li>The Nairobi National Park an unique wildlife sanctuary only 7 kms from the Nairobi bustling City Centre</li> <li>Museums including National museum of kenya, the current blixen museum, The Carnivore Restaurant , the ultimate 'Beast of a Feast' A variety of game meat including ostrich, crocodile and camel</li> <li>Specialized animal parks:- such as Snake Park, Mamba village and Ostrich park.</li> <li>Bomas of Kenya offering wide displays traditional villages belonging to the several Kenyan tribes</li> <li>Mount Kenya The only snow capped Mountain at close to equator,</li> <li>Maasai Mara National Reserve for the Wild beast migration one of the natural wonders of the world</li> <li>Wide variety of game parks and game reserves including Nakuru National park, tsavo national park, tsavo national park among others</li> <li>Arboretum forest</li> </ul>
<b>12. Attendance</b> Expectation of international, regional and local attendance Realistic number of international and national participants	It is expected that Working Week 2019 will attract participants from 70-90 countries. There are close to 5000 professionals in the surveying from the regional who will also be expected to attend.
<b>13. Accommodation</b> Hotel costs Value for money Variation in hotel offers Closeness to proposed venue Transportation to venue	There are several hotels in the area around the Convention Centre. Price range in USD (approximate) 7* 256-530 USD 6* 750-2500 USD 5* 200-350 (18 5* hotels mentioned) 4* 140-220 3* 160-260

<b>14. Finances</b> 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	Expected surplus of 229.310 EUR Budget based on 1500 Participants Proposed fees: Early bird: 680,12 EUR, Normal: 816,14 EUR, Late: 952,17 EUR Proposed dinner costs: gala dinner: 227 EUR, Kenyan evening: 181 EUR
<b>15. Sponsorship</b> Estimate sponsorship and exhibition income Proposed income How realistic is proposed income Local sponsor offerings Sponsor interest to conference	Governmental support is expected. There is a realistic budget for sponsors and exhibitors.
<b>16. Why host</b> Reason for hosting	The FIG working week in Kenya will explore the development of a knowledge management concept for the surveying profession which will enhance the status of the surveyors ISK is a local version of FIG in the region with a capacity to host international conferences. The region is yet to host an FIG working week or a congress despite the advancement of the surveying practice in Kenya. Hosting the FIG working week will achieve the following:- • Mobilize and spear head the recruitment of more professionals from Africa. • Strengthen the membership of FIG in Africa, • Enhancing the surveying profession in the region • By hosting the working week ISK will enhance the capacity of its members.
17. Objectives and outcomes Thought through why conference should be held at destination Difference to other destinations Short term outcome Long term outcome	<ul> <li>The contribution of ISK FIG Working week to surveying in Kenya and the region</li> <li>The FIG working week in Kenya will explore the development of a knowledge</li> <li>management concept for the surveying profession which will enhance the status of the</li> <li>surveyors. It will assist countries in the region better integrate surveying in their</li> <li>development agendas such as infrastructure development, mining and agriculture</li> <li>among others.</li> <li>Objectives of the working week:</li> <li>i) Explore the gap existing in the knowledge and practice of surveying profession</li> <li>ii) Establish ways of bridging the gap between the existing knowledge and practice of surveying profession</li> </ul>
<b>18. Suggested theme</b> Thought of possible theme that fits to	Proposal of Working Week theme: Tying knowledge and practice –Mainstreaming knowledge management in the Surveying profession

local/regional situation	
19. Events organized in the past three years	Nothing expressed in the bidding document.
How experienced is the host in organising events	
20. Major event planned in the proposed city in 2017	The are no Major events slated for May - June 2019 in Nairobi
Many events might affect the price level	
21. Initiatives for sustainable conference environment	Nothing expressed in the bidding document.
Is host city paying attention to environmental issues Is venue paying attention to environmental issues Is host paying attention to environmental issues	
22. New initiatives or activities	Nothing expressed in the bidding document.
Originality – but within the overall FIG concept	
23. What legacy to leave locally from the Working week	Outcome: The working week will identify recommendations of bridging the gap existing in the knowledge and practice of surveying profession
With host Hosting city For the surveying community	
VALUATION	
Issues supporting destination – subjective rating for Council	<ul> <li>ISK has a clear idea of theme and outcome incl benefit for the country</li> <li>ISK is an active association and has held various events</li> <li>ISK is active within FIG</li> <li>Large local representation</li> </ul>
Issues against destination - rating	<ul> <li>Safety is an issue in Nairobi although precautions are taken.</li> <li>Hotels are not as cheap as could be expected</li> </ul>

