

**INTERNATIONAL FEDERATION OF SURVEYORS****FIG 36<sup>th</sup> GENERAL ASSEMBLY****6 and 10 May 2013****Conference Hall, Nicon Luxury Hotel, Abuja, Nigeria****PROGRAMME**

<b>Monday, 6 May 2013</b>		
Nicon Luxury Hotel, Abuja, Nigeria		
Monday 6 May	09:00-12:00 13:00-15:00 Conference Hall at Nicon Luxury Hotel	General Assembly, First Session
Monday 6 May	16:00-18:00 Nicon Luxury Hotel, Pool Side Area	Welcome Reception
<b>Tuesday, 7 May – Thursday, 9 May 2013</b>		
<b>FIG Working Week 2013</b>		
International Conference Centre and Nicon Luxury Hotel		
<a href="http://www.fig.net/fig2013">www.fig.net/fig2013</a>		
Wednesday 8 May	18:00-19:00 Tbc Nicon Luxury Hotel	Reception for participants of GLTN/FIG Surveyor Generals Roundtable, Presidents or Heads of Delegation of Member Associations and main sponsors (by invitation only)
<b>Friday, 10 May 2013</b>		
Conference Hall, Nicon Luxury Hotel		
Friday 10 May	08:30-10:30 Tbc Nicon Luxury Hotel	FIG President's Meeting For Presidents or Heads of Delegation of Member Associations (or their representatives) By invitation only
Friday 10 May	11:00–12:30 13:30-15:00 Conference Hall, Nicon Luxury Hotel	General Assembly, Second Session
Friday 10 May	15:00-16:00 Conference Hall, Nicon Luxury Hotel	Closing Ceremony Closing ceremony will start immediately after the General Assembly and will be followed by the Farewell Reception hosted by the Association of Authorised Land Surveyors Malaysia, (PEJUTA), host of FIG 25 <sup>th</sup> Congress 2014.

# FIG 36<sup>th</sup> GENERAL ASSEMBLY

## List of Agenda Items

### Monday, 6 May, 09:00-12:00 and 13:00-15:00

1. OPENING PROCEEDINGS
2. ROLL CALL
3. APPOINTMENT OF TELLERS
4. ADOPTION OF THE AGENDA
5. ADOPTION OF THE MINUTES OF THE 35<sup>th</sup> GENERAL ASSEMBLY
6. MEMBERSHIP
7. PRESIDENT'S REPORT
8. REPORTS FROM FIG COMMISSIONS AND FIG NETWORKS 2012-2013
9. REPORTS OF FIG TASK FORCES 2012-2013
10. REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS 2012-2013
11. REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2012-2013
12. CO-OPERATION WITH THE UNITED NATIONS AND THE WORLD BANK
13. LIAISON WITH INTERNATIONAL PROFESSIONAL ORGANISATIONS
14. FIG ACCOUNTS FOR 2012, AUDITOR'S REPORT AND BUDGETS 2013-2016
15. SUBSCRIPTION RATES FOR 2015
16. VENUE FOR FIG WORKING WEEK 2017
17. REPORT ON THE FIG WORKING WEEK 2016 IN CHRISTCHURCH, NEW ZEALAND
18. REPORT ON THE FIG WORKING WEEK 2015 IN SOFIA, BULGARIA

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

19. FIG PRESIDENT'S MEETING

### Friday, 10 May, 11:00-12:30 and 13:30-15:00

20. ROLL CALL
21. MEMBERSHIP
22. REPORTS FROM MEMBER ASSOCIATION'S FORUM; AFFILIATE (DIRECTOR-GENERAL'S) FORUM AND ACADEMIC MEMBERS FORUM
23. CO-OPERATION WITH FIG CORPORATE MEMBERS
24. REPORTS FROM ACCO
25. REPORT ON THE FIG CONGRESS 2014 IN KUALA LUMPUR, MALAYSIA
26. CLOSING PROCEEDINGS

## FIG 36<sup>th</sup> GENERAL ASSEMBLY

### AGENDA

for the meetings to be held on Monday 6th May and on Friday 10<sup>th</sup> May in Conference Hall, Nicon Luxury Hotel, Abuja, Nigeria

#### MONDAY, 6 MAY

**Monday, 6 May, 09:00-12:00 and 13:00-15:00  
in Conference Hall, Nicon Luxury Hotel  
General Assembly, First Session**

##### 1. OPENING PROCEEDINGS

President CheeHai Teo to open the 36<sup>th</sup> 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 FIG officers. Member associations are asked to inform the FIG Office, Claudia Stormoen: [csp@fig.net](mailto:csp@fig.net) by **21 April 2013** about their attendance and at the same time to submit the names of their delegates and to inform who their Head of the delegation is, if it is not the President or Chair. Since only member associations that have paid all their membership fees to the end of 2012 are allowed to vote at the meeting, a list of member associations that are not allowed to vote will be published on the FIG web site **10 April 2013**. All other members are also encouraged to inform FIG Office, about their attendance.

**Appendix to items 2 & 20:** Roll Call

**Appendix to items 2 & 20:** List of member associations that are not allowed to vote at the General Assembly because of unpaid membership fees for 2012 and earlier – will be posted **10 April 2013**.

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

**Decision:**

##### 3. APPOINTMENT OF TELLERS

The General Assembly shall appoint two persons as tellers following the principle that the tellers will represent member associations hosting the preceding and the current General Assembly.

**Motion:** That the General Assembly appoints two tellers, representing respectively the preceding and the current hosts, for the two sessions of the General Assembly.

**Decision:**

##### 4. ADOPTION OF THE AGENDA

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

**Decision:**

## 5. ADOPTION OF THE MINUTES OF THE 35<sup>th</sup> GENERAL ASSEMBLY

Minutes have been circulated previously.

**Appendix to item 5:** Minutes of the General Assembly in Rome, Italy, May 2012, without appendices.

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

**Decision:**

## 6. MEMBERSHIP

### 6.1 Acceptance of new member associations

FIG has received no new applications for membership from national associations during 2012/13.

**Motion:** That the General Assembly records that there are no new membership applications from national associations.

**Decision:**

### 6.2 Other member association issues

#### 6.2.1 The Society of Chartered Surveyors, Ireland

The Society of Chartered Surveyors has merged with RICS, United Kingdom, and has therefore terminated its membership with FIG since they are now represented through RICS. FIG Council has agreed to move the membership to RICS.

**Motion:** That the General Assembly records the decision of the Council to move the SCS membership in FIG to RICS.

**Decision:**

#### 6.2.2 The Appraisal Institute, United States

The Appraisal Institute has decided to terminate their membership with FIG.

**Motion:** That the General Assembly records the decision of the Appraisal Institute to terminate their membership of FIG.

**Decision:**

### 6.3 Expulsion of member associations

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

- MA-10001 Ordre des Geometres-Experts Fonciers, Algeria
- MA-10011 Sociedade Brasileira de Cartografia, Geodesia, Fotogrametria e Sensoriamento Remoto, Brazil
- MA-10114 Albania Association of Geodesy
- MA-10115 Ethiopian Surveying Professionals Association (ESPA)

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 letters to these associations informing that if their membership fees are still in arrears at the time of the General Assembly in Abuja, then the General Assembly shall expel these member associations.

As at 5.3.2013 the number of FIG member associations is 103 from 87 countries. After expulsions the number of FIG member associations will be 99 from 84 countries.

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

- MA-10001 Ordre des Geometres-Experts Fonciers, Algeria
- MA-10011 Sociedade Brasileira de Cartografia, Geodesia, Fotogrametria e Sensoriamento Remoto, Brazil
- MA-10114 Albania Association of Geodesy
- MA-10115 Ethiopian Surveying Professionals Association (ESPA)

from the FIG membership if their membership fees still are in arrears by 6 May 2013.

**Decision:**

#### 6.4 Other membership issues

##### Corporate members

The Council has admitted the following companies to become a Corporate Member of FIG after the General Assembly in 2012:

- CM 30051 - ISQ Portugal (category F – regional level)

Following corporate members have terminated their membership since May 2012:

- CM-30009 - Grontmij nv, The Netherlands (category C –silver level)
- AED-SICAD Aktiengesellschaft, Germany (Category D – Bronze level)

The Council has expelled the following corporate members because of unpaid membership subscriptions:

- CM-30013 IGN France International, France (Category D – Bronze level)
- CM-30045 Hi-Target Survey Instrument CO, China (Category C – Silver level)

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

##### Affiliate members

The Council has admitted the following national agency to become an affiliate member:

- AF-20046 Consejo Federal de Catastro de la Republica Argentina (C.F.C)

The Council has expelled following affiliate member because of unpaid membership subscriptions:

- AF-20032 Surveying Department, Dubai Municipality, United Arab Emirates

The number of Affiliate Members after these changes remains at 41.

## Academic members

The Council has admitted the following universities and institutions to become an academic member:

- AC-40127 University of Stuttgart
- AC-40128 Universidad de los Andes
- AC-40129 Rovaniemi University of Applied Sciences
- AC-40130 Lebanese International University, LIU
- AC-40131 INES-Ruhengeri

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

- AC-40008 Arabian Gulf University, Bahrain
- AC-40014 Universidad de Concepcion, Chile
- ~~AC-40056 Polytechnic University of Puerto Rico~~
- AC-40095 National Water Research Center, Egypt
- AC-40100 The National Research Institute of Astronomy & Geophysics, Egypt

The number of Academic Members after these changes is 91.

## Correspondents

At its meeting 4/2011 Council has decided to terminate the appointment of correspondents from Bhutan, Eritrea, Gabon, India, Lesotho, Peru, Saint Lucia WI, Tanzania and Tuvalu at the end of 2012.

After these decisions the number of correspondents is 4.

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

### **Decision:**

#### 7. PRESIDENT'S REPORT

President CheeHai Teo has prepared the President's report on the activities of the President and the Council since the General Assembly in Rome in May 2012.

#### **Appendix to item 7:** President's report

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

### **Decision:**

#### 8. REPORTS FROM FIG COMMISSIONS AND FIG NETWORKS 2012-2013

Each Commission Chair, 2011-2014, has submitted a written report on the Commission activities covering period from Working Week in Rome to Working Week in Abuja. 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 chair will give a brief report on their respective Commission key activities at the meeting.

#### **Appendices to item 8:** Commission reports:

**8.01** Commission 1

**8.02** Commission 2

- 8.03** Commission 3
- 8.04** Commission 4
- 8.05** Commission 5
- 8.06** Commission 6
- 8.07** Commission 7
- 8.08** Commission 8 – to be added
- 8.09** Commission 9
- 8.10** Commission 10
- 8.11** Young Surveyors Network
- 8.12** Standards Network

**Motion:** That the General Assembly note the 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:**

#### 8.1 Young Surveyors Network

Having had discussion with Eva-Maria Unger (OVG, Austria), President Gert Steinkellner (OVG,- Austria) and Chair of YSN, Kate Fairlie (SSSI, Australia), Council has decided to nominate Eva-Maria Unger, the current Secretary of YSN as the chair-elect of the Young Surveyors Network (2015 – 2018).

**Motion:** That the General Assembly approves the nomination.

**Decision:**

### 9. REPORTS OF FIG TASK FORCES 2012-2013

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

**Appendices to item 9:** Task Force reports:

- **9.1** FIG Africa Task Force
- **9.2** Task Force on Surveyors and the Climate Change
- **9.3** Task Force on Property and Housing – to be added

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

**Decision:**

### 10. REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS 2012-2013

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

Mr. Christiaan Lemmen, Director of OICRF has prepared a report on the OICRF activities since the General Assembly in Rome. He will make a brief report orally at 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 International Institution for the History of Surveying and Measurement, Permanent Institution of FIG

Mr. Jan de Graeve, Director of the IIHSM has prepared a report on the IIHSM activities since the General Assembly in Rome. IIHSM will make a short oral presentation at 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:**

11. REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2012-2013

Mr. John Hohol, President of the FIG Foundation has prepared a report on the FIG Foundation activities from May 2012 to February 2013. He will make a brief report orally at the General Assembly.

**Appendix to item 11:** Report of the FIG Foundation activities 2012-2013

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

The main partners in the co-operation with the United Nations and the World Bank since the FIG Working Week in Rome have been:

- World Bank
- United Nations Global Geospatial Information Management
- United Nations Human Settlement Programme (UN-HABITAT) Global Land Tool Network
- Food and Agriculture Organization (FAO)
- United Nations Group of Experts on Geographical Names (UNGEGN)
- United Nations Office for Outer Space Affairs (UNOOSA)
- United Nations Economic Commission for Africa (UNECA)
- United Nations Regional Committee on Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP)

The activities with these bodies are described in the President's report, **appendix to item 7**.

**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:**

13. 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 2012 was held in Melbourne, Australia, where Prof. William Cartwright was retained as Chairperson for further one year.

Co-operation with international and regional organisations is described in President's report, **appendix to item 7**.

FIG has further bilateral agreements of co-operation with several other international associations like ISM, IFHP, CIB, ION, ICEC, FIABCI, IFHS and PAQS. Some of the partners are also working together within the Habitat Professionals Forum.

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

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

**Decision:**

14. FIG ACCOUNTS FOR 2012 AND AUDITOR'S REPORT AND BUDGETS 2013-2016

Vice President Bruno Razza and former Vice President Iain Greenway have jointly prepared a report on the FIG Financial Issues. This report includes summary of 2012 accounts, an updated budget for 2013 and proposals for budgets 2014-2016 with notes and proposal for membership fees for member associations in 2015.

The Auditors Report includes the auditors report from 2012, official accounts (income statement 2012) and balance sheet 31 December 2012.

**Appendix to item 14:**

- Report on Financial Issues (including 2012 accounts and budgets 2013-2016)

Annexes:

- **14A** Auditor's Report, Income Statement for 2012 and Balance Sheet at 31 December 2012.
- **14B** FIG Result 2012
- **14C** FIG Budgets 2013-2016
- **14D** List of member associations whose membership fees are in arrears for 2012 and earlier and that are not allowed to vote, will be published on the FIG web site **10 April 2012**.

**Motion:** That the General Assembly

- adopts the audited accounts for 2012 and
- adopts budgets for 2013–2016

15. SUBSCRIPTION RATES FOR 2015

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 14**.

The 2012 General Assembly approved membership fees for 2014 as follows:

<u>Year</u>	<u>Per capita fee</u>	<u>Minimum fee</u>	<u>Maximum fee</u>
2014	4.48 € per member up to a maximum of 5,500 members Member associations from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay 2.24 € member up to a maximum of 5,500 members.	20 members or 50 € (whichever is greater)	5,500 members (24,640 €)

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

The Council proposes to the General Assembly to keep the membership fees for member associations for 2015 at the same level as endorsed by the General Assembly in 2012 for 2014. In the draft budgets for 2013-2016 the membership fees are planned to be kept at the 2013 level for all membership categories for 2013-2015.

In addition, Council has looked again at the maximum fee, which is currently set at 5,500 members. Council considered holding this to a fixed monetary amount, or adjusting the number of members, and have concluded that it would be appropriate to fix it at 5,500 members or €25,000, whichever is the lower – this would be the maximum that any Member Association would pay to be a member of FIG. The current maximum is 5,500 members x €4.48 = €24,640; the cap of €25,000 would apply once the subscription rate has increased by 1.5% or more.

**Motion:** That the General Assembly adopts following membership fees payable by member associations in 2015:

<u>Year</u>	<u>Per capita fee</u>	<u>Minimum fee</u>	<u>Maximum fee</u>
2015	4.48 € per member up to a maximum of 5,500 members Member associations from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay 2.24 € member up to a maximum of 5,500 members.	20 members or 50 € (whichever is greater)	5,500 members (24,640 €)

and to fix the maximum fee payable by a member association at 5,500 members or €25,000, whichever is the lower.

**Decision:**

#### 16. DECISION OF THE VENUE FOR FIG WORKING WEEK 2017

The FIG Working Weeks are organised by FIG together with the local member association. FIG and the local member association will together have full responsibility of the arrangements. The Council has to ensure that all candidates are aware about the role of FIG and split of responsibilities for organising the Working Week. FIG Council has lately worked on defining the split of responsibilities between the local association and FIG, and has therefore decided to postpone the bid for 2017 by one year to allow time to evaluate the current concept. The bid material for 2017 Working Week will be published Summer 2013 and deadline for bids for 2017 will be 30 November 2013. The decision on venue for 2017 will be made at the General Assembly in Kuala Lumpur, Malaysia, June 2014.

**Motion:** That the General Assembly records postponement of the decision of venue for FIG Working Week 2017 until the General Assembly in Kuala Lumpur, Malaysia, June 2014.

**Decision:**

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

President Andrew Stirling from the New Zealand Institute of Surveyors and representatives of the Organising Committee of FIG Working Week 2016 will give a presentation on preparations of FIG Working Week 2016.

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

**Decision:**

18. REPORT ON THE FIG WORKING WEEK 2015 IN SOFIA, BULGARIA

President Angel Yanakiev from the Chamber of Graduated Surveyors and representatives of the Organising Committee of FIG Working Week 2015 will give a presentation on preparations of FIG Working Week 2015.

**Appendix to agenda item 18:** Report for FIG Working Week 2015 in Sofia Bulgaria

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

**Decision:**

**FRIDAY 10 MAY, 2013**

**Friday, 10 May, 08:30-10:30  
Tbc, Nikon Luxury Hotel**

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

19. FIG PRESIDENT'S MEETING

Separate invitation to Presidents of the Member Associations.

**Appendix to item 19:** Invitation to Presidents of FIG member associations

**Friday, 10 May, 11:00–12:30 and 13:30-15:00  
Conference Hall, Nikon Luxury Hotel  
General Assembly, Second Session**

20. 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 FIG officers. Member associations are asked to inform the

FIG Office, Claudia Stormoen: [csp@fig.net](mailto:csp@fig.net) by **21 April 2013** about their attendance and at the same time to submit the names of their delegates and to inform who their Head of the delegation is, if it is not the President or Chair. Since only member associations that have paid all their membership fees to the end of 2012 are allowed to vote at the meeting, a list of member associations that are not allowed to vote will be published on the FIG web site **10 April 2013**. All other members are also encouraged to inform FIG Office, Claudia Stormoen about their attendance.

Appendix to items 2 & 20: Roll Call

Appendix to items 2 & 20: List of member associations that are not allowed to vote at the General Assembly because of unpaid membership fees for 2012 and earlier – will be posted **10 April 2013**.

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

**Decision:**

## 21. MEMBERSHIP

The Council will decide on other membership issues considered in Abuja 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:**

## 22. REPORTS FROM MEMBER ASSOCIATION'S FORUM; AFFILIATE (DIRECTOR-GENERAL'S) FORUM AND ACADEMIC MEMBERS FORUM

Member associations, Affiliate (Director Generals) and Academic members will have their fora during the Working Week and may choose to report back to the General Assembly on any issues are of general interest.

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

**Decision:**

## 23. CO-OPERATION WITH THE FIG CORPORATE MEMBERS

A meeting for FIG Corporate Members is organised in Abuja (Thursday 9 May 09:00 - 10:30 Corporate Members' Meeting). A report on co-operation between FIG and its Corporate Members will be given at the meeting..

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

**Decision:**

## 24. REPORTS FROM COMMISSIONS AND TASK FORCES

Commission Officers (ACCO), Commissions and Task forces will have their annual and other administrative meetings in Abuja. They will report back to the General Assembly on any issues that need endorsement of the General Assembly or are of general interest.

**Motion:** That the General Assembly records the reports and decides on any recommendations arising from the reports.

**Decision:**

25. REPORT ON THE FIG CONGRESS 2014 IN KUALA LUMPUR, MALAYSIA

President Mr Mohammad Azmi Mohd Zin from the Association of Authorised Land Surveyors Malaysia and representatives of the Local Organising Committee will give a presentation on preparations of the 25<sup>th</sup> FIG Congress in Kuala Lumpur, Malaysia.

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

**Decision:**

26. CLOSING PROCEEDINGS

CLOSING CEREMONY

**36<sup>th</sup> General Assembly  
Abuja, Nigeria, 6 and 10 May 2013**

**Roll Call**

<b><u>MEMBER ASSOCIATIONS</u></b>	6 May	10 May
<b>*) Albania, Republic of</b> Albania Association of Geodesy, MA-10114		
<b>*) Algeria, People's Democratic Republic of</b> Order of Land Surveyors Expert. (O.G.E.F), MA-10001		
<b>***) Argentina</b> Federación Argentina de Agrimensores FADA, MA-10002		
<b>Australia</b> Surveying and Spatial Sciences Institute SSSI, MA-10004		
<b>Austria</b> Österreichische Gesellschaft für Vermessung und Geoinformation (Austrian Society for Surveying and Geoinformation) OVG, MA-10005		
<b>Belarus</b> Land Reform Association, MA-10007		
<b>Belgium</b> Union Belge des Géomètres-Experts Immobiliers, MA-10008		
<b>***) Benin</b> Ordre des Géomètres Experts du Benin, MA-10113		
<b>Bosnia-Herzegovina</b> Geodetic Association of Herceg-Bosnia, MA-10112		
<b>*) Brazil</b> Sociedade Brasileira de Cartografia, Geodésia, Fotogrametria e Sensoriamento Remoto, MA-10011		
<b>Brunei Darussalam</b> Brunei Institution of Geomatics, BIC, MA-10012		
<b>Bulgaria</b> Union of Surveyors and Land Managers in Bulgaria, MA-10013		
<b>Bulgaria</b> Chamber of Graduate Surveyors, MA-10108		
<b>Burkina Faso</b> Association des Géomètres et Topographes du Burkina AGT-B, MA-10014		
<b>***) Cameroon</b> Ordre National des Geometres du Cameroun OGEC (National Order of Cameroon Surveyors NOCS), MA-10015		
<b>Canada</b> Canadian Institute of Geomatics CIG, MA-10016		
<b>China P.R.</b> Chinese Society of Geodesy, Photogrammetry and Cartography, MA-10017		
<b>China P. R.</b> China Institute of Real Estate Appraisers and Agents CIREA, MA-10102		
<b>China P. R.</b> China Land Science Society CLSS, MA-10120		
<b>***) Costa Rica</b> Colegio de Ingenieros Topógrafos de Costa Rica CFIA, MA-10019		
<b>Croatia</b> Croatian Geodetic Society HGD, MA-10020		
<b>***) Congo, Democratic Republic of</b> Federation of Geometers and Surveyors – Congo, MA-10101		
<b>Cyprus</b> Association of Rural Surveying Engineers of Cyprus, MA-10022		
<b>Cyprus</b> Cyprus Association of Property Valuers, MA-10111		
<b>Czech Republic</b> Czech Association of Certified Property Appraisers CSCOM, MA-10023		
<b>Czech Republic</b> Czech Union of Surveyors and Cartographers CSVTS, MA-10024		
<b>Denmark</b> Den danske Landinspektørforening DdL, MA-10025		

<b>Egypt</b> Egyptian Committee of Surveying and Mapping ECSM, MA-10026		
***) <b>Estonia</b> Eesti Geodeetide Ühing EGÜ (Association of Estonian Surveyors), MA-10027		
*) <b>Ethiopia</b> Ethiopian Surveying Professionals Association (ESPA), MA-10115		
<b>Fiji</b> Fiji Institute of Surveyors, MA-10028		
<b>Finland</b> Suomen Maanmittausinsinöörien Liitto MIL (The Finnish Association of Surveyors), MA-10029		
<b>Finland</b> Maanmittausalan ammattikorkeakoulu- ja opistoteknisten Liitto MAKLI ry, MA-10030		
<b>France</b> Ordre des Géomètres-Experts OGE, MA-10031		
<b>France</b> Association Française de Topographie AFT, MA-10032		
<b>Georgia</b> Society of Professionals of Land Information Technologies SPLIT, MA-10099		
<b>Germany</b> DVW – Deutscher Verein für Vermessungswesen – Gesellschaft für Geodäsie, Geoinformation und Landmanagement, MA-10033		
***) <b>Ghana</b> Ghana Institution of Surveyors GhIS, MA-10034		
***) <b>Greece</b> Technical Chamber of Greece TEE, MA-10035		
***) <b>Greece</b> Hellenic Association of Rural and Surveying Engineers HARSE, MA-10036		
***) <b>Hong Kong SAR, China</b> The Hong Kong Institute of Surveyors HKIS, MA-10037		
<b>Hong Kong SAR, China</b> The Hong Kong Institution of Engineering Surveyors HKInstES, MA-10100		
***) <b>Hungary</b> Hungarian Society of Surveying, Mapping and Remote Sensing MFTTT, MA-10038		
***) <b>Indonesia</b> Ikatan Surveyor Indonesia ISI, MA-10039		
*) <b>Iran, Islamic Republic of</b> Iranian Professional Society of Surveying Engineers (ISS), MA-10040		
<b>Ireland</b> The Irish Institution of Surveyors IIS, MA-10042		
<b>Israel</b> Association of Licensed Surveyors in Israel ALSI, MA-10043		
<b>Italy</b> Consiglio Nazionale Geometri e Geometri Laureati CNGeGL, MA-10044		
<b>Jamaica</b> The Land Surveyors Association of Jamaica LSAJ, MA-10045		
<b>Japan</b> Nippon Sokuryosha Renmei (Japan Federation of Surveyors JFS), MA-10046		
<b>Kenya</b> Institution of Surveyors of Kenya ISK, MA-10047		
<b>Korea, Republic of</b> Korea Cadastre Survey Corporation, MA-10048		
***) <b>Kosovo</b> Kosova Association of Surveyors, MA-10049		
<b>Latvia</b> Latvian Associations of Surveyors LMB, MA-10050		
***) <b>Lebanon</b> Ordre des Géomètres-Topographes du Liban, MA-10051		
<b>Liberia</b> Cadastral Surveyors Association of Liberia CASUAL, MA-10119		
<b>Lithuania</b> Lithuanian Association of Surveyors LMA , MA-10053		
<b>Lithuania</b> Lithuanian Association of Property Valuers LTVA, MA-10052		
<b>Luxembourg</b> Ordre Luxembourg des Géomètres OLG, MA-10054		
<b>Malaysia</b> Association of Authorised Land Surveyors Malaysia AALSM, MA-10055		

<b>Mali</b> Ordre des Geometres Experts du Mali OGE, MA-10117		
<b>Malta</b> The Malta Institution of Surveyors, MA-10056		
<b>Mongolia</b> Mongolian Association of Geodesy and Cartography MAGaC, MA-10098		
<b>Morocco</b> Ordre National des Ingénieurs Géometres-Topographes ONIGT, MA-10059		
<b>Nepal</b> Nepal Institution of Chartered Surveyors, MA-10110		
<b>Netherlands, The</b> Geo-Information Netherlands, MA-10060		
<b>New Zealand</b> New Zealand Institute of Surveyors NZIS, MA-10061		
<b>Nigeria</b> Nigerian Institution of Surveyors NIS, MA-10062		
<b>Nigeria</b> The Nigerian Institute of Quantity Surveyors NIQS, MA-10063		
<b>Nigeria</b> Nigerian Institution of Estate Surveyors and Valuers NIESV, MA-10118		
<b>Norway</b> Norges Jordskifte kandidatforening NJKF, faglig gruppe af Tekna and GeoForum, MA-10064		
<b>Palestinian Authority</b> Licensed Surveyors Association in Palestine, MA-10065		
<b>Papua New Guinea</b> Association of Surveyors of Papua New Guinea ASPGN, MA-10066		
<b>***) Philippines</b> , Geodetic Engineers of the Philippines, Inc., MA-10107		
<b>Poland</b> Stowarzyszenie Geodetow Polskich SGP Association of Polish Surveyors, MA-10067		
<b>Portugal</b> Ordem dos Engenheiros, Colégio de Engenharia Geografica ORDENG Order of Engineers - College of Geographical Engineering, MA-10068		
<b>***) Puerto Rico, USA</b> Colegio de Ingenieros y Agrimensores de Puerto Rico CIAPR College of Engineers and Land Surveyors of Puerto Rico, MA-10069		
<b>Romania</b> Union of Romanian Geodesy, MA-10070		
<b>Romania</b> Romanian Association of Private Surveyors APCGCR, MA-10105		
<b>Russian Federation</b> Federal Service of State Registration, Cadastre and Cartography (Rosreestr), MA-10071		
<b>Russian Federation</b> None commercial partnership “Self-regulated organization of activity of cadastral engineers”, MA-10121		
<b>Senegal</b> Ordre National des Geomètres Experts du Senegal (ONGES), MA-10116		
<b>Serbia, Republic of</b> Union of Surveying Engineers of Serbia, MA-10072		
<b>Slovak Republic</b> Slovak Union of Surveyors and Cartographers, MA-10074		
<b>Slovak Republic</b> Chamber of Surveyors and Cartographers KGK, MA-10075		
<b>Slovenia</b> Association of Surveyors of Slovenia ZGS, MA-10076		
<b>South Africa, Republic of</b> South African Council for Professional and Technical Surveyors PLATO, MA-10077		
<b>Spain</b> Colegio Oficial de Ingenieros Técnicos en Topografía, MA-10078		
<b>***) Sri Lanka</b> Surveyors’ Institute of Sri Lanka, MA-10079		



<b>Sweden</b> Swedish professionals for the built environment, MA-10080		
<b>Switzerland</b> geosuisse - Swiss Society of Geomatics and Landmanagement, MA-10081		
***) <b>Syria</b> Order of Syrian Engineers and Architects OSEA, MA-10082		
<b>Togo</b> Ordre des Géomètres du Togo OGT, MA-10084		
<b>Trinidad and Tobago</b> Institute of Surveyors of Trinidad and Tobago, MA-10085		
***) <b>Tunisia</b> Association Nationale des Ingenieurs Géomètres-Experts Tunisiens ANIGET, MA-10086		
***) <b>Turkey</b> TMMOB Chamber of Surveying Engineers of Turkey, MA-10087		
***) <b>Ukraine</b> Ukrainian Society of Geodesy and Cartography, MA-10088		
<b>United Kingdom</b> Chartered Institution of Civil Engineering Surveyors ICES, MA-10090		
<b>United Kingdom</b> The Royal Institution of Chartered Surveyors RICS, MA-10091		
<b>United States of America</b> National Society of Professional Surveyors (NSPS), MA-10092		
<b>Uruguay</b> Asociacion de Agrimensores del Uruguay, MA-10094		
<b>Vietnam</b> Association of Geodesy, Cartography and Remote Sensing VGCR, MA-10095		
***) <b>Zimbabwe</b> Survey Institute of Zimbabwe SIZ, MA-10097		
*) <b>to be expelled 6 May 2013</b> **) <b>membership to be approved 6 May 2013</b> ***) <b>no voting right 6 May 2012 unless arrears paid</b>	103	99

<b><u>AFFILIATES</u></b>		
<b>Afghanistan, Islamic Republic of</b> (Afghan Land Consulting Organization, ALCO), AF-20034		
<b>Afghanistan, Islamic Republic of</b> (Afghanistan Information Management Services, AIMS), AF-20038		
<b>Argentina</b> (Consejo Federal De Catastro De La Republica Argentina (C.F.C)), AF-20047		
<b>Australia and New Zealand</b> (ANZLIC), AF-20001		
<b>Belgium</b> (General Administration of the Patrimonial Documentation), AF-20002		
<b>Brunei Darussalam</b> (Survey Department) AF-20003		
<b>Cambodia, Kingdom of</b> (Ministry of Land Management, Urban Planning and Construction), AF-20004		
<b>Chile</b> (Servicio Hidrográfico y Oceanográfico de la Armada de Chile), AF-20005		
<b>China P. R.</b> (China Land Surveying and Planning Institute), AF-20043		
<b>Colombia</b> (Instituto Geográfico Agustín Codazzi, IGAC), AF-20006		
<b>Colombia</b> (Alcaldía Mayor de Bogotá DC), AF-20046		
<b>Croatia</b> (State Geodetic Administration of Republic of Croatia, DGU), AF-20042		
<b>Cyprus</b> (Lands and Surveys Department), AF-20045		
<b>Denmark</b> (Danish Geodata Agency), AF-20026		
<b>Fiji</b> (Ministry of Lands and Mineral Resources), AF-20039		
<b>Finland</b> (National Land Survey of Finland), AF-20030		
<b>Hungary</b> (Institute of Geodesy, Cartography and Remote Sensing, FÖMI), AF-20009		
<b>Iceland</b> (The Land Registry of Iceland), AF-20010		
<b>Iran, Islamic Republic of</b> (National Cartographic Center)		
<b>Iraq, Republic of</b> (General Directorate for Surveying, Ministry of Water Resources), AF-20031		
<b>Israel</b> (Survey of Israel), AF-20040		
<b>Italy</b> (Italian Society of Photogrammetry and Topography, SIFET), AF-20035		
<b>Jordan</b> (Department of Lands & Survey), AF-20011		
<b>Lao People's Democratic Republic</b> (National Geographic Department), AF-20028		
<b>Macedonia, FYROM</b> (State Authority for Geodetic Works), AF-20019		
<b>Mexico</b> (National Institute of Statistics, Geography and Informatics, INEGI), AF-20012		
<b>Moldova, Republic of</b> (Agency for Land Administration and Cadastre of Republic of Moldova), AF-20041		
<b>Mongolia</b> (Administration of Land Affairs, Geodesy & Cartography), AF-20018		
<b>Namibia</b> (Office of the Surveyor General), AF-20013		
<b>Nepal</b> (Survey Department, Government of Nepal), AF-20021		
<b>Netherlands, The</b> (Cadastre, Land Registry and Mapping Agency),		

AF-20025		
<b>Norway</b> (Norwegian Mapping and Cadastre Authority), AF-20023		
<b>Romania</b> (National Agency for Cadastre and Land Administration), AF-20020		
<b>Russian Federation</b> (Siberian State Academy of Geodesy), AF-20029		
<b>Rwanda, Republic of</b> (Ministry of Lands, Resettlement and Environment), AF-20016		
<b>Saudi Arabia, Kingdom of</b> (Ministry of Municipal and Rural Affairs), AF-20017		
<b>Sri Lanka</b> (Survey Department, Sri Lanka), AF-20044		
<b>Sweden</b> (Lantmäteriet), AF-20027		
<b>Switzerland</b> (Swiss Federal Office of Topography, swisstopo), AF-20033		
<b>*) United Arab Emirates</b> (Surveying Department, Dubai), AF-20032		
<b>USA</b> (NOAA, National Geodetic Survey), AF-20024		
<b>USA</b> (Cadastral Survey Bureau of Land Management, Dept. of the Interior, BLM), AF-20037		
	/41	/41
<b><u>CORRESPONDENTS</u></b>		
<b>Bahrain</b>		
<b>Madagascar</b>		
<b>Thailand</b>		
<b>Tonga</b>		
	/4	/4
<b><u>ACADEMIC MEMBERS</u></b>		
<b>Australia</b> The University of Melbourne, AC-40002		
<b>Australia</b> RMIT University, AC-40003		
<b>Australia</b> University of New South Wales, AC-40004		
<b>Australia</b> University of Southern Queensland, AC-40005		
<b>Australia</b> University of Technology Sydney, AC-40006		
<b>Austria</b> BOKU, Vienna, AC-40007		
<b>*) Bahrain, Kingdom of</b> Arabian Gulf University, AC-40008		
<b>Belgium</b> University of Applied Sciences Kaho Sint-Lieven, AC-40009		
<b>Belgium</b> ECAM - Haute Ecole Leonard de Vinci, Département Construction, AC-40093		
<b>Belgium</b> University of Liege, Unit of Geomatics, AC-40096		
<b>Belgium</b> Antwerp Maritime Academy, AC-40123		
<b>Botswana</b> University of Botswana, AC-40010		
<b>Brazil</b> UNISINOS, AC-40011		
<b>Canada</b> University of Calgary, AC-40012		
<b>Canada</b> University of New Brunswick, AC-40013		
<b>Canada</b> Université Laval, AC-40092		
<b>*) Chile</b> Universidad de Concepcion, AC-40014		
<b>China P. R.</b> School of Public Administration, AC-40091		
<b>China P. R.</b> The University of Nottingham Ningbo China, AC-10126		
<b>Colombia</b> Universidad Distrital, Facultad de Ingenieria, AC-40016		
<b>Colombia</b> Universidad Distrital, Facultad del Medio Ambiente y Recursos		

Naturales, AC-40017		
<b>Colombia</b> Universidad de los Andes, AC-40128		
<b>Croatia</b> University of Zagreb, AC-40020		
<b>Cyprus</b> Neapolis University Pafos, AC-40114		
<b>Czech Republic</b> Brno University of Technology, AC-40107		
<b>Denmark</b> Aalborg University, AC-40021		
*) <b>Egypt</b> National Water Research Center, AC-40095		
*) <b>Egypt</b> National Research Institute of Astronomy & Geophysics, AC-40100		
<b>Ethiopia</b> Institute of Land Administration, Bahir Dar University, AC-40103		
<b>Fiji</b> University of the South Pacific, AC-40053		
<b>Finland</b> Aalto University School of Science and Technology, AC-40022		
<b>Finland</b> Helsinki Metropolia University of Applied Sciences, AC-20023		
<b>Finland</b> Rovaniemi University of Applied Sciences, AC-40129		
<b>France</b> Ecole Supérieure des Géomètres et Topographes, AC-40024		
<b>Germany</b> Technische Universität München, AC-40026		
<b>Germany</b> Anhalt University of Applied Sciences, AC-40025		
<b>Germany</b> Technische Universität Berlin, AC-40027		
<b>Germany</b> Fachhochschule Trier, Standort Umwelt-Campus Birkenfeld, AC-40109		
<b>Germany</b> University of Stuttgart, AC-10127		
<b>Ghana</b> University of Mines and Technology (UMaT), AC-40030		
<b>Greece</b> School of Rural and Surveying Engineering, AC-40031		
<b>Hong Kong SAR, China</b> The Hong Kong Polytechnic University, AC-40033		
<b>Hungary</b> University of West Hungary, AC-40034		
<b>Hungary</b> UNIGIS International Association, AC-40120		
<b>Ireland</b> Dublin Institute of Technology, AC-40031		
<b>Israel</b> Technion – Israel Institute of Technology, AC-40104		
<b>Jamaica</b> University of Technology Jamaica, AC-40037		
<b>Kazakhstan</b> East Kazakhstan State Technical University, AC-40112		
<b>Kazakhstan</b> Kazakh National Technical University after K. I. Satpaev, AC-40125		
<b>Kosovo</b> University of Prishtina, AC-40116		
<b>Latvia</b> Riga Technical University, AC-40090		
<b>Lebanon</b> Lebanese Canadian University, AC-40130		
<b>Lebanon</b> Lebanese International University, LIU, AC-40130		
<b>Malaysia</b> Universiti Teknologi Malaysia, Department of Geomatics Engineering, AC-40041		
<b>Mexico</b> Universidad Autónoma de Nuevo León, AC-40101		
<b>Morocco</b> IAV, Institut Agronomique et Vétérinaire Hassan II, AC-40118		
<b>Nepal</b> Land Management Training Centre, AC-40089		
<b>Netherlands, The</b> ITC International Institute for Geo-Information Science and Earth Observation, AC-40046		
<b>New Zealand</b> University of Otago, AC-40047		
<b>Nigeria</b> University of Lagos, AC-40049		

<b>Nigeria</b> Nnamdi Azikiwe University, AC-40050		
<b>Nigeria</b> Abia State Polytechnic, AC-40121		
<b>Norway</b> Norwegian University of Life Sciences, Department of Mathematical Sciences and Technology, AC-40052		
<b>Norway</b> Bergen University College, AC-40113		
<b>Palestine Authority</b> Palestine Polytechnic University, AC40099		
<b>Poland</b> Agricultural University of Krakow, AC-40054		
<b>Puerto Rico, USA</b> Universidad de Puerto Rico, AC-40055		
<b>*) Puerto Rico, USA</b> Polytechnic University of Puerto Rico, AC-40056		
<b>Romania</b> 1 Decembrie 1918 University of Alba Iulia, AC-40058		
<b>Russian Federation</b> Moscow State University of Geodesy and Cartography, Economic and Land Management, AC-40060		
<b>Russian Federation</b> State University of Land Use Planning, AC-40061		
<b>Rwanda, Republic of</b> INES-Ruhengeri, AC-40131		
<b>Saudi Arabia, Kingdom of</b> "TECRS" The Environmental Center of Remote Sensing, AC-40117		
<b>Serbia, Republic of</b> University of Novi Sad, Faculty of Technical Sciences, AC-40097		
<b>Singapore</b> National University of Singapore, AC-40061		
<b>Slovenia</b> University of Ljubljana, AC-40062		
<b>South Africa, Republic of</b> University of Cape Town, AC-40063		
<b>Spain</b> Universidad Politécnica de Madrid, AC-40064		
<b>Spain</b> Universidad de Jaen, AC-40122		
<b>Sweden</b> Lund University LTH, AC-40068		
<b>Sweden</b> Royal Institute of Technology, AC-40067		
<b>Switzerland</b> University of Applied Sciences Northwestern Switzerland, AC-40069		
<b>Trinidad and Tobago</b> University of the West Indies, AC-40085		
<b>Turkey</b> Istanbul Technical University, AC-40071		
<b>Turkey</b> Zonguldak Karaelmas University, AC-40111		
<b>Uganda</b> Makerere University, AC-40119		
<b>United Kingdom</b> Kingston University, AC-40073		
<b>United Kingdom</b> The University of Nottingham, AC-40078		
<b>United Kingdom</b> Oxford Brookes University, AC-40074		
<b>United Kingdom</b> Reading University, AC-40110		
<b>United Kingdom</b> Sheffield Hallam University, AC-40076		
<b>United Kingdom</b> University of the West of England, AC-40079		
<b>USA</b> New Mexico State University, AC-40081		
<b>USA</b> Texas A&M University – Corpus Christi, AC-40084		
<b>USA</b> University of Houston, AC-40108		
	/90	/90
<b><u>CORPORATE MEMBERS</u></b>		
<b>Category A - Platinum level</b>		
Bentley Systems, CM-30035		
Environmental Systems Research Institute, Inc. (ESRI), CM-30001		
Leica Geosystems AG, CM-30002		
Trimble Navigation Ltd., CM-30005		