- Budget is somewhat insecure because of uncertainty with the numbers of international participants.
<ul> <li>It might be difficult to find national and regional sponsors and exhibitors</li> </ul>
<ul> <li>Insecure how many internationals will participate</li> </ul>

## Summary of the bids for 2019 - Switzerland, Geneva or Interlaken, geosuisse

ITEM and criteria	Switzerland, Geneva or Interlaken, geosuisse
1. Rotation of the conference:	Europe (2017, 2015, 2012, 2008)
Previous and planned conferences:	<ul> <li>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)</li> <li>Working Weeks: 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</li> <li>Africa/Arab countries (Egypt); 2004: Europe (Greece); 2003: Europe (France); 2001: Asia (Republic of Korea); 2000. Europe: Czech Republic.</li> </ul>
<b>2. Country</b> hosting of earlier FIG events and general experience	Switzerland is placed "in the heart of Europe" and is a stable country. Switzerland is not member of EU, but is place right in the middle of Europe and is know for its financial stability. The country has a long history of armed neutrality. There is in general a good infrastructure, high standards of quality, political and economic stability The last time a FIG conference was held in Switzerland was XVI International FIG Congress 1981, 9 - 18 August 1981, Montreaux, Switzerland. Priory it has been in Bern 1961, Lausanne 1949, Geneve 1931, Zurich 1930 and Zurich 1929.
<b>3. Member association</b> Its activeness, Commitment to FIG and to FIG 2019 Execution ability for local association	Geosuisse is one of the founding members of FIG in 1878. 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 hots 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
4. Supporting organisations Local support to the Working Week Governmental support Financial support General support	Swiss Federal Office of Topography swisstopo Swiss Land Management foundation For Geneva: The Working week will be supported by the Geneva Canton and the Cantonal Office of Tourism. Also the President of Geneva Canton expressed his support for the event. The canton of Geneva/Swiss Confederation is sponsoring the rental costs for the congress centre in Geneve, and every visitor receives a free "Geneva Transport Card" for the public transportation. Geneva Convention bureau offers welcome desk at Geneva International Airport, sponsoring of opening ceremony or welcome reception. For Interlaken: The Working Week will be supported by the Bernese Cantonal Office of Tourism and Regional Development. The canton of Bern is sponsoring the rental costs for the congress centre in Interlaken. The Mayor of Interlaken expresses his support for the event
5. Host city	Two possibilities:
Characteristics and interest	1. Geneva Geneva is a cosmopolitan city. the city is home to the European headquarters of