<b>Category C - Silver level</b>		
COWI A/S, CM-30011		
FARO, CM-30044		
Geoweb S.p.A., CM-30043		
*) Hi-Target Survey Instruments Company Ltd, CM-30045		
Meridian+, CM-30049		
<b>Category D - Bronze level</b>		
GIM International – Geomares Publishing, CM-30012		
*) IGN France International, CM-30013		
KQ Geo Technologies, CM-30050		
Mason Land Surveys Limited, CM-30015		
SEPRET (Société des Etudes de Projets et Réalisation des Travaux), CM-30031		
<b>Category E - Basic level</b>		
Derinsu Underwater Engineering Ltd., CM-30038		
Global Survey Qatar, CM-30047		
Thomson-Reuters, CM-30024		
<b>Category F - Regional level</b>		
Cameroon Engineering, CM-30027		
Concord Surveying Works Co., CM-30048		
Coordinates Magazines, CM-30042		
Geo:connexion, CM-30018		
Institut Cartogràfic de Catalunya, CM-30023		
ISQ Portugal, CM-30051		
ORBITS Engineering Firm, CM-30036		
	/22	/22
*) expelled by Council		
<b>HONORARY PRESIDENTS</b>		
<b>HONORARY MEMBERS</b>		
<b>COMMISSION CHAIRS 2011-2014</b>		
Commission 1 – Leonie Newnham		
Commission 2 – Steven Frank		
Commission 3 – Yerach Doytsher		
Commission 4 – Michael Sutherland		
Commission 5 – Mikael Lilje		
Commission 6 – Gethin W. Roberts		
Commission 7 – Daniel Roberge		

Commission 8 – Wafula Nabutola		
Commission 9 – Frances Plimmer		
Commission 10 – Robert Šinkner		
Young Surveyors Network		
Standards Network		
<b>PERMANENT INSTITUTIONS</b>		
International Office of Cadastre and Land Records (OICRF)		
International Institution for the History of Surveying and Measurement, Permanent Institution of FIG		
<b>FIG FOUNDATION</b> – President John Hohol		
<b>FIG COUNCIL</b>		
President CheeHai Teo		
Vice President Dr. Pengfei Cheng		
Vice President Bruno Razza		
Vice President Chryssy A. Potsiou		
Vice President Rudolf Staiger		

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



International Federation of Surveyors

## **General Assembly**

### **MINUTES**

**6 and 10 May 2012**

**Rome Cavalieri, Rome, Italy**



**INTERNATIONAL FEDERATION OF SURVEYORS**

**FIG 35<sup>th</sup> GENERAL ASSEMBLY**

**6 and 10 May 2012**

**Salone dei Cavalieri 3 & 4, Rome Cavalieri, Rome, Italy**

**List of Minutes Items**

**Sunday, 6 May, 09:00-12:00 and 13:00-15:00**

1. OPENING PROCEEDINGS
2. ROLL CALL
3. APPOINTMENT OF TELLERS
4. ADOPTION OF THE AGENDA
5. ADOPTION OF THE MINUTES OF THE 34<sup>th</sup> GENERAL ASSEMBLY
6. MEMBERSHIP
7. APPOINTMENT OF AN HONORARY MEMBER
8. PRESIDENT'S REPORT
9. REPORTS FROM FIG COMMISSIONS AND FIG NETWORKS 2011-2012
10. REPORTS OF TASK FORCES 2011-2012
11. REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS 2011-2012
12. REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2011-2012
13. REPORT OF THE WORKING GROUP ON VOTING RIGHTS
14. CO-OPERATION WITH THE UNITED NATIONS AND THE WORLD BANK
15. LIAISON WITH INTERNATIONAL PROFESSIONAL ORGANISATIONS
16. FIG ACCOUNTS FOR 2011 AND AUDITOR'S REPORT AND BUDGETS 2012-2015
17. SUBSCRIPTION RATES FOR 2014
18. ELECTION OF TWO VICE PRESIDENTS FOR 2013-2016 – PRESENTATION BY CANDIDATES
19. ELECTION OF COMMISSION CHAIRS ELECT FOR 2013-2014 – PRESENTATION BY CANDIDATES
20. DECISION OF THE VENUES FOR FIG WORKING WEEK 2015 AND 2016 – PRESENTATION BY CANDIDATES

**Tuesday, 8 May, 16:00-17:30**

21. PRESIDENTS' MEETING

**Thursday, 10 May, 08:30-10:00**

22. FIG PRESIDENT'S MEETING

**Thursday, 10 May, 10:30-12:00 and 13:00-15:00**

23. ROLL CALL
24. MEMBERSHIP
25. ELECTION OF TWO VICE PRESIDENTS FOR 2013-2016
26. ELECTION OF COMMISSION CHAIRS ELECT 2013-2014
27. DECISION OF THE VENUES FOR FIG WORKING WEEK 2015 AND 2016
28. REPORTS FROM COMMISSIONS AND TASK FORCES
29. REPORT FROM WORKING GROUP ON VOTING RIGHTS

30. CO-OPERATION WITH THE FIG CORPORATE MEMBERS
31. REPORT ON THE 8TH FIG REGIONAL CONFERENCE 2012 IN MONTEVIDEO,  
URUGUAY
32. REPORT ON THE FIG CONGRESS 2014 IN KUALA LUMPUR, MALAYSIA
33. REPORT ON THE FIG WORKING WEEK 2013 IN ABUJA, NIGERIA, 2013
34. PRESENTATION OF CERTIFICATES OF APPRECIATION

## FIG 35<sup>th</sup> GENERAL ASSEMBLY

### MINUTES

of the meetings to be held on Sunday 6<sup>th</sup> May and on Thursday 10<sup>th</sup> May in Salone dei Cavalieri 3 & 4 at the Rome Cavalieri Hotel, Rome, Italy

### SUNDAY, 6 MAY

#### First Session, Sunday, 6 May, 09:00-12:00 and 13:00-15:00

##### 1. OPENING PROCEEDINGS

President CheeHai Teo opened the 35<sup>th</sup> General Assembly and welcomed the members and delegates in Rome, Italy and the second General Assembly of the current four-year term. The President expressed his gratitude to members and delegates for their participation and acknowledged the hard work and generous support of CNGeGL and the local organising committee to assure the high standard of this Working Week. The Working Week in Rome with 1,500 participants from almost 100 countries is the biggest Working Week in FIG history.

Before the official meeting President Fausto Savoldi welcomed the members and delegates to Rome on behalf of CNGeGL.

The President welcomed Honorary Presidents Juha Talvitie, Robert W. Foster and Stig Enemark to the meeting and noted several greetings and apologies that were received from member associations and other members.

The General Assembly stood and observed a moment of silence to honour the memory of Honorary President Prof. Heinz Draheim (Germany), Honorary Member Milan Klimes (Czech Republic) and Dr. David Neale (Commission 4 officer, Trinidad and Tobago) and other colleagues that had passed away during the past year.

##### 2. ROLL CALL

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

Recorded that based on the decision of the General Assembly in 2006 only those member associations that had paid all their membership fees to the end of 2011 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 on 12 April and updated on 9 May 2012.

#### **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 2011 and earlier.

66 member associations out of 107 were present at this session, which is more than one third of the membership needed for the General Assembly to be constitutionally valid. 58 member associations were allowed to vote.

**Motion:** That 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 following the principle that one of the tellers will represent member associations hosting the preceding ((Ordre National des Ingénieurs Géomètres-Topographes, ONIGT, Morocco) and the current General Assembly (Consiglio Nazionale Geometri e Geometri Laureati, CNGeGL, Italy).

**Motion:** That the General Assembly appoints President Mohamed Chrourou from ONIGT and Secretary General Enrico Rispoli from CNGeGL as the tellers for the two sessions of the General Assembly.

**Decision:** The motion was adopted.

### 4. ADOPTION OF THE AGENDA

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

**Decision:** The motion was adopted.

### 5. ADOPTION OF THE MINUTES OF THE 34<sup>th</sup> GENERAL ASSEMBLY

Minutes have been circulated previously.

**Appendix to item 5:** Minutes of the General Assembly in Marrakech, Morocco, May 2011, without appendices.

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

**Decision:** The motion was adopted.

### 6. MEMBERSHIP

#### 6.1 Acceptance of new members

##### 6.1.1 China Land Science Society (CLSS)

The China Land Science Society (CLSS) has submitted an application to become the third member association of FIG from China P. R. The association was constituted in 1980 and currently has 1,130 qualified members. The application is supported by the two current Chinese member associations. 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 China Land Science Society (CLSS).

**Motion:** That the General Assembly admits the China Land Science Society (CLSS) to become a member association of FIG.

**Decision:** The motion was adopted and the FIG President presented Vice Minister Shiyuan Wang, President of CLSS the membership certificate who also addressed the assembly.

#### 6.1.2 NP Cadastral Engineers, Russian Federation

NP Cadastral Engineers has submitted an application to become a second member association of FIG from Russian Federation. The association was constituted in 2006 and represents private surveyors in Russia. The association has currently 1,366 members. The application is supported by the current Russian member association Rosreestr that indicates in their supportive letter that it would be good to have the Russian private surveyors represented in FIG. 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 6.1.2:** Membership application from NP Cadastral Engineers

**Motion:** That the General Assembly admits the NP Cadastral Engineers to become a member association of FIG.

**Decision:** The motion was adopted and the FIG President presented Mr. Victor Kislov, President of NP Cadastral Engineers the membership certificate who also addressed the assembly.

#### 6.2 Expulsion of member associations

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

- Botswana Surveying and Mapping Association, Botswana
- AGEN Association Géomètres-Experts du Niger AGEN, Niger

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 these member associations in Rome.

Association des Géomètres et Topographes du Burkina (AGT-B) from Burkina Faso was expelled by the General Assembly in 2011, but AGT-B has since paid its arrears and the Council has restored its membership at its meeting on 3 May 2012.

After acceptance of new member associations and expulsions the number of FIG member associations is 105 from 87 countries.

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

- Botswana Surveying and Mapping Association, Botswana
- AGEN Association Géomètres-Experts du Niger AGEN, Niger

from the FIG membership if their membership fees remained in arrears by 6 May 2012.

**Decision:** The motion was adopted.

### 6.3 Other membership issues

#### Corporate members

The Council has admitted the following companies to become a Corporate Member of FIG after the General Assembly in 2011:

- Meridian+, Russian Federation (category C – silver level)
- KQ Geo Technologies Co, China PR (category D – bronze level).

Following corporate members have terminated their membership from 1.1.2012:

- Ashtech, USA (category C – silver level)
- Blom ASA, Denmark (category C – silver level)
- Geotrilho Topografia Engenharia e Projecto Ida, Portugal (category E – basic level)
- Geoexpert, France (category E – basic level)
- Geoinformatics, Netherlands (category E – basic level)

In addition the membership of International Land Systems (ILS), Inc. has been moved over to Thomson Reuters.

After these changes the number of corporate members is now 25.

#### Academic members

The Council has admitted the following universities and institutions to become an academic member:

- Makerere University, Geomatics and Land Management Department, Uganda
- UNIGIS International Association
- Abia State Polytechnic, Surveying and Geoinformatics Dept, Nigeria
- Kazakh National Technical University after K. I. Satpaev, Kazakhstan
- Lebanese Canadian University, Faculty of Science and Art, Lebanon
- Hogere Zeevaartschool, Institute for Hydrography, Belgium
- Universidad de Jaen, Programa Formativo en Catastros, Valoraciones Inmobiliarias y Urbanismo, Spain

University College London and Newcastle University from United Kingdom and Universidade de Santiago de Compostela from Spain have terminated their membership.

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

- Technological Education Institute of Athens, Greece
- University of Nairobi, Kenya
- Vilnius Gediminas Technical University, Lithuania
- Lithuanian University of Agriculture, Lithuania
- University of Lagos, Nigeria (restored 9 May 2012)
- Nnamdi Azikiwe University, Nigeria (restored 9 May 2012)
- Dunarea de Jos University Galati, Romania
- Ardhi University, Tanzania
- The Pennsylvania State University, USA

The number of Academic Members after these changes is 87.

## Correspondents

Council has terminated membership of correspondents from Benin, Ethiopia, Guyana and Senegal because these countries have joined FIG at higher level or because the correspondent has passed away.

After these decisions the number of correspondents is 14.

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

**Decision:** The motion was adopted and the new members present at the General Assembly were given their membership certificate.

## 7. APPOINTMENT OF AN HONORARY MEMBER

### **Matthew B. Higgins**

The Surveying and Spatial Sciences Institute, SSSI from Australia has sent the Federation a nomination letter in which it proposes that FIG appoints Mr. Matthew B. Higgins as an Honorary Member of FIG.

According to paragraph 3.1.7 in the statutes “honorary member: an individual who has materially assisted the development and promotion of the surveying profession at the international level”. Nomination shall be made by a member association or by the Council, which will consider it and submit it to a vote of the General Assembly. The 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 decided to propose to the General Assembly that it appoints Mr. Matt B. Higgins as an Honorary Member of the Federation for the outstanding services rendered to the Federation.

**Appendix to item 7:** The nomination letter from Surveying and Spatial Sciences Institute, SSSI

The nomination was presented to the General Assembly by Mr. Rob Sarib from SSSI.

**Motion:** That the General Assembly appoints Mr. Matthew B. Higgins as an Honorary Member of FIG.

**Decision:** The General Assembly appointed Mr. Matthew B. Higgins an Honorary Member of FIG. The badge with silver oak leaves and Certificate of Appointment as Honorary Member for his services and contribution to the Federation were presented to Mr. Rob Sarib who received them on behalf of Mr. Higgins.

## 8. PRESIDENT’S REPORT

The written report was appended to the Agenda and taken as read. President CheeHai Teo proceed to orally present his report on the core activities of the Federation since the Working Week in May 2011 as well as his observation on the current standing of the Profession.

### **Appendix to item 8:**

**8.1** President’s report

**8.2** Handouts of President’s PowerPoint presentation

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

**Decision:** The motion was adopted.

## 9. REPORTS FROM FIG COMMISSIONS AND FIG NETWORKS 2011-2012

Each Commission Chair, 2011-2014, has submitted a written report on the Commission activities covering period from Working Week in Marrakech to Working Week in Rome. 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.

Vice President Rudolf Staiger, Chair of ACCO, gave an overall report on Commission activities at the meeting.

**Appendices to item 9:** Commission reports:

- 9.01 Commission 1
- 9.02 Commission 2
- 9.03 Commission 3
- 9.04 Commission 4
- 9.05 Commission 5
- 9.06 Commission 6
- 9.07 Commission 7
- 9.08 Commission 8
- 9.09 Commission 9
- 9.10 Commission 10
- 9.11 Standards Network
- 9.12 Young Surveyors Network
- 9.13 Handouts of Vice President Staiger's report

**Motion:** That the General Assembly adopts 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 and the General Assembly recorded its thanks to all chairs and Commission officers for their work during the past year.

## 10. REPORTS OF TASK FORCES 2011-2012

FIG has currently four Task Forces: 1) Task Force on Spatially Enabled Society, chaired by Dr. Daniel Steudler (Switzerland) will get its work completed by publishing its final report at the General Assembly in Rome; 2) FIG Africa Task Force (2009–2014), chaired by Dr. Diane Dumashie (United Kingdom); 3) Task Force on Surveyors and the Climate Change (2011-2014) chaired by Prof. John Hannah (New Zealand); and 4) Task Force on Property and Housing (2011-2014) chaired by Prof. Chryssy Potsiou (Greece).

**Appendices to item 10:** Task Force reports:

- 10.1 Task Force on Spatially Enabled Society
- 10.2 FIG Africa Task Force
  - Handouts of PowerPoint presentation
- 10.3 Task Force on Surveyors and the Climate Change
- 10.4 Task Force on Property and Housing



- Handouts of PowerPoint presentation
- FIG Publication No. 58: Spatially Enabled Society. Joint publication of FIG-Task Force on Spatially Enabled Society in cooperation with GSDI Association and with the support of Working Group 3 of the PCGIAP. FIG Report 2012. Hard copies were distributed at the General Assembly.

**Motion:** That the General Assembly records all Task Force 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 and the General Assembly recorded its special thanks to the Task Force on Spatially Enabled Society for successfully completing its task, its report and its publication (FIG Publication No. 58) and recorded its thanks and appreciation to the members and Chair of the Task Force.

## 11. REPORTS FROM THE DIRECTORS OF PERMANENT INSTITUTIONS 2011-2012

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

Mr. Christiaan Lemmen, Director of OICRF had prepared a report on the OICRF activities since the General Assembly in Marrakech. He gave a supplementary oral report at the General Assembly.

**Appendix to item 11.1:** Report from the International Office of Cadastre and Land Records (Office International du Cadastre et du Régime Foncier) OICRF.

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

**Decision:** The motion was adopted.

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

Mr. Jan de Graeve, Director of the IIHSM had prepared a report on the IIHSM activities since the General Assembly in Marrakech. He gave a supplementary oral report at the General Assembly drawing special attention to the celebrations of Mercator in 2012.

**Appendix to item 11.2:** Report from the International Institution for the History of Surveying and Measurement, Permanent Institution of FIG.

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

**Decision:** The motion was adopted.

## 12. REPORT OF THE PRESIDENT OF THE FIG FOUNDATION 2011-2012

Mr. John Hohol, President of the FIG Foundation had prepared a report on the FIG Foundation activities from May 2011 to February 2012. He made a supplementary report orally at the General Assembly.

**Appendix to item 12:** Report of the FIG Foundation activities 2011-2012

**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 and efforts.

**Decision:** The motion was adopted.

### 13. REPORT OF THE WORKING GROUP ON VOTING RIGHTS

The Working Group on voting rights was established in Marrakech by the General Assembly that also appointed the members to the Working Group from member associations from Belgium, Canada, Denmark, Germany, Hong Kong SAR, Ireland, Italy, Kenya, Lebanon, New Zealand, Netherlands, South Africa and USA. The group elected Brian Coutts from New Zealand as the Chairperson and Henning Elmstroem as the Vice Chair.

The Chairperson had prepared a report for the General Assembly. The report included the summary of the discussions and chairperson's conclusions. As appendices there were reports on the development of the voting rights in FIG (prepared by Henning Elmstroem, Denmark) and on participation to FIG General Assemblies 2000-2011 (prepared by Maria Joao Henriques, Portugal).

The Chairperson presented the interim report at the first session of the General Assembly followed by questions on clarification from members from OGE, France; HKIS, Hong Kong SAR, China; GhIS, Ghana; ONIGT, Morocco; GIN, Netherlands; NZIS, New Zealand; NIS, Nigeria; and RICS, United Kingdom followed by a summary from Vice Chair Henning Elmstroem. The members were encouraged and invited to continue the discussion at a Presidents' Meeting on Tuesday 8 May 16:00-17:30.

The Chairperson was requested to report back to the General Assembly in its second session. The General Assembly will then guide the Council and Working Group how to proceed with the voting right issues.

**Appendix to item 13, 21 and 29:** Working Group on Voting Rights – Chairperson's report

**Annex 1:** History of Voting Rights in FIG

**Annex 2:** Participation of Member Associations of FIG in the General Assemblies 2000-2011

- Handouts of Chairperson's report
- Handouts of Vice Chairs report

**Motion:** That the General Assembly records the report and discussion and request the Chair of the Working Group to report back to the General Assembly at its second session 10 May 2012.

**Decision:** The motion was adopted.

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

The main partners in the co-operation with the United Nations and the World Bank since the FIG Working Week in Marrakech have been:

- World Bank
- United Nations Global Geospatial Information Management
- United Nations Human Settlement Programme (UN-HABITAT)
- Global Land Tool Network
- Food and Agriculture Organization (FAO)
- United Nations Group of Experts on Geographical Names (UNGEGN)
- United Nations Office for Outer Space Affair (UNOOSA)

- United Nations Economic Commission for Africa (UNECA)
- United Nations sponsored Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP)

The activities with these bodies are described in the President's report, **appendix to item 8**.

UN ECA have prepared and signed a Memorandum of Understanding and forwarded to FIG. Council proposed that is MoU be presented to the General Assembly for its endorsement.

**Appendix to item 14:** Memorandum of Understanding between UN ECA and FIG

**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.
- endorse the Memorandum of Understanding between UN ECA and FIG.

**Decision:** The motion was adopted.

15. LIAISON WITH INTERNATIONAL PROFESSIONAL ORGANISATIONS

The Joint Board of Spatial Information Societies JB-GIS was formally established during the FIG Working Week in Cairo in 2005 and meets annually during a major conference. The meeting of JB-GIS in 2011 was held in Paris in July 2011 where Prof. William Cartwright was elected as the new chairperson of JB-GIS.

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

FIG has bilateral agreements of co-operation with several other international associations like ISM, IFHP, CIB, ION, ICEC, FIABCI, IFHS and PAQS. Some of the partners are also working together within the Habitat Professionals Forum.

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

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

**Decision:** The motion was adopted.

16. FIG ACCOUNTS FOR 2011 AND AUDITOR'S REPORT AND BUDGETS 2012-2015

Vice President Iain Greenway has prepared a report on the FIG Financial Issues that he presented to the General Assembly. This report included summary of 2011 accounts, an updated budget for 2012 and proposals for budgets 2012-2015 with notes and proposal for membership fees for member associations in 2014.

The Auditors Report includes the auditors report from 2011, official accounts (income statement 2011) and balance sheet 31 December 2011.

**Appendix to item 16:** Report on Financial Issues (including 2011 accounts and budgets 2012-2015)  
Annexes:

- **16A** Auditor's Report, Income Statement for 2011 and Balance Sheet at 31 December 2011.
- **16B** FIG Result 2011
- **16C** FIG Budgets 2012-2015
- **16D** List of member associations whose membership fees are in arrears for 2010 and earlier and that are not allowed to vote, 12 April 2012.
- **16E** Vice President Greenway's finance presentation at the General Assembly – handouts of presentation

**Motion:** That the General Assembly

- adopts the audited accounts for 2011 and
- adopts budgets for 2012–2015

**Decision:** The motion was adopted.

#### 17. SUBSCRIPTION RATES FOR 2014

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 16**.

The 2011 General Assembly approved membership fees for 2013 as follows:

<u>Year</u>	<u>Per capita fee</u>	<u>Minimum fee</u>	<u>Maximum fee</u>
2013	4.48 €per member up to a maximum of 5,500 members Member associations from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay 2.24 € member up to a maximum of 5,500 members.	20 members or 50 € (whichever is greater)	5,500 members (24,640 €)

The World Bank lists of the low-income economies and the lower-middle-income economies are available at:

<http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20421402~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>

The Council proposes to the General Assembly to keep the membership fees for member associations for 2014 at the same level as endorsed by the General Assembly in 2011 for 2013. In the draft budgets for 2012-2015 the membership fees are planned to be kept at the 2012 level for all membership categories for 2013-2015.

**Motion:** That the General Assembly adopts following membership fees payable by member associations in 2014:

<u>Year</u>	<u>Per capita fee</u>	<u>Minimum fee</u>	<u>Maximum fee</u>
2014	4.48 €per member up to a maximum of 5,500 members Member associations from countries	20 members or 50 € (whichever is greater)	5,500 members (24,640 €)

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

#### 18. ELECTION OF TWO VICE PRESIDENTS FOR 2013-2016 – PRESENTATION OF CANDIDATES

The FIG Council has received three proposals for the two open posts of FIG Vice President: Dr. Pengfei Cheng, CSGPC, China PR, Mr. Bruno Razza, CNGeGL, Italy and Mr. Yaacoub Saade, OSL, Lebanon. The profile templates of each candidate were attached to the agenda. In the first session of the General Assembly each candidate was given equal time (5 minutes) to introduce himself and to make a presentation focussing on his ideas and goals for developing the FIG agenda.

The actual election will take place at the second session of the General Assembly by blind votes on Thursday 10 April. The election will take place one position at a time. If there will be no absolute majority in the first voting, second vote will be organised between those two candidates that have most votes.

**Appendix to item 18 and 25:** Profiles of the candidates

- Dr. Pengfei Cheng, CSGPC, China PR
- Mr. Bruno Razza, CNGeGL, Italy
- Mr. Yaacoub Saade, OSL, Lebanon

**Motion:** That the General Assembly notes the presentations of the candidates and makes its decisions at the elections during the second session of the General Assembly on the 10<sup>th</sup> May according to FIG statutes and internal rules.

**Decision:** The motion was adopted.

#### 19. ELECTION OF COMMISSION CHAIRS ELECT FOR 2013-2014 – PRESENTATION OF CANDIDATES

According to the FIG Statutes and Internal Rules the General Assembly appoints Commission Chairs Elect at its meeting two years prior to the Congress. These Chairs Elect will then automatically become Chairs of the Commissions for the next term of office. Thus the General Assembly shall appoint at this meeting Commission Chairs Elect for term of office 1.1.2013-31.12.2014 and these Chairs Elect will then become Commission Chairs for the term of office 1.1.2015-31.12.2018.

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

- Commission 1: Mr. Brian J. Coutts, NZIS, New Zealand  
Dr. Ping Xiao, CSGPC, China PR
- 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. Claire Galpin, OGE, France  
Ms. Gerda Schennach, OVG, Austria  
Dr. Daniel Steudler, geosuisse, Switzerland  
Commission 8: Mr. Raymond Chan Yuk Ming, HKIS, Hong Kong SAR, China  
Mr. Kwame Tenadu, GhIS, Ghana  
Commission 9: Prof. Liao Jinping (Patrick), CIREA, China PR  
Commission 10: no proposals

As there were no nominations for Commission 10, the Council has discussed about the situation with this Commission. As a result of these studies, the Council proposes to the General Assembly that Council finds a suitable candidate and that the appointment of Chair Elect to Commission 10 be postponed to the General Assembly in 2013. This will still allow enough time for the appointed Chair Elect to prepare his/her agenda and work plan for the next term of office.

**Appendices to item 19 and 26:** Nomination templates of candidates to Commission Chairs Elect for 1.1.2013-31.12.2014:

Commission 1: Mr. Brian J. Coutts, NZIS, New Zealand  
Dr. Ping Xiao, CSGPC, China PR  
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. Claire Galpin, OGE, France  
Ms. Gerda Schennach, OVG, Austria  
Dr. Daniel Steudler, geosuisse, Switzerland  
Commission 8: Mr. Raymond Chan Yuk Ming, HKIS, Hong Kong SAR, China  
Mr. Kwame Tenadu, GhIS, Ghana  
Commission 9: Prof. Liao Jinping (Patrick), CIREA, China PR

At the first session of the General Assembly each candidate was given 3 minutes to introduce him/herself and his/her agenda how to develop the Commission if he/she will be elected. All candidates made their presentations except Ms. Etuonovbe who was introduced by Dr. Michael Sutherland, Chair of Commission 4, because of her problems in getting a visa.

The election for Chairs Elect will take place at the second session of the General Assembly on 10<sup>th</sup> May. The election will take place in one election, in which all commission chairs elect are elected at the same time. If there will be no absolute majority in the first voting for any commission, second vote will be organised between those two candidates that have most votes.

**Motion:** That the General Assembly notes the presentations and makes its decision at the election during the second session of the General Assembly on the 10<sup>th</sup> May.

**Decision:** The motion was adopted.

## 20. DECISION OF THE VENUES FOR FIG WORKING WEEK 2015 AND 2016 – PRESENTATION OF CANDIDATES

The FIG Working Weeks are organised by FIG together with the local member association. FIG will have full responsibility of the arrangements and also of the financial result, naturally together with the local member association. This offers FIG better opportunities in terms of organising events and

generating funds. Therefore the Council has to ensure that all candidates are aware about the role of FIG and split of responsibilities for organising the Working Week.

At the meeting in Rome the General Assembly will decide on the hosts for two Working Weeks.

The FIG Council has received three bids to host the FIG Working Week 2015 and three bids to host the Working Week Congress 2016:

#### Working Week 2015

- Chamber of Graduated Surveyors Bulgaria, Bulgaria
- Nepal Institution of Chartered Surveyors, NICS, Nepal
- Union of Romanian Geodesy, UGR and Romanian Association of Private Surveyors, APCGC, Romania

#### Working Week 2016

- Chamber of Graduated Surveyors Bulgaria, Bulgaria
- New Zealand Institution of Surveyors, NZIS, New Zealand
- Union of Romanian Geodesy, UGR and Romanian Association of Private Surveyors, APCGC, Romania

The Council prepared a desktop evaluation report on the bids that was published 26 April 2012. In the evaluation report following issues will be described for comparison:

- Rotation of the conferences (region);
- Country (hosting of earlier FIG events);
- Member association (its activeness, commitment to FIG and to FIG 2015/2016);
- Supporting organisations (local support to the Working Week);
- Host city (characteristics and interest from congress programme point of view);
- Venue (technical issues of proposed congress centre, hotels etc.);
- Access (flight connections);
- Safety and security (including political stability);
- Environment issues;
- Proposed dates (in relation to FIG requirements);
- Technical programme (coverage of all FIG Commissions, potential partners);
- Technical tours (coverage of all FIG Commissions);
- Social programme (attractiveness and variety);
- Attendance (expectation of international, regional and local attendance);
- Accommodation (hotel costs);
- Finances (estimate of surplus and financial risks);
- Sponsorship (estimate sponsorship and exhibition income);
- Attractiveness (general attractiveness as congress destination).

The evaluation report does not give a recommendation or a preference to any candidate but it lists their qualifications on each subject above and summarises the pros and cons of each candidate to assist the member association in making their decision. During the last years the influence of economy as well as security concerns has increased in the decision making process. This relates both to participation and registration fees, hence the overall costs and anticipated returns to the organisers. The purpose of the evaluation process is to maintain the high standard and quality of the FIG conferences.

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

**Appendix to item 20 and 27:**

Evaluation Report on the Bids for Working Week 2015 and 2016, 26 April 2012

Bidding documents for Working Week 2015:

- Chamber of Graduated Surveyors Bulgaria, Bulgaria
- Nepal Institution of Chartered Surveyors, NICS, Nepal
- Union of Romanian Geodesy, UGR and Romanian Association of Private Surveyors, APCGC, Romania

Bidding documents for Working Week 2016:

- Chamber of Graduated Surveyors Bulgaria, Bulgaria
- New Zealand Institution of Surveyors, NZIS, New Zealand
- Union of Romanian Geodesy, UGR and Romanian Association of Private Surveyors, APCGC, Romania

At the first session of the General Assembly each candidate was given the same time (10 minutes for those Bulgaria and Romania who are bidding for 2015 and 2016 and 10 minutes for Nepal and New Zealand) to make a presentation of their destination and framework of the Working Week and their bid.

Decision on the venue of FIG Working Week 2015 and Working Week 2016 will be made at the second session of the General Assembly on 10<sup>th</sup> May. The voting will be made by blind votes. If there will be no absolute majority in the first voting for any of the Working Weeks, second vote will be organised between those two candidates that have most votes. If the applicant that has applied for Working Week 2015 is not successful it will go for the selection of the venue for the Working Week 2016.

**Motion:** That the General Assembly records the presentations and decides to make its decision on the venue at its second session.

**Decision:** The motion was adopted.

**TUESDAY 8 MAY, 2012**

**Presidents' Meeting, Tuesday, 8 May, 16:00-17:30, San Giovanni, Rome Cavalieri**

21. PRESIDENTS' MEETING

This session was aimed for Presidents or Heads of delegation (or their representatives) of member associations to discuss issue of their common interest. The main topic discussed this year was the report from the Working Group on Voting Rights. President Fausto Savoldi, CNGeGL chaired the Presidents' meeting as chair of the host association with Mr Brian Coutts, NZIS as the Rapporteur.

**Appendix to item 13, 21 and 29:** Working Group on Voting Rights – Chairperson's report

**Annex 1:** History of Voting Rights in FIG – only short version; full version on the web

**Annex 2:** Participation of Member Associations of FIG in the General Assemblies 2002-2011

**Appendix to item 21 and 29:** Recommendation from the Working Group on Voting Rights to the General Assembly



**Motion:** Summary notes from the meeting including discussion on voting rights will be recorded and presented back to the General Assembly in its second session on 10<sup>th</sup> May 2012.

**Decision:** The motion was adopted.

#### **THURSDAY 10 MAY, 2012**

**Presidents' Meeting, Thursday, 10 May, 8:30-10:00** (by invitation only),  
**Ellisse, Rome Cavalieri**

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

A total of 44 persons attended this Presidents' Meeting out of which 37 were Presidents or Heads of delegations. At the meeting challenges facing the member associations and relations between member associations and FIG were discussed as well as experiences from the FIG Working Week 2012. A separate memorandum of this meeting is circulated to the participants of the meeting and to the Presidents of member associations. There was positive feedback on this year's format for networking and interaction amongst Presidents and Heads of Delegation including support to the concept that in the future Presidents' meetings could be convened over two sessions.

**Appendix to item 22:** Memo of the Presidents' meeting

**General Assembly, Second Session, Thursday, 10 May, 10:30–12:00 and 13:00-15:00**  
**Salone dei Cavalieri 3 & 4, Rome Cavalieri**

#### **23. ROLL CALL**

Vice President Staiger took the roll call.

The roll call was made only for member associations and affiliate members. Delegates representing academic members, corporate members and correspondents as well as honorary presidents and honorary members were entered in the records based on their registration and information given to the FIG Office.

Recorded that based on the decision of the General Assembly in 2006 only those member associations that had paid all their membership fees to the end of 2011 were allowed to vote at the meeting. A list of member associations that are not allowed to vote was published on the FIG web site 12 April and updated 9 May 2012.

To be noted that the General Assembly had appointed President Mohamed Chrourou from ONIGT, Morocco and Secretary General Enrico Rispoli from CNGeGL, Italy as tellers to this session of the General Assembly.

**Appendix to items 2 & 23:** Roll Call.

65 member associations out of 105 were present at this session, which is more than one third of the membership needed for the General Assembly to be constitutionally valid. 58 member associations were allowed to vote.

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

**Decision:** The motion was adopted.

## 24. MEMBERSHIP

The Council has decided to accept following new academic member at its meeting 9 May 2012:

The University of Nottingham Ningbo China, China P. R.

The Council has also restored the academic membership of the University of Lagos (Nigeria) and Nnamdi Azikiwe University (Nigeria) after they had paid their arrears in Rome.

After this the number of academic members is 90.

**Motion:** That the General Assembly endorses the Council decision on academic members.

**Decision:** The motion was adopted.

## 25. ELECTION OF TWO VICE PRESIDENTS FOR 2013-2016

The General Assembly heard presentations of the three candidates for the FIG Vice President 2013-2016 at the first session. The election took place between Dr. Pengfei Cheng, CSGPC, China PR, Mr. Bruno Razza, CNGeGL, Italy and Mr. Yaacoub Saade, OSL, Lebanon.

The election took place by blind votes following the FIG statutes and internal rules. The election was carried one position at a time. In the case that there would not be an absolute majority in the first voting, second vote shall be organised between those two candidates that have most votes.

**Appendix to item 18 and 25:** Profiles of the candidates

- Dr. Pengfei Cheng, CSGPC, China PR
- Mr. Bruno Razza, CNGeGL, Italy
- Mr. Yaacoub Saade, OSL, Lebanon

**Motion:** That the General Assembly elects two Vice Presidents for FIG for term of office 1.1.2013-31.12.2016.

**Decision:** At the election in the first round Mr. Bruno Razza got 33 votes, Mr. Yaacoub Saade 14 votes and Dr. Pengfei Cheng 10 votes (with one invalid vote). As Mr. Razza secured more than half of the valid votes he was elected as the Vice President of the Federation for 1.1.2013-31.12.2016. In the second round of the election Dr. Cheng got 30 votes while Mr. Saade got 27 votes (with one invalid vote), so Dr. Cheng was elected for the second open post of FIG Vice President for 1.1.2013-31.12.2016.

## 26. ELECTION OF COMMISSION CHAIRS ELECT FOR 2013-2014

The General Assembly listened to the presentations of the candidates for the position of the Commission Chairs Elect at its first meeting. At this meeting the General Assembly appointed or elected the Chairs Elect for the term of office 1.1.2013-31.12.2014. The Chairs Elect will under normal circumstances be automatically elected as Chair of their Commission for the term of office 1.1.2015-31.12.2018.

The election will take place on the following candidates:

- Commission 1: Mr. Brian J. Coutts, NZIS, New Zealand  
Dr. Ping Xiao, CSGPC, China PR

- 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. Claire Galpin, OGE, France  
Ms. Gerda Schennach, OVG, Austria  
Dr. Daniel Steudler, geosuisse, Switzerland
- Commission 8: Mr. Raymond Chan Yuk Ming, HKIS, Hong Kong SAR, China  
Mr. Kwame Tenadu, GhIS, Ghana
- Commission 9: Prof. Liao Jinping (Patrick), CIREA, China PR

Because there was only one candidate for Commission 2, 3, 4, 5, 6 and 9, these candidates were appointed as Commission Chair Elect by the General Assembly.

For Commissions 1 and 8 there are two candidates for each Commission, so the election took place between these two candidates. For Commission 7 there were three candidates, so the election took place between these three. If there would not be absolute majority in the first round of voting, a second vote shall be organised between those two candidates that have most votes.

The Council had proposed to postpone the election for Commission 10 to the General Assembly in 2013.

**Appendices to item 19 and 26:** Nomination templates of candidates to Commission Chairs Elect for 1.1.2013-31.12.2014:

- Commission 1: Mr. Brian J. Coutts, NZIS, New Zealand  
Dr. Ping Xiao, CSGPC, China PR
- 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. Claire Galpin, OGE, France  
Ms. Gerda Schennach, OVG, Austria  
Dr. Daniel Steudler, geosuisse, Switzerland
- Commission 8: Mr. Raymond Chan Yuk Ming, HKIS, Hong Kong SAR, China  
Mr. Kwame Tenadu, GhIS, Ghana
- Commission 9: Prof. Liao Jinping (Patrick), CIREA, China PR

**Motion:** That the General Assembly appoints or elects the Chair Elect to Commissions 1, 2, 3, 4, 5, 6, 7, 8 and 9 as described above and that the General Assembly decides to postpone the election of Chair Elect to Commission 10 to next General Assembly in 2013.

**Decision:** In the election for Chair Elect in Commission 1 Mr. Brian Coutts got 49 votes and Dr. Ping Xiao 9 votes and in Commission 8 Mr. Kwame Tenadu got 40 votes and Mr. Raymond Chan 18 votes. In Commission 7 elections on the first round, Dr. Daniel Steudler got 25 votes, Ms. Gerda Schennach 21 votes and Ms. Claire Galpin 12 votes. The second round of voting for Commission 7 Chair Elect was then carried out between Dr. Steudler and Ms. Schennach and Ms. Schennach got 27 votes and Dr. Steudler 25 votes (with 6 invalid votes).

The General Assembly appointed or elected following persons to Commission Chairs Elect for period 1.1.2013-31.12.2014:

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

## 27. DECISION OF THE VENUES FOR FIG WORKING WEEK 2015 AND 2016

Candidates for hosting the FIG Working Week 2015 and Working Week 2016 made their presentations in the first session of the General Assembly. The decision was made between:

### Working Week 2015

- Chamber of Graduated Surveyors Bulgaria, Bulgaria
- Nepal Institution of Chartered Surveyors, NICS, Nepal
- Union of Romanian Geodesy, UGR and Romanian Association of Private Surveyors, APCGC, Romania

### Working Week 2016

- Chamber of Graduated Surveyors Bulgaria, Bulgaria
- New Zealand Institution of Surveyors, NZIS, New Zealand
- Union of Romanian Geodesy, UGR and Romanian Association of Private Surveyors, APCGC, Romania

### **Appendices to item 20 and 27:**

Evaluation Report on the Bids for Working Week 2015 and 2016, 26 April 2012

Bidding documents for Working Week 2015:

- Chamber of Graduated Surveyors Bulgaria, Bulgaria
- Nepal Institution of Chartered Surveyors, NICS, Nepal
- Union of Romanian Geodesy, UGR and Romanian Association of Private Surveyors, APCGC, Romania

Bidding documents for Working Week 2016:

- Chamber of Graduated Surveyors Bulgaria, Bulgaria
- New Zealand Institution of Surveyors, NZIS, New Zealand
- Union of Romanian Geodesy, UGR and Romanian Association of Private Surveyors, APCGC, Romania

The voting was made by blind votes. If there would be no absolute majority in the first voting for any of the Working Weeks, second vote will be organised between those two candidates that have most votes. If the applicant that has applied for Working Week 2015 is not successful it will go for the selection of the venue for the Working Week 2016.

**Motion:** That the General Assembly decides on the venue for FIG Working Week 2015 and Working Week 2016.

**Decision:** In the selection for the venue of FIG Working Week 2015 Bulgaria got 34 votes, Nepal 10 votes and Romania 10 votes. The General Assembly had thus decided that the Working Week 2015 will be held in Sofia, Bulgaria co-organized with the Chamber of Graduated Surveyors Bulgaria.

Decision on the venue of the Working Week 2016 was made between New Zealand and Romania. In the voting New Zealand got 43 votes and Romania 10 votes. The General Assembly had decided that the Working Week 2016 will be held in Christchurch, New Zealand co-organized with the New Zealand Institution of Surveyors.

## 28. REPORTS FROM COMMISSIONS AND TASK FORCES

Commission Officers (ACCO), Commissions and Task forces had their annual and other administrative meetings in Rome. Vice President Rudolf Staiger reported back to the General Assembly on the main outcome of the meetings. None of these require an endorsement of the General Assembly at this stage.

**Motion:** That the General Assembly records the reports and decides on any recommendations arising from the reports.

**Decision:** The motion was adopted.

## 29. REPORTS FROM WORKING GROUP ON VOTING RIGHTS

Chairperson presented his report on the Working Group activities at the first session of the General Assembly. The report was further discussed at the Presidents' Meeting on Tuesday. The Chairperson reported back to the General Assembly on the recommendations from the Presidents' meeting. The recommendations were accepted at the Presidents' meeting with a clear majority.

**Appendix to item 13, 21 and 29:** Working Group on Voting Rights – Chairperson's report

**Annex 1:** History of Voting Rights in FIG – only short version; full version on the web

**Annex 2:** Participation of Member Associations of FIG in the General Assemblies 2000-2011

**Appendix to item 21 and 29:** Recommendation from the Working Group on Voting Rights to the General Assembly

**Motion:** That the General Assembly records the report and decides on next steps or proposals to the Council on how to proceed with the voting right issue.

**Decision:** The General Assembly unanimously adopted the recommendations of the Presidents and Heads of Delegations present at the President's Meeting of 8<sup>th</sup> May 2012 as presented by the Chair of the Working Group on Voting Rights, which are as follows:

- 1) the voting system be changed;
- 2) that the right to vote remains with members associations;
- 3) that a sliding scale of voting, relative to association's membership numbers, be adopted;
- 4) that Council prepare a proposal (and after consultation with the members) to be adopted no later than at the 1<sup>st</sup> session and to be used at the 2<sup>nd</sup> session of the General Assembly at Kuala Lumpur in 2014.

The General Assembly recorded its thanks to the Presidents and Heads of Delegations present at the President's Meeting of 8<sup>th</sup> May for a recommendation that is clear, the Chair, Vice Chair and Members of the General Assembly's Working Group on Voting Rights for its work and report. The General Assembly agreed that the work of the Working Group on Voting Rights has now completed and applauded its deliberations and efforts.

### 30. CO-OPERATION WITH THE FIG CORPORATE MEMBERS

A meeting for FIG Corporate Members was organised in Rome. A report on co-operation between FIG and its Corporate Members was given at the meeting by Brent Jones, Esri.

**Appendix to item 30:** Handouts of the presentation of Brent Jones

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

**Decision:** The motion was adopted.

### 31. REPORT ON THE 8<sup>th</sup> FIG REGIONAL CONFERENCE IN MONTEVIDEO, URUGUAY

President Nelma Bénia from the Asociación de Agrimensores Uruguay gave a presentation on preparations of the 8<sup>th</sup> FIG Regional Conference ([www.fig.net/uruguay](http://www.fig.net/uruguay)) in Montevideo, Uruguay and invited the members to attend this important meeting for Latin America.

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

**Decision:** The motion was adopted.

### 32. REPORT ON THE CONGRESS 2014 IN KUALA LUMPUR, MALAYSIA

President Mohammad Azmi Mohd Zin from the Association of Authorised Land Surveyors Malaysia and representatives of the Organising Committee of FIG 2014 ([www.fig.net/fig2014](http://www.fig.net/fig2014)) gave a presentation on preparations of FIG Congress 2014.

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

**Decision:** The motion was adopted.

### 33. REPORT ON THE FIG WORKING WEEK 2013 IN ABUJA, NIGERIA, 2013

President Yakubu Maikano from the Nigerian Institution of Surveyors and representatives of the Organising Committee of FIG Working Week 2013 ([www.fig.net/fig2013](http://www.fig.net/fig2013)) gave a presentation on preparations of FIG Working Week 2013. The greeting from the President of Nigeria was presented by the Ambassador of Nigeria to Italy.

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

**Decision:** The motion was adopted.

### 34. PRESENTATION OF CERTIFICATES OF APPRECIATION

At the Closing Ceremony certificates of appreciation were given to Geom. Fausto Savoldi, President of CNGeGL, Congress Director Enrico Rispoli, Secretary General of CNGeGL and Ms. Maria Scorza, Conference Coordinator, FIG 2012 and other members of the organising committee, CNGeGL office and Italian young surveyors.

## CLOSING CEREMONY

President CheeHai Teo presented a summary of the main outcome and highlights of the FIG Working Week 2012 and thanked all parties, participants and accompanying persons for a memorable event.

**Appendix:** Handouts of the President's Closing Address.

At the closing ceremony the FIG banner was handed over by Geom. Fausto Savoldi, President of CNGeGL to Mr. Yakubu Maikano, President of NIS. The FIG Working Week 2013 will be held in Abuja, Nigeria, 6-10 May 2013. President Teo formally closed the 35th General Assembly of FIG as well as the Working Week.

## **2013 FIG General Assembly President's Report**

### **1. Preamble**

As a United Nations and the World Bank Group recognized non-governmental organization, we are seeking to collaborate and to ensure that the disciplines of surveying and all who practise them are relevant and meeting the needs of both the community and the market we are present. This worldwide professional community measures, maps, estimates, costs, values, assesses, models, plans and manages the natural and built environment for the effective planning and efficient administration of the land, the seas and any structures thereon.

FIG draws its membership from professional practitioners working in both the public and private sectors, the scientific, research and academic community, as well as from the spatial technologies innovators and providers. Together, we seek to extend the use and usefulness of surveying for the betterment of humanity. FIG is fortunate and thankful as the Federation essentially functions out of the goodwill, resources and contribution of our corps of volunteers and members from around the world.

Within FIG, our current work plan is driven by a vision of a profession, armed with knowledge and best practices, extending the usefulness of surveying for the benefit of society, environment and economy, increasingly positioned in significance and relevance, next door to everywhere.

### **2. Introduction**

This report covers, generally, the period between the 2012 General Assembly in Rome, Italy until the upcoming 2013 General Assembly in Abuja, Nigeria and should be read together with papers and reports prepared and included in the 2013 General Assembly Agenda.

On a solemn note, our condolences to the family of Honorary President William A Radlinski (USA) who passed away on 15<sup>th</sup> February 2013 and Honorary President Charlie Weir (Canada) who passed away on 24<sup>th</sup> September 2012; Honorary Member Seppo Härmälä (Finland) who passed away 3rd January 2013 and Commission 4 Vice Chair, Professor Dr. Volker Böder (Germany) who passed away on 31<sup>st</sup> August 2012.

Congratulations to FIG Vice President (2007 – 2010) Matthew B. Higgins (SSSI, Australia) on his appointment as FIG Honorary Member by the General Assembly in Rome, Italy.

Appreciations and gratitude to Vice Presidents Dalal Alnaggar (Egypt) (2007 – 2012) and Iain Greenway (RICS, United Kingdom) (2009 – 2012) for their service, efforts and contributions to FIG and its membership.

### **3. 2012 Working Week**

The working week in Rome, Italy Morocco from 6<sup>th</sup> to 10<sup>nd</sup> May 2012 had the general theme "Knowing to Manage" and included the XXXV General Assembly, a three-day technical program and an exhibition. The event was co-organized with the local member association, *Consiglio Nazionale Geometri e Geometri Laureati, CNGeGL, Italy*. The technical program had in excess of 100 sessions with close to 500 presentations. FAO was the main partner and



collaborative activities included a joint full day workshop as well as a visit to and seminar at FAO Headquarters. FIG also collaborated with GLTN (UN-Habitat) including sessions with grass root organizations and other Partners within GLTN's professional cluster. There was also a session on Professional Women in Surveying. The Working Week in Rome was another well-attended and supported event with just over 1,500 participants from 96 countries, making it the biggest Working Week in FIG history.

The 2012 General Assembly saw the election of Bruno Razza (CNGeGL, Italy) and PengFei Cheng (CSGPC, PR China) as Vice Presidents for the term 2013 – 2016. In addition, the following were elected or confirmed as chair-elects –

- FIG Commission 1 Brian J. Coutts (NZIS, New Zealand) (elected)
- FIG Commission 2 Ms. Liza Groenendijk (GIN, The Netherlands)
- FIG Commission 3 Enrico Rispoli (CNGeGL, Italy)
- FIG Commission 4 Ms. Angela Kesiena Etuonovbe (NIS, Nigeria)
- FIG Commission 5 Volker Schwieger (DVW, Germany)
- FIG Commission 6 Ivo Milev (USLMB, Bulgaria)
- FIG Commission 7 Ms Gerda Schennach (OVG, Austria) (elected)
- FIG Commission 8 Kwame Tenadu (GhIS, Ghana) (elected)
- FIG Commission 9 Liao Jinping (Patrick) (CIREA, PR China)

The General Assembly decided, in the selection of venues for future FIG Working Weeks, that for 2015, be held in Sofia, Bulgaria co-organized with the Chamber of Graduated Surveyors Bulgaria and for 2016 to be held in Christchurch, New Zealand co-organized with the New Zealand Institution of Surveyors.

The Working Week will also be remembered for its deliberations and decision on an appropriate voting structure for FIG. The 2012 General Assembly in Rome unanimously adopted the recommendations from the Working Group on Voting Rights (that was convened by the 2011 General Assembly in Marrakech) that:

- the voting system be changed;
- the right to vote remains with member associations;
- a sliding scale of voting, relative to association's membership numbers, be adopted; and
- Council prepare and table a proposal (after consultation with the members) to amend Article 6.6 of the FIG Statutes no later than at the 1<sup>st</sup> session and to be implemented at the 2<sup>nd</sup> session of the 2014 General Assembly in Kuala Lumpur, Malaysia.

4. Council has taken cognizance this decision and the work of the Working Group on Voting Rights with its discussion papers and reference materials that was prepared as well as the discussions, both in Marrakech and Rome. Council has prepared a one-page consultation paper that set out the essentials of Council's recommendation for the revision to FIG's voting structure. **1<sup>st</sup> Young Surveyors Conference**

The inaugural Young Surveyors Conference with the theme "Knowing to Create the Future" was held prior to the Working Week in Rome (4<sup>th</sup> & 5<sup>th</sup> May, 2012) and gathered about 120 young surveyors from 40 countries. One item to note is the prominence and use of social media during the Conference, where the Network was able to reach out to many within the Network scattered at differing locations. It was observed that these online chats, tweets and online fora added to the vibrancy of the discussions at the Conference.

## 5. **8<sup>th</sup> FIG Regional Conference**

The 8th FIG Regional Conference with the theme "Surveying towards Sustainable Development" was hosted by Asociación de Agrimensores del Uruguay (AAU) in Montevideo from 26<sup>th</sup> – 29<sup>th</sup> November 2012. More than 250 participants from 33 countries, mainly from

Latin America participated in the conference that was co-sponsored by UN-HABITAT/GLTN, OAS and the World Bank. This regional conference continues FIG's engagement with the region, where the primary focus of both the plenary and parallel technical sessions being that of the Latin American region. It was observed that participants, both from within the region and the world over, engaged in varied discussions, capitalizing on the diversity within FIG. FIG Foundation played an active and supportive role, sponsored five young surveyors, giving them the opportunity to participate in the Regional Conference.

## 6. Membership

At each General Assembly, new members are admitted or confirmed while others that have failed to fulfil the obligations of membership in accordance with our Statutes and Bye-laws were removed. After the 2012 Working Week, our membership stands at:

Member Associations	105	from 88 countries
Corporate Members	25	
Affiliate Members	41	
Academic Members	92	
Correspondents	14	
with a presence in 120 countries		

During this period, Council reviewed and accepted a number of applications and will recommend these to the 2013 General Assembly accordingly. Equally, Council has to act and will propose member associations, that are in arrears for three or more years for expulsion together with corporate, affiliate and academic members that were in arrears, after much effort to retain their membership. Council too has received notice of termination from Member Associations (one arising from its merger with another FIG member association), Corporate and Academic Members. In 2011, Council reviewed and noted that a majority of prior appointed correspondents were inactive, and some no longer contactable, and council has since decided to cease those appointments at the end of December 2012. Council will continue to review the remaining four correspondents' appointment.

A summary of the membership situation for the reporting period is as follows -

	New Application	Termination	Proposed Expulsion
Member Associations	0	2	4
Corporate Members	1	2	2
Affiliate Members	1	0	1
Academic Members	5	0	5
Correspondents		10	

Council recognized that, overall, our membership numbers are declining due to terminations and expulsions. At the same time, members continue to face challenges in sustaining its membership and there is a need to improve our efforts to articulate and communicate the value and benefits of membership.

## 7. Responsibilities of Council Members: 2013 & 2014

*President CheeHai TEO (2011 – 2014)*

Manage, together with Council, the business of the Federation in accordance with the Statutes and Internal Rules and as directed by the General Assembly to ensure that the Federation remains the premier international non-governmental organization that represents the interests of surveyors and users of surveying services globally. Lead the

Council in ensuring effective management of the Federation and engagement with the general membership.

Responsible for the agenda and related motions to each General Assembly and implement all decisions of the General Assembly. Provide strategic leadership of the Federation; take appropriate initiatives to ensure that the Federation achieves its principal objectives as laid down in the statutes and the adopted work plan. Promote the Federation and the significance of the profession; communicate and clarify to the membership the vision and direction of the Federation; co-ordinate and enhance the Federation's partnership with UN related agencies, the World Bank and other external international or multi-lateral agencies as well as sister and allied organization; oversee the overall management of the Federation and matters related thereto; recommend the formation of task forces to undertake specific tasks, monitor and guide their work thereof and undertake any other tasks and duties as decided by the General Assembly and the Council.

*Vice President Chryssy POTSIU (2011 – 2014)*

Chair FIG Task Force on Property and Housing; manage and co-ordinate FIG's initiatives in the area of property and housing, co-ordinate related agenda for action and promote appropriate activities, outputs and delivery; responsible for FIG's response the UN-Habitat's global housing strategy and initiatives; responsible for FIG's initiatives on Academic Members and co-ordinate related agenda for action, outputs and delivery; co-ordinate the annual Forum for Academic Members; supporting development in the areas of professionalism and ethics and provide Council with regular status report indicating highlights and challenges on matters related thereto. Responsible, when required, for reporting to the General Assembly including presentations and implementing related decisions; and participate in projects and tasks as decided by Council.

Together with the President, promote the Federation and the significance of the profession; communicate and clarify to the membership the vision and direction of the Federation, contribute in enhancing the Federation's partnership with UN related agencies, the World Bank and other external international or multi-lateral agencies as well as sister and allied organizations.

Council's representative to the FIG Foundation.

*Vice President Rudolf STAIGER (2011 – 2014)*

Chair FIG's Advisory Committee of Commission Officers (ACCO); manage and co-ordinate FIG's ten Commissions, technical strategy and initiatives including providing oversight to FIG's initiatives on standards, peer-review process, knowledge sharing initiatives and Affiliate Members, co-ordinate related agenda for action, outputs and delivery; supporting development in the areas of professionalism and ethics and provide Council with regular status report indicating highlights and challenges on matters related thereto. Responsible, when required, for reporting to the General Assembly including presentations and implementing related decisions; and participate in projects and tasks as decided by Council.

Together with the President, promote the Federation and the significance of the profession; communicate and clarify to the membership the vision and direction of the Federation, contribute in enhancing the Federation's partnership with UN related agencies, the World Bank and other external international or multi-lateral agencies as well as sister and allied organizations.

Council's representative on the FIG's Task Force on Surveyor and Climate Change.

*Vice President Bruno Razza (2013 – 2016)*

Manage and co-ordinate FIG's financial and administrative strategy and initiatives including providing oversight for general membership issues, the FIG Office, the FIG Administrative Manual and matters related thereto. Together with the FIG Office, provide Council with quarterly financial and administrative report indicating finance and administrative highlights, challenges and constraints. Support the development in the areas of professionalism and ethics and participate in projects and tasks as decided by Council.

Together with the President, promote the Federation and the significance of the profession; communicate and clarify to the membership the vision and direction of the Federation, contribute in enhancing the Federation's partnership with UN related agencies, the World Bank and other external international or multi-lateral agencies as well as sister and allied organizations.

Council's representative on the FIG's Africa Task Force.

*Vice President Pengfei Cheng (2013 – 2016)*

Manage and co-ordinate FIG's initiatives and development in the areas of professionalism and ethics; support cooperation with regional structures, co-ordinate related agenda for action, outputs and delivery; and provide Council with regular status report indicating highlights and challenges on matters related thereto. Responsible, when required, for reporting to the General Assembly including presentations and implementing related decisions; and participate in projects and tasks as decided by Council.

Together with the President, promote the Federation and the significance of the profession; communicate and clarify to the membership the vision and direction of the Federation, contribute in enhancing the Federation's partnership with UN related agencies, the World Bank and other external international or multi-lateral agencies as well as sister and allied organizations.

## **8. Commissions and Networks**

VP Rudolf Staiger, the Chair of ACCO together with the ten Commission Chairs as well as the two Networks will make their respective reports to the General Assembly. The conviction remains that Commissions are the "powerhouses" of the Federation, delivering knowledge and disseminating best practices through its activities. These activities, where appropriate, are complemented and supported by the Standards and Young Surveyors Networks. At the 2013 General Assembly, some Commissions will seek endorsement to amend their adopted work plans, to further reflect the realities they are working to within their Commissions. ACCO continue to work with the Office to facilitate the technical program at FIG events.

FIG Members are urged to nominate and support enthusiastic national delegates and correspondents to the Commissions and Networks, to participate in the work and activities of the Commissions and Networks, as these are vital in the efforts to bring benefits to the local membership. Council will continue to co-ordinate Commission level activities as much as it is feasible including its workshops and symposia, aiming to serve the Federation's geographically diverse membership. National member associations are encouraged to step up, work with and host commission and network level activities in their respective countries or region.

Council will recommend for endorsement by the General Assembly the Chair-elect for the Young Surveyors Network for the period 2015 – 2018. Council is of the opinion that the

Young Surveyors Network is ready to have Chair elected, just like Commission Chairs for subsequent terms.

## **9. Task Forces**

The Chairs of FIG Task Forces will make their respective reports to the General Assembly. For the remaining Council term, there will only be three Task Forces as the *Task Force on Spatially Enabled Society* had successfully concluded its task with FIG Publication No. 58: *Spatially Enabled Society*, a joint publication of FIG-Task Force on Spatially Enabled Society in cooperation with GSDI Association and with the support of Working Group 3 of the PCGIAP. Council acknowledges its gratitude to Dr. Daniel Steudler (Geosuisse, Switzerland) for his able leadership as well as members of the Task Force on Spatially Enabled Society for their contributions and efforts.

## **10. Engagements and Visits**

Council travels and visits were managed and focused on engaging the membership and delivering the Council's Work Plan. For the period covered by this report, Vice Presidents and Presidents, apart from engaging their respective home memberships and regional affiliations, engaged members in Kenya, Hungary, Bulgaria, New Zealand, Argentina, Uruguay, Nigeria, Hong Kong SAR, Brunei, Burkina Faso, Germany, Denmark, Finland, Russia, Croatia, Italy, United States and PR China. Vice Presidents and the President also had the opportunity to engage members (including FIG Corporate, Affiliate and Academic members) at various international and regional events including those organised by regional and linguistics groupings within FIG such as CLGE, ASEANFLAG and FGF. There were a number of occasions where Commission or Network Officers represented FIG and participated events in Russia, Spain and Cameroun.

## **11. Collaboration with the World Bank**

The Annual World Bank Conference on Land and Poverty each year brings together representatives from governments, civil society, academia, the private sector and the development community to discuss issues of concern to land practitioners and policymakers worldwide. The conference aims to foster dialogue and sharing of good practices by showcasing the diversity of reforms, approaches and experiences that are being implemented in the land sector around the world. The theme of 2013 edition is "Moving towards transparent land governance: Evidence-based next steps" and FIG is collaborating with the Bank, actively contributing towards the Conference program and ensuing discussions. The Conference will include an Expert Group Meeting jointly convened by both the Bank and FIG the day after the close of the Conference and will bring together, by invitation, professionals from government and private sector, academia and research institutes, services and technologies providers and civil society to consider trends and issues to be spatially fit-for-purpose.

Within FIG, we recognize that our Profession must consider the wider good, the needs within society, environment and economy and not just that of our measurement and its related methodology and accuracy or that of technological sophistication. At the 2013 Conference, FIG's corps of volunteer intent to advocate the Profession's key role within the Land Sector (Land and the seas and her natural resources are often referred to as the source of all production and consequently the generation of capital, wealth and wellbeing) and contribute to the discussion on that which is applicable, appropriate and affordable, that's fit-for-purpose.

The 2013 Conference has six thematic areas:

- Securing land rights and improving land use at the grassroots;
- Adjusting laws and institutions to address urban expansion and governance;
- Innovative approaches towards spatially enabling land administration and management;
- Supporting a continuum of rights in a decentralized environment;
- Mobilizing the private sector to improve land governance; and
- Sharing benefits from exploitation of land-based resources.

The Bank supported the 8<sup>th</sup> FIG Regional Conference and provided one of the plenary speakers, contributing towards the vibrancy and success of the Conference.

## **12. Collaboration with the United Nations**

### *12.1 United Nations Global Geospatial Information Management*

The United Nations convened the second High Level Forum on Global Geospatial Information Management (UN-GGIM) in February this year. The Forum was held pursuant to the mandate from the United Nations Economic and Social Council (ECOSOC) to convene global forums to promote comprehensive dialogue on global geospatial information management with all relevant governments, non-governmental organizations and the private sector. The Forum provides member states and stakeholders the unique opportunity to share and learn from each other to support local, regional and global sustainable development initiatives.

The United Nations initiative on Global Geospatial Information Management (UN-GGIM) aims at playing a leading role in setting the agenda for the development of global geospatial information and to promote its use to address key global challenges.

The Doha Declaration on Advancing Global Geospatial Information Management issued at the close of Second High Level Forum had the participants, among others, resolved to:

- Commit to working together as an international community, under the coordination of the United Nations, to work with all stakeholders to improve a sustained operational global geodetic reference frame and infrastructure, to support the increasing demand for positioning and monitoring applications with associated societal and economic benefits;
- Affirm the importance of having a stable, credible and reliable national geospatial information infrastructure in each country built on internationally recognized standards that will integrate, manage and deliver geospatial information for timely, evidenced-based and authoritative decision making and policy formulation on location-based development issues, including disasters and humanitarian needs;
- Affirm the importance of an agreed set of authoritative core global geospatial reference datasets that are needed to support global sustainable development activities and to work jointly towards the preparation, improvement and maintenance of these core reference datasets.

Our Profession must note that within the Declaration, there is the emphasis on societal and economic benefits, disasters and humanitarian needs, hence the challenge to advance and extend the services and usefulness of our Profession for the wellbeing of humanity.

### *12.2 United Nations Committee of Experts on Global Geospatial Information Management*

UNCE-GGIM was established to be the official United Nations consultative mechanism on place, locality and geography. UNCE-GGIM plays a leading role in setting the agenda for the

development of global geospatial information, while promoting its use to meet key global challenges. The second session of the Committee of Experts was held in August 2012 in New York and deliberated on an analysis and report on future trends in geospatial information management carried out by the Committee. Member states discussed the desire for options in their respective evolution to create national geospatial information authorities and requested mechanisms for governments to engage each other in learning and sharing. The impact on member states with limited access to technology was also discussed especially in an era of rapid technological changes. It was opined that there is a need to reduce this technological divide. The importance of geodesy and global geodetic reference system was emphasized leading to a special session at the Second High Level Forum and inclusion into the Doha Declaration.

### *12.3 United Nations Human Settlement Programme (UN-HABITAT)*

The 24th Session of the Governing Council of UN-Habitat will be held from 15-19 April 2013 at the UN-Habitat headquarters in Nairobi, Kenya, under the theme of *Sustainable Urban Development: The Role of Cities In Creating Improved Economic Opportunities For All, With Special Reference To Youth and Gender*. The President will represent FIG at this year's Governing Council.

FIG also participated at the UN-Habitat Sixth World Urban Forum in September 2012 hosted by the city of Naples, Italy. The President was joined by a number of colleagues and the Young Surveyors Network actively participated in the Forum, particularly the Youth Assembly as well as the Roundtable on Youth, confirming that the younger and youth have relationships to land. The Forum with the theme "Urban Futures" was held in the context where some fifty per cent of the world's population currently live in urban areas and often in inequitable condition. This urban population is projected to increase to sixty per cent of all humanity in 2030 with a growing urban young, estimated to increase to sixty per cent of all urban dwellers by then. The focuses of the Sixth World Urban Forum were on urban planning, equity and prosperity, productive cities and urban mobility, energy and environment.

### *12.4 Global Land Tool Network*

The FIG President sits on the International Advisory Board (IAB) as the representative of GLTN Partners within the professional cluster and must continue to work on improving the feedback mechanisms and to strengthen working relationships and collaboration between and among partners within the professional cluster and across other clusters towards addressing emerging global challenges in the land sector.

GLTN has developed a global partnership on land issues, is a network of international organizations including FIG and individuals (collectively, partners) promoting secure land and property rights for all through the promotion of the continuum of land rights and development of pro-poor and gender appropriate land tools. GLTN continues to take a more holistic approach to land issues by improving global coordination on land.

FIG collaborates with and contribute to GLTN's objectives, primarily through collaborative and joint activities, in the past year, focusing on youth responsiveness to land, participatory and inclusive land readjustment, social tenure domain model, cost and financing of land administration services, valuation of unregistered land and engagement with grass root organisations.

FIG supported GLTN's objectives at GLTN's Roundtable with the theme "Celebrating the Recognition of a Range of Land Rights: Taking Stock and Moving Forward" at the Sixth World

Urban Forum. Through the FIG Foundation<sup>1</sup>, FIG supported GLTN's STDM pilot project in the Ugandan southwestern town of Mbale where STDM was used to capture and register the relationship to land of informal settlers. GLTN supported the 8<sup>th</sup> FIG Regional Conference with two plenary speakers and a series of joint sessions.

UN-Habitat/GLTN will be the main institutional partner for our 2013 Working Week and will be supporting a number of joint events.

#### *12.5 Food and Agriculture Organization (FAO)*

FAO was the main institutional partner at our 2012 Working Week and on 11<sup>th</sup> May 2012, the United Nations Committee on World Food Security endorsed the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. The VG (Voluntary Guidelines) outlined the principles and practices that governments can refer to when making laws and administering land, fisheries and forest rights. It is a historic breakthrough that countries have agreed to these first-ever-global tenure guidelines, particularly in the administration of tenure and specifically in areas such as the recording of tenure rights, valuation, taxation, spatial planning as well as issues and responses that is required in the recognition and protection of access and rights.

In October 2012 Technical Meeting on "Supporting the Implementation of the Voluntary Guidelines" at FAO's headquarters in Rome, FIG was part of the opening segment, to address on the responses of professionals. We observed an urgency and an immediate challenge in the building of an up-to-date, credible, comprehensive and authoritative inventory of land (and the seas) that include information on tenure, custodianship and ownership. We express our view that this could be key to the success of the voluntary guidelines and asked that we seize the opportunities provided by a newer generation of web and mobile technologies and services such as online maps and location based solutions to build this crucial information base.

FIG currently has an agreement to collaborate in an activity to support the implementation of the Voluntary Guidelines in the Pacific region with a focus on small island developing states.

#### *12.6 United Nations Office for Outer Space Affair (UNOOSA)*

The Seventh Meeting of the International Committee on Global Navigation Satellite Systems (ICG) was held in Beijing, PR China in November 2012. FIG is an Associate Member of the ICG and is represented by the Chair of FIG Commission 5, Mikael Lilje. The ICG has been formed as a result of recommendations of the UN Committee on the Peaceful Use of Outer Space (COPUOS), as ratified by the General Assembly of the UN. The International Federation of Surveyors (FIG) is an Associate Member of the ICG. The seventh meeting was attended by Matt Higgins (Past FIG Vice President) and Mikael Lilje, who is also FIG's representative to UNOOSA.

UNOOSA also supported the IAG/ICG/FIG Technical Seminar on Reference Frame in Practice by sponsoring four delegates to the event held before our 2012 Working Week in Rome.

#### *12.7 United Nations Group of Experts on Geographical Names (UNGEGN)*

Prior to the second session of UNCE-GGIM in New York in August 2012, FIG President observed the closing meeting of the Tenth United Nations Conference on Standardization of Geographical Names (UNCSGN) as well as the closing meeting of the Twenty-seventh Session of the Group of Experts on Geographical Names (UNGEGN) that was held at the UN

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<sup>1</sup> The FIG Foundation made a token financial and technical contribution to the pilot project. (The technical contribution was in the form of handheld GNSS/mapping technology and access to technical support contributed by FIG Platinum Corporate Member, Trimble Navigation to the Foundation)



Headquarters between 31<sup>st</sup> July and 10<sup>th</sup> August 2012. UNGEGN's outgoing chair, Ms. Helen Kerfoot (Canada) was recognized for her twenty years of service and contributions as Vice Chair and Chair of UNGEGN with a commendation from the United Nations Secretary General that was read out to all delegates at the closing meeting of the 27<sup>th</sup> Session of UNGEGN. The Session elected Bill Watt (Australia) as Chair with Ferjan Ormeling (Netherlands) and Naima Friha (Tunisia) as Vice Chairs.

### *12.8 United Nations Regional Cartographic Conference for Asia and the Pacific*

The President attended the 19<sup>th</sup> United Nations Regional Cartographic Conference for Asia and the Pacific (UNRCC-AP) convened at the United Nations Complex in Bangkok, Thailand in November 2012. The theme of the Conference is "UNGGIM Vision for Asia and the Pacific".

FIG submitted and presented its report with a focus on Spatial Enablement towards Managing All Information Spatially. The President also participated in a panel discussing the "UNGGIM Vision of Managing All Information Spatially for Asia and the Pacific Region", contributed and participated in the Consultation Session on Global Geodetic Reference Frame and the meeting of the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP). PCGIAP, at its meeting agree to rename to United Nations Regional Committee on Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP).

In the reporting session and the panel discussion, it was emphasized that the Profession has the competence and capacity to develop and implement the next generation of solutions that are fit-for-purpose, more affordable, are citizen centric and can be improved incrementally when appropriate. This would include spatially referencing other information including socio-economic and environmental information to derive wider societal, environmental and economic benefits that could be more effectively used in all levels of policy formulation and decision-making.

FIG will be collaborating with UN-GGIM-AP in furthering the "Sydney Agenda for Action" that has a primary focus on the small island developing states in the Pacific as these states are part of the 56 member jurisdictions of UN-GGIM-AP.

## **13. Cooperation with Sister Organizations**

### *13.1 Joint Board for the Geospatial Information Societies (JB-GIS)*

The Joint Board for the Geospatial Information Societies (JB-GIS) at its annual meeting in Melbourne in August 2012 reaffirmed Prof William Cartwright from International Cartographic Association as the Chair for a further period of one year. The Joint Board continue to improve its profile and standing, particularly within the United Nations initiatives on Global Geospatial Information Management.

The Joint Board was tasked to scope and deliver the Exchange Forum with Geospatial Industry at the recent Second High Level Forum of the United Nations Global Geospatial Information Management together with the United Nations Cartographic Section. With the theme "Future Proofing the Provision of Geoinformation: Emerging Technologies", the Exchange Forum focused on methodologies and technologies used to determine place, facilitate information capture, ensure accessibility and usefulness of place-based information. This was a pre-Forum exchange that facilitated the continued involvement of the geospatial industry at the most senior levels, discussing and demonstrating the trends and directions the industry is heading. The Exchange Forum concluded that future proofing the provision of place-based information that is critical to national, regional and international efforts and collaboration to address challenges faced by communities and nations such as food security, climate change, rapid urbanization and sustainable economic development, to name some, require an international mandate on a global reference frame, strategies to demonstrate

societal and economic returns and benefits, intensify multi-disciplinary cooperation and promoting visualization and publishing of spatially enabled information to non-specialist users via mobile devices.

### *13.2 International Association of Geodesy (IAG)*

FIG Commission 5 collaborated with IAG and the International Committee on GNSS (ICG) to realise a Technical Seminar before the 2012 Working Week in Rome on Reference Frame in Practice. 42 delegates, four of whom were sponsored by UNOOSA, attended the two-day event. The President of IAG, Prof. Chris Rizos, provided the overview of the transition from traditional to modern geodesy where he described the evolution of roles, impact of services and the importance of reference frame definition.

### *13.3 International Society for Photogrammetry and Remote Sensing (ISPRS)*

The President attended the opening segment of the XXII Congress of ISPRS hosted by SSSI, Australia in Melbourne in late August 2012. The President also made a presentation at the ISPRS/JBGIS special session on Spatially Enabling Society. FIG Commission 2, represented by the Chair of FIG YSN, also organized joint sessions with ISPRS at the Congress.

FIG is also contributing to ISPRS led project on the *Value of Geo-Information for Disaster and Risk Management* (VaLID). FIG is represented by Chair of FIG Commission 3 and the intention is to produce a publication to give evidence of the economic, humanitarian and organizational benefits which can be realized by applying geo-information to disaster and risk management based on analyses of socio-economic benefit.

## **14. Finance and Administration**

VP Bruno Razza is now the Vice President responsible for Finance and Administration will table his report separately to the General Assembly. It must be stressed that Council continue to recognize that we are in a period of economic and financial uncertainties. These economic and financial uncertainties affect the Federation's membership directly. Over the past year, FIG's financial management and administration continued to be underpinned by fiscal prudence and restraint while providing the necessary financial and administrative stability and sustainability to the Federation.

### *FIG Office*

Council have carefully considered and shaped an administration that will continue to build on the foundations that was laid, to carry and advance the Federation and its objective in the coming years and term. The FIG Administration is now wholly located within the FIG Office in Copenhagen and with the FIG Director departing later this year, the reshaped Administration now comprises:

- Ms Louise Friis-Hansen, FIG Manager;
- Ms Hanne Elster, FIG Office and Events Coordinator;
- Ms Claudia Stormoen, FIG Office and Events Coordinator;
- Ms Julie Hyun Sook Lee, FIG Development Coordinator; and
- Ms Maria Bargholz, FIG Bookkeeper.

Council is grateful to the Korean Cadastral Survey Corporation (KCSC), a key member of the Korean Confederation of Surveyors, FIG member association from the Republic of Korea for

providing and financially supporting one of its staff to undertake the role of FIG Development Coordinator.

Council records its appreciation and thanks to Iain Greenway, the Vice President responsible for finance and administration (2009 – 2012) for his engagements, efforts, services and leadership towards a sustainable administration that will continue to advance the aims and aspirations of the Federation.

### **15. Concluding Remarks**

The Council records its appreciation and thanks to all Member Associations as well as all Corporate, Affiliate and Academic Members; National Delegates and Correspondents; Chairs of Commissions, their Vice Chairs and their delegates and correspondents; Chairs of Task Forces and their members; Chairs of Networks and their members; and last but not least the FIG Administration including the FIG Director, together with the many who has in one way or another contributed to another eventful and successful FIG year.

CheeHai TEO  
4<sup>th</sup> March 2013

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

## **Report for 2012 for Work Plan 2011–2014**

### **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 and Young Surveyors 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 professionals in their work by providing them with tools and approaches to dealing with common practice issues.
- develop individuals as professionals and provide opportunities for them to continue to develop as part of the surveying community.

### **4. General**

Commission 1 will continue the work on the changing nature of surveying work and the role of the professional, work at connecting with other like professional commissions operating in regional organizations, building supporting knowledge and materials for surveying professionals. The Commission will continue its work in the Standards and Young Surveyors Networks.

In general the 2011-2014 work plan aims to:

- Share understanding on the challenges facing professional practice in a changing environment of work and within a changing world.
- Provide opportunities for an ongoing exchange of information around issues on professional standards and practice using new technologies.
- Share knowledge of professional practices around ethical delivery of services.

- Connect with other groups in member associations that promote and develop surveying professional standards and practice to share knowledge and develop possible joint activities.
- Work with Commission 2 to develop ongoing pathways of professional education that support the concept of ongoing professional development.
- Promote cooperative development opportunities and the development of new initiatives by growing knowledge from working together with other commissions on the current and future role of the surveyor, the definition of the surveyor as well as the age-structure within the profession.
- Build activities with world wide standards development and certification through the Standards Network.
- Build activities with Young Surveyors through the active support of the Young Surveyors Network.

The Commission will host the inter-commission working group to consider the current and future role of the surveyor, the definition of the surveyor as well as the age-structure within the profession. The other joint working group hosted by Commission 1 will study the technological, methodological and practical as well as legal aspects on the demarcation of international boundaries.

## **5. Report on activities for 2012**

### **Working Week; Regional Conference and Seminar Activities:**

#### **Manage the Territories, Protect the Environment, Evaluate the Cultural Heritage – Rome, Italy. May 6-10, 2012.**

I attended the working week along with Vice Chairs Robyn McCutcheon, Australia; Brian Coutts, New Zealand; Stephen Djaba; Ghana; Winnie Shu, Hong Kong, China, and Haim Srebro, Israel.

In addition I was invited and attended the first day of the Young Surveyor's Conference held in the two days before the working week. I also participated in the special event held on women in Surveying and was very impressed with the work done in this area over a number of years by the Italian Surveyors.

The Commission held its annual meeting at the FIG Working Week in Rome with about 20 people attending. The group heard about the Work Plan and received progress reports from Working Groups. They contributed ideas to the future implementation of the Plan and Commission activities. Delegates attended representing the Young Surveyors group, the Standards Network and the FIG Council.

Four technical sessions were held with joint sessions to develop professional activities across a broader sphere. They allowed the themes of a range of our working groups to be developed.

- **The Changing Work Environment of the Surveying Professional – Looking towards 2020.**

This explored the work being done by Working Group 1.1 and also 1.5 considering the role of social media in how we work.

- **Cultural Diversity of Work and the Surveying Professional** – joint session with Commission 2 and the Young Surveyors Network

This support the worldwide surveying profession analysis work being undertaken across the world and work undertaken by Robyn McCutcheon, Australia, on the status of women in the spatial industry.

- **Setting the Boundaries for Large and Small Territories** – joint session with Commission 7

This will continue the work from the last working week for Working Group 1.4. Vice Chair Haim Srebro, Israel, has progressed the FIG publication on boundary issues and is close to having this completed.

- **Professional Work Environment – Associations, Ethics and Practice**

This is a similar session to the very successful one held in Morocco and covers a wide range of issues across countries. It should is a good way to gain ideas from the expertise that exists in our profession from across the world.

The joint work with YSN provided a good opportunity to discuss professional issues that are complex and affect a number of aspects of professional life

### **8th FIG Regional Conference – Surveying Towards Sustainable Development, Montevideo, Uruguay, November 26-29, 2012.**

I attended the conference. A joint session was held with the Young Surveyors and Commission 1 that was very well attended. It generated lots of interest and discussion.