City safety – is it safe to	
8. Safety and security Political stability Airport safety	Switzerland is a very safe and politically stable country.
	airports within a time of approx. 1.5 to 2h. Once the participants are in Interlaken, all facilities are within walking distance. There are direct train connections from e.g. Berlin, Frankfurt, Hamburg, Munich, Paris. For individual travelling, there is parking space available at the congress centre. Swiss and its partners would be happy to support this conference as the official carrier. Swiss is also a member of the Star Alliance Group.
7. Accessibility Flight connections Several access possibilities Security Visa issues Air fare to destination	Geneva is directly connected to the international airport Geneva. There are frequent and direct train connections to and from the airport within a time of approx. 10 minutes. All facilities are within walking distance. For individual travelling, there is parking space available at the congress centre. Interlaken is ideally connected to the international airports Zurich, Basel and Geneva. There are frequent and direct train connections to and from theses
venue, structure and layout of the venue Catering Value for money Hotels nearby Facilities for exhibition	The proposed venue in <b>Interlaken is the Congress Centre Kursaal</b> , which is ideally located near several hotels and public transport stations. All is in walking distance. The congress centre is suitable for 1500-2000 delegates and has 19 different rooms.Exhibition space is 5'000 m <sup>2</sup>
<b>6. Venue</b> Price/affordability Location of venue Internet availability Suitability of rooms, size of	<b>Congress Centre Geneva</b> , connected to the UN buildings in Geneva. The canton of Geneva/Swiss Confederation is sponsoring the rental costs for the congress centre. Meeting facilities with state-of-the-art technology. 22 conference rooms from 20 to 2,200 seats, 4,000 sqm exhibition space
C. Verue	2. Interlaken Interlaken is a relatively small city with a big international tourist reputation and with considerable tourist visits. All facilities are within walking distance, which will make the FIG Working Week into a real networking event. Testimonies to that are several similar sized events held in Interlaken every year, among them the Swiss Economic Forum, which has been held annually in Interlaken since 2011. Interlaken offers a different setting than FIG conferences are used to in large cities. Interlaken has many restaurants, which cover the full scope of affordability. It is the hub of a dense public transportation network, which can take the host virtually to the top of mountains. Interlaken also is a major centre for outdoors activities including hiking, thus offering the full scope of affordability.
from congress programme point of view Host city attractiveness Host city offerings	the United Nations and its specialized agencies, to over 200 international organizations, and to numerous international corporations. Today, 43 per cent of the city's inhabitants are foreign, enhancing the cultural diversity. The proposed venue in Geneva is the Congress Centre, which is ideally located in close vicinity of the UN buildings in Geneva. There is a reliable public transport network for connections to the city centre and to the airport. Geneva hosts more than 250 international meetings per year. Geneva has many restaurants, which cover the full scope of affordability. It also is the hub of a dense public transportation network. Geneva also is a major centre for outdoors activities. Public transportation is free for visitors staying in hotels: every visitor receives a free "Geneva Transport Card" upon checking-in to their hotel, valid for the duration of their stay.

move around?	
Political stability in country	
(rating must be 3 or higher)	
Proposed dates	Geneva:
Must meet FIG	10 - 14 June
requirements	Interlaken:
Following FIG statutes	
Practical dates	26 April - 3 May, 3 - 10 May, 31 May - 7 June, 14 - 21 June, 21 - 28 June.
Availability of venue	
Other conferences at same	
time	
time	
9. Technical programme	LOC will organize the technical programme in cooperation with FIG and with the 10
Coverage of all FIG	
Commissions, Potential	commissions. Geosuisse has active representatives in all FIG commissions.
partners Originality	
Special ideas	
10. Technical tours	Conque is in itself a major international destination with planty of passibilities for
10. Technical tours	Geneva is in itself a major international destination with plenty of possibilities for
	social activities and technical tours.
Coverage of all FIG	
Commissions	Interlaken is in itself a major tourist destination with plenty of possibilities for
Originality	social activities and technical tours. With the topographically challenging alpine
Ideas proposed	environment around Interlaken, there were and still are many technical problems
	to be solved, requiring the expertise of surveyors.
11. Social programme	Geneve: several places are suitable for FIG social programme hereunder: the
	Grand Theatre (The Geneva Opera House), Bâtiment des Forces Motrices (A
Attractiveness and variety	motionless vessel thatwas built in 1886 directly on the river Rhône), Ariana
Proposals for dinners	Museum
Attractiveness of offered	Interlaken: various tours available e.g. excursion to the mountains around, to the
dinners	lake, city walk with a chocolate show, open air museum. Also various venues for
Proposals for tours	
Is the program following	social dinners.
the overall FIG concept	
12. Attendance	Expected approximately 1200 International and 200 national paying participants
Expectation of	
international, regional and	
local attendance	
Realistic number of	
international and national	
participants	
13. Accommodation	Geneva: Geneva offers the full scope of accommodation, from 5-star-hotels to
	backpacker hostels. The majority of hotels is in the 3- to 4-star range. The total of
Hotel costs	available bed rooms is some 3000. Pricing of hotel rooms in the 3- to 4-star hotel
Value for money	range is between EUR 95-200). More than 1500 hotel rooms are within walking
Variation in hotel offers	
Closeness to proposed	distance of the Conference Centre CICG. 500 beds are available in low cost,
venue	student accommodation from CHF 40
Transportation to venue	Interlaken: Interlaken offers the full scope of accommodation, from 5-star-hotels
	to backpacker hostels. The majority of hotels is in the 3- to 4-star range. The total