The Young Surveyors had a number of sessions with UN-Habitat /FIG on Youth Responsiveness in the Land Sector and I attended on invitation as a Commission 1 delegate.

### **Working Week– Abuja, Nigeria. May 6-10, 2013.**

A number of very good papers and abstracts were received and this will allow the Commission to run some informative technical sessions. It is very pleasing to be able to work across Commissions to tackle some of the more complex issues and questions facing the profession.

There are number of technical sessions planned. Once again there will be some joint sessions to develop professional activities across a broader sphere. They will allow the themes of a range of our working groups to be developed.

### **The Changing Role of the Surveying Professional – Looking towards 2020, Melbourne, Australia September 11. 2013**

This will explore the work being done by Working Group 1.1 and also 1.5 considering the role of social media in how we work.

The workshop in Melbourne on the Changing Role of the Surveying Professional to be held on 11 September 2013 will have a social media component to allow for ideas and views to be captured prior to the workshop. This will be a one day event and will be attached to the local SSSI Victorian Summit. The information captured through the social media discussion will be used to inform the workshop and create an online community to participate in the discussion around the ideas and the outcomes of the workshop.

A working paper and / or a range of papers around discussion questions will be created– with the view of discussing and refining these at the September 2013 workshop in Melbourne Australia. An approach will be used that includes a selected group of people to represent all areas of the profession and include young surveyors and some from related industries.

The Melbourne event would generate the material to develop a formal discussion paper to engage widely across members and industry to be launched in the working week in 2014 in Kuala Lumpur.

### **Speaking Engagements**

Robyn McCutcheon and I will attend the Surveying & Spatial Sciences Conference 15-19 April 2013, Canberra. Robyn is holding a Women in Spatial forum as part of this event and we will both be speaking on the day.

### **Special Achievements**

Robyn McCutcheon, was recognized in the 2012 Annual Spatial Excellence Awards held in September for her work for the profession.

### **General Commission Activities**

**Iain Greenway** who has been a great contributor to Commission 1 and FIG over many years has finished his term as Vice President. He has been instrumental in creating some of the major initiatives to come out of Commission 1 including the Standards Network. He has left a great legacy and he will be greatly missed.

**LinkedIn sub group** - Work progressed with building Commission 1 membership and its activity program. Robyn McCutcheon created a Commission 1 group on LinkedIn as a sub group to the FIG group. There are regular messages posted on this group and some very useful discussions have been held on Commission 1 work through this and other LinkedIn groups.

### **Commission officer news –**

- Brian Coutts has moved to be a Vice Chair in Working Group 1.1. This leaves a vacancy in Working Group 1.2 that has yet to be filled. However an offer has been made to a Commission 1 national delegate to fill this role.
- The work Robyn McCutcheon is doing can be seen to be part of the activity of Working Group 1.3 as it is about tackling issues of concern for the larger professional

community and as she outlined provides information of interest for other Commissions especially Commission 2 and the YSN.

- Curtis Sumner, USA has had a change of work and is no longer able to be part of working group 1.1.
- Jan Tischer, Germany is interested in co-chairing Working Group 1.5.
- A number of young surveyor's are working with Commission 1's joint activities with the Young Surveyor's group and a number have expressed interest in holding office and/or participating in Working Groups.

## 6. Working groups

### **Working Group 1.1 - Changing Nature of Work and the Role of a Surveyor (Joint Working Group with Commission 2 )**

#### Policy issues:

- To consider the current and future role of the surveyor
- To review the definition of the surveyor
- To study the age-structure within the surveying profession and prepare proposals how to respond to the competition to market the profession for new generations
- Surveying professionals work in a variety of work environments and are required to respond to constant changes 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 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 on change.

#### Co-chairs:

Winnie Shiu, Hong Kong SAR, China, e-mail: [wshiu@hkis.org.hk](mailto:wshiu@hkis.org.hk)

Brian Coutts, New Zealand, e-mail: [brian.coutts@otago.ac.nz](mailto:brian.coutts@otago.ac.nz)

#### Specific project(s)

- To consider the current and future role of the surveyor
- To review the definition of the surveyor
- Age structural survey within FIG (implemented by Cecilia Lindén, Sweden)
- Prepare proposals how to respond to the competition to market the profession for new generations

#### Workshop(s)

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

#### Publication(s)

- To be determined

#### Timetable

- Final report at the FIG Congress 2014



## **Report for 2012 –**

Papers produced for Working Weeks on this issue. Brian Coutts has moved into this Working Group and is progressing with his FIG and academic work that is focusing on the land surveying aspect of this topic.

Cecilia Lindén age structural survey project within FIG progressing well and will provide valuable information for the work of this group.

Sadly Curtis Sumner is not able to participate due to a change in his work arrangements

## **Working Group 1.2 – Regulation approaches that provide secure tenure**

### Policy issues

- Regulation is a way to develop secure land tenure and through this the alleviation of poverty through one of the basic principles of a secure tenure – integrity of the system and the control (elimination ) of corruption.
- Reviewing practice around the world provides an opportunity for professionals to share ideas on what has been done in various countries, consider how it was done and learn from others experiences of implementing regulation..

### Chair:

- Vacancy to be filled. Request now out to a national delegate to undertake work in this group.

### Specific project(s)

- Develop case studies on how countries operate legislative systems that monitor the surveying profession.
- Review aspects of regulation, survey controls systems, the role of educational and professional development systems to develop practice examples.

### Workshop(s)

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

### Publication(s)

- Publish case studies on regulation approaches around the world.

### Timetable

- Final report at the FIG Congress 2014

## **Report for 2012 –**

Brian Coutts has moved into Working Group 1.1 and a new Vice Chair is being sought.

There is lots of interest in this topic being generated by members. An approach has been made to a national Commission 1 delegate to chair this group.

## **Working Group 1.3 – Community of Practice on Professional Standards and Practice**

### Policy issues

- All professionals face professional standards and practice challenges and find ways to respond effectively. Anyone facing a problem or issues can be certain that somewhere in the world, someone has solved a problem that might be very similar. Developing a way to share practice issues using Web 2 technologies would provide a way for surveying professionals to develop a place where they can share the knowledge of others in dealing with current issues. This will be supplemented by professional standards and practice issues workshops held at each Working Week and the Regional Conference. Through this regular updates on emerging issues around the world can be obtained.
- There are regional and other structures in place where members also interested and committed to issues around professional standards and practice for surveying professionals. These groups develop ideas and produce papers and possibly publications that are part of a world wide knowledge bank that FIG could access. Building links to regional and world structures for surveying professionals that focus on issues around professional standards and practice will expand our understanding and access to knowledge and resources.

#### Chair:

- Stephen Djaba, Ghana, e-mail: [Stephen@ghana.com](mailto:Stephen@ghana.com)

#### Specific project(s)

- Linking worldwide with professional groups that focus on issues around professional standards and practice.
- Develop a knowledge management concept for FIG as a professional organization.

#### Workshop(s)

- Participation in FIG Working Weeks and other major Commission events with dedicated technical sessions and/or workshops as appropriate.
- Professional Standards and Practice Issues workshops at each FIG Working Week and the Regional Conference.

#### Publication(s)

- To be determined.

#### Timetable

- Final report at the FIG Congress 2014

#### **Report for 2012 –**

Robyn McCutcheon's work on the Commission 1 LinkedIn discussion group and the development of the analysis of issues across FIG based on past conferences and Working Weeks has provided a lot of useful research to develop a common shared interest around the lack of balance around age and gender profiles in the profession.

#### **Working Group 1.4 – International Boundary Settlement and Demarcation (Joint Working Group with Commissions 4, 5 and 7)**

#### Policy issues

- To deal with theoretical, methodological and some legal aspects and analysis of a few practical cases in international and national boundaries
- To prepare an FIG publication on international boundary settlement and demarcation all over the world.

#### Co-chairs:

- Dr. Haim Srebro, Israel, e-mail: [haim@mapi.gov.il](mailto:haim@mapi.gov.il)
- Dr. Bill Robertson, New Zealand, email: [billrobertson@xtra.co.nz](mailto:billrobertson@xtra.co.nz)

#### Workshop(s)

- Participation in FIG Working Weeks and other major Commission events with dedicated technical sessions as appropriate.

#### Publication(s)

- FIG publication on international boundary settlement and demarcation all over the world.

#### Timetable

- Final report at the FIG Congress 2014

#### **Report for 2012 –**

This group has worked very efficiently and Haim Srebro has reported they have a draft publication for FIG that will move to the next stage for publishing.

#### **Working Group 1.5 – Social Media and Surveyors (Joint Working Group with the Young Surveyors Network)**

#### Policy issues

- Survey and recommendations on the use of social media (Facebook, LinkedIn, YouTube, Twitter etc.) in surveying community for member associations
- Raise the understanding of new communication tools within surveying community
- Prepare proposals on using social media in marketing the profession and reaching new generations
- Initiate opportunities for participating in social media at FIG events using skill sharing with Young Surveyors

#### Chair

- Interim Chair, Leonie Newnham, Australia, e-mail: [Leonie.Newnham@dse.vic.gov.au](mailto:Leonie.Newnham@dse.vic.gov.au)

#### Workshop(s)

- Participation in FIG Working Weeks and other major FIG events with dedicated technical sessions and/or workshops as appropriate. Test online communication for out-reaching surveyors that do not normally attend FIG events.

#### Publication(s)

- FIG guidelines for member associations on the use of social media.

#### Timetable

- Final report at the FIG Congress 2014

### **Report for 2012 –**

A paper on this topic was given at Rome. There seems to be a lot of interest from across the world and some emerging experts or local champions in this area. Commission 1 work with the LinkedIn discussion group is a way of developing further skills and ideas on how this might work.

Jan Tischer from Germany has expressed interest in co-chairing this working group.

The workshop in Melbourne on the Changing Role of the Surveying Professional to be held on 11 September 2013 will have a social media component to allow for ideas and views to be captured prior to the workshop.

### **7. Co-operation with Other Commissions and organisations**

Commission 1 is co-operating with the two FIG networks on standards and young surveyors.

## **8. Commission Officers**

### **Commission Chair and Initial Co-Chair of WG 1.5**

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### **Vice Chair of Administration and Communication**

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**Vice-Chair and Chair of WG 1.3**

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**Vice-Chair and Co-Chair of WG 1.4**

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**Vice-Chair and Co-Chair of WG 1.4**

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February 2012

## Commission 2 Report

### 2012 Activities

Steven Frank, Chair

Commission 2 had a very good turnout in Rome with 4 technical sessions featuring over 20 presentations. The sessions were well attended and were followed by good discussions on the topics presented.

The Commission 2 workshop “Global Trends and Convergence in Surveying Education” was hosted by “Global Trends and Convergence in Surveying Education” and was held September 26 – 28, 2012. Presentations were made on professional surveying education in Russia and around the world. Conference hosts Irina Fartukova and Vladimir Golubev were ably assisted by the surveying faculty and students of the university. Those unable to go to Moscow for the workshop were able to attend over the Internet. Internet attendees were able to ask questions and contribute to discussion via email. All attendees had computer monitors with which to interact with both actual and virtual workshop people.

A wrap-up dinner was held in a classic Russian restaurant with a variety of foods to sample. Dinner was followed by dancing and singing. The workshop ended with a one day trip to Star City, the Russian cosmonaut training center where workshop delegates were given a tour of the facilities.



Moscow workshop host Irina Fartukova and FIG Commission 2 Chair Steve Frank begin the Commission 2 workshop.



Moscow workshop attendees tour Star City.

Commission 2 activities at the FIG Regional conference in Montevideo featured 2 sessions with about 10 presentations. Several presentations on education in Uruguay were well received and invited much discussion.



Stig Enemark gives a Commission 2 presentation in Montevideo.



# Commission 3

## Spatial Information Management

### Annual Report 2012

FIG General Assembly, May 2013, Abuja, Nigeria

#### General

Commission 3 2011-2014 work-plan is based on several concrete terms of reference:

- Management of spatial information concerned with land and property (data, tools, policies, standards, and regulations);
- Spatial data infrastructure (SDI) – collection technologies, integration processes, maintenance, visualization, standardization, and dissemination;
- Management and dissemination of knowledge and skills for SIM (Spatial Information Management);
- Impacts on organizational structure, business models, Public-Private-Partnerships, professional practice, and administration; and,
- Management of spatial information in supporting good governance.

Within these terms of reference Commission 3 2011-2014 work-plan consists of the following main mission statements, namely:

- Increasing awareness about successful and qualitative SIM approaches and achievements within the “e-Society” framework by demonstrating good practice, including availability, reliability, efficiency, and accessibility of spatial information for better decision making and processes;
- Support of spatial information and SIM-tools usage by surveyors and by all decision-making participants to serve the goals of good governance;
- Share good practice on managerial processes and infrastructure required for data handling, using of information and knowledge distribution;
- 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 standards committees; and,
- Encourage the use of spatial information within e-government and e-commerce.

Based on these terms of reference and missions, Commission 3 Working Groups focus on the contribution of spatial information for sustainable development. Commission 3 continues to address the phenomenon of rapid urbanization and its impacts with emphasizing on the identification of spatial tools and general principles, norms and standards designed for good governance whilst using reliable and accessible spatial information.

Commission 3 delegates have expressed their strong interest in organizing annual meetings and workshops while concentrating on the specifically identified needs/topics. As in last couple of years, Commission 3 continued the peer review option at its own symposia, and in addition to publishing the accepted peer reviewed papers in special issues of international professional journals (currently in the Survey Review Journal and the Surveying and Land Information Science Journal).

## **Organization and Working Groups**

Commission Chair: Prof. Dr. Yerach Doytsher

### Administration and Communication

Vice-Chair for Administration (Communication): Dr. Sagi Dalyot

Vice-Chair for Administration (Events): Mr. Gerasimos Apostolatos

### Working Groups

Vice-Chair and Chair of WG 3.1: Prof. Dr. Hartmut Mueller

Vice-Chair and Chair of WG 3.2: Prof. Dr. Ioannidis Charalabos

Vice-Chair and Chair of WG 3.3: Prof. Dr. Peter van Oosterom

## **Working Group 3.1 – SIM Infrastructure**

Chair: Prof. Dr. Hartmut Mueller

WG 3.1 focuses on SIM policy issues; within the information society domain SIM serves as an integrator of components designed for Spatial Information Infrastructure, mainly in urban areas. SIM is a facilitator for IT-based services used by planners, administrators as well as by the public. Thus, the general topics of the WG 3.1 activity involve: NSDI / GSDI - Spatial Data and Information Infrastructure; modelling and geo-visualization; legal aspects related to SIM; and, SIM in respect to LBS.

The national delegates and members of WG 3.1 actively participated in the FIGWW'2012 held on May in Rome, Italy, in the 8th FIG Regional Conference, held on November in Montevideo, Uruguay, and in the Annual Commission 3 workshop held on December in Athens, Greece (see more details below).

The activity of WG 3.1 is oriented to a FIG-publication on guidelines to establish an efficient SIM Infrastructure in urban areas by addressing legal, institutional and technical issues (planned as a joint publication with WG 3.2 to be published at the FIG Congress 2014).

## **Working Group 3.2 – Technical Aspects of SIM**

Chair: Prof. Dr. Ioannidis Charalabos

WG 3.2 focuses on SIM technical issues. New tools, techniques and policies are required to baseline and integrate the social, economic and environmental factors associated with spatially managing urban areas in general, and cities/megacities in particular. Technical aspects are concerned with: 2D, 3D, and 4D spatial data collection and management; integration and update of spatial data-bases; standardization of information and metadata; and, visualization of information.

The national delegates and members of WG 3.2 actively participated in the FIGWW'2012 held on May in Rome, Italy, in the 8th FIG Regional Conference, held on November in Montevideo, Uruguay, and in the Annual Commission 3 workshop held on December in Athens, Greece (see more details below).

Together with WG 3.1, the activity of WG 3.2 is oriented to a joint FIG-publication on guidelines to establish an efficient SIM infrastructure in urban areas addressing legal, institutional and technical issues (to be published at the FIG Congress 2014).

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

Chair: Prof. Dr. Peter van Oosterom

WG 3.3 focuses on 3D Cadastres issues. The increasing complexity of infrastructures and densely built-up areas requires a proper registration of the legal status (private and public), which can be provided to a limited extent by the existing 2D-cadastral registrations. An on-going main objective of WG 3.3 is to establish an operational SIM infrastructure framework for 3D-Cadastres. The operational aspect addresses: a common understanding of the terms and issues; and, a description of issues that have to be considered before 3D-cadastres can be implemented. Topics dealt within the activity of WG 3.3 are: 3D-Cadastre - models, SDI and time; 3D-Cadastre and its usability; and, analysing alternatives for the realization of a 3D cadastre model. An important work has been done by the WG in preparing a very detailed questionnaire and gathering information regarding the status of 3D Cadastre in many different countries worldwide. More detailed information can be found on the WG 3.3 website <http://www.gdmc.nl/3DCadastres/>

The activity of WG 3.3 is oriented, inter alia, to a FIG-publication on guidelines to establish 3D-cadastres (a “Primer on 3D-Cadastres”), addressing legal, institutional and technical issues (to be published at the FIG Congress 2014).

### **Events**

In 2012 Commission 3 has been active in 4 international events:

**(a) A very active participation in the annual FIGWW 2012 conference (May 6-10), Rome, Italy with 23 technical sessions:**

- First group of 7 joint technical sessions
- TS01D: Spatial Data Infrastructure

- TS02H: Technical Aspects of Spatial Information I
- TS02M: Cartography and Mapping Solutions
- TS05E: Technical Aspects of Spatial Information II
- TS07D: GIS Applications
- TS08H: 3D Principles and Technology
- TS09E: GIS Algorithms

Second group of 6 joint technical sessions with Commission 7

- TS03B: Volunteered Geographic Information
- TS04C: Cadastre and Spatial Information
- TS05A: 3D and 4D Cadastre I
- TS06B: e-Governance
- TS06F: 3D and 4D Cadastre II
- TS07B: Cadastral and Land Administration Perspectives

And a third group of 10 joint technical sessions with other Commissions (8, 7/8, 5/6, and 10)

- TS08I: Low Cost Surveying and Mapping
- TS03E: Planning Policies and Procedures II
- TS05D: City Development and Planning
- TS05H: Remote Sensing I
- TS06I: Remote Sensing II
- TS07G: Planning, Environment and Water Management
- TS08J: Building Information Modelling - BIM
- TS08M: Surveying and Cultural Heritage I
- TS09C: Surveying and Cultural Heritage II
- TS09F: Risk Management in Planning and GIS

The number of presentations was 3 to 5 per session, which brings it to a total figure of close to 100 presentations in Commission 3 sessions. More detailed information can be found on [http://www.fig.net/fig2012/technical\\_program.htm](http://www.fig.net/fig2012/technical_program.htm)

**(b) Participation in the 8th FIG Regional Conference, Montevideo, Uruguay, 26-29 November 2012 with 4 technical sessions.**

- TS01D: Data and Land information Systems
- TS02C: SDI-Spatial Data Infrastructure
- TS04D: Calculation and Visualization of Geodata
- TS08D: Cadastre and Land Information Systems

More detailed information can be found on

<http://www.fig.net/pub/uruguay/techprog.htm>

**(c) The annual 2012 FIG Commission 3 workshop/conference (December 10-14), Athens, Greece, jointly with FIG Task Force on Property and Housing, and 2012 UNECE WPLA workshop on "Spatial Information and Informal Development, Property and Housing". Close to 100 participants arriving from more than 25 countries worldwide have attended 16 technical sessions:**

- TS1: Spatial Data Infrastructures
- TS2: Spatial Processing
- TS3: Data Modelling

- TS4: Spatial Planning and Real Estate Properties
- TS5: Hellenic Cadastre and Spatial Planning Action Plan
- TS6: The Hellenic Cadastre
- TS7: Technical Aspects I
- TS8: Technical Aspects II
- TS9: Legalization Policies
- TS10: Legalization of Informal Development
- TS11: Experience from Legalization Projects I
- TS 12: Experience from Legalization Projects II
- TS13: The Economic Crisis, Property and Housing
- TS14: Informal Development and Property Markets
- TS15: Property and Housing Aspects
- TS16: Institutional and Technical Aspects

The total number of presentations at the event was more than 70. More detailed information can be found on the conference website:

<https://sites.google.com/site/figcom3athens2012/topics>

**(d) 3<sup>rd</sup> International Workshop on 3D Cadastres – jointly with Commission 7 (25-26 October 2012), Shenzhen, China, with 6 technical sessions:**

- Session 1: Legal Aspects
- Session 2: Systems and Applications
- Session 3: Modelling
- Session 4: Organizational Aspects
- Session 5: Visualization
- Session 6: Technical Aspects

The total number of presentations at the event was more than 20. More detailed information can be found on the workshop website:

<http://www.cadastre2012.org/eProgramme.aspx>

### **Planned Events for 2013**

**Commission 3 will participate and/or organize 2 conferences and workshops:**

- (a) Will participate in the annual FIGWW 2013 conference (May 6-10), Abuja, Nigeria.
- (c) Will organize the Annual FIG Commission 3 workshop/conference, Skopje, Macedonia, 6-9 November 2013 (jointly with FIG Task Force on Property and Housing and the South-East European Research Association on Geo Sciences). A call for participation and submission of papers will be published shortly.

Prof. Dr. Yerach Doytscher, Chair  
FIG Commission 3

February 2013



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

## **FIG COMMISSION 4**

### **Hydrography**

### **ANNUAL REPORT – 2012**

*Dr. Michael Sutherland (Canada, and Trinidad and Tobago)*

*Chair (2011-2014), Commission 4, International Federation of Surveyors (FIG)*

*February 2013*

The end of the year 2012 marked the end of the 2<sup>nd</sup> year of Commission 4's 2011-2014 term. Some events have affected the Commission during 2012:

- The now former Chair of Working Group Working Group 4.3 *Multi-Sensor Systems for Hydrographic Applications* died tragically on Friday, 31st August, 2012;
- The current Chair of Work Group 4.1 *Ellipsoidally Referenced Hydrographic Surveys (ERS)* retired from his fulltime job and, though still committed to Commission 4, has understandably begun a new phase in his life.

Regardless, the Commission continues to pursue significant contributions to hydrography and hydrography-related activities. Specific contributions and achievements for 2011 are outlined in this report.

### **ACTIVITIES OF THE CHAIR**

During 2012, the Chair of Commission 4 assisted in organizing sessions at FIG2012 (Rome, Italy) and the 8<sup>th</sup> FIG Regional Conference in Montevideo, Uruguay, and FIG2013 (Abuja, Nigeria), among the other duties of the position. In 2012, the Chair was specifically invited to speak at certain international events, and gave the following Commission 4 relevant presentations:

- Sutherland M. (2012). "Boundaries and Governance in Coastal and Marine Spaces". Special invited presentation, European Union Permanent Committee on Cadastre (PCC), Cyprus, November 29-30.
- Sutherland M. (2012). "Spatially Enabled Governance". Special invited presentation, UNRCC-PCGIAP International Symposium on Spatially Enabled Government and Society, Kuala Lumpur, Malaysia, February 15-16.

### **WORKING GROUPS**

#### **Work Group 4.1 Ellipsoidally Referenced Hydrographic Surveys (ERS)**

The objectives of Commission 4.1 for 2011-14 included:

1. Study and report on the technical aspects of using GNSS to vertically reference hydrographic surveys to the ellipsoid;
2. Catalog the methods used to conduct a vertical datum transformation from the ellipsoid to vertical datums used for hydrographic and offshore surveying;
3. Develop uncertainty models for both of the above.

Work is progressing on writing and editing the proposed technical report on ERS surveys. The Chair of this working – Mr. Jerry Mills – now retired from his fulltime job, is in communication with his replacement on the technical report, Mr. Corey Allen. A first draft has been completed and is in further development. The intention is to complete the paper by early 2014.

Next Steps:

1. Continue to engage the international hydrographic community in identifying and refining "best practices" for (a) the use of GNSS in vertical positioning relative to the ellipsoid for hydrographic surveying, (b) the development of vertical separation models and (c) the determination of uncertainty models for both of the above.

2. Produce a publication on the above “best practices” and make a proposal to the International Hydrographic Organization (IHO) to include the information in this publication in the IHO Manual on Hydrography.

#### **Work Group 4.2 Standards and Guidelines for Hydrography**

This working group’s aim is to:

- 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.

The working group continues to seek to:

- Promote the use of standards and guidelines to the surveying community;
- Review Standards coming from ISO TC211 (and other 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 and other Manuals of Hydrography in conjunction with WG 4.3.

WG activity in 2012 was still limited to tasks undertaken by the chair on a Canadian national level where priorities called for efforts related to Standards and Guidelines to be directed closer to home.

#### **Working Group 4.3 Multi-Sensor Systems for Hydrographic Applications**

The stated foci of this working group are to:

- Assist in the development of technical guidelines for sensor integration (best practises);
- Cooperate with sister organizations and other appropriate bodies (e.g., IHO, IMO);
- Cooperate with other FIG Commissions.

Stated specific objectives are to:

- Liaise with working group 4.2 to upholding the standards of hydrography;
- Report on the development, possibilities and limitations of new technologies;
- Organize a Symposium with the working title "Integrating Sensors in Hydrography";
- Assist in the development of technical guidelines for sensor integration.

In 2011 it was reported by the now deceased Chair as follows:

*A questionnaire was distributed in summer 2010. The main goals were to contact with interested persons and establish an efficient working group. Responses to the questionnaire didn't meet expectations but the working group is active and is communicating via email and ftp. An ftp website for the distribution of information was announced to collect the description of problems, international, national and institutional standards and presentations/papers regarding the use of multi-sensor systems. New approaches shall be taken into account.*

*A new German report was distributed which deals with uncertainties in Hydrography, implemented as part of a new quality management system of the German water- and shipping authorities. Presentations and papers can be expected in the near future. Several discussions clarified that one focus of the working group shall lie on the positioning, attitude determination and calibration of MBES and MLS onboard (patch test).*

*Next steps:*

- *The ftp site has to be filled up with information, published to interested user and later be switched to a website.*
- *The IHO Manual will be investigated regarding possible additions.*

- *Beside the FIG Working Week in Rome some aspects of multi-sensor systems for hydrographic applications will probably be presented at the Hydro12 conference in Rotterdam (NL) in November 2012 (hydro12.com).*

The work was in continual development in 2012 but, sadly, Dr. Volker Böder died tragically on Friday, 31st August, 2012. The Passing of Professor Dr. Volker Böder was reported in *Hydro International* as follows:



*It is with great sadness that we recognise the passing on Friday, 31st August, 2012 of Professor Dr. Volker Böder of HafenCity University Hamburg (HCU), Germany and, until his passing, Vice-Chair of Commission 4, and Chair of Working Group 4.3 Multi-Sensor Systems for Hydrographic Applications. Ironically, Volker's demise was due to a shipping accident that occurred on the River Rhine close to Basel (on the German-Swiss border). Volker was a very active member of Commission 4 who was working on a publication related to the development of technical guidelines for sensor integration (best practises). Although he had a busy life outside of FIG and Commission 4, he was very supportive of the Commission's work and objectives. I found him always pleasant, soft spoken, respectful and dependable. He shall be very much missed as a colleague and friend.*

Commission 4 will meet in Abuja, Nigeria at FIG 2013 to discuss the future of this Working Group.

#### **Work Group 4.4 Maritime and Marine Spatial Information Management**

This working group's aim is to participate in co-operation with 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. Specifically the working group aims to:

- 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.

This working group (specifically the Chair) has directly been involved in the following activities:

- Conference Chair, 5<sup>th</sup> International Conference on Geoinformation Technologies for Natural Disaster Management, Mississauga, Ontario, 9-11 October 2013.
- International Scientific Committee , 26th ICC 2013, 25-30 August 2013, Dresden, Germany
- Chair, Scientific Committee, 4th International Conference on Earth Observation of Global Change (EOGC2013), 5-7 June 2013, Toronto, Ontario, Canada
- Co-Chair, 8<sup>th</sup> International Symposium on Mobile Mapping Technology (MMT2013), Tainan, Taiwan, 1-3 May 2013.



- Scientific Committee, International Workshop on the Role of Geomatics in Hydrogeological Risk, 27-28 February 2013, Padua, Italy
- Conference Chair, International Conference on Computer Vision in Remote Sensing, 16-18 December 2012, Xiamen, China
- Scientific Committee, 8th International Conference on Geo-information for Disaster Management (Gi4DM 2012), 13-14 December 2012, Enschede, The Netherlands
- Chair, Scientific Committee, International Symposium on Geomatics for Integrated Water Resources Management (GIWRM2012), 19-21 October 2012, Lanzhou, Gansu, China
- International Advisory Board, International Workshop on Laser Scanning Technologies and Applications (LSTA2012), 28 March 2012, Kuala Lumpur, Malaysia

#### Related literature in 2012:

- [1] Kwon, T.-J., Li, J., and Wong, A., 2013. ETVOS: an enhanced total variation optimization segmentation approach for SAR sea-ice image segmentation, *IEEE Transactions on Geoscience and Remote Sensing*, doi:10.1109/TGRS.2012.2205259 (IEEE SCI/EI).
- [2] Chen, J., Mao, Z., Philpot, B., Li, J., and Pan, D., 2013. Detecting changes in high-resolution satellite coastal imagery using an image object detection approach, *International Journal of Remote Sensing*, 34(7): 2454-2469 (Taylor & Francis: SCI).
- [3] Sun, Z., Wang, C., Li, P., Wang, H., and Li, J., 2012. Hyperspectral image classification with SVM-based domain adaption classifiers, *Proceedings of CVRS2012*, Xiamen, China, 16-18 December, 4pp (IEEE: EI).
- [4] Li, J. and Kwon, T.-J. 2012. Improved capability for marine oil spill detection using new generation of SAR imaging satellites, *ISPRS 2012 Congress*, Melbourne, Australia, 25 August- 1 September, Oral Presentation.
- [5] Chen, H.Y., Xu, S.Q., Sun, Q., Chen, L.Q. and Li, J., 2012. Retrieval atmospheric W2 profile from underway data and AIRS in the southern ocean, *Journal of Remote Sensing*, in press.
- [6] Shu, Y., Li, J. and Xie, S., 2012. SAR image segmentation using a novel Markov random field model with label cost prior, *ASPRS Annual Conference*, Sacramento, California, March 19-23.
- [7] Yang, X. and Li, J. (eds.), 2012. *Advances in Mapping from Remote Sensor Imagery: Techniques and Applications*, Taylor & Francis, CRC Press, ISBN 978-1-43-987458-5, 444pp.
- [8] Kwon, T.-J. and Li, J., 2012. Mapping marine oil spills from space, In Yang, X. and Li, J. (eds.) *Advances in Mapping from Remote Sensor Imagery: Techniques and Applications*, Taylor & Francis.
- [9] Chen, J., Li, J., Zhu, Q. and Mao, Z., 2012. Edge-guided multiscale segmentation of satellite multispectral imagery, *IEEE Transactions on Geoscience and Remote Sensing*, 50(11): 4513 - 4520 (IEEE: SCI/EI).

#### **Work Group 4.5 Hydrography in Africa**

The stated foci of this working group are to:

- Raise the awareness of hydrography in all African countries.
- Make available its potentials to various countries (Africa).
- Enunciate its potentials as a vital component and catalyst to nation building.
- Promote free exchange of information among all those engaged in Hydrography.

Stated specific objectives are to:

- Organize seminars and workshops on the potentials of hydrography in several countries.
- Promote recognition of hydrography by organizing charity walks.
- Communicate the activities of Commission 4 and other FIG events to African member countries.
- Liaise with working group 4.2 to uphold the standards of hydrography.

In 2012 this working group continued engaging stakeholders with the aim of increasing recognition in Africa of the important contributions of hydrography to society's objectives, and to ensure that this discipline receives the public funding and support that it deserves.

In October 2012, the Chair of this working group – Commission Chair-Elect Mrs. Angela Etuonovbe – visited as an attendee at the FIG Africa Task Force meeting. After the workshop a visit was made to the Lands Ministry where meetings were held with the Director and other top government officials. At another meeting a presentation was made on the economic benefit of hydrography to a nation. This activity has stimulated interest among the government officials.

#### **Future Plans**

There are plans for further visits to Ghana, and for a visit to Kenya.

### **CONFERENCES, MEETINGS, WORKSHOPS AND SYMPOSIA**

#### **FIG Working Week 2012, Rome, Italy**

Commission 4 fully participated in the International Federation of Surveyor's Working Week 2012 held in Rome, Italy between May 6<sup>th</sup> and 11<sup>th</sup>. Commission 4 technical sessions included themes such as Hydrographic Surveying, Hydrographic Technologies, Hydrography Development and Vertical Reference Systems (held jointly with Commission 5). The sessions were well attended with some sessions full to capacity.



The Commission remains active by all accounts. The full report to the FIG 2012 General Assembly is to be found on the Commission's appropriate website. Discussions during a Commission meeting held at FIG 2012 focussed on a number of activities underway by working groups and members, including but not limited to:

- The use of GNSS to vertically reference hydrographic surveys to the ellipsoid;
- The development of multi-sensor systems for hydrographic applications;
- The development of awareness of the importance of hydrography, among key decision makers in Africa;
- Continued involvement in FIG Task Forces (related to Africa, and climate change);
- Continued development and strengthening of FIG/Commission 4 relationship with the IHO (attendance at meeting and conferences);

- Continued involvement in the joint FIG/IHO/ICA International Board for the Standards of Competence of Hydrographic Surveyors and Nautical Cartographers (IBSC).



It is expected that publications will eventually ensue from some of these activities. Ms. Angela Etuonovbe (Nigeria) was confirmed as Chair-Elect, Commission 4 for 2012-2014.



Mrs. Angela Etuonovbe (Nigeria)  
Chair-Elect, Commission 4

**UNRCC – PCGIAP INTERNATIONAL SYMPOSIUM ON SPATIALLY ENABLED GOVERNMENT AND SOCIETY  
14th - 16th February 2012, Kuala Lumpur, Malaysia**

The International Symposium on Spatially Enabled Government and Society, hosted by the Department of Survey and Mapping, Ministry of Natural Resources and Environment Malaysia was held at the Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia over the period February 14 – 16, 2012. The Symposium was sponsored by the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) with support from the International Federation of Surveyors (FIG), the Global Spatial Data Infrastructure Association (GSDI), The International Cartographic Association (ICA) and the International Society for Photogrammetry & Remote Sensing (ISPRS). The main symposium (15th and 16th February) was preceded by an Expert Group Meeting on Spatially Enabled Government & Society held on 14th February and in which FIG representatives played active roles. FIG was represented at the expert meeting and main symposium by CheeHai TEO (President), Professor Ing. Rudolf Staiger (Vice President), Dr Michael Sutherland (Chair, Commission 4), Dr Daniel Steudler (Chair, FIG Task Force on Spatially Enabled Society), Peter Laarakker (Dutch Kadaster), Enrico Rispoli (CNGGeL Italy) and Brent Jones (ESRI).

The symposium sought to emphasise the importance of spatial information to governance decision making processes that support the pursuit of economic, social, political and environmental objectives. Many countries including Malaysia, Japan, Korea, The Netherlands, Singapore, Brunei, Trinidad and Tobago, Iran, Australia, Switzerland, and Hong Kong made presentations. Representatives from institutions and organizations such as FIG, ICA, Trimble, ESRI and the World Bank also made presentations. Commission 4 Chair, Dr. Michael Sutherland presented on Spatially Enabled Governance and underscored a number of important points:

- The historic divisionist view of the world is the root cause for the development of silo institutions that struggle to share information needed to make better governance decisions;
- Governance is best approached from a holistic point of view;
- A change of mentality from tessellations of reality to systems thinking is vital in designing information systems to support holistic governance;
- Spatial information is a key contributor to the governance decision making process;
- The need for spatial enablement of government and society has been recognised for decades, especially among geomatics professionals;
- Spatial enablement also relates to the marine environment.



Many other symposium speakers presented various local institutional, technological and social barriers to spatial enablement that had to be overcome, but the foci of their presentations were mostly land-related. Hydrographic and other marine and maritime spatial information are very important components of the spatial enablement of government and society, and Commission 4 must rise to the challenge.

#### **The 8th Regional Conference, Montevideo, Uruguay, November 2012.**

This was the first event in South America and Commission 4 had one key technical session, TS07D – Hydrography, chaired by Gordon Johnston. One paper was not presented due to the absence of the speaker; otherwise it was a full session and the audience of some 30 persons sat quietly and asked many questions causing the session to overrun its allotted time. The room had simultaneous translation between Spanish and English which was very necessary and a complete success. The contacts made at the event will be added to the Commission 4 contact list for distribution of notices and promotions etc.

## **IHO - IMO - IOC – WMO – IALA - IAEA 5th Capacity Building Coordination Meeting, December 2012**

The IHO - IMO - IOC – WMO – IALA - IAEA held their 6th Capacity Building Coordination Meeting at IOC Project Office for IODE, Oostende, Belgium, 10 December 2012. Commission 4 was in attendance and was represented by Vice-Chair Administration and Communication, Mr. Gordon Johnston, Commission 4's de facto liaison to IHO.

Commission 4's participation represents evidence of its commitment to cooperate with sister organizations, outlined in section 6 of its work plan. The organizations meet with the freedom of not having established any formal terms of reference for this event. This enables the participants to express their views and indicate potential (as well as real activities) that illustrate how they each work and where some lessons may be gained for other organizations. The role of FIG and Commission 4 was outlined citing various publications, in particular S-57, The Economic Benefits of Hydrography and the various meetings we organise. These are the practical and demonstrated deliverables relating to Capacity Building. Again the concept of a coordinated meeting was raised and the up and coming event in April 2013 was promoted. IMO, IHO are participating. If successful this could pave the way for more coordinated meetings, possibly as joint events, to better reach our audiences.

### **Other Conferences, Meetings and Symposia**

During 2012 Commission 4 officers and members attended other meetings or presented papers at a number of conferences of importance to hydrography:

- IEEE Transactions on Geoscience and Remote Sensing;
- CVRS2012, Xiamen, China, 16-18 December;
- ISPRS 2012 Congress, Melbourne, Australia, 25 August;
- Ocean Business 2012, Southampton, UK;
- ASPRS Annual Conference, Sacramento, California, March 19-23;
- Canadian Hydrographic Conference (15<sup>th</sup> - 17<sup>th</sup> May, 2012) in Niagara Falls, Canada;
- Hydro12 "Taking Care of the Sea" conference, Rotterdam, Netherlands, November 13<sup>th</sup> – 15<sup>th</sup> 2012;
- FIG 8<sup>th</sup> Regional Conference, Montevideo, Uruguay, 26<sup>th</sup> to 29<sup>th</sup> November, 2012.

## **BOARDS, COMMITTEES AND LIAISONS**

### **FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC)**

Commission 4 continues to represent FIG on the FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) jointly with IHO and ICA. Commission 4 has four representatives on the Board, these being: Gordon Johnston (UK), Dr. Razali Mahmud (Malaysia), Adam Greenland (New Zealand) and Dr. Keith Miller.

At the IBSC meeting, held in May 2012, Buenos Aires, Argentina, kindly hosted by the Argentine Naval Academy and Hydrographic Office at the Sea Sciences School, the IBSC reviewed 14 submissions, granting immediate recognition to 9 and several conditional recognitions (subject to clarifications and further material). A full list of the current Recognised Courses is available on the IHO website at:

[http://www.iho.int/srv1/index.php?option=com\\_content&view=article&id=440:ibsc&catid=64:4ircc&Itemid=398](http://www.iho.int/srv1/index.php?option=com_content&view=article&id=440:ibsc&catid=64:4ircc&Itemid=398)

Included in the successful submissions for the very first time was the Australasian Hydrographic Certification Panel that sought recognition for its continuing competency and assessment certification scheme. The aim for the 2013 meeting will be to update the Standards themselves for their technical content in relation to a syllabus. Some internal discussions have been made regarding the IBSC and how it relates to the main body of work of the Commission and FIG as a whole. This will be a subject proposed for the working week in Abuja.

### **IHO Liaison**

IN 2011 a dialogue started between FIG Commission 4 and the IHB of the IHO with an aim to creating a possible dual hosted event. This work has been fruitful in that a joint FIG-IHO one day conference is now planned for the 9th April 2013 in Southampton, UK alongside the large commercial exhibition Ocean Business that attracts several thousand visitors.

Meanwhile FIG has been included in the invitations to a couple of Regional Hydrographic Commission events. There are a number these events each year and this is a topic that will be raised in Abuja for discussion.

## **PUBLICATIONS**

### **FIG Publications**

No Commission 4 supported FIG publications were made during 2012.