	of available bedrooms is some 3000. Pricing of hotel rooms in the 3- to 4-star hotel
14. Finances	range is between EUR 95-200).
14. Finances	The budgets seem very realistic. The preliminary budget whether in Geneva or
Estimate of surplus and	Interlaken foresees a surplus of EUR 287'000.
financial risks	VAT is 8%: the lowest VAT rate in Europe
Realistic fees proposed	Suggested fees:
Fees in an acceptable price	Early bird: 600, Normal: 700, Late: 800
range	Suggested dinner fees: Gala Dinner: 100 EUR, Swiss evening: 80 EUR
Difference between	
international and national	
fees	
Realistic budget	
Estimated revenue	
15. Sponsorship	The canton of Geneva/Swiss Confederation is sponsoring the rental costs for the
	congress centre in Geneve.
Estimate sponsorship and	-
exhibition income	The canton of Bern is sponsoring the rental costs for the congress centre in
Proposed income	Interlaken.
How realistic is proposed	Sponsorship/exhibition income seems realistic and there is a large local and
income	regional potential.
Local sponsor offerings	
Sponsor interest to	
conference	
16. Why host	It has been a rather long time since Geosuisse and Switzerland has hosted an FIG
	event (Montreux, 1981). Switzerland also has been very active within FIG
Reason for hosting	Commission 7 and all other commissions over the last 20 years and contributed a
	lot to the international community.
17. Objectives and	The Working Week gives a potential benefit to promote the profession and attract
outcomes	the young generation in Switzerland. FIG will benefit from networking within its
Thought through why	Commissions and with the international organizations that are represented in and
conference should be held	close around Switzerland.
at destination	
Difference to other	
destinations	
Short term outcome	
Long term outcome	
18. Suggested theme	Organising committee has been formed.
Thought of possible theme	
that fits to local/regional	
situation	
19. Events organized in the	Geosuisse has both organized several national events and has also hosted and
past three years	organized FIG events earlier.
How experienced is the	
host in organising events	
20. Major event planned in	Nothing expressed in the bidding document.
the proposed city in 2019	
Many events might affect	
the price level 21. Initiatives for	Dath hatala and yon yoo are in several abaamant of containability and
sustainable conference	Both hotels and venues are in general observant of sustainability and
environment	environmental friendly activities
Is host city paying attention	
to environmental issues	
	1

Is venue paying attention to	
environmental issues	
Is host paying attention to	
environmental issues	
22. New initiatives or	Nothing expressed in the bidding document.
activities	
Originality – but within the	
overall FIG concept	
23. What legacy to leave	The topographic features in Switzerland are at the base of many professional
locally from the Working	challenges that surveyors are facing, and the presence of the conference and FIG
week	might highlight some future focus areas that the Swiss society might focus on.
With host	
Hosting city	
For the surveying	
community	
VALUATION	
Issues supporting	- Both proposed venues are suitable for a FIG conference. Geneva has the
destination – subjective	advantage of a large city and the closeness to UN. A FIG Conference in
rating for Council	Interlaken will be different because it is a cozy and small city which will give
	another flavor to the conference and good networking facilities.
	- Budget is realistic and healthy
	<ul> <li>Large support from the Kantons to cover the costs of the proposed venues</li> </ul>
	<ul> <li>Local outcome on surveying matters and an increase of awareness</li> </ul>
	- Good accessibility
Issues against destination -	<ul> <li>There is a risk in the fluctuation of the Swiss franc</li> </ul>
rating	

## Summary of the bids for 2019 - Vietnam, Hanoi, The Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR)

ITEM and criteria	Vietnam, Hanoi, The Vietnam Association of Geodesy, Cartography and Remote
	Sensing (VGCR)
1. Rotation of the	Asia/Pacific (2016, 2014, 2010)
<b>conference:</b> Previous and planned conferences:	<ul> <li>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)</li> <li>Working Weeks: 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</li> <li>Africa/Arab countries (Egypt); 2004: Europe (Greece); 2003: Europe (France); 2001: Asia (Republic of Korea); 2000. Europe: Czech Republic.</li> </ul>
<b>2. Country</b> hosting of earlier FIG events and general experience	Today, Vietnam is known as one of the most dynamic countries in ASEAN with the rapid economic growth rate over many decades. Its population is approx. 90 million people from 54 ethnics group (more than 80% of people are Viet People), which made Vietnam become most crowded country in the region. VGCR successfully hosted the FIG 7 <sup>th</sup> regional conference in 2009. VGCR has collaborated with Asian Remote Sensing Association to organize two conferences on "Asian Remote Sensing". VGCR was established in 1989.
<b>3. Member association</b> Its activeness, Commitment to FIG and to FIG 2019 Execution ability for local association	Vietnam Association of Geodesy, Cartography and Remote Sensing (VGCR). VCGR has in the later years been quite active in FIG, and has been represented at the FIG Working Weeks and Congresses. The association is in good standing.
4. Supporting organisations Local support to the Working Week Governmental support Financial support General support	<ul> <li>Government Funding: Vietnamese Government will not provide funding directly to FIG Working Week; however, they provide funding through assistances to use the public venues with great discount cost for rent: <ul> <li>The Vietnam National Convention Center (main venue is proposed for FIG Working Week Hanoi 2019)</li> <li>Hanoi Opera House (to organize social programs)</li> </ul> </li> <li>Government Support: Vietnamese Government support to organize FIG Working Week Hanoi 2019 as following: <ul> <li>Transportation Clearance for Conference VIP, Delegates by Police Motorbikes (if necessary).</li> <li>Visa Procedure: support quickly for Conference Delegates &amp; Accompanying Persons.</li> <li>Security check &amp; Public Orders during the FIG Working Week Hanoi 2019.</li> </ul> </li> <li>The Ministry of Natural Resources &amp; Environment will consider to support to The Working Week 2019 if the event will be awarded to organize in Hanoi.</li> </ul>
5. Host city	Hanoi - Vietnam is well-known for being a city of peace, recognized by UNESCO since 1999, and it is also regarded as an elegant city of safety, beautiful landscapes,
Characteristics and interest	

from congress programme point of view Host city attractiveness Host city offerings	<ul> <li>delicious cuisines, and charming people. cording to TripIndex by TripAdvisor in 2012, Hanoi will be the cheapest city in the world for two of a one-night stay in a four-star accommodation, food&amp;beverages, and taxi transport.</li> <li>Hanoi has many advantages and: <ul> <li>Peaceful, Safe Environment with Friendly People.</li> <li>Opened Foreign Policy by Vietnamese Government.</li> <li>Nice weather &amp; Beautiful landscape</li> <li>Well-equipped National Convention Center, 4-5 Hotels, International Airport, Transportation Infrastructure.</li> <li>Great culture &amp; Delicious cuisine.</li> <li>Very reasonable prices with high standards.</li> </ul> </li> <li>The official currency is Vietnam Dong (VND), but the US dollar is pretty widely accepted. In tourist centers, most hotels will accept either. Taxi Sample Rate (as of 2014) 12 202 VIII (a CLICE (b))</li> </ul>
	2014): 12,000 VND/km (0.6 USD/km)
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	Vietnam National Convention Center in Hanoi is currently one of the three biggest Convention Centers in Southeast Asia. NCC was also the main venue of FIG Regional Conference in Hanoi 2009. VNCC has a large hall (MMH), nearly 30 other halls and meeting rooms with area from 40m2 to over 4.000m2, which can hold from 120 to more than 3.500 people. There are many 5 star hotels surrounding NCCHaving multiple room systems; especially, the lobby systems inside and outside the building with area over 12.000m2, VNCC can also meet the demand of holding big exhibition and products displaying Shuttle Buses to and from VNCC
7. Accessibility	Noi Bai International Airport is the largest airport in the north of Vietnam. It is 28
Flight connections Several access possibilities Security Visa issues Air fare to destination	miles (45 km) from the city centre. The travel time from the city centre is 30–45 minutes. At 650 ha, Noi Bai is the second-largest airport in Vietnam with a total serving capacity of 19 million passengers per year. Every day, more than 30 Vietnamese and international airlines, both conventional and budget, operate from Hanoi Noi Bai Airport Citizens from Thailand, Philippines, Malaysia, Singapore, Indonesia, Myanmark, Cambodia, Brunei and Laos do not need Visa. Citizens from Japan, South Korea, Sweden Norway, Denmark and Finland need no visa if travel is less than 15 days. All other citizens are required to get Vietnam entry visa before departure (Vietnam visa issued prior to departure by Vietnamese consulates or embassies) or a pre- approved Vietnam entry visa (visa is issued on arrival at Vietnam's International Airports) supplied before arrival in Vietnam.
8. Safety and security	Vietnam is a fairly safe and stable country.
Political stability Airport safety City safety – is it safe to move around? Political stability in country (rating must be 3 or higher) <b>Proposed dates</b>	Option 1: 05 12 April 2010
i i oposeu uales	Option 1: 05 – 12 April 2019