### **Newsletters**

Commission 4 continued to publish newsletters in *Hydro International* on a regular basis. Newsletters are also published in *Geomatica* (the official publication of the Canadian Institute of Geomatics) and *Lighthouse* (the official publication of the Canadian Hydrographic Association) upon request. A newsletter was also published on Commission 4 website (<http://www.fig.net/commission4/newsletters/newsletters.htm>).

### **Other Publications**

In 2012 Commission 4 members made contributions to hydrography and hydrography-related issues *via* publications in journals and other related media. The importance of these publications, when not directly about hydrography, is that they demonstrate the importance of hydrography as applied to the social, economic, political and environmental objectives of society at large. Some of these publications include:

- Kwon, T.-J., Li, J., and Wong, A., 2013. ETVOS: an enhanced total variation optimization segmentation approach for SAR sea-ice image segmentation, *IEEE Transactions on Geoscience and Remote Sensing*, doi:10.1109/TGRS.2012.2205259 (IEEE SCI/EI).
- Chen, J., Mao, Z., Philpot, B., Li, J., and Pan, D., 2013. Detecting changes in high-resolution satellite coastal imagery using an image object detection approach, *International Journal of Remote Sensing*, 34(7): 2454-2469 (Taylor & Francis: SCI).
- Sun, Z., Wang, C., Li, P., Wang, H., and Li, J., 2012. Hyperspectral image classification with SVM-based domain adaption classifiers, *Proceedings of CVRS2012, Xiamen, China, 16-18 December*, 4pp (IEEE: EI).
- Li, J. and Kwon, T.-J. 2012. Improved capability for marine oil spill detection using new generation of SAR imaging satellites, *ISPRS 2012 Congress, Melbourne, Australia, 25 August- 1 September*, Oral Presentation.
- Chen, H.Y., Xu, S.Q., Sun, Q., Chen, L.Q. and Li, J., 2012. Retrieval atmospheric W2 profile from underway data and AIRS in the southern ocean, *Journal of Remote Sensing*, in press.
- Shu, Y., Li, J. and Xie, S., 2012. SAR image segmentation using a novel Markov random field model with label cost prior, *ASPRS Annual Conference, Sacramento, California, March 19-23*.
- Yang, X. and Li, J. (eds.), 2012. *Advances in Mapping from Remote Sensor Imagery: Techniques and Applications*, Taylor & Francis, CRC Press, ISBN 978-1-43-987458-5, 444pp.
- Kwon, T.-J. and Li, J., 2012. Mapping marine oil spills from space, In Yang, X. and Li, J. (eds.) *Advances in Mapping from Remote Sensor Imagery: Techniques and Applications*, Taylor & Francis.
- Chen, J., Li, J., Zhu, Q. and Mao, Z., 2012. Edge-guided multiscale segmentation of satellite multispectral imagery, *IEEE Transactions on Geoscience and Remote Sensing*, 50(11): 4513 - 4520 (IEEE: SCI/EI).
- Sutherland, M. (2012). "Report from FIG Working Week 2012, Rome Italy". In *Hydro International*, 2012, Volume 16, Number 4, July/August.
- Nanlal, C., D. Davis and M. Sutherland (2012). "An Evaluation of Tides in the Caribbean". Published in the proceedings of the International Federation of Surveyors Working Week 2012, Rome, Italy, May 6-11, 15 pages.

- Davis, D., M. Sutherland, S. Jaggan and D. Singh (2012). "Determining and Monitoring Sea Level in the Caribbean using Satellite Altimetry". Published in the proceedings of the International Federation of Surveyors Working Week 2012, Rome, Italy, May 6-11, 13 pages.
- Sookram, S. and M. Sutherland (2012). "Grande Riviere, Trinidad and Tobago: The Vulnerability of a Coastal Community to Sea-Level Rise". Presented at the UCCI/UWI/ICCI Caribbean Conference: 50-50 – Surveying the Past, Mapping the Future, Grand Cayman, Cayman Islands, March 21-23, 25 pages.

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**Former Vice Chair and Chair of Work Group 4.3 Multi-Sensor Systems for Hydrographic Applications**



**Prof. Dr. Volker Böder (Deceased)**

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**Vice Chair, Chair of Work Group 4.4 Marine and Maritime Spatial Information Systems, and Study Group 4.4.2 Remote Sensing of Coastal and Marine Waters**



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# FIG Commission 5

## Annual Report of Activities 2012

### 1. General

The Commission 5 2011-14 work plan consists of realising tangible outcomes for our FIVE missions, which are -

- FOCUS on modern technologies, technical developments and applications
- FACILITATE and follow technical developments through collaborations with other FIG Commissions and like organisations
- FOSTER and support research and development and stimulate new ideas in the fields of expertise represented within the commission.
- FORMULATE and formalise collaboration with manufacturers on the improvement of instrumentation and associated software.
- FIG EVENTS - present and promote the work of the Commission and its working groups through technical events and necessary media

The year of 2012 for Commission 5 was primarily centred on the technical activities associated with the FIG 2012 Working Week in Rome and the Regional Conference in Montevideo, Uruguay. Commission 5 were especially pleased about the outcome of the FIG / IAG / ICG Technical Seminar on Reference Frame in Practice that was held just prior to the FIG Working Week in Rome. We also continued our effective collaboration with our sister organisations at events to promote and fulfil the objectives of our work plan, especially at events such as the Machine Control and Guidance (Stuttgart, Germany) and ICG-7 (Beijing, China). In addition to this, the Commission has been involved in the preparations for the next FIG Technical Seminar on Reference Frames in Practice in Manila, and the FIG Working Week in Abuja.

A summary of the working group activities in 2012 is as follows:

### 2. Working Groups

#### **WG 5.1 – Standards, Quality Assurance and Calibration**

Chaired by David Martin

Standards play important role in surveying. This is even truer in the modern black-box world where the details of instrumentation and techniques are often opaque for the average practicing surveyor. They are very reliant upon standards underpinning the correct functioning of their instruments.

Working Group 5.1 was active at the FIG Working week in Rome. In addition the working week sessions, and an active participation in the first Technical Seminar on Reference Frames in Practice; a Standards Network meeting for all delegates interested in “standards” was convened. This meeting was well attended by Commission 5 representatives.

At this meeting there was a discussion around who will replace Ian Greenway as the FIG liaison to the ISO Technical Commission (TC) 211 (<http://www.isotc211.org/>). Ian Greenway advocated the new representative should come from one of Commission 4, 5 or 6. This is where there is considerable work in the field of standards right now.

Briefly, TC 211 is concerned with standardization in the field of digital geographic information. This commission aims to establish a structured set of standards for information concerning objects or phenomena that are directly or indirectly associated with a location relative to the Earth. These standards may specify, for geographic information, methods, tools and services for data management (including definition and description), acquiring, processing, analyzing, accessing, presenting and transferring such data in digital/electronic form between different users, systems and locations. The work links to appropriate standards for information technology and data where possible, and provides a framework for the development of sector-specific applications using geographic data.

Nic Donnelly of Land Information New Zealand (LINZ) has agreed to replace Ian Greenway as the FIG liaison to the ISO Technical Commission (TC) 211. Current work items include:

- 19119 – services (revision)
- 19157 – data quality (at FDIS stage so no real chance to change now)
- 19159-1 – calibration of remote sensitive imagery sensors (optical)
- 19160-1 – addressing: conceptual model
- 19161 – geodetic references
- 19162 – well known coordinate reference systems

There was also some discussion concerning FIG Publication No. 9. At the FIG working week held in Marrakesh it was decided that FIG publication No. 9 Recommended Procedures for Routine Checks of Electro-Optical Distance Meters - ([http://www.fig.net/pub/figpub/pub09/FIG-Publication\\_Nr9\\_english.pdf](http://www.fig.net/pub/figpub/pub09/FIG-Publication_Nr9_english.pdf)) should be revised with additions for recommendations for hand held distance-meters and reflector-less instruments. Unfortunately due to a very heavy workload this has not advanced.

Ian Greenway initiated a discussion concerning work of the Royal Institution of Chartered Surveyors (RICS) on International Measurement Standards, with particular reference to the field of valuation and real estate management

Several other standards under Technical Committee ISO/TC 172/SC 6 "Geodetic and surveying instruments" are also presently under discussion and/or revision:

- ISO 09849 Geodetic and surveying instruments - Vocabulary (Edition 3)
- ISO 12858-1 Optics and optical instruments -- Ancillary devices for geodetic instruments -- Part 1 Invar levelling staffs (Edition 2)
- ISO 12858-2; 1999 Amendment 1
- ISO 17123-5 Field procedures for testing geodetic and surveying instruments - Part 5 - Total stations (Edition 2)
- ISO 17123-6 Field procedures for testing geodetic and surveying instruments - Part 6 - Rotating lasers (Edition 2)
- ISO 17123-7 Field procedures for testing geodetic and surveying instruments - Part 7 - Optical plumbing devices

- ISO 17123-8 Field procedures for testing geodetic and surveying instruments - Part 8 - GNSS field measurement systems in real-time kinematic (RTK) (Edition 2)
- ISO 17123-9 Field procedures for testing geodetic and surveying instruments - Part 9 - Terrestrial laser scanners (TLS) A principal aim of Working Group 5.1 over the coming year remains the examination and promotion of guidelines and recommendations for standards and quality in survey measurements based on the ISO Guide to Uncertainty in Measurement (GUM) and its supplements.

Nic Donnelly, from Land Information New Zealand, spoke about the importance of Metadata standards. This is an important field - not just in surveying and geodesy. He is looking to establish a joint FIG/IAG working group to study this important subject.

A principal aim of Working Group 5.1 remains the examination and promotion of guidelines and recommendations for standards and quality in survey measurements based on the ISO Guide to Uncertainty in Measurement (GUM) and its supplements.

### **WG 5.2 – Reference Frames**

Chaired by Graeme Blick

Over the past year WG 5.2 has focused on four main activities.

**Development of 4 Dimensional Datums:** A small focus group continues to work on issues around the establishment of 4 dimensional datums, i.e. those including a time variable component to account for the effects of crustal deformation. Of particular interest has been how deformation following an event such as an earthquake can be incorporated into a datum. The concept of a patch to model the deformation has been refined and this is being trialled as a method to incorporate the effects of ground movements as a result of the recent Canterbury Earthquakes in New Zealand into their geodetic datum. Formats for deformation models are also being refined, and a draft format has been circulated to interested parties for review. While the Canterbury Earthquakes are a highly relevant case study for this work, the aim is to develop deformation modelling processes that will be widely applicable internationally for earthquakes and other deformation events. Several papers on the topic were presented at the FIG Working Week meeting in Rome and Technical Seminar on Reference Frames in Practice also held in Rome.

**eGeodesy:** Work has also continued into the development of geodetic data models and data transfer formats and standards. The most substantial piece of work has been the use of the data model to develop a Geography Markup Language (GML) compliant schema. The advantage of compliance with GML is that the transfer format will then be more widely supported by software vendors, as many already support GML. A GML standard has been published by the International Standards Organisation (ISO), so the use of GML should ensure wide support for the geodetic transfer format being developed. The Use Case documentation has been developed, which outlines the major behaviours expected of an automated geodetic management system. Nic Donnelly (New Zealand) spent several months at JPL looking into the topic and he presented some preliminary findings in Rome. This initiative continues through a small Australia/New Zealand working Group.

**Technical Seminar on Reference Frames in Practice:** The inaugural Technical Seminar on Reference Frames in Practice was held as part of the 2012 FIG Working Week Rome meeting. This seminar was given as a series of short presentations covering a range of topics including the role of Geodesy – GGOS and future trends, regional and national reference systems, and gravity and world height systems. With over 20 delegates this initial seminar proved to be very successful and a follow up seminar is planned to be held in Manila in June 2013.

**Reference Frames in Practice Manual:** Leading on from the Technical Seminar on Reference Frames in Practice seminar a decision was made to develop a manual on the topic. This is being produced as a series of two page fact sheets so that they can be easily updated and used individually. A draft manual has been developed covering the following topics:

- Introduction
- Geodesy and Global Reference Frames
- Key International Geodetic Groups
- Global Terrestrial Reference Systems and Frames
- Regional and National Reference Frames
- Height Systems
- Standards and Traceability of Terrestrial Reference Frames – Quality and Standards
- Standards and Traceability of Terrestrial Reference Frames – Example and References
- Global Navigation Satellite Systems
- GNSS CORS Networks and Linking to ITRF
- Transforming Between Datums
- Transforming Between Datums in Non-static Reference Frames

It is anticipated that the manual will be available for review at the next Commission 5 meeting in Manila.

### **WG 5.3 – Geodetic and Positioning Infrastructure**

Chaired by Neil D. Weston

The national developments regarding geodetic and positioning infrastructure was as intense as usual during 2012. Many countries are developing their infrastructure to meet the demands of the users. The development of national GNSS CORS is rapid. The International GNSS Service (IGS) is playing a very important role to develop standards and recommendations on how a reference station should be set up. These issues were raised and discussed at FIG events such as the Reference Frame Technical Seminar and Working Week in Rome, and at other related symposiums. This working group also provided presentations or assistance with technical sessions, and often together with our sister organisations IAG, at e.g. the ICG-7 (Beijing, China), the PPP-RTK and Open Standards Symposium (Frankfurt, Germany) and the IGS Workshop (Olzтын, Poland).

A proposal to investigate ‘standardization needs’ for geodetic references, has been submitted by France to the International Standardization Organization (ISO) in early 2012. This proposal was specifically sent to the ISO Technical Committee 211 on Geographical

Information / Geomatics. This proposal was approved in June by ISO TC 211 under the title of Project 19161. FIG endorses this initiative and needs to be actively involved in this effort in the future.

This working group has also been liaising and working with both Commission 5.2 and 5.4 on their respective technical publications.

#### **WG 5.4 – Kinematic Measurements**

Chaired by Volker Schweiger

The technical main points identified by Working Group 5.4 are multi-sensor-systems related to monitoring and to machine guidance. This was the reason to support the 3rd International Conference on Machine Control and Guidance (MCG 2012) that was held in Stuttgart, Germany on 27 - 29 March 2012. A total of 33 papers were accepted. The conference papers were included in sessions about the topics: Global Navigation Satellite Systems, Kinematic Measurements, Sensor Integration, Data Management and Communication, Control Algorithms, Agriculture and Construction. The content of the lectures ranged from scientific contributions (e.g. regarding the development of new control algorithms) to best-practise reports of construction companies as well as presentation about teaching possibilities in the field of machine control.

WG 5.4 was also active at the events held at the FIG Working Week in Rome and the Regional Conference in Montevideo. Especially in Rome a dedicated session called “multi-sensor-systems”, where a broad range of presentations were given, including an overview report about “Challenges of Kinematic Measurements”.

In collaboration with FIG Commission WG 5.5, a special issue for the Journal of Applied Geodesy on the topic “Multi-sensor positioning and navigations systems” is being prepared. Papers that investigate new technologies and techniques for multi-sensor systems delivering enhanced positioning and navigation capabilities have been invited. Also papers that describe new integration architectures, algorithms and applications for multi-sensor systems are particularly encouraged. The peer-review process for this special edition will start in 2013.

#### **WG 5.5 – Ubiquitous Positioning**

Chaired by Allison Kealy

In 2012 a major activity undertaken by members of the joint IAG Working Group WG 4.1.1 and FIG WG 5.5 was field experiments at the University of Nottingham from May 14 to 18, 2012. These revolved around the concept of collaborative navigation, and partially indoor navigation. Collaborative positioning is an integrated positioning solution which employs multiple location sensors with different accuracy on different platforms for sharing of their absolute and relative localizations. Typical application scenarios are dismounted soldiers, swarms of UAV's, team of robots, emergency crews and first responders. The stakeholders of the solution (i.e., mobile sensors, users, fixed stations and external databases) are involved in an iterative algorithm to estimate or improve the accuracy of each node's position based on statistical models. For this purpose different sensor platforms have been fitted with similar type of sensors, such as geodetic and low-cost high-sensitivity GNSS receivers, tactical grade IMU's, MEMS-based IMU's, miscellaneous sensors, including magnetometers, barometric

pressure and step sensors, as well as image sensors, such as digital cameras and Flash LiDAR, and ultra-wide band (UWB) receivers. The employed platforms in the tests include a train on the roof of the Nottingham geospatial building, mobile mapping vans, a personal navigator and a foot tracker unit.

In terms of the tests, the data from the different platforms are recorded simultaneously. The personal navigator and a foot tracker unit moved on the building roof, then through the building down to where it logged data simultaneously with the vans, all of them moving together and relative to each other. The platforms then logged data simultaneously covering various accelerations, dynamics, etc. over longer trajectories. Promising preliminary results of the field experiments showed that a positioning accuracy on the few meter level can be achieved for the navigation of the different platforms.

Data related to these tests can be accessed from <http://ubpos.net/>

The working group also maintained a strong and active presence at the following international events through participation in coordinating workshops, scientific and organizing committees, delivering short courses and tutorial, publishing papers and presentations, session chairing, etc.

- PLANS 2012, Myrtle Beach, South Carolina, USA, Apr. 24-26, 2012
- FIG Working Week: May 6-10, 2012 in Rome, Italy
- ION GNSS, Nashville, Tennessee, USA, Sep. 17-21, 2012
- UPINLBS 2012, Helsinki, Finland, Oct. 3-4, 2012
- LBS 2012, Munich, Germany, Oct. 16-18, 2012
- IPIN 2012, Sydney, Australia, Nov. 13-15, 2012

### **3. Cooperation**

#### 3.1 Cooperation with Other Commissions

During the 2012 period Commission 5 worked with other FIG Commissions as required. This work primarily consisted of holding joint technical sessions and meetings at FIG related events as well as co-sponsoring symposiums. For example, FIG Commission 5's alliance with Commission 6 to address contemporary issues relating to deformation measurement, calibration of instruments, long range measurement, satellite and terrestrial imagery measuring techniques such as mobile and static laser scanning.

#### 3.2 Cooperation with Sister Organisations

Commission 5 has continued to maintain a successful working relationship with the International Association of Geodesy (IAG), the Permanent Committee for GIS Infrastructure Asia-Pacific (PCGIAP) and the International Committee on GNSS (ICG). This was achieved by convening joint technical sessions and holding joint administrative meetings (e.g. during the FIG Working Week in Rome) on significant issues such as geospatial and positioning infrastructure and how to continue the joint technical seminar on Reference Frames in Practice



FIG Commission 5 is also taking a lead role as a liaison with ISO (ISO/TC 211 and ISO/TC 172/SC 6). Nic Donnelly from Land Information New Zealand will be our delegate.

During 2012, the following events were held with sister organisations or where the Steering Committee held discussions with our sister organisations;

- 
- 3<sup>rd</sup> International Conference on Machine Control and Guidance (Stuttgart, Germany)
- ICG-7, International Committee on GNSS (Beijing, China)
- PPP-RTK and Open Standards (Frankfurt, Germany)
- IGS Workshop (Olzтын, Poland)
- Interexpo Geo-Siberia 2012 (Novosibirsk, Russian Federation)

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

### 3.2 Cooperation with UN

The International Committee on Global Navigation Satellite Systems (ICG), met in Beijing, China during 4 - 7 November 2012. Chair Mikael Lilje attended representing FIG, and Matt Higgins as Co-Chair of Working Group D of the ICG. Mikael Lilje was also at the meeting as our Commission's representative on Task Force D1 on Geodetic References. A full report can be found on our Commission website.

## **4. Events**

### **2012**

A summary of the Commission 5 activities at events in 2012 can be found on our website <http://www.fig.net/commission5/index.htm>

### **2013**

In the first half of 2013 Commission 5 will endeavour to send representatives to the following conferences -

- 8-11 April, Washington DC  
Annual World Bank Conference on Land and Poverty, The World Bank
- 24-26 April, Novosibirsk, Russian Federation  
Interexpo Geo-Siberia-2013. Organised by Siberian State Academy of Geodesy (SSGA). Co-sponsored by FIG, Web site: [www.expo-geo.ru](http://www.expo-geo.ru)
- 1-3 May, Tainan, Taiwan  
The International Symposium on Mobile Mapping Technology (MMT2013). Web site: <http://conf.ncku.edu.tw/mmt2013/>
- 6-10 May, Abuja, Nigeria  
Environment for Sustainability. FIG Working Week and General Assembly.  
Web site: <http://www.fig.net/fig2013>

- 18-20 June, Manila, Philippine  
The 12th South East Asia Survey Congress "Geospatial Cooperation towards a Sustainable Future".

## **5. Communication and Publications**

Commission 5 have issued numerous reports and periodic newsletters to our delegates. These communiqués can also be found on websites -

- <http://www.fig.net/commission5/reports/reports.htm> and
- [http://www.fig.net/commission5/news/news\\_1.htm](http://www.fig.net/commission5/news/news_1.htm)

**Mikael Lilje**

**Chair**

Chair of FIG Commission 5

February 2013

## **FIG Commission 6 – Engineering Surveys**

### **Annual Report of Activities 2012**

#### **General**

Commission 6's work plan for 2011-2014 consists of 4 main mission statements, namely:

- promote the knowledge, skills and abilities of surveyors in civil and industrial works within the various professional fields of engineering
- 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
- provide a forum for exchange of knowledge related to engineering analysis of survey data for the study of structures
- in addition to the links with related WGs of IAG, ISM and ISPRS, look for possible cooperation within these organisations and support the co-operation of civil, structural and mechanical engineers with our profession

During 2012, commission 6 was active within the FIG Working Week in Rome, participating in 15 technical sessions, Working Group 6.2's organised "First International FIG Workshop on Monitoring High Rise and Tall Engineering Structures Development and Practices" in Hong Kong, and involvement, participation and support of a further 5 international meetings in Novosibirsk, Beijing, Hangzhou and Uruguay. Commission 6 is sub-divided into three working groups and a fourth jointly with commission 5:

#### **Working Group 6.1 – Deformation Measurements and Analysis**

Chair: Prof Wolfgang Niemeier.

#### **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.

## **Working Group 6.2 – Engineering Surveys for Construction Works and Structural Engineering**

Chair: Joel VanCranenbroeck

### **Policy Issues**

- Promoting the use of adapted survey techniques in industry & engineering;
- Promoting a multidisciplinary collaboration between survey engineers, civil engineers, structural & mechanical engineers;
- Promoting the use of adapted survey techniques in the rail and railway building and operating sector;
- Promoting the understanding of fibre optic sensors, e.g. interferometric sensors, Brillouin and Raman scattering and Bragg gratings;
- Study the use of embedded sensor arrays and the role of advanced surveying techniques for structural monitoring;
- Creating an awareness of surveyors through a task force "Fibre optic sensors" of the rapidly emerging technology of fibre optic sensors as "non-geodetic" sensors to measure deformations (strain) and temperatures in civil engineering structures
- Promoting the use of Terrestrial based RF positioning system in engineering surveying;
- 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.
- Creating an awareness of surveyors through a task force "Railways Trolley monitoring system.

## **Working Group 6.3 – Machine Control and Guidance (MCG)**

Chair: Henrik Vad Jensen

### **Policy Issues**

The importance of real-time 3D-position sensors for navigation of machinery on construction sites of roads, tunnels, railways, and airports has increased over the last years and the market is still growing. Also in the field of agriculture GPS-based applications such as crop mapping and automatic steering are well introduced. The new FIG Working Group 6.5 will intensively deal with following topics:

- Kinematic Measurement and Sensor Technology (focus on L1 RTK Low-cost systems, adjustments of total station MCG requirements,

additional Sensor like Slope Sensors, INS, Orientations Sensors, etc.),

- 3D-Applications (Agriculture, Construction, Special Applications e.g. UAVs),
- Multi-Sensor Systems and -platforms
- MCG Data Processing and Data Flow
- Control Process and Control Algorithm
- Standardization of Major Construction Projects
- The main goal of Working Group 6.3 is the interaction of research and industry activities.

## **Activities in 2012**

### **FIG Working Week**

Commission 6 participated in the FIG Working Week in Rome, May 2012 in 15 technical sessions, presenting 84 papers. A personal report from Gethin Roberts is attached to this paper, this was presented in the Chartered Institution of Civil Engineering Surveyors' Journal.

### **Geosiberia**

Commission 6 supported this event, and was attended by Ivo Milev. The event brings together surveyors from inside and outside of Russia and is growing every year to be an international conference.

### **Kazakhstan**

A joint commission 5 and 6 meeting was held in Kazakhstan in September 2012. The Workshop was entitled "Innovative Technologies for an Efficient Geospatial Management of Earth Resources" organized by the International Federation of Surveyors (FIG), Kazakh National Technical University after K.I. Satpaev (KazNTU) and Siberian State Academy of Geodesy (SSGA). The workshop was held in Almaty, Kazakhstan.

### **Hong Kong**

The First International FIG Workshop on High Rise and Tall Engineering Structures: Development and Practices, 22 - 23 November 2012, was held at The Hong Kong Polytechnic University. This was organised by Working Group 6.2.

### **Beijing, China**

Prof Roberts was invited to give a key note talk at the RICS Annual General Meeting and Conference Fit for the Future Conference in March 2012.

## **Hangzhou, China**

Prof Roberts was invited to attend the Hangzhou Forum on UN-GGIM & PCGIAP EB Meeting, May 2012. This was a UN meeting, attended by many senior surveying heads from around the World.

## **Wuhan, China**

Prof Roberts as invited to give a key note talk at the RICS International Geomatics Conference in December 2012.

## **FIG Regional Conference, Uruguay**

Commission 6 had representation and were involved with technical sessions at this event.

Further information about the details of these meetings can be found on the FIG's web page.

## **2013**

Three main events will be the focus of Commission 6's activities in 2013:

- FIG Working Week, Abuja, Nigeria.
- Working Group 6.1's workshop on Deformation Monitoring, Nottingham, UK.
- Commission 6 and Young Surveyors Conference in Ningbo, China September 2013.

Further information on Commission 6's activities and contacts can be found on the Commission 6 web page, and most of the conference proceedings can also be found on the FIG's web page.

[www.fig.net/commission6](http://www.fig.net/commission6)

## **Professor Gethin Wyn Roberts FCInstCES**

### **Chair of Commission 6**

February 2013

## **FIG Working Week 2012, Rome, Italy**

Prof Gethin Wyn Roberts, FIG UK Commission 6 Delegate and Chairman of Commission 6 “Engineering Surveys”, The University of Nottingham Ningbo China

Dr Lawrence Lau, Commission 6 Vice Chair for Administration, The University of Nottingham Ningbo China

Dr Craig Hancock, Commission 6 Vice Chair for Administration, The University of Nottingham UK.

The 35<sup>th</sup> FIG Working Week took place in Rome from the 5 – 10 May 2012. The event was hosted by Consiglio Nazionale Geometri e Geometri Laureati, CNGeGL, and over 1,300 delegates attended, including an incredible 150 young surveyors from 40 different countries.

### **FIG Young Surveyors**

The Young Surveyors (YS) Network held their own pre-conference on the 3 – 4 May. 32 papers were presented by the YS, covering the following areas:

- Challenges for Young Professionals
- Young Surveying Professionals
- GIS and Land Management
- Surveying and Measurement
- Real Estate and Property
- Forum Discussion on Young Surveyors Role and Challenges in the Current Society
- Plenary Session - Young Surveyors as Agents of Change
- Plenary Session - GLTN and Youth Dimensions (co-organised by UN HABITAT)

### **FIG/IAG Workshop**

Running in parallel to this, commissions 5 and 6 held a workshop jointly with the International Association of Geodesy (IAG) focussing on “Reference Frames in Practice”. Some 40 delegates attended this event and the following topics were presented:

- The Role of Geodesy
- GGOS and Future Trends
- Global Terrestrial Reference Systems and Frames
- Regional and National reference systems
- IGS services and other initiatives
- Four dimensional deformation models for Terrestrial Reference Frames
- Gravity and WHS
- Worked examples of Terrestrial Reference Frame realisations

- Multi GNSS Environment
- Standards and Traceability of a Terrestrial Reference Frames / GNSS

### **ACCO Meeting**

On the 4<sup>th</sup> May, there was a daylong meeting of the Advisory Committee of Commission Officers (ACCO) where discussion and decisions were made with regards technical sessions at future FIG events, procedures involved, as well as commission specific events.

### **General Assembly**

The working week itself started off with the General Assembly during the whole of Sunday; where various member organisations, including the ICES, vote on various FIG issues. These included membership applications from new organisations. The University of Nottingham Ningbo China (UNNC) successfully applied for academic membership, The University of Nottingham UK is already a member. This illustrates the increasing surveying activities on the two campuses, including the introduction of the MSc course in Engineering Surveying and Geodesy at UNNC. The full proceedings, agenda and minutes of the General Assembly can be found at the FIG's web page.

### **Technical Sessions**

During Monday to Wednesday the technical sessions at the FIG were held. Commission 6 organised and co-organised the following sessions that included some 84 papers:

TS01F - Dam and Reservoir Engineering Surveying  
 TS01L - Mining and Underground Engineering Surveying I  
 TS02F - Engineering Surveying – Photogrammetry  
 TS03F - Deformation Monitoring I  
 TS04F - Deformation Monitoring II  
 TS05J - Mining and Underground Engineering Surveying II  
 TS06G - Engineering Surveying, Machine Control and Guidance  
 TS07A - Laser Scanners I  
 TS07M - Remote Sensing Applications and Case Studies  
 TS08C - Laser Scanners II  
 TS09D - Laser Scanners III  
 TS09I - Engineering Surveying  
 TS05H - Remote Sensing I  
 TS06I - Remote Sensing II  
 TS08B - The Impact of Earthquakes and Geodynamics on Geodetic Reference Frames

These sessions were very well attended, with standing room only at a couple of the sessions, illustrating the interest in this subject area. One area in particular that has shown a lot of interest this year is that of the subject of laser scanners. Commission 6 has a joint Study Group 6.2.2 Laser Scanners (Joint with Commission 5). This is chaired by Dr Ivo Milev, Bulgaria, who was also voted in as the new Commission 6 chair from 2014. The interest in laser scanners illustrates the impact this device is having on surveying, and how it has become part of the surveyor's armoury over the past 10 to 15 years. Another new device that has emerged over the past handful of years is Ground Based Synthetic Aperture Radar (GBSAR). This is a tripod mounted SAR system.



I can remember when I first saw a laser scanner, on display at the World of Surveying when it was held at Castle Donnington some 10 or so years ago. There was a lot of interest and scepticism of this strange device, that looked a little like a Geodimeter EDM, and only a relatively short time later some such devices are as small and light as a total station, able to record data at a phenomenally high data rate, with a resolution close to that of total stations. The applications of these devices are ever increasing.

Various plenary sessions were held during the working week, including the following:

- Knowledge to Manage
- Knowledge to Protect
- Knowledge to Evaluate

All the papers and presentations will be available on the FIG's web page [www.fig.net](http://www.fig.net).

### **Commission 6's Work**

Commission 6 has been very busy over the past year or so. Various sessions were organised at both the Rome working week, as illustrated earlier, as well as the working week in Morocco in May 2011. Various jointly organised events were held, notably GeoSiberia in Novosibirsk in April 2011 and 2012, a surveying conference focussing on "Innovative Technologies for an Efficient Geospatial Management of Earth" in Ulaanbaatar Outer Mongolia in September 2011, and the same conference is planned in Kazakhstan for September 2012. A conference focussing on surveying high rise buildings is planned for the 22 - 23 November 2012, and the 8<sup>th</sup> FIG regional meeting is to be held in Uruguay 26 – 29 November 2012.

These conferences are held in regions and parts of the World where there are increasing opportunities. An internationally focussed surveyor can take advantages of these opportunities, and such events can allow the right connections to be made.

### **UNNC Paper**

This year I gave a presentation about the University of Nottingham's Campus in China, where I am the Dean of the Faculty of Science and Engineering, and our activities; in particular the start of the MSc course in Engineering Surveying and Geodesy here from September 2012.

The overview of the campus is that we have approximately 5,200 students, and expanding to 8,000 over the next few years. There are a variety of subject areas, including business, international studies, international communications, education, as well as science and engineering. Science and Engineering is relatively new on the campus. All the courses are delivered in English, and follow the same learning outcomes as the courses in the UK and Malaysia campuses. All the quality assurance is carried out in the UK, with the same external examiner. All the students receive a University of Nottingham degree certificate once they graduate.

We plan to expand our non Chinese student numbers to 20% and our postgraduate numbers to 15-20% of the planned 8,000 overall student number. The advantage is that students can obtain a UK based education, but also live in China; hence learning more about the culture as well as the language through our complimentary Mandarin classes.

Due to the expansion, the faculty is currently recruiting a further 39 academic staff from all over the world to join the current 38. This gives academics the opportunity to work in a new facility, supported by the University of Nottingham's pedigree. The University, with support from the local and national Chinese governments, are investing in the infrastructure required for the expansion, as well as equipment and facilities. It is truly an incredible place to live and work, and the pace of expansion is incredible.

The enigma that China appears to be to most people is in reality an easy place to work and live in. The most difficult thing was that first step in taking the plunge and coming out here.

Moreover, two technical papers were presented in TS05B - GNSS CORS Infrastructure and Applications I and TS08C – Laser Scanners II by the Commission Vice Chairs. Lawrence gave insights on the effect of GNSS modernisation on surveying, especially on multipath effect. Craig ..

### **FIG Activities**

The University of Nottingham Ningbo China became an academic member of the FIG at the working week.

Future FIG events include the following:

26 – 28 September 2012, Commission 2 “Professional Education” conference on “Global trends and convergence in Surveying Education”, Moscow.

22-23 November 2012, Commission 6 workshop on “Monitoring High Rise and Tall Engineering Structures”, Hong Kong.

26-29 November 2012, FIG Regional Conference in Uruguay.

During the FIG working week at Rome, various elections for FIG officers were made. The following were voted in to start as commission chairs in January 2014:

Dr Pengfei Cheng (China PR) and Mr Bruno Razza (Italy) were elected as the next Vice Presidents of FIG for term 2013-16.

The Commission Chairs Elect for 2013-14 are –

Commission 1: Mr. Brian Coutts (New Zealand)

Commission 2: Ms. Liza Groenendijk (Netherlands)

Commission 3: Mr. Enrico Rispoli (Italy)

Commission 4: Ms. Angela Kesiena (Nigeria)

Commission 5: Prof. Volker Schwieger (Germany)

Commission 6: Dr Ivo Milev (Bulgaria)

Commission 7: Ms Gerda Schennach (Austria)

Commission 8: Mr Kwame Tenadu (Ghana)

Commission 9: Prof Liao Jinping (China PR)

These people will become chairs from January 2014. In addition to this, the venues for the 2015 and 2016 working weeks were decided upon as:

FIG Working Week 2015 will be in Sofia, Bulgaria

FIG Working Week 2016 will be in Christchurch, New Zealand

### **Final Words**

The FIG working week was an excellent event, and allowed networking as well as learning about new concepts and applications. The World is becoming increasingly smaller and the opportunities for UK surveyors overseas is increasing.



Gethin with President CheeHai Teo



Gethin and President Jason Smith, President ICES



Gethin with Vice President Rudolf Staiger and Kate Fairlie (chair of the FIG Young Surveyors' Network)



Gethin Receiving the Certificate of Academic Membership for the University of Nottingham Ningbo China.



A who's who of FIG and IAG.



It was very hot in Rome.



Lots of Deformation Monitoring in such a Historic City.



More monitoring



Gethin, Alan Wright, Ahmed Chiki and daughter Neila Chiki from Algeria



## **Commission 7**

### **Cadastre and Land management**

### **Annual Report 2012**

36<sup>th</sup> General Assembly  
FIG Working Week 2012 in Abuja, Nigeria

#### **Mission**

- To provide a forum for enhancing and exchanging knowledge about cadastre, land administration and land management world wide;
- To encourage the development of pro poor land management and land administration;
- To promote the importance of development of sustainable land administration as infrastructure for sustainable development to underpin economic growth;
- To promote the application of innovative and advanced technology in cadastre, land administration;
- To promote awareness of the role of surveyors in land administration matters to the public and among stake holders.

#### **FIG Commission 7: The year 2012 in brief**

For Commission 7, the year 2012 has been a very active and dynamic one, thanks to the quality of the team and the commitment of its members.

During the actual term, Commission 7 wants to develop cooperation in some regions of the world land professionals are less represented on this commission. So it is in this objective that Claire Galpin, vice-chair Administration and Communications of Commission 7, who is also the president of Géomètres sans frontières, and Daniel Roberge participated to the successful International



Surveying Week Conference (Semaine internationale du géomètres) in Yaoundé, Cameroun last April. This event has been organised by the Ordre des géomètres du Camerou, under the leadership of its president Fabien Omboudou Ndjina and the strong support of the Ministère des domaines, du cadastre et des Affaires foncières.

A week after, the FIG president Teo CheeHai and Commission 7 co-organised with the World Bank a very well attended workshop about *Spatial Enabling Governments and Societies* within the World Bank Land and Poverty Conference 2012. This one day workshop has been an excellent opportunity to promote the evolving role of land surveyors to support the sustainable land administration and management, low cost approaches in cadastre, data acquisition and land recordation system and management of public land. Christiaan Lemmen, chair of FIG Working Group 7.1, Jaap Zevenbergen, co-chair of WG 7.2 and Daniel Roberge represented FIG Commission 7 as speakers and chairman in various sessions. Stig Enemark and Jürg Kauffman, longtime FIG Commission 7 supporters have also been important contributors.

Later in May, FIG Commission 7 has played an important role in the Working Week in Rome, with twenty sessions in which a hundred of papers have been presented. Moreover, FIG Commission 7 and GIM International organised a very dynamic forum about Future of Land Administration in which representative from each continents were represented with a panellist. Thanks to Christiaan Lemmen (chair), Gerda Schennach (rapporteur) and Jean-François Beaupré (panellist representing young surveyors) from FIG Commission 7 managing team and the other panellists Peter Laarakker, Robin McLaren, Quang Thanh Bui, Diego Alfonso Erba and Clarissa Augustinus. Thanks also to Durk Haarsma, the publishing editor of GIM International for the promotion of FIG Commission 7 work in this magazine and on its website, namely with interviews of some of the panellists.

The United Nations Food and Agriculture organization (FAO) and FIG Commission 7 took the opportunity of this working week in Rome to organize, at the FAO headquarter, a joint workshop on Land Tenure and Disaster Risk Management in which Daniel Roberge, Jaap Zevenbergen, David Mitchell and Francis Roy presented the role land surveyors should play supporting communities to be better prepared to face situations of natural disaster. A special thank to Paul Munro Faure and Adriana Herrera from FAO for their trust and support in the organization of this workshop.

One of the highlights of the last working week was certainly the election of the next FIG Commission 7 chair. Three dedicated, high profile and well know Commission 7 colleagues were candidate for the position: Claire Galpin from France, Gerda Schennach from Austria and Daniel Steudler from Switzerland. Congratulations to Gerda who was elected by the General Assembly in the second voting round and thank you very much to Claire and Daniel for their much appreciated participation.

For FIG Commission 7, the year 2012 ended in apotheosis with the first ever Commission 7 meeting in Latin America held in San Luis Argentina, just after the FIG Regional Conference in Montevideo, Uruguay. This annual meeting included a One-day International Symposium with the theme “Land Governance in South America and International Perspectives” which ended with a common declaration in which participants agreed on the need for closer cooperation and collaboration between local professionals themselves and with international organizations, namely OAS and FIG and concluded that «language is not a barrier as linguistic and cultural diversity is an asset. Any linguistic challenges can be addressed by the willingness and efforts to engage and work together».

These annual meeting and international symposium have been generously supported by the San Luis Provincial Government and co-organized by the Consejo Federal de Catastro (CFC) and the Federacion Argentina de Agrimensores. Claire Galpin and Jean-François Beaupré, the Commission 7 Administration and Communications team and Fernando Daniel Nasisi, president of CFC and his colleagues made a fantastic job, organizing all the technical, logistical and financial aspects. Thank you very much to our Argentinian colleagues for the unforgettable warm welcome. Also a big thank to the organizing team and to the sponsors Trimble and ESRI.

We are hoping that these meeting and symposium in Argentina and the regional conference of FIG in Uruguay will contribute to the development of the commission 7 network in this region and future collaborations.

### **Working Group 7.1 – Pro Poor Land Management**

Chair: Christiaan Lemmen

The Land Administration Domain Model has been published as a formal International Standard at ISO. The ISO 19152 LADM includes the Social Tenure Domain Model (STDM). LADM and STDM are strongly supported by FIG. The standard is already in use as part of the INSPIRE specifications within the European Union. FAO is developing a Land Administration System based on the LADM standard and UN Habitat builds a prototype based on STDM. This means the standard can be used as integrating tool for conventional and unconventional systems; it is not only a pro poor tool, it is a generic tool for development of land administration systems.

During the development of the standard different versions of the model have been reviewed by LA modelling experts, delegated by member countries and external liaisons (European Commission, FIG and UN-HABITAT) to the project team and later by the editorial committee within ISO/TC 211. Comments from those reviews are documented and have been processed by the editors. This methodology implies peer reviews by experts within the editorial committee of LADM within ISO/TC211: Danilo Antonio, replacing Solomon Haile (UN-HABITAT, Kenya); Wim Devos (Joint Research Centre of the EU, Italy); Antony

Cooper (South Africa, chair); Paul Egesborg and Christian Lord (Canada); Tomohiko Hatori (Japan); TaikJin Kim (Korea); Christiaan Lemmen (the Netherlands, editor); Julie Binder Maitra (United States); Tarja Myllymäki (Finland); Peter van Oosterom (the Netherlands, co-editor), Jesper Paasch (Sweden); Markus Seifert (Germany); Harry Uitermark (the Netherlands, co-editor); Frédérique Williams (France).

On the 6th of July 2012 a workshop on 'LADM from research to implementation' was held at Kadaster in the Netherlands. The thirty participants from ten countries accounted for a good mix of land administration organisations, academia and industry, software vendors including ESRI, Thomson Reuters, Delinea and Trimble. Representatives from those industries recognise the importance of LADM. Reactions were very positive, instantly establishing a kind of user community. More meetings will follow. The presentations given at this workshop are available on [www.oicrf.org](http://www.oicrf.org) website. A LADM Wiki is available at Delft University of Technology. Publications can be downloaded, as well as the UML model: <http://wiki.tudelft.nl/bin/view/Research/ISO19152/WebHome>.

In 2012 presentations have been given during the World Bank conference on Land and Poverty in Washington DC, USA in April, the FIG Working Week in Rome, Italy, in May and during the FIG Regional Conference in Montevideo, Uruguay in November – combined with the FIG Commission 7 Annual Meeting in San Luis, Argentina. In the Montevideo event a contribution was given to the Joint UN-Habitat/FIG Session on Participatory and Inclusive Land Readjustment for Latin America.

### **Working Group 7.2 – Disaster management and Climate change?**

Co-Chairs: David Mitchell and Jaap Zevenbergen

Working group 7.2 has continued to develop a joint project with the UN FAO that aims to produce online training materials on land tenure and Disaster Risk Management.

The first phase of this project involved developing training materials and conducting face to face training. In July, 2012 David Mitchell conducted face-to-face training in Fiji at the University of the South Pacific for 25 public sector participants from Pacific Island Countries under an AusAID grant. In October, Jaap Zevenbergen and Adriana Herrera from FAO conducted training at the University of West Indies for participants from several Caribbean countries. This was funded by FAO and supported by the University of the West Indies. The result both these training sessions has been the development of several country case studies and also much audio-visual material that will form part of the online training resources developed in phase two of the project.

Jaap Zevenbergen, David Mitchell and Francis Roy have submitted reports to FAO for review on land tenure and spatial information management, valuation and taxation and land use planning respectively. These will form part of the

online resources to be made available and will feed into the FAO Voluntary guidelines dissemination process.

During 2013 and 2014 we plan to use the material and develop this into a suitable online format by the end of the project in 2014. We will be having further discussions with FAO as this work progresses and will be providing reports at Abuja Working Week and also the Commission 7 meeting in Yaoundé. There are also possibilities for a training session to be held at either event.

Related to the Working Group 7.2 activities is the FIG Climate Change Task Force which will meet at the Abuja Working Week. David Mitchell is a member of this Task Force.

### **Working Group 7.3 - Cadastral perspectives**

Chair: Gerda Schennach

After a very successful Cadastre 2.0 symposium in Innsbruck in 2011 and the publication of the proceedings, this working group is now working on the following aspects:

- questionnaire about new techniques in cadastre and analysis role of boundaries and boundary marks for society
- investigate about possible professional and future models especially focussing on involvement of citizens into cadastral processes
- define requirements for a multifunctional cadastre as a successor of multipurpose cadastre
- first outline for final brochure (2014)

The members of the WG 7.3 took part in a number of international and national seminars and conferences and presented papers about future developments of cadastre. Discussions are reflecting a need of more communication among different regions of the world and among professionals and stakeholders from outside in order to create a win-win situation and to find best solutions from experiences already done.

### Joint Working Group Commissions 3 and 7 on 3D Cadastres

Chair: Peter van Oosterom

3D Cadastre Symposium in Shenzhen, China, 25-26 October 2012

The third workshop did attract over 160 participants from 20 different countries. Of course, the host country China was well represented, most often at municipal level: Shenzhen, Hong Kong, Macao, Beijing, Shanghai, Guangzhou, Wuhan, Changchun, Chengdu, Xi'an, Ningbo, Nanjing, etc. Most of these are cities in the near or above 10 million inhabitants range. So, the high Chinese participation in the workshop was not only a matter of geographic closeness, but also illustrating

the rapid 3D developments and urgent need for 3D Cadastre in many of these large Chinese cities, of which Shenzhen is a prime example.

More information about this 3D Cadastre Symposium:

<http://www.cadastre2012.org/>

The fifth LADM workshop (with attention to 3D aspects) will be in conjunction with the International Symposium on Geo-information, 24-25 September 2013, Kuala Lumpur, Malaysia. More information is available on the LADM Wiki:

<http://www.isoladm.org> and the call for contributions is at

[:http://wiki.tudelft.nl/pub/Research/ISO19152/LADM2013Workshop/flyer\\_LADM2013.pdf](http://wiki.tudelft.nl/pub/Research/ISO19152/LADM2013Workshop/flyer_LADM2013.pdf).

Extended abstracts can be submitted until 31 May 2013 via EasyChair

<https://www.easychair.org/account/signin.cgi?conf=ladm2013>.

There will be no 3D Cadastre workshop in 2013.

More information about the 3D Cadastre Joint working group:

[www.gdmc.nl/3DCadastres](http://www.gdmc.nl/3DCadastres)

#### **Working Group 7.4 – Cadastral and land management and reforms**

Chair: Richard Grover

Working Group 7.4 held a successful international seminar in conjunction with FAO and the Hungarian Ministry of Rural Development entitled *State Land Management in Transition Countries: Issues and Ways Forward* in Budapest, Hungary, on 20-21 September 2012. The seminar was convened by Richard Grover and András Osskó and followed on from the successful FAO/FIG seminar on the management of state and public sector land held in Verona in 2008. It was attended by 65 delegates from 26 countries. The attendance of many of those from the transition countries was made possible through the generous provision of travel and accommodation bursaries by FAO.

Important features of the seminar were the number of well-developed and expert case-studies and the overviews from those with long experience of working in transition countries. The papers can be accessed at the seminar website managed by the Ministry of Rural Development:


[http://en.foldhivatal.hu/index.php?option=com\\_content&task=view&id=175&Itemid=166](http://en.foldhivatal.hu/index.php?option=com_content&task=view&id=175&Itemid=166)

The papers have also been made available through FIG and OCRIF. A book is currently in preparation that will include edited versions of the papers presented at the seminar and country studies based on the research that FIG Commission 7 has undertaken on state and public sector land management.

The Working Group has approached other bodies who it is hoped might be willing to support a similar seminar on state land management in their region but there are no firm proposals as yet. Work has also been undertaken to increase the number of country studies and this has produced some additional studies from transition countries as well as some updating of previous ones.

**Next Commission 7 Annual Meeting and International Symposium,  
Yaoundé, Cameroun, 21-25 October 2013**

The next FIG Commission 7 Annual meeting will be held in Yaoundé, Cameroun jointly with the Francophone Federation of Surveyors and the FIG Commission 2.

A handwritten signature in blue ink, appearing to read 'Daniel Roberge', with a long horizontal flourish extending to the right.

Daniel Roberge, Chair  
FIG Commission 7

26 February 2013

# **Commission 9 Valuation and Real Estate Management**

## *“Managing Value for our Future”*

**Report to General Assembly,  
Abuja, May 2013**

### **WORKPLAN**

The work plan of the Commission continues, with the focus on Property Taxation, specifically Automated Valuation Models (Study Group 9.1 Varnavas Pashoulis), Large Scale Land Acquisitions (Working Group 9.2 Ibimena Kakulu) and, in conjunction with Commission 7, the Management of Public Property Assets in Developing Countries. Learning lessons (from both good and bad practice) is an important theme underlying the work of Commission 9's Working Groups.

We are also involved in widespread discussions of methods of valuation where there is no market and anticipate further progress on this in Abuja in May. As a result, we will be seeking advice and input from Commission 9 delegates and friends in the near future.

Despite the fact that we are half-way through the four year term, it is time to plan the delivery of the reports which we proposed at the start, and that will be the main focus for the next two years.

Almost inevitably, over a four year term, things change and it is unfortunate that Prof h.c. Dr.-Ing Ingolf Burstede is unable to continue to chair our working group 9.3. A four year commitment to such a role is a big undertaking for anyone and we are very grateful to Ingolf for his early work in the area of Management of Public Property Assets in Developing Countries. While we are seeking a replacement for him, we continue to work jointly with Commission and their Working Group 7.4 on Land Management Reforms.

### **COMMISSION 9 STUDY GROUP 9.2 WORKSHOP**

A Workshop of Mass Appraisal Systems was held on 14<sup>th</sup> – 16<sup>th</sup> September 2012 at Neapolis University, Paphos, Republic of Cyprus. The Workshop was organised jointly by the Cyprus Association of Property Valuers, Neapolic University, Paphos, and Commission 9.

The workshop was attended by delegates from around the world, including Alan S Dornfest of the International Association of Assessing Officers, based in the USA.

### **REGIONAL CONFERENCE, MONTEVIDEO, URUGUAY**

After the Working Week in Rome which I reported on in my last newsletter, Commission 9 was present in Montevideo for the very first FIG Regional Meeting in South America. The event was very well attended and Commission 9 technical sessions proved most popular. It was particularly interesting to hear the presentations from the “local” surveyors and to discover both the similarities and the differences which we have between the major issues which confront us all.

As with all these occasions, much of the progress was made out of the sessions, with friendships and networks being developed and strengthened.

## **NEWSLETTERS**

Two newsletters were published, one in June 2012 (following the Rome Working Week) and one in February 2013, both of which included updates from the IVSC and TEGOVA websites. These are available on the Commission 9 Website and my thanks go to the staff in the office for all their support in this as well as other FIG matters.

## **CHAIR ELECT**

The election of Professor Dr Liao Junping as chair-elect to Commission 9 is an important milestone for Commission 9, and we look forward to working closely with him in the future.

Liao Junping is Associate professor and Director of the Institute of Real Estate Studies, at Lingnan College, Sun Yat-sen University. He is also the Vice President, China Institute of Real Estate Appraisers and Agents; President, Guangzhou Society of Real Estate Appraisers Lingnan College, Sun Yat-sen University, Guangzhou in P. R. CHINA. He is also the CIREA delegate to Commission 9 and can be contacted at: [liaojp@mail.sysu.edu.cn](mailto:liaojp@mail.sysu.edu.cn)

## **SAD NEWS**

I am sorry to report the death of Bruce Harding, who passed away on 20 January 2013. Bruce was born in 1931 in the USA and was Commission 9 Chair during the Finnish Presidency (1988 – 1991). His good friend, Juha Talvitie, describes him as “*modest*” and “*a good man and devoted appraiser*”. He worked at Harding Appraisal Co Eng, in Sebastopol, Ca. Our condolences to all his friends and family.

## **ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY**

There will be a paper presented to the Annual World Bank Conference on Land and Poverty 2013 entitled “*Community Growth through Land Taxation*”. This paper is jointly authored by the Chair and Vice Chair of Commission 9 (Frances Plimmer and William J McCluskey).

Of particular interest is the increased links between the Commission, UN's FAO and the GLTN. There will be more about how the Commission and these important international organisations are collaborating in the future.

## **INTERNATIONAL PROPERTY MEASUREMENT STANDARDS**

FIG is represented by Frances Plimmer in a coalition recently established to develop International Property Measurement Standards, which will ensure a high degree of consistency in the measurement of property globally. She is supported by other colleagues in FIG in this activity. The first meeting of a coalition, which is led by RICS, will be held in May in Washington DC, USA. Further details will be made available via the website.



# **FIG Commission 10 – Construction Economics and Management**

**Period 2011 - 2014**

## **Annual Report 2012**

### **1. Title of Commission 10**

**Construction Economics and Management**

### **2. Terms of reference**

- Construction economics including Quantity Surveying, Building Surveying, Cost Engineering and Management, Estimating and Tendering (Bidding)
- Commercial management including Procurement, Risk Management and Contract Law for construction and non construction activity
- Construction Law and Negotiation
- Building Information Modelling - BIM
- Project and programme management including Planning / Scheduling

### **3. Beginning of the activity in 2010**

The FIG General Assembly elected at its meeting in Sydney, Australia in April 2010, Robert Sinkner as FIG Commission 10 Chair for a four-year term of office 1.1.2011 – 31.12.2014.

#### **▪ Handover Meeting, Copenhagen, 26th November 2010**

Handover meeting was visited by many important persons of FIG, mainly the current President Stig Enemark, Honorary Presidents and incoming President CheeHai Teo.

Beginning of the activity of the new Chair – Robert Sinkner was welcomed by incoming President of FIG for 2011 – 2014 and he was ordered by big FIG badge. Andrew Winston Morley, recent Chair of Commission, was present. The new Chair expressed his thanks for the last 4 years period of activity, for the experiences shared from this period and for support for next 4 years.

**The main idea for Commission 10 for the new period 2011 – 2014** is to bring the Balance into the FIG Com 10 activity through the persons of 4 Chairs (Commission Officers) of 4 Working Groups:

**Geographical:** W. + E. Europe / Africa / Asia / Australia / S. + N. America

**Development:** Developed Countries / Developing Countries

**Gender + Age:** Male / Female and Youths / Adults

**Environmental:** Academic / Government / Private

#### 4. List of Activities in 2012

The mission of Commission 10 is:

- To advance the professional practice of surveyors working in all disciplines of Construction Economics, Commercial Management and Project Management
- To research and identify “best practice” of surveyors working in different cultures and economies
- Broaden the activity from “British” part of the world to Middle and East Europe, Asia and Africa etc.
- To bring greater focus to commercial and project management.

#### **Working Week, Italy, Rome, 6<sup>th</sup> - 10<sup>th</sup> May, 2011.**

The Technical Programme for the Working Week was prepared with the great support from FIG Director Markku Villikka and from the FIG Office.

The Chair of Commission 10 took part at the 1<sup>st</sup> Young Surveyors Conference on 4<sup>th</sup> May and at ACCO Meeting on 5<sup>th</sup> May.

Annual Meeting of Com10 was holding on 6<sup>th</sup> May, 2012 in Hotel Cavalieri. The Annual Report 2011 and Work Plan for 2012 Plan were introduced to the supporters of Commission 10. The presentation was followed by the interesting discussion about Project management, Green Management, Sustainable Development and Building Information Modelling. The annual meeting was visited by the Vice President Rudolf Staiger.

The Commission Dinner took part in the on 6th May, 2012, from 8:00 p.m. at Ristorante Capperi! (Via Damiano Chiesa 10-12-14, 00136 Rome) and it was organised as a joint dinner with Commissions 7 and 8 with the help of three Italian Young Surveyors. The atmosphere was very relaxed; we spent a very pleasant evening among FIG friends with the local food and drinks.

There were prepared three Technical Sessions for the Working Week for Monday, 7<sup>th</sup> May, in room Caravaggio, and one Technical Session about BIM (Building Information Modelling) for Wednesday 9<sup>th</sup> May, The Technical Session brought interesting presentations of the papers followed by the live discussion to the topics. The reaction of the auditorium was perfect, and the best speaker of each session was rewarded by one bottle of the famous Czech beer.

Monday, 7 May, 09:00–10:30, Caravaggio, Rome Cavalieri, TS01C - Construction Economics and Management I, Chair: Robert Šinkner (Czech Republic), Rapporteur: Andrea Massaro (Italy)

Monday, 7 May, 14:00–15:30, Caravaggio, Rome Cavalieri, TS02C - Construction Economics and Management II, Chair: Robert Šinkner (Czech Republic), Rapporteur: Tzena Y C Wong (Hong Kong SAR, China)

Monday, 7 May, 16:00–17:30, Caravaggio, Rome Cavalieri, TS03C - Construction Economics and Management III, Chair: Andrea Massaro (Italy), Rapporteur: Tzena Y C Wong (Hong Kong SAR, China)

Wednesday, 9 May 14:00–15:30, joint TS08J with Com3, BIM – Building Information Modelling, Chair: Ian Greenway (UK), Rapporteur: Robert Sinkner (Czech Republic)

At the TS on Wednesday was presented a paper, which later became an Article of the Month June 2012: Jason Smith, President, Institute of Civil Engineering Surveyors, UK: **BIM – A Contractors Perspective**. Building information modelling (BIM) is an approach to designing and documenting building projects and is gaining acceptance in many jurisdictions across the world. It allows all stakeholders and actors within a building project the seamless link between the owner, the designers, the construction professionals, the master builders and the end users. In an era where our profession works towards managing all information spatially, BIM is an enabling a platform that should bring not only sharing and collaboration, but also avoidance of duplication, timeliness and value adding.

**10<sup>th</sup> Volleyball Tournament for Surveyors 2012, Sobota 19<sup>th</sup>, May, 2012, hall Czech Technical University (ČVUT), Pod Juliskou, Prague 6** – FIG and FIG Com 10 as a proud sponsor of this popular sport event for Czech and Slovak Surveyors (please see <http://galerie.maestroclub.cz/index.php?id=thumb&dir=2012.05-volejbal-turnaj-gk2012>).

The Chair of Com10 took part at the **International Conference BIM Day 2012, Prague, Tuesday, 12<sup>th</sup> June**.

For the majority of the scientific community is the concept of BIM rather Spanish village than an ideal tool for their professional activity, and that's why a nonprofit organization "Expert Council for BIM" has set itself the objective to make the Spanish village more clear and "Czech". The organizers promised to answer the many questions and did that - from the transparency of structures, construction, and sustainability through financial savings to the administration buildings. The main lecture "**BIM in UK**" by Dr. Stephen Hamil introduced the National BIM Library ([www.nationalbimlibrary.com](http://www.nationalbimlibrary.com)) and four years of experience from the implementation of BIM in UK.

**8<sup>th</sup> FIG Regional Conference in Montevideo, Uruguay (26<sup>th</sup> – 29<sup>th</sup> November, 2012)**

Chair of Com 10 took part at the ACCO Meeting prior the Regional Conference and at Technical Programme of Conference. We had one Technical Session with three papers and 25 auditors.

Com 10 is still seeking for the Chair Elect of Com 10 for 2013 and 2014 to be the Chair for 2015-2018.

The Deputy Czech National Delegate of FIG Com 10 Ing. Ivan Turecek took part at the **International Conference BIM2Day 2012 (BIM today – BIM tomorrow), Prague, 29<sup>th</sup> November, 2012**.

This Conference freely connected to Conference BIM Day in June 2012. The participants suggested the possibility of the introduction of BIM in the world, especially in the UK. At the same time opened up the discussion of the possibilities of the introduction of BIM in the conditions of the other countries.

### **Cooperation with the AAQS - Africa Association of Quantity Surveyors ([www.aaqs.org](http://www.aaqs.org))**

At a built environment congress in 1995 in Harare, Zimbabwe some of the quantity surveying delegates expressed interest in establishing an association for quantity surveyors practising in Africa. In 1999 at Sun City in South Africa the first General Assembly of the Africa Association of Quantity Surveyors ratified a constitution with by-laws and the first council of the AAQS was elected with Mr Len Harris from South Africa the first president.

The Prime objective of AAQS is to unite national bodies of quantity surveyors on the African continent on a democratic basis and to foster co-operative, intellectual, cultural, educational and scientific ties among such bodies.

The **6<sup>th</sup> General Assembly of AAQS was held on 26<sup>th</sup> August, 2011 in Mombasa, Kenya**, and Mr. Michael K. Frimpong, the Chair of Working Group 10.3, was elected as a President of this Association. This will helped the cooperation between AAQS and Com 10 and the FIG as a whole. 14<sup>th</sup> Council placed on 23rd June 2012 in Durban, South Africa under President M K (Michael) Frimpong. Michael decided to stop his activities as a Chair of Working Group 10.3 due to his work for AAQS.

### **Cooperation with the PAQS - Pacific Association of Quantity Surveyors ([www.paqs.net](http://www.paqs.net))**

The Pacific Association of Quantity Surveyors (PAQS) is an international association of national organizations representing Quantity Surveyors in the Asia and Western Pacific region. The Mission of the PAQS is: The promotion of the practice of quantity Surveying (QS) in the region, The promotion of “best practice” for QS in the region, The promotion of dialogue between member organizations, Encouragement of regional co-operation in the practice of QS, Fostering of research appropriate to the better understanding of building practice in the region, Rendering of assistance to members of member organizations working in each other’s countries.

The 16th PAQS Congress and Board meeting was successfully held in The Empire Hotel, Brunei Darussalam from 7 to 10 July 2012. For the very first time the Surveying Division of PUJA (B) hosted one of the most significant events for the Quantity Surveyors in the Pacific Region. The theme of the congress was Innovation and Sustainability: Challenges and Opportunities. Kindly view this website, <http://www.paqs2012.com>. Vice Chair and Chair of WG 10.4 – Green Management, Mr. Hock Hai Kwan, became a member of Research Committee of PAQS and decided to get decreased his activities as a Chair of WG 10.4 due to the big amount of work for PAQS.

Memorandum of Understanding between THE PACIFIC ASSOCIATION OF QUANTITY SURVEYORS (PAQS, [www.paqs.net](http://www.paqs.net)) and THE INTERNATIONAL FEDERATION OF SURVEYORS (FIG) was accepted by the General Assembly. The Chair of Working Group 10.4., Mr. Hock Hai Kwan, was delegated to develop this cooperation.

## **Cooperation with ICEC - the International Cost Engineering Council ([www.icoste.org](http://www.icoste.org))**

The International Cost Engineering Council (ICEC) is a non-political and non-profit organization which was founded in 1976 with the object of promoting cooperation between national and multinational cost engineering, quantity surveying and project management organizations worldwide for their mutual wellbeing and that of their individual members. ICEC office holders are members of an ICEC member association and are elected for a two year period. The term of the current officers will end in June 2014. The current ICEC Chair is Mr. Carsten Wredstrøm from Denmark. Mr. Carsten Wredstrøm is invited to the Working Week in Abuja to follow our activities.

### **5. Working Groups**

Every Chair of Working Group will prepare Report at FIG Working Week outlining activity and progress. Due to the other activities of the Chairs of Working Groups 10.3 and 10.4 for AAQS and PAQS we supposed to stop the programme of these Working Groups.

**Working Group 10.1 - Construction Economics**

**Working Group 10.2 - Commercial Management**

Working Group 10.3 - Project and Programme Management

Working Group 10.4 – Green Management

### **6. Calendar of incoming Events**

- Full participation at FIG Working Week and Congress: 2013 Abuja, Nigeria, 2014 Kuala Lumpur, Malaysia
- FIG strategic meetings
- Annual Meeting of FIG Commission 10 – Prague, Czech Republic, 2013
- Meetings of Sister Associations
- ICEC: The AIQS, AACE International & ACES will be holding this collaborative conference on 7 March 2013 in Perth, Australia. The title of the conference is: Project Cost Management: Control at the Interface with BIM.
- 17<sup>th</sup> PAQS 2013 will be held on 18-21 May 2013 at Xi'an, China and is well advertised at <http://www.paqs2013.cn>
- AAQS Council Meeting, October /November 2013 in Lagos, Nigeria

### **7. Commission Officers – recent contacts (actualisation)**

#### **Commission Chair**

Mr. Robert Sinkner

1<sup>st</sup> Vice Chairman of the Czech Union of Surveyors and Cartographers

Director and Vice Chairman of the Board, GEFOS a.s.

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**Vice Chair of Administration and Communication**

Mr. Tomas Beran, Ph.D.

CANADA

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**Vice Chair and Chair of WG 10.1 - Construction Economics**

Ms Sara J. Wilkinson

Associate Professor in Property and Construction

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**Vice Chair and Chair of WG 10.2 - Commercial Management**

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**Vice Chair and Chair of WG 10.3 - Project and Programme Management**

Mr. Michael K. Frimpong

Africa Association of Quantity Surveyors (AAQS), Ghana Institution of Surveyors

President of AAQS (from 2011)

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**Vice Chair and Chair of WG 10.4 – Green Management**

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Director, Perunding PCT Sdn Bhd

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An “unofficial photo page” of FIG Commission 10 you can find at the address

<http://figcom10.rajce.idnes.cz>

**Ing. Robert Šinkner, MBA**

Chair, FIG Commission 10

[www.fig.net/commission10](http://www.fig.net/commission10)

Czech Republic, February 2013

## FIG STANDARDS NETWORK REPORT TO 2013 FIG GENERAL ASSEMBLY

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The Standards Network was formed in 2002. It works within Commission 1 and consists of representatives from each of FIG's Commissions.

### **Terms of reference:**

The terms of reference of the Network are set out in the FIG Guide on Standardisation and are as follows:

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

### **Work since the 2012 Working Week**

The Network met at the 2012 Working Week in Rome. Key activities undertaken by Network members and other colleagues over the past year include:

- **Maintaining a list of commission topics relevant to standardisation** – this “Standards Template” is under revision. FIG commission chairs are reminded that this is one of the Standards Network's key tools. Regular updates are one of the main contributions the FIG Commissions can make to the Network. ***Unfortunately this template is obsolete today. It is essential that the commissions contribute to it.***
- **Staying involved with ISO/TC 211 standardisation activities** Nic Donnelly of Land Information New Zealand (LINZ) is the lead liaison from FIG to ISO/TC 211. Key items are:

At the Rome Standards Network meeting there was a discussion around who will replace Ian Greenway as the FIG liaison to the ISO Technical Commission (TC) 211 (<http://www.isotc211.org/>). Iain Greenway advocated the new representative should come from one of Commission 4, 5 or 6. This is where there is considerable work in the field of standards right now.

Briefly, TC 211 is concerned with standardization in the field of digital geographic information. This commission aims to establish a structured set of standards for information concerning objects or phenomena that are directly or indirectly associated with a location relative to the Earth. These standards may specify, for geographic information, methods, tools and services for data management (including definition and description), acquiring,

processing, analyzing, accessing, presenting and transferring such data in digital/electronic form between different users, systems and locations. The work links to appropriate standards for information technology and data where possible, and provides a framework for the development of sector-specific applications using geographic data.

Nic Donnelly of Land Information New Zealand (LINZ) has agreed to replace Ian Greenway as the FIG liaison to the ISO TC 211. Current work items include:

- 19119 – services (revision)
  - 19157 – data quality (at FDIS stage so no real chance to change now)
  - 19159-1 – calibration of remote sensitive imagery sensors (optical)
  - 19160-1 – addressing: conceptual model
  - 19161 – geodetic references
  - 19162 – well known coordinate reference systems
- **Progress of ISO 19152 on the Land Administration Domain Model (LADM)** – this work grew out of the Commission 7 work on the Core Cadastral Domain Model and was accepted into the ISO/TC 211 work programme in 2008. Christiaan Lemmen reports:

*“The Land Administration Domain Model (LADM) is a common standard since the end of 2012. Cadastre 2014 provided an important departure point in the development.*

*LADM will stimulate the development of software applications and will accelerate the implementation of proper land administration systems that will support sustainable development. The LADM covers basic information-related components of land administration (including those over water and land, and elements above and below the surface of the earth). The standard provides an abstract, conceptual model with four packages related to:*

- 1. parties (people and organizations);*
- 2. basic administrative units, rights, responsibilities, and restrictions (ownership rights);*
- 3. spatial units (parcels, and the legal space of buildings and utility networks);*
- 4. spatial sources (surveying), and spatial representations (geometry and topology);*

*LADM defines terminology for land administration, based on various national and international systems, that is as simple as possible in order to be useful in practice. The terminology allows a shared description of different formal or informal practices and procedures in various jurisdictions; The standard further provides a basis for national and regional profiles; and enables the combining of land administration information from different sources in a coherent manner.*

*LADM can integrate different forms of tenure; e.g. formal and customary types of tenure. Or even informal tenure or overlapping claims on land.*

*There is already recognition and support by FAO, UN HABITAT and several countries.*

*LADM based software developments have already been started in several places.*

*There is of course no interference with (national) land administration laws that would have any legal implications.*



*The LADM has been accepted by a unanimous vote from the participating ISO TC211 members.*

*At this moment the (very last) editorial updates are under process. The International Standard has been published at the 1st of December 2012.*

*We like to thank the editorial committee for their support and contributions."*

We are reminded that this is the first standard that has been initiated from within FIG.  
**Congratulations to Chrit for this very important – and impressive achievement.**

- **Staying involved with ISO/TC 172 SC6 work on survey instrument standards** – Hans Heister leads this work for FIG. Several standards under Technical Committee ISO/TC 172/SC 6 "Geodetic and surveying instruments" standards grouping are presently under discussion and/or revision:
  - ISO 09849 Geodetic and surveying instruments - Vocabulary (Edition 3)
  - ISO 12858-1 Optics and optical instruments -- Ancillary devices for geodetic instruments -- Part 1 Invar levelling staffs (Edition 2)
  - ISO 12858-2; 1999 Amendment 1
  - ISO 17123-5 Field procedures for testing geodetic and surveying instruments - Part 5 - Total stations (Edition 2)
  - ISO 17123-6 Field procedures for testing geodetic and surveying instruments - Part 6 - Rotating lasers (Edition 2)
  - ISO 17123-7 Field procedures for testing geodetic and surveying instruments - Part 7 - Optical plumbing devices
  - ISO 17123-8 Field procedures for testing geodetic and surveying instruments - Part 8 - GNSS field measurement systems in real-time kinematic (RTK) (Edition 2)
  - ISO 17123-9 Field procedures for testing geodetic and surveying instruments - Part 9 - Terrestrial laser scanners (TLS)

**Hans Heister provides us with this report from the last the ISO/TC 172/SC 6 Meeting held in Neubiberg, Germany on October 11 – 12 2012**

The meeting was held on invitation of FIG and the Institute of Geodesy of the University of the Bundeswehr Munich, represented by Prof. Dr. Hans Heister, in Neubiberg, Germany.

As usual, the conference was well prepared by the new chairman Mr. Wolfgang Hardegen, Leica Geosystems Ltd, Heerbrugg and the secretary Mr. Christian Schenk, SNV, Winterthur.

The main topics of this meeting can be summarised as follows:

- Report of the secretariat
- ISO/NP 9849: Vocabulary
- ISO 12858 – Part 1: Invar levelling staffs
- ISO 12858 – Part 2: Tripods
- ISO 17123 – Part 5: Total stations
- ISO 17123 – Part 8: GNSS field measurement systems
- ISO 17123 – Part 10: Non prism measurement (reflectorless distance measurements)
- ISO 17123 – Part 9: Terrestrial laser scanners
- ISO 16331 – Part 2: Terrestrial laser scanners

Newly published Standards:

- ISO 17123-Part 4:2011 Eletro-optical distancemeters (EDM measurements to reflectors)
- ISO 17123-Part 6:2011 Rotating Lasers
- ISO/DIS 16331-Part 1 (Performance of handheld laser distance meters)

**Comments on specific topics:**

The secretary Mr. Chris Schenk will retire at the end of the year 2012. Mrs. Barbara Mullis has been appointed by the SNV as the new secretary of ISO TC 172 SC6.

The delegates discussed again the revision of **ISO 9849:2000** (Vocabulary) and confirmed the project. The project leader has to prepare the CD after inclusion of the agreed changes.

The delegates discussed the comment resolution on **ISO 12858-Part 1** / CD (levelling staffs) and asked the secretary to launch the CD ballot after inclusion of the agreed changes.

Concerning **ISO 12858-Part2:1999** / CD (Tripods) the delegates asked the project leader to prepare a 2<sup>nd</sup> CD with a new set of parameters with respect to stability.

**ISO 17123 – Part 5** (Total stations): After inclusion of the agreed comments the secretary will submit the final version for publication.

**ISO 17123- Part 8** (GNSS): The second working draft was successfully discussed, so that the final version of the CD could be completed until end of 2012.

**ISO 17123 – Part 10** (Non prism measurement, reflectorless distance measurements by electronical tacheometers): The project leader from Leica Geosystems has changed (now Mr. Zogg). The presented document structure was intensively discussed. Finally Mr. Zogg was asked to prepare a new document including the main performance parameters and test conditions.

**ISO 17123-Part 9** (Terrestrial laser scanners): Due to the lack of active members the possibility consists to cancel the PWI. Mr. Heister was asked to request DIN for the nomination of a new project leader.

**ISO 16331-Part 2** (Terrestrial laser scanners): Furthermore this project will be kept on hold, as no project leader is available.

The next meeting of ISO/TC 172/SC 6 will be held on September 18-20 2013 in Graz on invitation of Prof. Dr. Werner Lienhart, Institute of Engineering Geodesy and Measurement Systems, University of Technology Graz, Austria

After the meeting a voluntary afternoon trip was organized to the famous BMW Welt, an interesting architectural building with a technical museum concerning the evolution of BMW motor vehicles.

Hans Heister  
Neubiberg, February 22, 2012

Abbreviations:

PWI:	Preliminary work item proposal (stage 1)
WD:	Working draft (stage 2)
CD:	Committee draft (stage 3)
DIS:	Draft international standard (stage 4)
FDIS:	Final draft international standard (stage 5)
ISO	International standard (publication) (stage 6)

- **Standards issues related to FIG Commission 2.** People working in different countries have different competencies. One key issue is to establish a database on body of knowledge in land surveying. Distance and e-learning are important points of reflection and development.
- **Standards issues related to FIG Commission 4.** The International Board (IHO, FIG and ICA) has published guidelines for establishing individual recognition for hydrographic surveyors, at both professional and technical levels, taking into account education and experience.
- **Standards issues related to FIG Commission 5.** There was also some discussion concerning FIG Publication No. 9. At the FIG working week held in Marrakesh it was decided that FIG publication No. 9 Recommended Procedures for Routine Checks of Electro-Optical Distance Meters - ([http://www.fig.net/pub/figpub/pub09/FIG-Publication\\_Nr9\\_english.pdf](http://www.fig.net/pub/figpub/pub09/FIG-Publication_Nr9_english.pdf)) should be revised with additions for recommendations for hand held distance-meters and reflector-less instruments. Unfortunately due to a very heavy workload this has not advanced. Nic Donnelly, from Land Information New Zealand, spoke about the importance of Metadata standards. This is an important field - not just in surveying and geodesy. He is looking to establish a joint FIG/IAG working group to study this important subject.
- **Standards issues related to FIG Commission 6.** Commission 6 is interested in the ISO TC 172 and the ISO 17123 series of standards related to survey instruments. There is interest in helping to define standards in deformation measurement and monitoring and data analysis. Other points of interest include machine guidance, land xml for 3D models, integrating BIM model and machine guidance, exchange of data.
- **Standards issues related to FIG Commission 7.** See remarks on *Progress of ISO 19152 on the Land Administration Domain Model (LADM)* above.
- **Standards issues related to FIG Commission 9.** One item of interest is documents and valuations of properties in jurisdictions where there are no existing property markets and systems in place. During the Rome Standards Network meeting Ian Greenway initiated a discussion concerning work of the Royal Institution of Chartered Surveyors (RICS) on **International Property Measurement Standards (IPMS)**.

Frances Plimmer, FIG Commission 9 Chair, and the FIG lead for this initiative reports:

RICS has recruited a team of “partners”, of which FIG is one, to develop **these International Property Measurement Standards**. There is to be a two-stage process – standard setting and standard promotion – and we are at the very beginning of the first stage.

Membership of this team includes (but is not necessarily limited to):

Asia Pacific Real Estate Association (APREA)	Peter Mitchell
Association of Southeast Asian Nations (ASEAN)	Mr Tian Sui Goh
Associação Brasileira de Normas Técnicas (ABNT)	Marcia Ferrari
ASTM International	Brian Meincke
Building Owners and Managers Association International (BOMA)	Henry Chamberlain Lisa Prats
CREDAI	Lalit Kumar Jain
Commonwealth Association of Surveying and Land Economy	Max Croft
CoreNet	Angela Cain Larry Bazrod
FIABCI	Patricia Delaney Judy Shenefield
International Facility Managers Association (IFMA)	Tony Keane
International Federation of Surveyors (FIG)	Frances Plimmer
International Valuation Standards Council	Chris Thorne
Royal Institution of Chartered Surveyors	Johnny Dunford Alexander Aronsohn

There has been a conference call for partners to introduce themselves and we are due to meet up in Washington DC in early May for our first round table discussion to confirm the strategy and scope of the project. Our agenda is (to date) as follows:

**1. Review of Purpose:**

- Currently property around the world is measured using different standards. This leads to inconsistency of data and a lack of comparability that negatively impacts business decision making and valuation.
- By creating International Property Measurement standards together, as an international coalition we can:
  - Ensure the existence of high quality shared and open standards for all
  - All take responsibility for the use and implementation of the shared standards
  - Make the direct connection between Property Measurement Standards and International Valuation Standards to ensure both support international consistency of data
  - Allow for an open and transparent standard setting process, including consultation documents; inclusive of all stakeholders and the public
  - In the future, seek to expand the consistent measurement principles to other sectors beyond property; such as land and construction

**2. Scope Background and comment to aid discussion:**

The role of the Coalition should not be to engage in any standard setting; the coalition will not discuss technical issues at this stage.

Instead the Coalition will set out the scope, process and confirm any legal or procedural issues. So the Coalition will focus on the global strategy for the acceptance and implementation of the IPMS.

**3. Stakeholders and capability** *Background and comment to aid discussion:*

Each coalition stakeholder attending the inaugural meeting is invited to give a short presentation on their organisation, its capabilities and objectives for the IPMS project.

**4. Definition of Property** *Background and comment to aid discussion:*

While this project is focusing on property, it is felt that consistent measurement is needed across all sectors; including land and construction. The coalition might confirm that Property Measurement is the first step in creating consistency of measurement across all sectors. If we look to confirm principles that underpin property measurement, we should ensure that those principles are relevant beyond property. This will enable us to use the same principles in the future to confirm measurement standards in other sectors.

Property includes a broad range of asset types and chattels. For the purpose of IPMS and to ensure the project is bounded the current proposal is to limit property to the real estate sector. Real estate means land and the built environment so small assets such as arts and antiques, personal property and chattels and intangible assets such as business valuation are excluded at this stage

**5. Communications** *Background and comment to aid discussion:*

Communication of the IPMS project, progress and stakeholder involvement will require a comprehensive communications plan. With this in mind we have established a website [www.internationalmeasurementstandards.org](http://www.internationalmeasurementstandards.org) which we are donating to the Coalition.

During the meeting we hope to discuss communications in detail. It is hoped that good communication and the early stages will help in long term and sustainable implementation.

**6. Entity** *Background and comment to aid discussion:*

It is suggested that the Coalition consider creating IPMS as a separate legal entity with all Coalition members as contributors. This will have the result that the IPMS entity will own the standards and therefore IPMS acts independently for the global public benefit.

**7. Copyright and Intellectual Property** *Background and comment to aid discussion:*

The Coalition, perhaps through a legal entity described above, should secure all copyright and intellectual property in the standards. We should seek absolute clarity that the content will be owned by the coalition. For example this should ensure that the content of IPMS is never changed, without agreement of the Coalition. We also suggest ensuring that the content of IPMS could never be used under a different name or brand for another purpose

The Coalition should also ensure that while ownership is clear, that the content be openly distributed for free; or as close to free as possible while recovering costs.

**8. Standard Setting Process** *Background and comment to aid discussion:*

The Coalition will need to set up a standard setting committee, perhaps of 5 - 7 individuals. For the purpose of IPMS the individuals would not represent any one organisation, sector or region. We would seek people who are qualified technically, have standard setting experience, and have an international outlook and understanding.

#### Suggested Next Steps:

- Standard Setting Committee is selected.
- Standard Setting Committee produces a consultation document and detailed scope with a comment period.
- Based on feedback, the Standard Setting Committee produce an Exposure Draft with a comment period.
- Based on feedback, the Standard Setting Committee produce the first version of International Property Measurement Standards.
- Updates produced annually following a comment period.

Once this first stage of setting standards has been achieved, there will be a roll-out second stage. Clearly, given FIG's relationship with its member associations, we are not in a position to impose any agreed standards on our membership, so the second stage for us will be very much one of promotion, and recommendation. But, of course, this will be for the future...

- **Communication issues.** It has been proposed in the Standards Network meeting that the Standards Template is sent out to the National Professional bodies. The FIG Commissions don't necessarily report their Standards activities to them. This would provide more interaction. It was proposed that the National Professional bodies are far more competent to evaluate the importance of standards to their members. Informing them of the FIG Standards Network work items would also ensure continuity and higher visibility.