Must meet FIG requirements	Option 2: 12 – 19 April 2019 Option 3: 19 – 26 April 2019
Following FIG statutes Practical dates Availability of venue Other conferences at same time	Weather in April is around 27 degree C (81F) and min Night time temperature is 21 degree C (70F). In April Hanoi still has warm climate and strong wind sometimes. The weather is the best when one still enjoys most beautiful days of spring.
9. Technical programme	Not informed in the bid
Coverage of all FIG Commissions, Potential partners Originality Special ideas	
10. Technical tours	- Introduction of 3D Laser Scanner applying for Cave, Historic Relics
Coverage of all FIG Commissions Originality Ideas proposed	<ul> <li>Satellite Image Ground Station</li> <li>Mining Survey, calculating the mineral resources base on the volume of waste output.</li> <li>threat of sea level rise, climate change.</li> <li>Soil Cracking &amp; Collapse</li> <li>GNSS/CORS Stations in Danang City, Quang Nam Province.</li> </ul>
<b>11. Social programme</b> Attractiveness and variety Proposals for dinners Attractiveness of offered dinners Proposals for tours Is the program following the overall FIG concept	Many interesting locations for social programme and many possibilities for tours and activities. Welcome Reception Dinner - buffet styled Dinner with authentic Vietnamese food, a recall of traditional culinary culture with the theme of "Village market" Cultural evening - set into special atmosphere of Hanoi 1930s, recalling the previous time of Indochina culture. Dinner is especially decorated with the image of Hanoi Old Quarter in a century ago. Gala Dinner: organized with the theme from a story of The Legend of Dragon and Fairy – the story about the origin of Vietnamese people. Vietnamese Traditional Music Concert Pre- or post tours offered.
12. Attendance Expectation of international, regional and local attendance Realistic number of international and national participants	1000 - 1100 Delegates including 800 International Delegates + 200 - 300 Local Delegates
<ul> <li><b>13. Accommodation</b></li> <li>Hotel costs</li> <li>Value for money</li> <li>Variation in hotel offers</li> <li>Closeness to proposed</li> <li>venue</li> </ul>	There are a large number of accommodation around the Vietnam National Conventional Center (VNCC) with capacity of more than 3000 rooms within 2km, ranging from top-quality 5 and 4-star hotels to more moderate and modest of 3 and 2-star options as well as very reasonable hostels, which means there are great choices for any budget. Rooms start from as little as 20 USD. Spending from 40 to 70 USD will boost the