**Closing Remarks.** Standards are important in surveying. If FIG does not contribute to them, present and future standards will be influenced by other concerned parties. And surveyors and the FIG will follow what these interested parties decide. For this reason it is important the FIG commissions participate actively in the Standards Network.

The Standards Network will not meet in Abuja.

David Martin

18 February 2013

# FIG Young Surveyors Network

Annual report on activities 2012

and

Revised Work Plan 2013 – 2014



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## 1. Terms of Reference

The FIG Young Surveyors Network addresses the need for young surveyor representation within the FIG, and the need to ensure FIG activities are meeting the needs of not only students and young professionals, but also youth as a broad category within society.

Young surveyors are defined as<sup>1</sup>:

- Surveyors aged 35 years or under
- Students of surveying
- Surveyors within 10 years of graduating from a Bachelor or Masters Degree.

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## 2. Mission

To facilitate an international network of young surveyors, and as a result:

**Represent:** Ensure young surveyors are present and represented across international, regional, national and local platforms. Ensure young surveyors are informed of key surveying events and news.

**Link:** Link young surveyors with the FIG and their national member association. Enable and promote international opportunities and experiences to young surveyors.

**Act:** Enable young surveyors to drive their own projects and surveying future, in addition to contributing to key programmes and objectives within the FIG, and with FIG Members

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<sup>1</sup> It must be stressed that the network is provided for those who need it, so there may be many who qualify as 'young surveyors' but who do not require the services of the network, and similarly many who do not qualify but who may still benefit from the network.

### **3. General**

#### **3.1 Vision**

1. Young surveyors are an integral part of the FIG and are visible and contributing across all levels of governance.
2. Young surveyors are actively taking part alongside other surveyors within FIG, and alongside other professionals.
3. Young surveyors have clear and designated platforms from which to gather local through to international information that is current and easy to navigate.
4. The international community understands the role of surveyors.

#### **3.2 Goals (By 2014)**

##### **Young surveyors are visible**

- There is a designated, officially recognised young surveyor representative to each FIG Commission and Task Force

##### **Young surveyors are active**

- There is a young surveyor representative contact for 50% of FIG National Member Associations
- There is a formalised young surveyor delegate for 20% of FIG National Member Associations
- A young surveyor event has been held in each region by 2014<sup>2</sup>, and has been reported on in the FIG YSN Newsletter and other professional publications
- The YSN has assisted in the coordination of at least two FIG Commission events

##### **Clear and designated platforms for information**

- The FIG YSN webpage is kept up to date.
- The FIG YSN is actively engaged with the redesign of the FIG webpage
- Facebook members increase to 1500, with at least 10 new posts per week
- LinkedIn usage increases from 2012
- FIG YSN newsletter is published quarterly

##### **The international community understands the role of surveyors**

- FIG YSN works with FIG Commissions and Partners (in particular, UN-Habitat Global Land Tools Network and Commissions 1 and 2) to promote the role of surveying and the interaction between surveyors and communities
- The FIG YSN works with Commission 1 to develop a report on this to the FIG Council and Members

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<sup>2</sup> Ideally linked to existing events, but including a dedicated YS day or session.



#### 4. Task groups

The YSN is different to the Commissions in that it aims to ensure its members are situated across the Commissions to best facilitate networking and engagement.

Instead of Working Groups, the work of the YSN is instead broken down into the following coordination tasks. Young surveyors coordinating these roles will be known as YSN Committee Members. Lead Young Surveyors are listed below in italics.

1. Events
  - a. FIG Working Week Abuja (*Yusuf Aro-Lambo, Pamela Ibikunle*)
  - b. South East Asia Survey Congress YSN program (*Donmarl Camua*)
  - c. YSN/Commission 6 joint event (*Jens-Andre Paffenholz*)
  - d. YSN/Commission 1 joint event (*TBA*)
  - e. Pacific Small Island Developing States Symposium (*TBA*)
  - f. European YSN Regional Conference (*Gustavo Palma*)
  - g. FIG Congress 2014 (*Nur Zurairah Abdul Halim*)
2. Work with FIG Member Associations, Commissions and Taskforces
  - a. Ensure a representative to each Commission and Task Force\*
  - b. Promote national member associations nominating a YS delegate\*
  - c. Develop FIG YSN linkages to other organizations (Eg. ISPRS, Engineers Without Borders, RICS, YGNSS, IGSO, ICA, CrisisCommons, RedR etc.) (*Cemal Ozgur Kivilcim, Mustafa Ustuner and Pinar Demirci*)
  - d. Facilitate information sharing and social networking with the Commissions (*Aliona Scutelnic, Chris McAlister*)

*National and Commission delegates will be listed in a pdf document available from [www.fig.net/ys](http://www.fig.net/ys)*

***Supporting Young Surveyors: Benedicta Ugwulebo, Daniel Helmricks, Kevin Msungu, Daniele Brancato, Andrea Massaro, Cemal Ozgur Kivilcim, Alex Maddison, Ronald Ssegendo, Luther Mathontu, Kazuaki Fujii, Hyunkee Lee, Genique Kemp, Juanvi Garcia, Carmen Tong***

3. Social Media and Communication
  - a. Develop a social media plan for the YSN
  - b. Build up LinkedIn usage
  - c. Develop mechanism for managing YSN data
  - d. Create YSN Newsletters

***Lead Young Surveyors: Bram van Londersele, Jonas van Hooreweghe, Ruben Martinez Naviera,***

4. Manage Funds and Sponsorship
  - a. Manage YSN Funds
  - b. Work with FIG Foundation to develop and promote opportunities
  - c. Work with FIG Corporate sponsors and additional event sponsors to ensure adequate promotion to Young Surveyors

**Lead Young Surveyors: Jens-Andre Paffenholz**

5. Mentoring and skills sharing
  - a. Develop and share information on mentoring programs
  - b. Develop and share information on international training and internship opportunities
  - c. Develop a plan for YSN skills sharing

**Lead Young Surveyors: Paula Dijkstra, Anne Kudelinbu**

6. Projects
  - a. Work with UN-Habitat Global Land Tools Network to develop body of knowledge on Youth and Land
  - b. Develop a project to survey the Struve Arc with the FIG Foundation

**Lead Young Surveyors: Kate Fairlie (Chair), Eva-Maria Unger (Incoming Chair)**

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## 5. Events

### 5.1 Past Events (2012)

- Rome FIG Young Surveyors Conference

4th- 5th May 2012, Rome ITALY

120 participants from =40 different countries attended this inaugural two-day event.

Report p. 1 - p.3 & p. 5 - p. 6: [http://www.fig.net/ys/Newsletters/ys\\_Newsletter\\_Aug\\_2012.pdf](http://www.fig.net/ys/Newsletters/ys_Newsletter_Aug_2012.pdf)

*See Appendix 1 for the outcomes from this conference*

- FIG Working Week Rome

6th- 10th May 2012, Rome ITALY

Young surveyor sessions were hosted throughout the Working Week, and the outcomes from the FIG Young Surveyors Conference were presented to the Closing General Assembly.

Report p. 1 - p.3 & p. 5 - p. 6: [http://www.fig.net/ys/Newsletters/ys\\_Newsletter\\_Aug\\_2012.pdf](http://www.fig.net/ys/Newsletters/ys_Newsletter_Aug_2012.pdf)

- Naples World Urban Forum

2nd - 6th September 2012, Naples ITALY

Kate Fairlie (sponsored by GLTN) and Eva-Maria Unger (sponsored by the FIG Foundation) attended this event to further the relationship between GLTN and the FIG YSN, and continue the discussion to highlight the dynamic relationships of Youth to Land and Land to Youth.

Report p. 5: [http://www.fig.net/ys/Newsletters/ys\\_Newsletter\\_nov\\_2012.pdf](http://www.fig.net/ys/Newsletters/ys_Newsletter_nov_2012.pdf)

- IV International Training Course in Topography

17th - 28th September 2012, Madrid SPAIN,

50 young surveyors from 17 countries participated. The FIG YSN was represented by Eva-Maria Unger (sponsored by the FIG Foundation and the Consiglio Nazionale Geometri e Geometri Laureati (CNGeGL)).

Report p. 2 & p.3: [http://www.fig.net/ys/Newsletters/ys\\_Newsletter\\_nov\\_2012.pdf](http://www.fig.net/ys/Newsletters/ys_Newsletter_nov_2012.pdf)

- FIG Commission 2 Workshop "Global Trends and Convergence in Surveying Education"

26th - 28th September 2012, Moscow RUSSIA

The FIG Young Surveyors Network was represented by Aliona Scutelnic.

Report p. 5: [http://www.fig.net/ys/Newsletters/ys\\_Newsletter\\_nov\\_2012.pdf](http://www.fig.net/ys/Newsletters/ys_Newsletter_nov_2012.pdf)

- Participation in Intergeo

9th - 11th October 2012, Hannover GERMANY

Presentation on the FIG Young Surveyors Network during the Students meeting. The FIG YSN was represented by Jens-Andre Paffenholz.

Report p. 6: [http://www.fig.net/ys/Newsletters/ys\\_Newsletter\\_nov\\_2012.pdf](http://www.fig.net/ys/Newsletters/ys_Newsletter_nov_2012.pdf)

- Ghana African Task Force

22<sup>nd</sup> - 23rd October 2012, GHANA

The FIG YSN was represented by Kate Fairlie. Five Young Surveyors were supported to attend by the FIG Foundation and the FIG YSN: Yusuf Aro-Lambo (Nigeria), Adama Sarr (Senegal), Ronald Ssengendo (Uganda), Luther Mathontu (Tanzania), and Leah Njuguna (Kenya).

Report provided in the February YSN newsletter.

- Participation in Trimble Dimension 2012

5th - 7th November 2012, Las Vegas UNITED STATES

The FIG YSN was represented by Eva-Maria Unger (sponsored by the FIG Foundation)

Report provided in the February YSN newsletter.

- FIG Regional Conference in Montevideo (Joint FIG YSN UN-Habitat GLTN session)

26th - 29th November 2012, Montevideo URUGUAY

Around 40 Young Surveyors joined this Regional Conference. Kate Fairlie and Eva-Maria Unger represented the FIG YSN, with sponsorship from the FIG Foundation. Genique Kemp (the Bahamas), Tobias Furlanetti (Brazil) and Melissa Robert (Uruguay) were supported to attend by the FIG Foundation.

Report provided in the February YSN newsletter.

- Participation in GLTN Workshop on Youth and Land Issues

16th - 18th December 2012, Casablanca Morocco

Kate Fairlie and Eva-Maria Unger were invited to represent the FIG YSN by the UN-Habitat Global Land Tools Network.

Report provided in the February YSN newsletter.

## 5.2 Upcoming Events 2013

- CLGE Meeting

18th March 2013, Brussels BELGIUM

- CLGE General Assembly 2013

21st - 23rd March 2013, Budapest HUNGARY

- Training for Trainers Workshop on STDM

3rd - 5th May 2013, Abuja NIGERIA

Joint FIG YSN and UN-Habitat GLTN Workshop

- FIG Working Week

6th - 10th May 2013, Abuja NIGERIA

Special joint YSN/Commission afternoon sessions are planned.

- 12th South East Asia Survey Congress

18th - 20th June 2013, Manila PHILIPPINES

*Including young surveyor sessions*

- Pacific Small Island Developing States Symposium

TBC September 2013, FIJI

- European Young Surveyors Conference

TBC October 2013, PORTUGAL

- Link with Commissions 1, 2, 6 and 9 for their events in 2012



## **6. Publications**

### **Newsletters 2012**

April 2012: [http://www.fig.net/ys/Newsletters/ys\\_newsletter\\_april\\_2012.pdf](http://www.fig.net/ys/Newsletters/ys_newsletter_april_2012.pdf)

August 2012: [http://www.fig.net/ys/Newsletters/ys\\_Newsletter\\_Aug\\_2012.pdf](http://www.fig.net/ys/Newsletters/ys_Newsletter_Aug_2012.pdf)

November 2012: [http://www.fig.net/ys/Newsletters/ys\\_Newsletter\\_nov\\_2012.pdf](http://www.fig.net/ys/Newsletters/ys_Newsletter_nov_2012.pdf)

### **GIM pieces**

[http://www.gim-international.com/news/id6605-FIG\\_Working\\_Week\\_Opens\\_in\\_Rome.html](http://www.gim-international.com/news/id6605-FIG_Working_Week_Opens_in_Rome.html)

### **Article in Professional Surveyor Magazine**

[www.profsurv.com/magazine/article.aspx?i=71266](http://www.profsurv.com/magazine/article.aspx?i=71266)

### **WUF statement**

<http://youth21dotorg.wordpress.com/2012/09/12/youth-statement-of-the-6th-world-urban-forum-2012/>

**Kate Fairlie** and

**Eva-Maria Unger**

**Chair of FIG Young Surveyors Network**

**Incoming Chair of FIG Young Surveyors Network**

February 2013

## **APPENDIX 1: Statement from the FIG Young Surveyors Conference:**

Based on our workshop sessions the young surveyors answered the following questions:

### **1. The FIG and Member Associations can best support young surveyors by...**

- ... Encouraging each country to nominate a young surveyor representative to FIG and to each FIG Commission
- ... Entrusting young surveyors with more responsibility, and delegating young surveyors with roles in decision making processes
- ... Ensuring information flows between the FIG and young surveyors
- ... Opening new doors of connection with international companies for internships and collaboration

### **2. Young surveyors think the benefits of FIG are...**

- ... Opportunities (Professional development, access to industry leaders and peers)
- ... Knowledge sharing (technical, cultural, problem identification and solving, mentoring)
- ... Networking – forming an international community
- ... Advocacy
- ... Professional standards of practice

### **3. The priorities for the FIG Young Surveyors network are...**

- ... Motivating young surveyors by sharing skills and knowledge
- ... Connecting young surveyors
- ... Advertising the FIG and enabling young surveyor opportunities
- ... Create a guideline for a mentoring scheme
- ... Improving the visibility of the profession
- ... To inspire.



**Final Report on**  
**Africa Task Force:**  
**West Regional Africa Workshop**

**Environmental Resilience:**  
**An Agenda for Action for**  
**Land professionals to advocate for change in**  
**Land and Natural Resource Management**

**Elmina, Ghana**

**21<sup>st</sup> – 22<sup>nd</sup> October 2012**

Prepared by

Dr D Dumashie

Chair FIG Task Force on Sub Saharan Africa

**International Federation of Surveyors**

## **Chairs Final Report 2013**

### **Africa Task Force: West Regional Africa Workshop**

The FIG Africa Task Force (ATF) is an initiative aimed at supporting FIG African Member Associations and Academic members over the period 2010- 14.

This global taskforce emerged in response to consideration by the general council and approved by General assembly in Eilat, Israel, May 2009. The terms of reference and supporting material can be viewed at [www.fig.net/atf](http://www.fig.net/atf).

This is the Chairs report of the sub Saharan African Task Force workshop regarding the preparation and running of a two-day workshop with a focus on Environmental Resilience: An agenda for Action for Land professionals, held on 21- 22 October 2012 in Elmina, Ghana.

The key purpose of the task force is to enable the surveying profession in sub Saharan Africa to deal with social responsibility in terms of contributing to achieving the MDGs. In this regard, the role of the surveyors as change agents engaging with the politicians and civic society is important.

Each year the Task Force invites an African member association to co-host the workshop event. It is with great pleasure that the FIG Africa Task Force (ATF) welcomed the **Ghana Institution of Surveyors (GHIS)** who organised the logistical arrangements in Ghana. In addition this year focus compliments building the profession for the future generation accordingly the FIG **Young Surveyors Network (YSN)** contributed significantly to the deliberations.

The two day Workshop considered and devised key messages in Environmental Resilience in Land, to strengthen FIG Members within sub Saharan Africa and will present its findings at FIG Working Week in Abuja 6<sup>th</sup>- 10<sup>th</sup> May 2013.

#### **Key activities undertaken**

##### **Seminar Organisation and Program**

This workshop brought together decision makers and practitioners from several African nations (Botswana, Democratic Republic of Congo, Ethiopia, Gabon, Ghana, Kenya, Nigeria, Niger Republic, Tanzania, Senegal, South Africa, Uganda and Zimbabwe) with expertise across the range of land professional disciplines within the FIG membership.

The final version of the workshop programme is attached to the detailed report available on the web site [www.fig.net/atf](http://www.fig.net/atf). Presentations from the workshop are also available on the FIG web site.

##### **The objectives of the workshop**

The task force in 2012 will look at the theme, Environmental Resilience in Land and to develop Land professional's capacity through a strategic foresight exercise. This aims to develop and promote an Agenda for Action for Land Professionals to advocate change in approaches to land and resource development in support of good land governance.

The workshop recognises that the pace of change in the Environmental agenda adds urgency to our professional work. Environmental resilience in this workshop is



defined as human impact that should not be greater than the environmental carrying capacity of the natural resource.

Over a two day workshop the Task Force objectives were to provoke thought and stimulate debate along with the objectives to:

- promote a longer term proactive outlook among delegates;
- challenge some existing assumptions about the future development of land governance;
- encourage alternative ways of thinking about what lies ahead in a rigorous and systematic manner; and
- provide a platform for delegates to participate in thinking, talking, planning and acting creatively and differently together.

These objectives were achieved and a set of Scenarios developed that have led to the drafting of an Agenda for Action with a final draft document expected to be uploaded on the web site soon. The deliberations of how this was achieved are explained below.

### **Speakers and Participants**

An invitation letter was sent to all member associations in sub Saharan Africa requesting that they circulate amongst their members. Other special invites were sent to African land professionals (Planners and Engineers). In addition the Young Surveyors Network (YSN) successfully obtained a FIG Foundation grant which combined with their own resources, funded young professional's to attend the workshop.

Delegates were limited to 42 in number, an initial list of participants were drawn from the registration process organised by ATF and GhIS

The list of confirmed participants and speakers is attached to the detailed report, available on the web site.

### **Deliberations**

In the face of ever increasing impacts as a result of human settlement, planning for the future of the places we inhabit has become increasingly challenging. The social, economic, environmental, and infrastructure systems that sustain us have become more complex and interdependent, and uncertainty about future changes remains high. A deeper understanding of sustainability has extended the planning horizon to 30 years and beyond, far longer than the terms of most politicians and the careers of today's planners and administrators.

As professionals we need to take the opportunity to take a leading role in advocating to stakeholders the need for key environmental mitigations steps to prevent land degradation. GHIS President D K Kyere (FGHIS) echoed that exploring the advocacy role of Land Professionals is very apt and timely as most governments in Africa, including Ghana, are trying to streamline the issues of land as part of the general shift in the development paradigm.

Our deliberations over the next two days are concentrated around a Futures approach. This approach offers a powerful means of exploring what might happen in the future and identifies strategic actions that might be taken today to prepare for prospective futures in our professional lives. Drawing upon and adapting Strategic Foresight methodologies, the two-day structure is very much a rapid futures appraisal approach.

The first day was led by presentations from Kayoed David Oluwamotemi (Nigeria),

and two Surveyors from the Young Surveyors network, Leah Njugana (Kenya) and Ronald Ssegendo (Uganda) each sharing their personal professional observations addressing the global trends that might influence African nations in the next 20+ years. Once the delegates shared their understanding of the trends, the deliberations moved onto the scenario planning and development process

Scenarios are compelling pictures of alternative possible futures. They are not predictions or forecasts, but stories that help us to imagine and portray complex, multi layered and multi dimensions systems, such as development in land and land use.

The participants were split into groups in which to carry out the two days' activities. The remainder of the day concentrated upon going through a rapid appraisal of scenario planning that will enable thinking to devise key messages. Delegates are divided into groups in order to concentrate on specific environmental themes:

- Climate Change (Group 1)
- Natural Resource Security; food, water (Group 2)
- Infrastructure; Power, Transport (Group 3)
- Urbanisation & Rural/ Urban migration (Group 4)
- Biodiversity; landscape/ nature protection (Group 5)
- Mining Resources (Group 6)

At the end of the day each group had a clear idea of their respective environmental theme, they created scenarios that are all plausible and take into account trends as identified today, and that will have an impact in the 20- 30 year future.

The second day maintained innovative thinking by deliberating and collecting information to compile an Agenda for Action. The outcome provided 6 environmental themes, each with 4 possible and plausible scenarios. From each set of scenarios, a preferred foresight future is identified for Land professionals. Delegates considered and debated in a rigours and logical sequence to find ideas for action for key messages, i.e. material that will prepare for the Agenda for Action. This included recommendations on how to mitigate negative impacts of environmental degradation (a) skills needed to help Land professionals to be better prepared and understand the issues (b) Engagement with whom, and on what stakeholder platforms, and (c) the role of Member Associations.

On the plenary stage the presentations of each group's proposal were made, followed by a plenary discussion led by Dr Jenny Whittle (South Africa), all positively critiqued issues presented by the groups.

In the final wrap-up session it was agreed that the 2012 ATF workshop has successfully outlined:

1. Key messages; A series of scenarios to demonstrate key messages based on environmental themes
2. Text material: to be used to compile an agenda for action. This will be prepared and incorporated into a Draft Futures document over the subsequent months to be further discussed at the ATF Roundtable to be held at the FIG Working Week in Abuja, May 2013.
3. For individuals: the workshop has started an earnest and continuing conversation about the future of the profession in an advocacy role, and especially the opportunity to be taken up by the member associations.

## **Outcome of the Workshop**

Reaching consensus on the next steps, that in the first quarter of 2013 action by:

- End February - Each of the 6 groups will be responsible for review and refinement of their scenarios.
- March - final edit, formatting and print production in preparation for,
- May - the draft Agenda for Action will be brought to the Roundtable held at the FIG Working week, Abuja, for final discussion on content.

A short workshop report based on the detailed deliberations has been prepared and uploaded onto the ATF web site.

## **Closing remarks**

Underpinning the workshop deliberations is the challenge for individual member associations to work toward our Vision to facilitate environmental resilience in land:

**By 2030 Africa land professionals will provide global thought leadership and promote professional leadership qualities amongst its members and within their Associations**

To do this requires capacity of sufficient number of Land professionals entering the profession who are mindful of the need for foresight in their own profession as well as society at large. Delegates were enthused to encourage their member associations to take on-board the Scenario strategic planning tool and All supported one delegate's observation that the process enables All to:

***UNDERSTAND LIFE FROM OUR HISTORY,  
WE WANT TO LIVE INTO THE FUTURE.***

Further, it is accepted that to reduce environmental impact as a result of human activities we need to change and adapt our practices. Environmental adaptation is not just an issue for government; the Land Professional sector has an opportunity to contribute to the development and deployment of public adaptation solutions.

Clearly in a rapid scenario appraisal such as this, detailed work on adaptation cannot be made but this workshop is the beginning. By providing exploratory and plausible story- scenarios will enable Member Associations to progress and adapt the stores and apply this to their own specific nation contexts.

Drawing from the key messages identified in the scenario planning process, it is hoped that this agenda will enable professionals to support and advocate practices contributing to the good land governance and potentially contribute to a Nation State Adaptation Strategy as these emerge in the upcoming years.

To achieve the workshop Vision requires delegates to encourage Member Associations to use the workshop output as a starting methodology for further development to devise a realistic strategy that articulates adaptation messages to mitigate against environmental degradation in land governance policy and land management actions.

We aim to now to cast the net wider than just the workshop and look at capturing the thinking and input from the wider FIG membership at the Roundtable in Abuja 2013.

## **Website**

The conference web site website is located at: <http://www.fig2010.com>

The FIG web site is located at: [www.fig.net](http://www.fig.net)

***Dr Diane Dumashie, Chair, Chair Africa Task Force, February 2013***

## **Climate Change Task Force: Report to FIG Working Week, Abuja, May 2013**

### **Membership**

The members of the Task Force are:

John Hannah	(New Zealand)
Isaac Boateng	(Ghana/UK)
Paul van der Molen	(Netherlands)
Neil Pullar	(FAO/New Zealand)
Michael Sutherland	(UK)
David Mitchell	(Australia)
Stig Enemark	(Denmark) Informal, Ex Officio member.

The Task Force also has a number of corresponding members who are contributing to its work.

### **Activity Over the Last 12 Months**

The Task Force met in Rome where two dedicated Technical Sessions were held as part of the FIG Working Week. The following actions were taken.

1. Subject to minor changes, the Terms of Reference were endorsed.
2. Confirmed the goal of producing a final report for the FIG General Assembly in Kuala Lumpur in 2014.
3. It was agreed that because of commonality of interest the TF would combine its technical sessions with those of FIG WG 8.1 at future Working Weeks.
4. The TF would next meet formally at the FIG WW in Abuja in May 2013.

Since the Rome WW, Task Force members have completed a comprehensive outline of the final draft report. Responsibilities for writing individual sections of this report have been allocated both to TF members and to members of associated commissions where there is a commonality of interest.

The proposed final structure of the report is shown in the Appendix below.

John Hannah  
Chair, Climate Change Task Force  
19 February, 2013

## Appendix

# THE CONTRIBUTION OF THE SURVEYOR TO CLIMATE CHANGE STUDIES

1. **Introduction** (1200 words)
  - 1.1. What is meant with Climate Change
  - 1.2. Climate change - challenges and priorities
    - a. Increase in frequency and severity of natural disasters
    - b. Rising sea levels?
    - c. Impact on natural resources
    - d. Impact on human settlements
    - e. Impact on food security
    - f. Economic impact
    - g. Etc
  - 1.3. What do we mean by 'surveyor'
  - 1.4. Previous FIG studies related to climate change
  - 1.5. The purpose of this publication
  - 1.6. Target groups for this publication
2. **The contribution of spatial science to climate change studies** (4000 words)
  - 2.1. Monitoring (requirements data on Sea level, Ice Mass, Land Cover, Land Forms....)
  - 2.2. Data integration and analysis
  - 2.3. Understanding issues of geographical scale (global, continental, regional, national, local, different requirements?)
3. **Tools for spatial data collection and analysis** (3000 words)
  - 3.1. Data collection tools
  - 3.2. Analytical tools
4. **Spatial aspects of mitigation and adaption to climate change** (4200 words)
  - 4.1. Urban areas/human settlements (reducing carbon/e footprint existing cities, adaptation measures, generation and transportation of renewable energy [solar, wind, geothermal, energy, cropping), design of energy landscapes)
  - 4.2. Rural areas (reducing carbon/e footprint existing cities, adaptation measures, generation and transportation of renewable energy [solar, wind, geothermal, energy, cropping), design of energy landscapes)
  - 4.3. Peri urban areas: rapid urbanization (special feature)
  - 4.4. Specific climate change adaptation sectors
    - a. DRR and Coastal management
    - b. Biodiversity and Coastal Ecosystems Resilience
    - c. Forestry and agriculture (REDD, REDD+) (300 words)
    - d. Food Security
    - e. Water resources
    - f. The Kyoto protocol and the establishment of emission allowances or carbon credits (compliance markets, voluntary carbon/e markets) (300 words)
    - g. Physical infrastructure
    - h. Capacity building

5. **Spatial aspects of climate governance** (inclusion of CC aspects in governance) (1200 words)
  - 5.1. Need for relevant data and information at decision makers level
  - 5.2. Impact on Policy and Land Policy
  - 5.3. Need for multi level collaboration and governance
  
6. **The application of the professional skills of the surveyor**
  - 6.1 Clarification Property Rights (Rights and Restrictions, Responsibility, Unbundling, externalities)
  - 6.2 Land Administration (ownership, value and use of land, energy labelling)
  - 6.3 Land management (planning, development, land use control, including energy sources, energy sinks and energy cascades)
  - 6.4 Spatial Information Management
  - 6.5 Valuation and taxation
  - 6.6 Positioning and measurement
  - 6.7 Disaster risk management
  
7. **Practical examples** (source: other FIG papers such as Friesicke & Kötter, Vranken & Broekhof) (10 pages, mainly figures)
  
8. **The role of surveyors and capacity building** (role of surveyors, new roles, requirements education and training) (1200 words = 2 pages).



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

## **OICRF Annual Report 2012**

OICRF - the International Office for Cadastre and Land Records - is one of the permanent bodies of the International Federation of Surveyors (FIG). OICRF serves as a documentation and study centre for land administration and is charged with the following tasks:

- collecting and systematically filing and indexing all documentation material relating to existing cadastres and land registration systems,
- conducting comparative studies of this material and publishing the results,
- providing information and advice on all cadastres and land registration systems to all interested persons and institutions for the purposes of study or to help countries wishing to set up a cadastre or land registration system or improve an existing system,
- maintaining the documentation system on a daily basis.

A main success in 2012 was the publication of a comprehensive comparative study: the Land Administration Domain Model, published as ISO19152.

## **The digital Land Administration Library in 2012**

OICRF maintains a digital library that contains approximately 11.152 publications (December 31, 2012), which includes things such as conference documents, magazine articles and reports on land administration. OICRF contents are available in different languages. At the moment there are 52 publications in Dutch, 421 publications in French, 318 publications in German, 14 publications in Italian, 19 publications in Russian, 169 publications in Spanish and 10.159 publications in English.

All of the available documents and the most recent publications can be accessed electronically at [www.oicrf.org](http://www.oicrf.org) and downloaded in portable document format. Users can also trace documents linked to a certain event, such as papers linked to a specific conference or seminar. The website is a popular resource. In 2012 the digital library got about 18.486 visitors from all over the world (138 countries). About 11.236 papers have been downloaded. This number is based on the application of Google Analytics; visits from search engines are excluded in this.

## **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.

Ir Christiaan Lemmen

Ms Pauline van Elsland

## Comparative Studies in 2012

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REPORT OF THE INTERNATIONAL INSTITUTION FOR THE HISTORY  
OF SURVEYING & MEASUREMENT (IIHSM)  
2012-2013

**Rome**

The IIHSM conference just before the FIG week was honoured by the visit of our FIG President. On this occasion the book on the maps of Rome was presented by the authors Mario Bevilaqua and Marcello Fagiolo: *Piante di Roma*. All participants and organisers were very surprised and delighted each to have been given a copy of this valuable book. The preparation of the one day symposium had been seriously disturbed by the financial problems of the Italian Government and the exhibition and the venue that had been booked and prepared already in 2010, in the library Casanatense, was cancelled a short time before May 2012. But our Italian colleagues made it possible to be the first to use the facilities in their new offices. Sincere thanks again to our Italian colleagues. John Brock had prepared a series of speakers and they were so numerous that the history session continued during the FIG week. On the Saturday a group visited the Vatican Museum and especially the map room by Danti.

**Mercator 1512-2012**

2012 saw the celebration of the 500th anniversary of Gerard Mercator, born in Rupelmonde, Belgium, he died in Duisburg, Germany. He was one of the most influential land surveyors and cartographers ever, who invented a projection system still in use to-day. By increasing the distances between the great circles of latitude he solved the major mathematical problem of the loxodrome, which became a straight line: or how to keep a constant bearing for the navigator. A one week conference was organised in Saint Niklaas, Belgium, and a one day conference in Duisburg, the two cities each housing a museum devoted to the great man. The Committee de Liaison des Geometres paid homage to Mercator.

Exhibitions were organised in Dortmund by our German colleagues and in St Niklaas, Belgium, by Jan de Graeve, on the mathematical and scientific books from the Mercator library. Jan has also published a 200p book on this research that had been finalised over the last few years. Title: *Gérard Mercator. La bibliothèque mathématique d'un génie. The mathematical library of a genius*, Le Livre & l'estampe.

Jan gave presentations in Vienna, Austria, in Duisburg, in Brussels, St Niklaas and in Rome during the FIG history meeting on Mercator.

**Struve Arc Enhancement**

As reported last year, the collection of Archive material relating to possible enhancement of the World Heritage Monument to cover 105° of latitude has been finalised. A meeting of existing Struve Arc countries was held in Belarus 3-5 July. Among the Resolutions taken there was the following:

*Resolution No. 2*

The Delegates of the countries of the Arc

**decided** to support the initiative of Mr Jim Smith, Alan Wright, Jan de Graeve and Vitalij Kaptüg in their impressive research work for the Central European and 30th Arc,

**endorsed** the Chair, Secretary General and other colleagues to prepare a stepwise work plan for a possible extension of the Struve Geodetic Arc in the northern and southern directions, further research of the Central European and 30th Arc. The plan shall consider an involvement of the authorities of the countries concerned, and provide guidelines for restoration of these Arc's geodetic sites.

It is feasible that some external funding may become available to assist this project but no details are available for publication yet.

The Struve arc enhancement was discussed in Belarus, and a paper prepared by Jim Smith was presented by Alan Wright and Jan de Graeve.

Subsequently in October Alan Wright and Jim Smith travelled to Brussels to meet up with Jan de Graeve and the Secretary General of the Struve Geodetic Arc Committee, Saulius Urbanus to further progress of the project. Useful exchanges took place with the hope that all could be completed in time for a submission to UNESCO by 1 January 2015.

### ***Vermessungs Geschichte***

The Dortmund Museum is interested to produce a translation of this volume into English. It is a history of surveying based on the German archives and practices prepared by our German colleagues. In Rome the FIG Foundation expressed its interest in this project and further discussions are on-going.

### **Adelaide**

Little progress has been achieved in the project in Adelaide, Australia for the preparation of William Light's plan and the preservation of the parks in and around the city, to be inscribed on the UNESCO World Heritage List

### **Abuja**

No interest was found during the Rome gathering for an exhibition and/or historical presentations in Abuja. Unfortunately Jim Smith and I cannot attend this 2013 meeting in Nigeria due to health problems, but we know for sure there is a serious concern and interest in the history of our profession, as over twenty Nigerian colleagues attended the Stockholm meeting some years ago.

### **Professor Mike Cooper**

During the year we lost valuable assistance with the unexpected death of Professor Mike Cooper. A former Commission Officer of FIG he had considerable historical knowledge and made numerous contributions to FIG gatherings. His input will be much missed.

### **Helmut Minow**

We were sorry to be informed that our colleague and friend Helmut Minow had passed away and with his colleagues we paid respect during the funeral to a pioneer in the history of our profession who has devoted a great part of his life to the history, library and museum of Dortmund.

### **Committee membership**

With the loss of Mike Cooper I would be pleased to hear from any FIG delegates with an interest in historical matters who might wish to join the group and help promote its projects. It is a small group of enthusiasts always looking for new anniversaries to celebrate or projects in which to take an active interest.

### **Museum of Mapping in UK?**

Efforts continue to find a location for a Museum of Mapping in UK. With the demise of the exhibit and records library at the Ordnance Survey and little of relevance now on show at the Science Museum the requirement for a dedicated home becomes more urgent. Suggestions and offers of help on this are welcomed.

### **Future meetings**

We look forward to prepare for next year a major program with the FIG President in his Home country with colleagues of the Philippine Islands who recently started a group on history of surveying

2014 Kuala Lumpur

2015 = 400 years after Snellius's triangulation of 1615

2015 = 350 years after Newton postulated in 1665 that the earth was oblate.

### **Board Members**

Our board members are getting older so we would welcome colleagues from all over the world to come and join us to prepare the future of our past. Jan de Graeve

Jan de Graeve

February 2013

**Report to the 36<sup>rd</sup> General Assembly  
FIG Working Week, Abuja, Nigeria, May 2012**

**FIG Foundation**

**Report of Activities 2012**



The FIG Foundation

**1. Administration**

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

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

The Board of Directors for 2012 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.

In addition there are two grant programmes under the FIG and the FIG Foundation:

- The ESRI/FIG Grant Programme was introduced in 2002 (on hold)
- The Intergraph/FIG Grant Programme was introduced in 2003 including different categories of grants (on hold).

**3. Meetings 2012**

The board held two meetings throughout 2012, an official meeting in Rome during the 2012 Working Week and an unofficial meeting during the 8<sup>th</sup> Regional Conference in Montevideo, Uruguay

At the meeting in Rome 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.

At the meeting FIG President CheeHai Teo was present to discuss various issues, among other things, how FIG Foundation may assist in spreading out some of the information that FIG knowledge bank consists of.

FIG Permanent Institution on History (IIHSM) represented by Jan de Graeve was invited due to the fact that, today, there is no book about the history of surveying available in English. There are books on parts of the surveying history but nothing that includes the full history. Therefore Jan de Graeve asked the Board to consider help with the realization of such a book. Target group will be mainly university students however it could be interesting for the whole surveying community.

The Board of the Foundation had a discussion on possible categories of other applications to fund:

- a) Research grants (which would be available to everyone, to be applied for using a 1-page standard application),
- b) Fellowships (primarily to developing countries, but should not be awarded to same person twice)
- c) Scholarships
- d) Separate travel grants (of up a few hundred EUR).

#### **4. Grants 2012**

FIG Foundation had decided to publish a 2012 FIG Foundation Academic Research Grants to provide for research grants of up to 20,000 euros spread over two years. The grants were intended to researchers representing countries which on the World Bank list are rated as low or lower middle income countries. At the deadline, FIG had received 8 applications of which two continued to a second round. At the meeting FIG Foundation Board decided not to grant any of the two with the FIG Foundation Academic Research Grant but re-published the call for grants for a new round. These grants should be decided upon in 2013.

FIG Foundation also decided on announcing a PhD Scholarship to help a PhD student in the final stage of the study, i.e. to someone who has a dissertation ready to publish. According to the statutes of the Foundation the PhD grants were intended to applicants who on the World Bank list are rated as low or lower middle income countries. Unfortunately, none of the received applications met the demands of the scholarship, and it was therefore decided to withdraw the scholarship.

The FIG Foundation decided at the 2011 FIG Working Week in Marrakech, Morocco to fully fund FIG Foundation Young Surveyor Fellowships for four young surveyors from developing countries to attend and participate in the 1<sup>st</sup> FIG Young Surveyors Conference and FIG Working Week in Rome. The four fellowships were awarded to:

- Rizqi Abdulharis (Indonesia)
- Luther Matonthu (Tanzania)
- Aliona Scutelnic (Moldova)
- Ronald Ssegendo (Uganda)

Additional support was provided to Kate Fairlie, Chair of the FIG Young Surveyors Network and Organizer of the 1<sup>st</sup> FIG Young Surveyors Conference to attend and participate in the conference and working week in Rome.

Encouraged by the success of the first FIG Young Surveyors Conference and the enthusiastic participation of 120+ young surveyors from over 40 countries at both the conference and working week, the FIG Foundation Board of Directors decided to provide additional funds to support FIG Young Surveyor Network (YSN) activities in 2012. All awards were made by application. These included:

Young Surveyor participation at African Task Force Workshop in Ghana, September 2012, 7 grants:

- Yusuf Aro-Lambo (Nigeria)
- Kate Fairlie (Australia)
- Luther Matontu (Tanzania)
- Leah Njuguna (Kenya)
- Adama Sarr (Senegal)
- Ronald Ssegando (Uganda)
- Benedicta Ugwulebo (Nigeria)

Young Surveyors participation in FIG Regional Conference 2012, November 2012 in Montevideo, Uruguay, 5 grants:

- Kate Fairlie (Australia)
- Thobias Furlanetti (Brazil)
- Genique J Kemp (Bahamas)
- Melissa Robert (Uruguay)
- Eva-Maria Unger (Austria)

2000 EUR in support to the CNGeGL two-week course for Young Surveyors: “IV International Training Course in Topography for Young Surveyors” which took place in September 2012 in Spain. Funds were also provided to Eva-Maria Unger, Secretary of the FIG Young Surveyors Network, to attend the opening of the course to make a presentation about the YSN and FIG.

Altogether 26,417 EUR was spent in 2012.

## 5. Donations in 2012

<b>Rome:</b>	EUR
Voluntary donations	2,090.00
Foundation Dinner and registration fee	16.717.00
<b>Total Rome</b>	<b>18,807.00</b>

### Other donations

Trimble donation Uruguay	5,000.00
Ives Foundation (USD 5000.00)	3,600.00
<b>Interest</b>	
Interest 2012	3,885.00
<b>Income FIG Foundation 2012</b>	<b>31,292.00</b>

**The voluntary donations from the FIG Working Week in Rome were as follows:**

1 x 300 EUR

Lugard Idoghomwenyi Edegbe, Nigeria

3 x 200 EUR

Fesowola Akintoye, Nigeria

Jacob odeh Ehiorobo, Nigeria

John Hohol, United States

1 x 150 EUR

Chime Ugochukwu, Nigeria

4 x 100 EUR

Stig Enemark, (Hon Pres), Denmark

Kate Fairlie, Australia

Robert Foster (Hon. Pres.), United States

Jerome (Jerry) Ives (Hon. Memb.), United States

Smaller amounts received (21 donations) were from:

Thomas Dabiri

Vincent Nwokoro. Nwafor Ezeani

Olajugba Oluropo

David Oluwamotemi

Helge Onsrud (Hon. Memb.)