Transportation to venue	comforts quickly, and rooms will generally include air-con, satellite TV, fridge and hot water. Make the step up to 80 USD and three-star frills are available. At 350 USD and above, it's five-star territory. There will be offered special discounts in 4 and 5 star hotels for FIG participants.		
<ul> <li>14. Finances</li> <li>Estimate of surplus and financial risks</li> <li>Realistic fees proposed</li> <li>Fees in an acceptable price range</li> <li>Difference between international and national fees</li> <li>Realistic budget</li> <li>Estimated revenue</li> </ul>	Budget is fairly realistic and shows a total result of 88,000 EUR, however sponsor/exhibition income is fairly optimistic. Proposed registration fees: Early bird: 500 EUR, Normal: 600 EUR, Late: 700 EUR Proposed dinner fees: Gala Dinner: 90 EUR, Vietnamese evening: 70 EUR.		
<b>15. Sponsorship</b> Estimate sponsorship and exhibition income Proposed income How realistic is proposed income Local sponsor offerings Sponsor interest to conference	Expected number of exhibitors is high, but there might be a high regional interest. Estimated income on local/regional sponsors/exhibitors is fairly high.		
<b>16. Why host</b> Reason for hosting	2019 will be a big festival year of the Vietnamese community of surveyors with the 60th anniversary of Surveying and Mapping Day of Vietnam (14/12/1959 - 14/12/2019) and the 30th birthday of the VGCR (1989 – 2019). Together with the 65th anniversary of Hanoi's independence (1954 – 2019), the FIG 2019 will add a great contribution to the festive atmosphere to honour and celebrate this UNESCO's City of Peace. Hanoi has been the one of the capital cities growing strongly to reach out for friends all over the globe with great potentials as well as time-tested achievements in education, technology, economics and cultures, while reserving its best elegance and richness in history and cultures. We believe FIG 2019 will be a great opportunity for the world to come and join our great celebration.		
17. Objectives and outcomes Thought through why conference should be held at destination Difference to other destinations Short term outcome Long term outcome	Becoming the host country for FIG Working Week is a great chance for Vietnam to promote our achievements and progress in the field of surveying & data management. Particularly, it would be considered an important opportunity for greater development and connection for the community of Vietnamese professionals, experts, and surveyors to approach to the world's scholars as well as the occasion for the world experts to help Vietnam to address all our concerns and issues as the fact that Vietnam is one of the most five countries in the world being suffering consequences from climate changes, especially the threat of sea level rise. Besides that, Vietnam still faces many challenges of industrialization, urbanization, and poverty reduction.		

18. Suggested theme	A conference logo is suggested Theme: "FOR SPATIAL ENABLEMENT OF EACH CITIZEN"	
Thought of possible theme that fits to local/regional situation	In Vietnam, VGCR has proposed an own concept to the Development Strategy of NSDI for Vietnam that to have 'Spatial Enablement of Governments and Societies' we need to do 'Spatial Enablement of Each Citizen'. It is the idea to form the Theme of Working Week 2017 in Vietnam as 'FOR SPATIAL ENABLEMENT OF EACH CITIZEN'.	
19. Events organized in the past three years	No information in the bidding material	
How experienced is the host in organising events		
20. Major event planned in the proposed city in 2017	In 2019, Hanoi - Vietnam will host the 25th APEC Summit.	
Many events might affect the price level		
21. Initiatives for sustainable conference environment	No information in the bidding material	
Is host city paying attention to environmental issues Is venue paying attention to environmental issues Is host paying attention to environmental issues		
22. New initiatives or activities	No information in the bidding material	
Originality – but within the overall FIG concept		
23. What legacy to leave locally from the Working week	The success of FIG Working Week 2019 will surely leave a deep footprint in international cooperation of the surveying field. This will be one of the greatest wealth for networking and social contacts as well as for sharing, exchanging and learning from each other the updated knowledge, technology and expertise.	
With host Hosting city For the surveying community VALUATION	A well-organised event like FIG Working Week 2019 will also boost the prestige and visibility of the host – VGCR. The Vietnamese surveying society, especially students and young surveyors, will definitely enjoy the international supportive environment catered by the event.	
Issues supporting destination – subjective rating for Council	<ul> <li>There is a real interest locally to host the Working Week. VGCR also submitted a bid for the FIG Working Week 2017.</li> <li>Association proved in 2009 to organize a successful Regional conference</li> <li>Reasonable registration fees</li> </ul>	

	-	Suitable conference venue Good hotels nearby for reasonable prices
Issues against destination - rating	-	Proposed dates are very early which is an advantage regarding the weather but difficult for FIG administration to finalise all needed material for the General Assembly. Budget may be too optimistic