Sani Nuhu

Juha Talvitie

Ibrahim Usman Jibril

Stephen Djaba

Henning Elmstroem

Louisa Jansen

Jürg Kaufmann (Hon. Memb.)

Christiaan Lemmen

Paul van der Molen (Hon. Memb.)

Dorine Burmanje

Julius Marete

Andrew Mangua

Leonie Newnham

Robert Sinkner

Leiv Bjarte Mjøs  
Gertrude Nnanjar Njar

## **6. Grants 2013**

The FIG Foundation research grants were announced for the second time and decision is to be made in 2013.

The PhD grant was postponed.

It was decided to support Young Surveyors with a number of grants for FIG Working Week in Abuja, with focus on African Young Surveyors.

## **7. Accounts 2012**

The income statement for 2012 and the balance sheet at 31 December 2012 are attached to this report.

The total income in 2012 was € 31,292.00 and expenses € 26,417.00 which gives the net result of € 4,875.00.

The total assets are € 216,191.00.

The FIG Foundation would like to sincerely thank all those who have generously donated in 2012 in support of the FIG Foundation.

### **John Hohol**

President of the FIG Foundation  
March 2013

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



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 2012**



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## Statement of the Management and the Council

Today the management have discussed and approved the Financial Statements for 1 January - 31 December 2012.

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 2012.

We recommend the Financial Statements to be approved at the annual general assembly.

Copenhagen, 22 January 2013

### Director and Office Manager:

\_\_\_\_\_  
Markku Villikka

\_\_\_\_\_  
Louise Friis-Hansen

### Council:

\_\_\_\_\_  
CheeHai Teo  
President

\_\_\_\_\_  
Chryssy A Potsiou  
Vice President

\_\_\_\_\_  
Rudolf Staiger  
Vice President

\_\_\_\_\_  
Bruno Razza  
Vice President

\_\_\_\_\_  
Cheng Pengfei  
Vice President

The annual financial report is submitted for approval at the general assembly on / 2013

\_\_\_\_\_  
CheeHai Teo

## **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 2012, which comprise summary of significant accounting policies, income statement and balance sheet. The Financial Statements are prepared in accordance with generally accepted accounting principles of associations.

### **The management and the Council's Responsibility for the Federation and the Foundation's Financial Statements**

The Management and the Council are responsible for preparation of Financial Statements that give a true and fair view in accordance with generally accepted accounting principles of associations and for such internal control as the Management and the Council determines is necessary to enable the preparation of Financial Statement that are free from material misstatement, whether due to fraud or error.

### **Auditor's Responsibility and Basis of Opinion**

Our responsibility is to express an opinion on the Financial Statements based on our audit. We conducted our audit in accordance with International Standards on Auditing and additional requirements under Danish Audit regulation. This requires that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Financial Statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Financial Statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatements of the Financial Statement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of Financial Statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Management and the Council, as well as the overall presentation of the Financial Statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

The audit has not resulted in any qualification.

*CONTINUED ON THE NEXT PAGE*

## **Independent Auditor's Report (fortsat)**

### **Opinion**

In our opinion, Financial Statements give a true and fair view of the Federation and Foundation's financial position at 31 December 2012 and of the results of the operations for the financial year 1 January to 31 December 2012 in accordance with accepted accounting principles of associations.

Roskilde, 22 January 2013

**ERIK MUNK**  
Statsautoriseret Revisionsaktieselskab  
Ringstedvej 71, DK-4000 Roskilde

Carsten Johnsen  
State Authorized Public Accountant

## **Federation Information**

### **Federation**

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Kalvebod Brygge 31-33  
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Internet: [www.fig.net](http://www.fig.net)

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Registration No. 21 33 60 76

Registered in: Copenhagen

Financial year: 1 January to 31 December

### **Council**

CheeHai Teo  
Chryssy A Potsiou  
Rudolf Staiger  
Bruno Razza  
Cheng Pengfei

### **Director and Office Manager**

Markku Villikka  
Louise Friis-Hansen

### **Auditor**

Erik Munk, statsautoriseret revisionsaktieselskab  
State Authorized Public Accountant  
Ringstedvej 71  
DK-4000 Roskilde  
Denmark

## **Accounting policies**

This Annual Financial Statements have 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 2012 for The International Federation of Surveyors - FIG

	<u>2012</u>	<u>2011</u>
	<i>EURO</i>	<i>EURO</i>
<b>Regular Income</b>		
Member associations.....	309.305	292.657
Affiliate members.....	26.980	24.523
Corporate members.....	85.815	92.091
Academic members.....	19.780	18.312
Less bad debts.....	(19.519)	(25.752)
Less change in provision for doubtful debts.....	(39.063)	0
	<b>383.298</b>	<b>401.831</b>
Advertisement income.....	0	501
Financial income.....	7.631	7.274
Less banking costs.....	(1.177)	(875)
Events, fees charged for services.....	52.017	61.700
	<b>441.769</b>	<b>470.431</b>
<b>Regular Expenditure</b>		
<i>Administration</i>		
Office costs.....	(165.636)	(164.317)
Outsourced office costs.....	(41.575)	(31.148)
	<b>(207.211)</b>	<b>(195.465)</b>
Marketing and publications.....	(17.714)	(11.804)
Council and executive management.....	(161.061)	(162.388)
<i>Commission support</i>		
Regular grants.....	(30.002)	(30.060)
Regular grants, Young Surveyors Network.....	(3.000)	(3.009)
	<b>(33.002)</b>	<b>(33.069)</b>
<b>Total Regular Expenditure</b>	<b>(418.988)</b>	<b>(402.726)</b>
<b>Deficit of Regular Income/Regular Expenditure</b>	<b>22.781</b>	<b>67.705</b>

**Income Statement for 1 January - 31 December 2012 for The International Federation of Surveyors - FIG**

	<u>2012</u>	<u>2011</u>
	<i>EURO</i>	<i>EURO</i>
<b>Result brought forward</b>	<u>22.781</u>	<u>67.705</u>
<b>Projects, events - funds received by FIG</b>		
Congress/Working Week.....	<u>20.000</u>	<u>29.720</u>
	<b>20.000</b>	<b>29.720</b>
<b>Development spend</b>		
IT and web development.....	0	(5.000)
Task Force support.....	(9.370)	(8.018)
Support to poor member associations.....	0	(100)
Specific grants for Commissions.....	<u>(3.490)</u>	<u>(4.287)</u>
	<b>(12.860)</b>	<b>(17.405)</b>
<b>Surplus for the year - regular activities</b>	<u>29.921</u>	<u>80.020</u>
<b>Final Result (Deficit)</b>	<u>29.921</u>	<u>80.020</u>

## Balance Sheet at 31 December 2012 for The International Federation of Surveyors - FIG

<u>Assets</u>	<u>2012</u> <i>EURO</i>	<u>2011</u> <i>EURO</i>
<b>Current assets:</b>		
Receivables:		
Receivables from members.....	102.417	88.336
Other receivables.....	15.916	8.938
Prepaid expenses Working weeks.....	4.496	56.070
Receivable VAT.....	5.725	8.345
Merchandise.....	3.866	6.175
Investments funds.....	221.000	221.405
Cash at hand and bankaccounts.....	386.180	389.943
<b>Total current assets</b>	<b>739.600</b>	<b>779.212</b>
<b>Total assets</b>	<b>739.600</b>	<b>779.212</b>
<b><u>Equity and liabilities</u></b>		
<b>Equity:</b>		
Equity at the beginning of the year.....	463.052	383.032
Retained earnings.....	29.921	80.020
<b>Total equity</b>	<b>492.973</b>	<b>463.052</b>
<b>Liabilities:</b>		
Projects in progress.....	0	60.511
Account payable, The FIG Foundation.....	209.479	204.285
Other debt.....	37.148	51.364
<b>Total liabilities</b>	<b>246.627</b>	<b>316.160</b>
<b>Total equity and liabilities</b>	<b>739.600</b>	<b>779.212</b>

## Income Statement for 1 January - 31 December 2012 for the FIG Foundation

	<u>2012</u>	<u>2011</u>
	<i>EURO</i>	<i>EURO</i>
<b>Donations</b>		
Personal donations.....	5.976	15.408
Other donations.....	4.211	1.727
FIG Conferences.....	17.220	33.637
Financial income.....	3.885	3.752
	<b>31.292</b>	<b>54.524</b>
<b>Expenses</b>		
Grants.....	(26.417)	(6.656)
<b>Total Expenses</b>	<b>(26.417)</b>	<b>(6.656)</b>
	<b>4.875</b>	<b>47.868</b>
<b>Final Result (Deficit)</b>		

## Balance Sheet at 31 December 2012 for The FIG Foundation

	<u>2012</u>	<u>2011</u>
	<i>EURO</i>	<i>EURO</i>
<b><u>Assets</u></b>		
<b>Current assets:</b>		
Receivables:		
Account receivable, FIG.....	209.479	204.285
Other receivables.....	1.156	1.157
Cash at hand and bankaccounts.....	5.556	5.874
<b>Total current assets</b>	<b>216.191</b>	<b>211.316</b>
<b>Total assets</b>	<b>216.191</b>	<b>211.316</b>
<b><u>Equity and liabilities</u></b>		
<b>Equity:</b>		
Equity at the beginning of the year.....	210.316	162.448
Retained earnings.....	4.875	47.868
<b>Total equity</b>	<b>215.191</b>	<b>210.316</b>
<b>Liabilities:</b>		
Other debt.....	1.000	1.000
<b>Total liabilities</b>	<b>1.000</b>	<b>1.000</b>
<b>Total equity and liabilities</b>	<b>216.191</b>	<b>211.316</b>

**FIG FINANCIAL RESULTS 2011 and 2012**

version of 04-feb-13

ANNEX B

	Result 2011 €	Budget 2012 €	Result 2012 €	Notes	
<b>REGULAR INCOME</b>					
<b>Subscriptions</b>					
Member associations	292.657	302.000	309.305		
Affiliate members	24.523	24.000	26.980		
Corporate members	92.091	91.000	85.815		
Academic members	18.312	20.000	19.780		
Less bad debts	25.752	15.000	19.519	1	
Less change in provision for doubtful debts	-	-	39.063	2	
	<b>401.831</b>	<b>422.000</b>	<b>383.298</b>		
<b>Financial income</b>					
Financial income	7.274	5.000	7.631		
Less banking costs	875	1.250	1.177		
Advertising income	501	-	-		
<b>Events - fees charged for services</b>					
Events - fees charged for services	61.700	60.000	52.017	3	
<b>Total regular income</b>	<b>470.431</b>	<b>485.750</b>	<b>441.769</b>		
<b>REGULAR EXPENDITURE</b>					
<b>Administration</b>					
Office costs	164.317	173.500	165.636	4	<b>The office provides</b> Member services Commission services Communication Event management
Outsourced office costs	31.148	42.000	41.575	5	
	<b>195.465</b>	<b>215.500</b>	<b>207.211</b>		
<b>Marketing and publications</b>					
Marketing and publications	11.804	20.000	17.714	6	
<b>Council and executive management</b>					
Council and executive management	162.388	194.500	161.061	7	<b>The Council provides</b> Promotion of the profession Executive management Member support Event development
<b>Commission support</b>					
Regular grants	30.060	30.000	30.002		
Regular grants - Young Surveyors Network	3.009	3.000	3.000		
	<b>33.069</b>	<b>33.000</b>	<b>33.002</b>		
<b>Total regular expenditure</b>	<b>402.726</b>	<b>463.000</b>	<b>418.988</b>		
<b>Surplus/deficit of regular income over regular expenditure</b>	<b>67.705</b>	<b>22.750</b>	<b>22.781</b>		
<b>PROJECTS</b>					
<b>Events - funds received by FIG</b>					
Congress/Working Week	29.720	30.000	20.000	3	
Regional Conference	-	10.000	-	8	
Other events and projects	-	-	-		
	<b>29.720</b>	<b>40.000</b>	<b>20.000</b>		
<b>Development spend</b>					
Task Force support	8.018	12.000	9.370	9	
IT and web - developmental activity	5.000	5.000	-	10	
Support for poor Member Associations	100	2.000	-	9	
Specific grants for commissions	4.287	7.500	3.490	9	
	<b>17.405</b>	<b>26.500</b>	<b>12.860</b>		
<b>RESULT</b>					
<b>Overall surplus/deficit in the year - normal activities</b>	<b>80.020</b>	<b>36.250</b>	<b>29.921</b>		
<b>Reserves</b>					
Events reserve	463.052		492.973	11	
General reserve	25.000		25.000		
	<b>438.052</b>		<b>467.973</b>		
General reserve as a % of regular annual expenditure	109%		112%	12	

**Notes**

- 1 This reflects the clearing of a backlog of expulsions in 2011
- 2 Provision for following year expulsions introduced in line with strong auditor suggestion and for prudent accounting
- 3 Costs of the Working Week were higher than budgeted
- 4 Office costs includes salaries, postage/mail, telecomms, copying, office supplies and equipment, and miscellaneous  
Costs were held steady in 2012 due to careful cost controls
- 5 Outsourced office costs includes auditing, accounting and IT costs. Additional money was spent on website maintenance in 2012
- 6 Marketing and publications includes printing, promotions, Annual Review  
Additional publications in 2012 compared with 2011
- 7 Council and executive management includes costs of the Council and the Director, all travels funded by FIG, and all meeting costs  
Travel costs were very carefully controlled in 2012, and meeting costs were reduced as all council meetings took place during FIG events
- 8 Uruguay income was taken as a fee for organising the technical programme and overall project management, with event risk passing to the local organisers
- 9 All requests were met
- 10 Because of work loads in the Office, some planned work was deferred until 2013
- 11 This reserve has been introduced because of the additional risks for FIG in taking greater management control of events, particularly in the current financial climate
- 12 Note that this percentage does not match that in the budget sheets, because the reserve in the budget sheets is divided by the average of annual expenditure over a 4-year period



	Final 2011 Result	Notes	GA 2012 Budget 2012	Outturn 2012	Notes	GA 2012 Budget 2013	Revised Budget 2013	Notes	GA 2012 Budget 2014	Revised Budget 2014	Notes	GA 2012 Budget 2015	Revised Budget 2015	Notes	Budget 2016	Notes
<b>PROJECTS AND DEVELOPMENT</b>																
<b>Events - funds received by FIG</b>																
Congress/Working Week - share of surplus	29.720		30.000	20.000		10.000	-	e	45.000	-	e	20.000	-	e	-	e
Regional conference	-		10.000	-		-	-		-	-		-	-		-	e
Other events	-		-	-		-	-		-	-		-	-		-	
Commission events	-		-	-		-	-		-	-		-	-		-	
	<b>29.720</b>		<b>40.000</b>	<b>20.000</b>		<b>10.000</b>	<b>-</b>		<b>45.000</b>	<b>-</b>		<b>20.000</b>	<b>-</b>		<b>-</b>	
<b>Developmental income</b>	-		-	-		-	-		-	-		-	-		-	
<b>Developmental spend</b>																
Task Force support	8.018		12.000	9.370		12.000	12.000		12.000	6.000		12.000	6.000		6.000	
IT and web - developmental activity	5.000		5.000	-		20.000	30.000	h	5.000	15.000	h	5.000	15.000	h	5.000	
Support for poor Member Associations	100		2.000	-		2.000	2.000		2.000	2.000		2.000	2.000		2.000	
Specific grants for Commissions	4.287		7.500	3.490		5.000	5.000		7.500	7.500		5.000	5.000		5.000	
	<b>17.405</b>		<b>26.500</b>	<b>12.860</b>		<b>39.000</b>	<b>49.000</b>		<b>26.500</b>	<b>30.500</b>		<b>24.000</b>	<b>28.000</b>		<b>18.000</b>	
<b>RESULT</b>																
Overall surplus/deficit in the year - normal activities	<b>80.020</b>		<b>36.250</b>	<b>29.921</b>		<b>-6.250</b>	<b>-63.250</b>		<b>22.750</b>	<b>-750</b>		<b>1.750</b>	<b>-7.250</b>		<b>-4.750</b>	
<i>[Key measure 2 - this to be positive in total over the term of the 4 year budget period]</i>																
<b>Exceptional items</b>																
<b>Total reserves at year end</b>																
General reserve	438.052		449.302	467.973		443.052	404.723		465.802	403.973		467.552	396.723		391.973	
Events reserve	25.000	i	50.000	25.000	i	50.000	25.000	i	50.000	25.000	i	50.000	25.000	i	25.000	
Total reserves as a % of regular annual exp	106%		110%	113%		109%	99%		114%	98%		111%	95%		94%	
General reserve as a % of regular annual exp	100%	j	99%	107%	j	98%	93%	j	103%	93%	j	100%	89%	j	88%	l
<i>[Key measure 3 - this to be within the range 90-100%]</i>																
<b>Notes:</b>																
a Assumes general stability in overall member numbers; subs held at the same level throughout budget period - 2013 figures are as invoiced																
b Backlog of expulsions in 2011; global financial situation requires to keep expulsions higher																
c Interest rates assumed to remain low																
d A change in accounting treatment has been applied to arrears from 2012, given the increase in arrears and the strong advice of the auditors - arrears of those due for expulsion the following year are accounted for as doubtful debts and an accounting provision is made accordingly																
e Change in contracts with local organisers, whereby FIG takes a fee for organising events but does not take a share of the surplus																
f Careful management of all office costs will continue																
g Travel costs will continue to be very carefully managed; this line will be reduced if overall finances are not within budget. 2013 increase due to Director severance arrangements																
h Major platform change to commence in 2013, plus significant enhancements to the registration system																
i This reserve has been introduced because of the risks, including cash flow, for FIG in organising events, particularly in the current financial climate																
j Currently required to be in 90-100% range																
Note that the formula allows for the cycle of expenditure over a 4-year period as the reserve is divided by the annual average expenditure over 4 years (2011-14 for those years; 2013-16 for 2015 and 2016)																



**2013 GENERAL ASSEMBLY**  
**FINANCIAL ISSUES (INCLUDING 2012 ACCOUNTS, 2013-16 BUDGETS AND 2015**  
**SUBSCRIPTIONS)**

**1. Introduction**

This paper provides the General Assembly with an update on FIG's financial progress in 2012, the Council's amended proposed budgets for 2013-15 and an indicative budget for 2016 (recognising that 2015 and 2016 will be the first half of the next Council's term), and other financial matters.

The General Assembly is asked to:

- Adopt the audited 2012 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)
- Endorse the budgets for 2013-16, at Annex C to the General Assembly agenda, noting that the General Reserve holds steady in the range 90-100% of regular annual expenditure aside from an increase to 107% at the end of 2012 and a decrease to 88% at the end of 2016.
- Approve member association subscription levels for 2015, set out in section 5 of this paper.

**2. A commentary on FIG income and costs 2012**

The global economic situation remained poor in 2012, but the Council's prudent approach to budgeting and close control of all costs allowed the return of a surplus for the year that was very close to the agreed budget.

Income from subscriptions was largely in line with budget, with member association income slightly above budget but, worryingly, corporate member subscription below budget and €5,000 below 2011 income from this source. Expulsions, a step only taken as a last resort, after many attempts to contact the member and agree a payment plan to pay off the arrears, resulted in bad debt income above budget. Council is very aware that many – perhaps most – members are suffering financial difficulties and so is anxious to ensure that the benefits received by members are removed from those who do not pay their arrears (for three years for Member Associations, and two years for other categories of member).

A key accounting change in 2012 was the introduction of an accounting provision for doubtful debt from subscriptions. This has been implemented at the strong urging of the auditors, and in line with general accounting provisions for prudent figures. The auditors have queried the lack of a provision for doubtful debt from subscriptions each year for some years, but a general reduction in arrears outstanding at year end has allowed us to argue that the lack of provision was acceptable. Arrears at the end of 2012, however, were €153,711, an increase of more than 50% from the 2011 figure of €98,185. This level of arrears exists despite very considerable efforts by Office staff to contact members in arrears to arrange payments. We have therefore introduced a provision into the 2012 accounts to cover all subscriptions of members that would be due for expulsion in 2013 if they do not make payments. In future years, we will apply the same provision, and the financial result each year will show the change in the provision from year to year. Council again requests all members to pay their invoices promptly, or to contact the Office if they have difficulties in doing so. This will considerably free up staff time to work on other FIG activities. The size of the arrears results in a portion of FIG's reserves being used to fund FIG cash flow, rather than being invested.

Financial income held steady at 2011 levels.

Income from the services provided to the Working Week was below budget, as was the share of the surplus from the event, due to higher than expected costs for the event.

Overall, income was €44k below budget – without the provision for doubtful debt, it would have been €5k below budget.

Office costs were realised slightly below budget (and at almost identical levels to 2011 costs), despite the need to retain an additional temporary member of staff to cover the Director's extended sick leave. Very careful controls continued to be exercised on all expenditure.

Outsourced costs were very slightly below budget.

There were fewer publications brought forward during the year than budgeted, enabling a saving against budget in this area.

Council and executive management costs were €33k below budget (and slightly below 2011 costs). This was realised through continuing careful control of travel costs, reduced meeting costs as all Council meetings during the year were held during FIG events (and the February 2012 meeting was financially supported by the Malaysian Government), and the receipt of sick pay from the Finnish Government to set against some of the Director's salary cost. It is important also to note that, in many cases, travel by Council members is subsidised or fully covered by Council members' employers, by the hosts, or by other organisations. FIG is very grateful for this support, which allows Council members to maintain close contact with many members during the year.

The grants to Commission chairs were paid in line with the levels agreed by the General Assembly.

Overall, the surplus of regular income over regular expenditure was €31 better than budgeted.

As summarised above, income from the Working Week in Rome was less than expected due to higher event costs. Due to staff pressures, we agreed a different financial model for the Regional Conference in Montevideo, and this reduced the income available to FIG (whilst passing tasks and financial risk to the local organisers).

Developmental spend was carefully monitored against the overall financial position, with monthly updates being produced by the Office, and formal quarterly reports to Council. The overall financial position allowed the Council to honour all requests from Task Force and Network chairs for support and from Commission chairs for specific support. No poor member support under the specific Council scheme was requested by eligible Member Associations, and staffing pressures meant that no IT development work was taken forward in 2012.

The final result therefore was a surplus for 2012 of €29,921 against a budgeted surplus of €36,250.

The reporting of the results follows the amended account structure presented to the General Assembly in 2011.

At the end of year, FIG's total reserve stood at €42,973, 118% of regular annual expenditure. A further discussion of the Federation's reserves for is presented in section 4.

### **3. Budgets 2013-16**

Annex C to this paper presents proposed revised budgets for 2013, 2014 and 2015 and an indicative budget for 2016. The Council is mindful of the competing requirements to state a budget 4-years ahead (as committed to at the 2009 General Assembly), and that the final two years of the budget will form the first half of the next Council's work plan. The 2015 and 2016 budgets should therefore, at this stage, be seen as indicative.

### **Key considerations in constructing the budget**

Council's overriding consideration in preparing the budget has been to minimise costs, whilst protecting the core activities of FIG. Council is very aware of the financial difficulties being faced by many FIG members, and therefore the risks to income (from both subscriptions and events) and therefore has sought to keep costs to as low a level as possible; but whilst still providing the key services that members expect from FIG – and that FIG needs to deliver if the Federation is to remain the pre-eminent international NGO representing the surveying profession, speaking on its behalf to organisations such as the World Bank and the UN (and its Agencies). This has proved a difficult balance to strike, recognising cost of living increases, striving to keep subscriptions at a constant level, and working within the protocols on FIG's reserves. A number of iterations of the budget have been completed, discussed and amended. Council therefore presents to the General Assembly a budget that has undergone very considerable review and refinement. Council is very mindful of the two key, ongoing risks to the budget:

- We can make predictions about income from events, but factors may arise which affect these. Council has (as described below) reviewed risks from events, and developed models to address these risks.
- The potential risk around subscriptions in the current economic situation could reduce subscription income. Council has recognised this risk in the revised accounting treatment of doubtful debt from subscriptions, but the levels of arrears show that it remains a significant area of concern.

### **Staffing**

Council has carefully considered the structure of FIG staffing, and the processes for organising events (which take a considerable percentage of staff time). With the Director leaving FIG in 2013, we have restructured the office with the following roles:

- FIG Manager (Louise Friis-Hansen) responsible for general management, developmental/strategic tasks, oversight of events, oversight of finances, membership matters (particularly in relation to corporate members), council/ commission matters, oversight of IT, communication and Foundation secretariat duties
- FIG Office and Events Coordinators (Hanne Elster, and Claudia Stormoen) responsible for membership administration, website maintenance, communication tasks, detailed planning and organisation of FIG events, and Foundation administration etc
- FIG Development Coordinator (Julie Lee) working on office development and liaison tasks including FIG publications, support on cooperation with UN offices and sister organisations, administrative support to President, Council and Commissions and assisting in the daily administrative office and events duties
- FIG bookkeeper (Maria Bargholz, part time) responsible for financial administration.

The Council is extremely grateful to the Korean Cadastral Survey Corporation (KCSC), a key member of the Korean Confederation of Surveyors, a member association of FIG from Korea for providing one of its staff to undertake the role of FIG Development Coordinator from early 2013, and the financial support of its employee Julie Hyun Sook Lee which KCSC has provided.

## **Organisation of events**

The Council and FIG staff have worked on defining a future concept for conferences which will secure the FIG brand, continue to bring FIG close to all members, be manageable for the office, and provide a level of financial security for FIG. We have considered various models, including the use of an international PCO; taking over all aspects of conference organising; and simply licensing the FIG brand to conference organisers. This has been a key area for Council discussion, given the vital importance of events for FIG and its members, but the considerable staff time they require, and the financial risk that running an event brings. After much consideration, the Council has agreed developed a set of models of FIG involvement in events. In these models:

- FIG will handle the overall programme, the technical programme, keynote speakers, the website, and international exhibitors;
- The local organisers will handle the opening ceremony; contact with the venue; hotels; the local exhibition; local registrations; social events; technical tours; and social tours;
- Responsibility for international registrations will be agreed event by event.

FIG will be paid a fixed fee for the services it provides, including bringing the FIG brand to the event.

Variations of the model are in place, with the fee agreed, for Abuja (the Uruguay event used a variation of the model as well). We are in discussion with the 2014 Congress organisers to agree the details of the model to be used and fee level. We will begin discussions with Sofia and Christchurch organisers shortly.

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.

## **Budgets**

The areas of staffing and event organisation are, of course, interlinked, and have been a key area of discussion as Council seeks to ensure a sustainable, vibrant, effective and efficient Federation for the future.

In light of these decisions, the 2013-15 budgets have been reviewed, and a 2016 budget drafted. The key changes to the budgets agreed at the 2012 General Assembly are:

- Reduction in budgeted income from member associations and corporate members, in light of resignations and 2013 invoiced figures. Once Office staffing is stabilised, membership development will be an important focus of the FIG Manager;
- Write off budgets are increased because of the overall financial situation;
- Income from events is moved fully to fees for services provided, in line with the model developed – and total income from events each year is revised in light of discussions with 2013 and 2014 organisers;
- Administrative costs have been further reduced wherever possible;
- Council costs have also been carefully scrutinised. Travel budgets have been reduced in light of 2012 actual figures (whilst recognising the expectations that the FIG President and Council members will be available for a range of events and activities; and that much of the current President's travel is supported by other sources of funding).
- The elements of salaries accounted for under Council costs have changed. In 2013, there will be costs associated with the departure of the FIG Director. Costs for future years reflect the contracted salaries of FIG staff members;

- IT developmental activity budgets have been increased for 2014 and 2015, recognising the significant work that is required to FIG systems to make them fully fit for purpose and efficient.

As last year, every effort has been made to base the budget on facts, and to set the budget prudently. This is particularly important given the overall economic situation.

There remain three key measures for the budget, Council believes; these are all set out in the Annex:

- Key measure 1: there must be a surplus of regular income over regular expenditure each year – to ensure the financial sustainability of FIG;
- Key measure 2: there must be an overall surplus over the 4-year Council period – again to ensure sustainability, but to allow flexibility of the profiling of income from events and expenditure on developmental activity;
- Key measure 3: the general reserve must remain within the level of 90-100% of regular expenditure.

The budget contained in Annex C meets key measures 1 and 2 with the following exceptions:

- Key measure 1 is not achieved in 2013, due to the costs associated with the departure of the FIG Director;
- Small deficits are budgeted for 2015 and 2016; key measure 2 therefore requires that 2017 and 2018 must offset these deficits. Council recognises that this is a matter for the next Council, and has therefore attempted at this stage to budget each of the years close to zero.

Key measure 3 is discussed further below.

The budgets at Annex C include a range of notes to the budgets explain particular figures.

#### **4. FIG Reserves**

As is shown in Annex C, the FIG general reserve at the end of 2012 was 107% of regular annual expenditure. This is above the 90-100% agreed by the 2009 General Assembly. The rise from the 99% budgeted in the 2012 General Assembly finance paper, to 107%, is mainly due to the reductions made to the annual expenditure budgets for future years (the reserve percentage is calculated using an average of four years' regular annual expenditure, as agreed at the 2012 General Assembly).

In addition, Council has retained the €25,000 events reserve, for the reasons set out in detail in the Finance Paper to the 2012 General Assembly. In essence, this recognises the ongoing risk of organising events, particularly in the current financial climate. Council considered increasing the size of this reserve (indeed, this had been indicated in the 2012 finance paper), but concluded that the new arrangements put in place for organising events enabled it to stay at €25,000.

The deficit budgeted in 2013 will bring the general reserve back into the agreed range. It then remains in that range, although dipping below (to 88%) in 2016. Council proposes that this is accepted by the General Assembly, on the basis that the next Council will want to consider the budget further. Given that costs have, in Council's opinion, been cut to a minimum, a subscription rise would be likely to be required to increase the reserve value. As member development will be progressed by FIG staff in 2013 and 2014, and subscription levels for 2016 will not be decided until the 2014 General Assembly, Council believes that the budget presented in Annex C provides for a sustainable Federation and can be accepted.

The reserves are held in low risk investments, in line with the policy agreed by the General Assembly. Any transfer of the reserves requires approval by two people, one of these being a Council member.

## 5. Subscriptions 2015

The 2012 General Assembly approved membership fees as follows:

Year	Per capita fee	Minimum fee	Maximum fee
2014	4.48 € per member up to a maximum of 5,500 members Member associations from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay 2.24 € member up to a maximum of 5,500 members.	20 members or 50 EUR (whichever is greater)	5,500 members (24,640 EUR)

These were the same level as for 2013 and Council indicated that it wished to maintain the same subscription levels for 2015. Council therefore now formally proposes the following subscription levels for member associations for 2015; in line with recent practice, Council also plans to hold subscription levels for other categories of member, which are set by Council, steady:

Year	Per capita fee	Minimum fee	Maximum fee
2015	4.48 € per member up to a maximum of 5,500 members Member associations from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay 2.24 € member up to a maximum of 5,500 members.	20 members or 50 EUR (whichever is greater)	5,500 members (24,640 EUR)

Council has also considered a number of other issues concerning subscriptions and has decided the following:

- It takes a good deal of staff effort to chase what are quite small annual payments from Academic Members (currently €220 per year). We considered a standard payment once every 4 years but staff are concerned this will actually make payments more difficult – because we will lose the annual contact with Academic Members that allows us to check contact details etc – we run the risk that, returning to them four years on, the person who had been the driving force behind Academic Membership will have moved on or retired and we will lose the member. Academic Members will therefore be offered two options from 2015:
  - Annual invoicing; or
  - 4-yearly invoicing, with a reduction of price by €80 (so €800 at current rates, instead of €880 – reflecting the reduced effort for officestaff of chasing payment each year). If an Academic Member chooses this option, they will still be asked to update contact details once a year.

- Council considered similar arrangements for Affiliate Members, but the fees in this case are larger, and most of these organisations operate annual budgets and would therefore resist swings from a larger amount in one year to zero in other years. The numbers of Affiliate Members are also smaller than those of Academic Members. Council will revisit this decision if we find that there is large take up of the option by Academic Members and it proves successful in reducing administrative effort.
- Council has looked again at the maximum fee, which is currently set at 5,500 members. We considered holding this to a fixed monetary amount, or adjusting the number of members, and have concluded that it would be appropriate to fix it at 5,500 members or €25,000, whichever is the lower – this would be the maximum that any Member Association would pay to be a member of FIG. The current maximum is 5,500 members x €4.48 = €24,640; the cap of €25,000 would apply once the subscription rate has increased by 1.5%.

The 2016 budget in Annex C is based on the assumption that subscriptions will stay at the same levels in that year, but a formal proposal will be brought forward to the 2014 General Assembly, after consideration of the 2013 financial results.

## **6. Conclusion**

2012 was a difficult year for the global economy. This was reflected in certain aspects of FIG's financial position, for instance the level of write off of subscriptions and the decision to make a provision for doubtful debt from subscriptions. Overall, however, close control of costs ensured a solid financial result and an increase in FIG's reserves. These reserves are vital for the Federation in these continuing difficult financial times, and maintaining reserve levels remains an important focus for the Council. Indeed, some of the reserves will be required to cover the deficit budgeted for 2013.

Council believes that the budget set is prudent and realistic and will allow appropriate decisions to be made on levels of developmental expenditure, to ensure the continuing sustainability of FIG's finances.

Bruno Razza  
Vice President



## Report of the first meeting of the Local Organising Committee for FIG Working Week 2015 in Sofia, Bulgaria

At the General Assembly of FIG in Rome 6-10 May 2012 Bulgaria was chosen to be the host of the Working week 2015 which will be held in Sofia. The preparation for it started in June 2012. On a meeting of the Executive board on 14 June 2012 a Local Organising Committee (LOC) was formed. The president of the Chamber of graduated surveyors invited representatives from the University of Architecture, Civil engineering and Geodesy and the Union of Surveyors and Land Managers in Bulgaria to take a part in it. LOC consists of nine members and two secretaries. Dipl. eng. **Angel Yanakiev** – president of the Chamber of Graduated Surveyors was elected for President of the Conference; dipl. eng. **Zlatan Zalatanov**, a member of the Executive board of the Chamber of Graduated Surveyors, was elected for managing director of the Conference; dipl. eng. **Kremena Boyanova** and dipl. eng. **Tatyana Arshinkova** – secretaries of the Chamber of Graduated Surveyors were elected for Secretaries of the Conference .

The first meeting of the LOC was on 27 February 2013. Mr **CheeHai TEO** – president of FIG and Mrs **Louise Friis-Hansen** – Manager of FIG were present. It was held in a hall of the Cartography and Cadastre Agency. Mr **Alexander Lazarov** – executive director of the Cartography and Cadastre Agency, **Georgy Milev** - president of the Union of Surveyors and Land Managers in Bulgaria, Mr **Misho Nastev** – president of the Association of Topographical Companies were invited to take a part in it.

The following issues were decided:

- The priorities of the organizational work were determined;
- The logo and the theme of the working week were selected;

The theme of the Working week 2015 Sofia is : INNOVATION AND GEOTECHNOLOGIES FOR EFFICIENT REGIONAL AND GLOBAL DEVELOPMENT.

The logo of the Working week 2015 Sofia will contain the image of one of the symbols of Sofia – the statue St. Sofia.

- The initial plan of work was elaborated;

The organization of the Working week 2015 Sofia, Bulgaria will be made through a project plan, prepared by FIG. In it the different kinds of tasks are divided between FIG and LOK during the time up to the event.

- Division of the work between FIG office and LOK office;

LOC needs to invite a representative of the government to support the Working week 2015 Sofia, Bulgaria and to find a media partner for the event. LOC has to find a local sponsor for the event, to organize the exhibition and to propose a technical and a social tours.

FIG needs to take care of the program of the Working week 2015 Sofia, Bulgaria (invitations, database, summaries, involved commissions, specific sessions), the website of the event (updating of the website, information about Bulgaria, social programs) and to find international sponsors for the event.

It was decided that until the Working week in Abuja, Nigeria – from 06 to 10 May 2013 the following task must be solved:

- Final budget of the event;
- Determining of the number of the necessary halls for the Conference;





- Creating of a web site;
- Elaboration of an initial program;

Currently, the partners of the Chamber of Graduated Surveyors are:

- University of Architecture, Civil Engineering and Geodesy;
- Geodesy, Cartography and Cadastre Agency;
- Union of Surveyors and Land Managers in Bulgaria;
- Metropolitan Municipality;
- Association of Topographical Companies;

LOC would like to thank to Mr. Chee Hai TEO and Mrs. Louise Friis-Hansen for their valuable help in this first steps for the organization of the conference.

Working week 2015 Sofia, Bulgaria is very important to FIG, because this event will be the first appearance of the new president of FIG.

A partner in the organization of the Working week 2015 Sofia, Bulgaria is the Company for International Congresses – CIC which has a signed contract for logistics with the Chamber of Graduated Surveyors.

#### **LOC – members:**

##### **President of the Conference:**

dipl. eng. **Angel Krumov Yanakiev** – President of the CGS

##### **Managing director of the Conference:**

dipl. eng. **Zlatan Georgiev Zlatanov** – a member of the Executive board of the CGS

##### **Vice – President of the Conference**

dipl. eng. **Rumen Zhelev Georgiev** - a member of the Executive board of the CGS

##### **Secretaries of the Conference:**

dipl. eng. **Kremena Boyanova** – secretary of the CGS

dipl. eng. **Tatyana Arshinkova** – secretary of the CGS

##### **Members:**

prof. **Borislav Marinov** – Dean of Faculty of Geodesy

prof. **Slaveyko Gospodinov** - University of Architecture, Civil Engineering and Geodesy

prof. **Penyo Penev** - University of Architecture, Civil Engineering and Geodesy

phd. **Ivan Klalchev** Ivanov vice president of the Union of Surveyors and Land Managers in Bulgaria

dipl. eng. **Boris Grozdanov Krastev** – member of Union of Surveyors and Land Managers in Bulgaria

dipl. eng. **Svetla Zaharieva** - a member of the Executive board of the CGS



**ENGAGING THE CHALLENGE:  
ENHANCING THE RELEVANCE**  
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To the Presidents or Chairs of all  
FIG Member Associations

5<sup>th</sup> March 2013

**Invitation to the Presidents' Meetings in Abuja, Nigeria during the FIG Working Week  
2013 from 6<sup>th</sup> to 10<sup>th</sup> May 2013**

Dear President/Chairs,

I am looking forward to welcoming and meeting you and your members at the FIG Working Week and the 36<sup>th</sup> General Assembly in Abuja, Nigeria from 6<sup>th</sup> to 10<sup>th</sup> May 2013. The FIG Working Week is the main FIG event this year and third during the four-year term of office of the current Council and Commissions. This year, our institutional partners among others are UN-GLTN, UN-HABITAT and World Bank.

This years **President's Meeting** is hosted by President CheeHai Teo for Presidents or Heads of delegation of FIG member associations (or their representatives). This traditional meeting will be held at the Nikon Luxury Hotel on **Friday 10th of May 2013 from 8:30 to 10:30**. Room will be announced later. The meeting will follow the concept as in previous General Assemblies.

Furthermore, a **Member Association's Presidents/HoD Forum** is organised as part of the Working Week programme to take place on **Wednesday 8 May at 09:00-10:30**. This is a Forum for Presidents and Heads of delegation of FIG member associations (or their representatives). Further information on the agenda for the Forum will be published later on the conference web site [www.fig.net/fig2013](http://www.fig.net/fig2013) together with the technical programme for the Working Week.


On **Wednesday 8 May at 17:00-19:00** you are cordially invited to participate in a **Reception** for participants of GLTN/FIG Roundtable/DG Forum, Presidents Forum and main sponsors. The reception will take place at Nikon Luxury Hotel; room will be announced later.

I hope that these additional activities will allow inspiring networking and interactions among colleagues and thus better serves our expectations for the Working Week. We also hope that these initiatives will add value to your attendance and provide improved interactions between Member Associations and FIG, in addition to the formal General Assembly sessions.

We would greatly appreciate if you could let FIG office, [fig@fig.net](mailto:fig@fig.net) know of your participation. If you are unable to come to Abuja personally, I hope that you will nominate a representative to attend the meeting on your behalf – in which case FIG office would like to be informed of the name of your representative. However, I very much hope that you will be able to come to Abuja.

Thank you and my very best wishes to you and to your membership.

Yours sincerely,  
**International Federation of Surveyors**

A handwritten signature in blue ink, appearing to read 'CheeHai Teo', with a stylized flourish at the end.

CheeHai Teo  
*President*



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On **Wednesday 8 May at 18:00-19:00** you are cordially invited to participate in a **Reception** for participants of GLTN/FIG Roundtable/DG Forum, Presidents Forum and main sponsors. The reception will take place at Nikon Luxury Hotel; room will be announced later.

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CheeHai Teo  
*President*